Keep V-ing

Aspectuality and event structure
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HANNA GLAD

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Abstract


The principal aim of this thesis is to provide a comprehensive account of the meaning of keep V-ing constructions, see (1a) and (1b).

(1) a. Mary kept winning (again and again).
   b. John kept running (for another ten minutes).

On the basis of a systematic study of combinations of keep with predicates of different aktionsarts, it is shown that keep can give rise to two different readings which share the overall meaning of ‘continued activity’. It is argued that the two readings of keep V-ing arise from different aspectual properties of the predicate in the complement clause. Under the first reading, labelled the continuative-iterative reading, (1a), the event in the complement clause is telic, and the interpretation is an iterative reading. Under the second reading, labelled the continuative reading, (1b), the event in the complement clause is atelic, and the interpretation is a reading of nonstop continuation.

It is argued that keep combines with activity predicates in the relevant construction type, that is, with dynamic, durative and atelic events, and that keep has the ability to induce aspect shift when combining with predicates that are not inherent activities. Thus, in (1a), a punctual and telic winning event is iterated, creating a series which in itself is durative and atelic. In (1b), the running event is already durative and atelic.

By comparing keep V-ing with the progressive construction be V-ing, (2), and with two other continuative constructions, continue V-ing, (3), and V on, (4), it is shown that keep readily shifts a telic predicate into an atelic reading by taking scope over the entire event, (1a), but cannot take scope over an internal part of a telic event. Both be V-ing, (2), and continue V-ing, (3), are able to take scope over an internal part of a telic event.

(2) John was building the house.
(3) John continued building the house.
(4) John ran on.

In addition, unlike continue V -ing and V on, keep V-ing does not necessarily denote continuation of an event which has already been initiated.

Keywords: aspect, aktionsart, event structure, telicity, boundedness, iteration, continuation, aspectualizers, progressive constructions, aspect shift.
Contents

List of tables vii

Acknowledgements ix

1 Introduction 1
  1.1 The keep V-ing construction 2
  1.2 Aim 4
  1.3 Outline of the thesis 6

2 Theoretical background 8
  2.1 Syntax, the lexicon, and the division of labour 9
  2.2 Linguistic vs. encyclopaedic meaning 10
  2.3 Aspect 11
    2.3.1 Situation aspect vs. viewpoint aspect 11
  2.4 The Vendler classes 13
  2.5 Ramchand (2008): a model of event structure 18
    2.5.1 Initiation, process and result features 18
    2.5.2 Decomposing the functional sequence 19
    2.5.3 The semantic interpretation of structure 25
    2.5.4 Telicity 28
  2.6 Verb classes based on categorial features 38
    2.6.1 Verbs without a [res] feature 42
7.7 Summary .............................................. 175

8 Concluding remarks 177

References 179
## List of Tables

2.1 The Vendler classes and their feature specifications (Smith, 1997) ............................ 14
2.2 Accomplishments in Ramchand’s model .......................... 64

4.1 Verb classes and their feature specifications, transitivity and participants .......................... 106
4.2 The distribution of the two readings of keep V-ing: the continuative-iterative reading (‘C-I’) and the continuative reading (‘C’) .......................... 118

5.1 Possible shifts of telic predicates .............................. 141
5.2 Ability to ignore the culmination .............................. 142

6.1 Prior initiation and resumption .............................. 157

7.1 Pluractional readings for different verbs .............................. 171
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I would like to thank all of my colleagues. It is because of you that I have enjoyed almost every day at work, even at times when the actual work has not been all that enjoyable. Thanks especially to my doctoral student colleagues Eva Klingvall, Frida Splendido and Sanna Skåland. Thank you for endless discussions about anything and everything, and thank you for always being there for me.
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Malmö, July 2016
Hanna Glad
Chapter 1

Introduction

This study is concerned with the meaning of a specific use of the verb keep, namely when it is followed by a V-ing complement clause, exemplified in (1a) below. This use differs from the use of keep exemplified in (1b).

(1) a. Mary kept running.
    b. Mary kept the change.

The main difference is that keep in (1a) requires another verb in the immediate linguistic context, while keep in (1b) does not. The use of keep illustrated in (1a) is often referred to as the aspectual verb use, and keep is often labelled an aspectual verb or an aspectualizer. Aspectualizers are verbs which restrict reference to the beginning, middle or end of the event denoted by the complement verb, and include ingressive verbs such as begin and start, continuative verbs such as continue and keep, and egressive verbs such as stop and finish. Aspectualizers typically take non-finite complements, such as to-infinitives and/or V-ing clauses, and contribute an aspectual meaning to the event denoted by the verb in the complement clause. There is no consensus in the lit-
erature on whether aspectualizers should be seen as lexical verbs or as auxiliaries or as something in between (see e.g. Duffley 2006:89-90 and references therein). The fact that they do not exhibit the so called NICE properties which are typical for auxiliaries indicates that they are lexical verbs.\footnote{NICE is an acronym for Negation, Inversion, Code, and Emphasis, coined by Huddleston (1976). Unlike auxiliaries, keep does not form the negative with not: *keepn’t, it does not allow for inversion in questions: *kept you running?, it cannot occur as a tag: *You kept running, keptn’t you?, and it cannot carry stress: *He said he wouldn’t keep running, but he KEPT running.} On the other hand, aspectualizers share certain semantic characteristics with auxiliary verbs, and some scholars argue that an aspectualizer semantically constitutes a single unit with its complement verb, and should thus be seen as an auxiliary (see e.g. Brinton 1988:74-75).

### 1.1 The *keep* V-ing construction

When *keep* occurs in a *keep* V-ing construction, it takes scope over the V-ing clause and modifies the event denoted by the V-ing clause. This is not the case for all verbs which are followed by a V-ing clause. *Keep* in (2a) does not refer to an event of its own, but it restricts the event denoted by the V-ing clause. This contrasts with (2b), where there are two events, one of *admitting* and another of *writing*.

\[(2) \quad \text{a. He kept writing anonymous letters.} \]
\[\text{b. He admitted writing the anonymous letters.} \]

The sentences in (3) below show that *keep* adds something to the event denoted by the V-ing clause. Both (3a) and (3b) denote durative and atelic events, but in (3a) there is also a sense of *continuation* and/or *insistence*.
1.1. The *keep* V-ing construction

(3)  
   a. He kept writing anonymous letters.  
   b. He wrote anonymous letters.

In the construction under study, the referent which is understood as the subject of the V-ing clause is the same as the subject of *keep*, illustrated in (4a) below. Duffley (2006) refers to this as *subject control*, which can be contrasted with *object control*, as in (4b), where the subject of the V-ing clause is co-referential with the object of the matrix verb. In this thesis, I will restrict the focus to structures such as that in (4a), where *keep* has subject control, excluding structures such as that in (4b), where *keep* has object control.

(4)  
   a. He kept running.  
   b. He kept the engine running.

Some verbs are able to select for V-ing clauses which are neither co-referential with the subject nor the object of the matrix verb. In (5a), the subject of *getting away* is someone other than *the psychiatrist*, and in (5b), the subject of *going* is either someone other than *she* or a group of people which includes the person referred to by *she*. *Keep* does not have this ability, which can be seen in (6).

(5)  
   a. The psychiatrist recommended getting away for a week.  
      (non-controlled)  
   b. She suggested going to the beach.  
      (non-controlled/NP₁ plus control²)  

   (Duffley, 2006:47)

(6)  
   Johnᵢ kept eᵢᵢ/sᵢ going to the beach.

²The term ‘NP₁ plus’ control was coined by Rudanko (1996:35), cited in Duffley (2006:48-49), and refers to cases where the event in the complement clause is controlled by a group which consists of the subject referent of the matrix clause along with one or more other referents.
Although often mentioned in connection with aspectualizers in the literature (e.g. Freed 1979, Brinton 1988, Duffley 2006), keep has not to my knowledge been studied in detail. It is often noted that it differs from other continuative aspectualizers, such as continue (e.g. Freed 1979, Brinton 1988, Duffley 2006, ter Meulen 2005, Verspoor 1999), but keep is still generally seen as a continuative aspectualizer, whose main function is to express continuation. The main purpose of this thesis is to capture the aspectual and semantic characteristics of keep in keep V-ing structures. This is done by studying what kind of impact keep has on its complement verb, and how this impact varies depending on the aspectual characteristics of the complement verb. To help pin down the meaning contribution of keep, comparison is made to other verbal expressions of continuation and progressivity, namely continue V-ing, V on and be V-ing structures, exemplified in (7).

(7)  
  a. He continued running.  
  b. He ran on.  
  c. He was running.

As will become evident, the meaning of the keep V-ing construction is dependent on the aspectual characteristics of the complement verb.

1.2 Aim

The principal aim of this thesis is to provide a comprehensive account of the meaning of keep V-ing constructions. I suggest that the often assumed status of keep as a continuative aspectualizer may be too simplistic, and that the meaning component CONTINUATION needs to be investigated in more detail.

The hypothesis is that keep can only occur with a complement verb which denotes an activity, i.e., which denotes a durative and
1.2. Aim

Atelic event. I will show that a careful study of the relation between keep and its V-ing complement will help identify two different readings which arise for keep and the V-ing clause, illustrated in (8).

(8)  

a. Mary kept winning (again and again).
b. John kept running (for another 10 minutes).

I will call the reading in (8a) the continuative-iterative reading, since the interpretation is that the entire event in the complement clause is iterated as well as continued, and the reading in (8b) the continuative reading, since here there is no iteration, only continuation of the process part of the event in the complement clause. An important part of the aim of the thesis is to provide insights into the characteristics of these two readings, such as their meanings, distributions and restrictions.

To achieve my aim, I set out to answer the following research questions:

(9)  

a. Which verbs can combine with keep? Are there any aspectual restrictions?
b. When do the different readings arise? Are there any restrictions on what kind of verb can yield the different readings?
c. Does keep have the ability to induce aspect shift? If so, how? Does keep have the same ability to induce aspect shift as the progressive be and other continuative aspectualizers, such as continue and on?
d. How does the meaning of keep V-ing correspond to that of other expressions of continuation, such as continue V-ing and V on?

The human language capacity consists of different parts which interact with each other. I will begin by investigating to what extent the
Chapter 1. Introduction

1.3 Outline of the thesis

In this first chapter, I have introduced the *keep V-ing* construction and presented the aim of the thesis, which was to provide a comprehensive account of the meaning of *keep V-ing* constructions. Chapter 2 provides a brief outline of the theoretical background and assumptions of this work as well as some important notions which are central to the thesis. This chapter includes a section on aspect and aktionsart in general, as well as a section on the so called Vendler classes. Chapter 2 also includes a section on the model of event structure (Ramchand, 2008) which constitutes the basis of my analysis, and a thorough presentation of the different verb classes which can be identified using this model. Chapter 3 provides an account of previous research on the aspectual verb *keep*. Chapter 4 sets out to establish the meaning components of *keep* as well as those of the following *V-ing* clause. In this chapter, I identify the two different readings associated with *keep*, and show how the two different readings have different restrictions with regard to the aktionsart of the complement verb and thus have different dis-
tributions. Chapter 5 compares *keep* to three other verbal expressions of continuity and progressivity: *continue V-ing*, *V on* and *be V-ing*, focusing on aspect shift and scope taking. After that, in chapter 6, the three continuative aspectualizers *keep*, *continue* and *on* are compared in terms of to which extent they express CONTINUATION. The final section of chapter 6, section 6.4, provides an intermediate conclusion of the meaning proposed for *keep V-ing* in chapters 4 to 6. Chapter 7 discusses the findings of chapters 4 to 6, and explores a possible way to accommodate the generalisations made in those chapters. Finally, chapter 8 concludes the thesis.
Chapter 2

Theoretical background

The thesis is concerned with the meaning contribution of the aspectual verb *keep* in *keep V-ing* structures. As will become clear as we go along, the meaning contribution of *keep* is dependent on the aktionsart of the complement verb. Therefore, the main focus of this thesis will be on the relation between the aspectual verb *keep* and the complement verb. The study of the complement verb is to a large extent concerned with the study of its aspectual properties. An important question is of course where the generalisations concerning aspectual properties are found. Some scholars argue that they are part of the lexicon, while others place them within the syntactic component. In the present work, I will pursue the view that generalisations concerning aspectual properties are due to syntax rather than due to the lexicon.

In this chapter, I start by discussing the division of labour between the syntax and the lexicon, and the distinction between linguistic and lexical-encyclopaedic meaning. After that, I present some important notions which are central to the thesis. First, I briefly introduce the concept of *aspect* and the distinction between *situation aspect* and *viewpoint aspect* (Smith, 1997). Then I present two different models
of lexical aspect: firstly, Vendler (1967), a model of verb classification which has been very influential, and secondly, Ramchand (2008), whose model will form the basis of my analysis.

2.1 Syntax, the lexicon, and the division of labour

The present work takes as its point of departure a generative view of language. Within the generative framework, there is debate concerning the division of labour between syntax and the lexicon. On the one extreme, there is the view that a lexical item is completely void of information regarding its syntactic function. A lexical item does not even contain any categorial features, i.e., it is not specified whether it is a verb, a noun, or something else. In this view, all such information comes from the syntax itself, and all restrictions regarding which lexical items are allowed in which syntactic structures come from convention and real world knowledge (see e.g. Marantz 1997, Borer 1998 and Borer 2005). On the other extreme, there is the view that there are two different modules: the lexicon and the syntax, each with its own computations. According to this view, the lexicon contains linguistically relevant information such as categorial information and theta role or argument structure information. This view also assumes that there are linking rules between the lexicon and the syntax, and that these linking rules in combination with the information on the lexical items are responsible for the restrictions on where in the syntax each lexical item is allowed. According to this view, generalisations regarding flexibilities and restrictions of phenomena such as argument structure and event structure can be accounted for within the module of the lexicon. For more on this view, see e.g. Baker (1988) and Levin and Rappaport Hovav (1995).
2.3. Aspect

Ramchand’s argument for this clear distinction is that "if all so-called lexical content can be reduced to either one or the other, the structural-generative aspect of meaning can be profitably analysed as part of the syntactic component." (Ramchand, 2008:14) "Lexical-encyclopedic knowledge is of a piece with real-world knowledge and does not give systematic compositional effects (the crucial distinguishing property of language)." (Ramchand, 2008:15) By separating the more structured and predictable aspects of meaning from the more arbitrary ones, and letting the former ones be part of the linguistic content of a lexical item, the model is able to account for generalizations such as argument structure alternations by assuming that they are based on linguistic content and are generated in the syntax. The more arbitrary aspects of meaning belong to the encyclopaedic content of a lexical item. This part of meaning plays an important part in judging the felicity of an utterance, but it does not restrict which structures a lexical item may associate with.

2.3 Aspect

The study of aspect concerns the internal temporal structure of an event (see e.g. Comrie 1976:5 and Tenny and Pustejovsky 2000:6). Aspect differs from tense in that tense is concerned with how an event relates to some temporal reference point, such as the time when the utterance is made, while aspect is concerned with temporal properties which are internal to the event itself.

2.3.1 Situation aspect vs. viewpoint aspect

An important distinction is that between situation aspect and viewpoint aspect (Smith, 1997). Situation aspect (sometimes referred to as 11

Chapter 2. Theoretical background

Like many authors within the generative tradition, I will assume a view somewhere in between the two extremes presented above. Following Ramchand (2008), I assume that there is only one module, the syn-sem computation, i.e., there is no separate lexicon module with its own computations. At the same time, each lexical item contains a certain amount of selectional information, i.e., a lexical item is not completely void of linguistically relevant information. This means that some of the restrictions of a lexical item come from linguistic features associated with the lexical item itself, and not only from convention and real world knowledge. It also means that although meaning is to a large extent built up and read off the syntactic structure, lexical items are not completely flexible as to which syntactic environments they can occur in.

Although Ramchand (2008) does not assume a lexicon in the sense of a separate module, she assumes that structure is built up from lexical items which are tagged with category information, and which are also associated with encyclopaedic meaning. So, while there is a lexicon in the sense that there are lexical items which are listed and whose encyclopaedic content to some extent has to be memorized, what is central to Ramchand’s view is that generalisations which can be made regarding phenomena such as event structure and argument structure are found within the syntactic component and not within the lexical component.

2.2 Linguistic vs. encyclopaedic meaning

Following Ramchand (2008), I assume a clear distinction between linguistic meaning and encyclopaedic content. The linguistic meaning links the lexical item to the central computational system. The lexical-encyclopaedic meaning links the lexical item to general cogni-
tion. Ramchand’s argument for this clear distinction is that “if all so-called lexical content can be reduced to either one or the other, the structural-generative aspect of meaning can be profitably analysed as part of the syntactic component.” (Ramchand, 2008:14) “Lexicalencyclopedic knowledge is of a piece with real-world knowledge and does not give systematic compositional effects (the crucial distinguishing property of language).” (Ramchand, 2008:15) By separating the more structured and predictable aspects of meaning from the more arbitrary ones, and letting the former ones be part of the linguistic content of a lexical item, the model is able to account for generalisations such as argument structure alternations by assuming that they are based on linguistic content and are generated in the syntax. The more arbitrary aspects of meaning belong to the encyclopaedic content of a lexical item. This part of meaning plays an important part in judging the felicity of an utterance, but it does not restrict which structures a lexical item may associate with.

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#### 2.3.1 Situation aspect vs. viewpoint aspect

An important distinction is that between situation aspect and viewpoint aspect (Smith, 1997). Situation aspect (sometimes referred to as
inner aspect, Travis 1992, lexical aspect, Garey 1957, or aktionsart\footnote{Mlynarzyk (2004:36) suggests that the present use of aktionsart dates back to Agrell (1908).} concerns aspectual properties of situations or events denoted by verbal expressions. These properties include telicity, dynamicity and durativity, and based on these properties, verbs are divided into verb classes. The terms situation aspect and aktionsart will be used interchangeably in the present work to refer to this aspectual category. Viewpoint aspect (sometimes referred to as outer aspect, Travis 1992, or grammatical aspect, Garey 1957) concerns different perspectives on events, such as the difference between perfective and imperfective events. The examples in (10) and (11) (from Rothstein 2004:2) illustrate the difference between situation aspect and viewpoint aspect. In (10), the aspectual difference between the (a) and the (b) example concerns situation aspect; (a) is a state and (b) is an accomplishment. In (11), the aspectual difference between the (a) and the (b) example concerns viewpoint aspect; (a) is imperfective while (b) is perfective. Both (a) and (b) involve accomplishments, so there is no difference in situation aspect in (11).

(10) a. Mary loved John very much. (state)
    b. Mary built a house. (accomplishment)

(11) a. He lived in a hotel while he built/was building the house.
    (imperfective)
    b. He built the house and then sold it for profit.
    (perfective)

Both situation aspect and viewpoint aspect are important notions in this thesis. Situation aspect is central when studying the complement clauses with which keep occurs. Are there any aspectual restrictions
on the complement verb, and how do the aspectual properties of the complement verb contribute to the meaning of the *keep* V-ing structure? Viewpoint aspect is important when studying the effect which *keep* itself has on the interpretation of a sentence. What does *keep* contribute to the sentence?

### 2.4 The Vendler classes

Vendler (1967) is one of the most influential articles on lexical aspect, and many subsequent studies are based on the verb classes presented there, often referred to as *the Vendler classes*. Verbs are divided into the four classes *states*, *activities*, *accomplishments* and *achievements*, given in (12).

(12)  
\[ a. \text{States: know (the answer), love} \]
\[ b. \text{Activities: run, push (a cart)} \]
\[ c. \text{Accomplishments: draw a circle, write a letter} \]
\[ d. \text{Achievements: win (the race), reach the top, find the treasure} \]

Vendler (1967) shows that verbs belonging to these classes differ along the parameters of stativity, durativity and telicity.\(^2\) An event is stative if it does not involve change over time, it is durative if it has temporal duration, and it is telic if it has an inherent endpoint. The feature specifications of the different classes are often presented in tables such as that in table 2.1 (from Smith 1997:20).

\(^2\)Vendler does not actually use the term *stativity*, but notes that verbs differ as to whether or not they may occur in the progressive.
2.4. The Vendler classes

Instead, Vendler uses another linguistic environment to show that accomplishments are durative, illustrated in (16a). The problem with this linguistic environment is that it can occur with achievements too, which are punctual, illustrated in (16b).

(16)
a. It took Mary twenty seconds to draw the circle.
b. It took Mary ten minutes to win the race.

Vendler acknowledges this, but argues that the test can still be used, since accomplishments and achievements yield different interpretations when modified in this way: in (16a), the interpretation is that during the entire time span of twenty seconds, Mary was drawing the circle, while in (16b), the interpretation is not that Mary was winning the race during the entire time span of ten minutes.

To show that achievements are punctual rather than durative, Vendler uses the linguistic environment at x time, which shows that an event occurs at a single moment. The example in (17a) shows that the achievement win the race occurs at a single moment, while the example in (17b) shows that the state believe in the stork has duration and cannot be said to occur at a single moment.

(17)
a. Mary won the race at noon sharp.
b. Mary believed in the stork at noon sharp.

Based on the features and tests presented above, Vendler (1967) shows that English verbs can be divided into four natural classes: activities, accomplishments, achievements and states. Firstly, activities are events which do not have an inherent endpoint, may occur in the progressive, and have temporal duration. A prototypical activity is run, and the examples in (18) show that run is $[-telic, +dynamic, +durative]$.

Vendler uses different linguistic environments to test whether or not a verb has each of these features. Telicity is tested by modifying the verb with a bounded temporal adverbial, such as in twenty seconds, illustrated in (13). If this kind of modification is possible, then the verb is telic. Dynamicity is tested by using the progressive form (14). If the progressive form is possible, then the verb is dynamic.

(13) Test for telicity
   a. Mary drew a circle in twenty seconds.
   b. Mary ran #in twenty seconds.

(14) Test for dynamicity
   a. Mary was running.
   b. # Mary was believing in the stork.

Vendler uses a number of different tests to show if an event is durative or punctual. To show that activities and states are durative, modification with for x time is used (15a). Vendler notes that although accomplishments are durative, they are often odd with temporal modification such as for x time (15b). It seems that for x time can only occur with events which are atelic as well as durative.

(15) a. Mary ran for 20 minutes.
    b. Mary drew the circle #for twenty seconds.
Instead, Vendler uses another linguistic environment to show that accomplishments are durative, illustrated in (16a). The problem with this linguistic environment is that it can occur with achievements too, which are punctual, illustrated in (16b).

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2.4. The Vendler classes

Finally, states do not have an inherent endpoint, they do not occur in the progressive, and they have temporal duration, i.e., they are \([-\text{telic}], [+\text{dynamic}], [+\text{durative}].\) This is illustrated in (21):

\[(21)\]

\[\text{State: believe}\]

\(a.\) Mary believed in the stork in twenty seconds. \([-\text{telic}]\)

\(b.\) Mary was believing in the stork. \([+\text{dynamic}]\)

\(c.\) Mary believed in the stork for many years. \([+\text{durative}]\)

The four categories activities, accomplishments, achievements and states play an important role in linguistic research and form the basis of many accounts of lexical verbal aspect following Vendler (1967), see e.g. Comrie (1976), Dowty (1979), Moens and Steedman (1988), Krifka (1989), Krifka (1992). Sometimes, a new category is added, for example, Smith (1997) adds the category of \(\text{semelfactives}\) (which is presented in the next chapter, in section 2.6.3), and sometimes two categories, usually accomplishments and achievements, are collapsed into one, e.g., in Mourelatos (1978).

In this thesis, I will often refer to the Vendler classes, because they are well established. Although there may be disagreement as to how the division is made and exactly where to draw the line between the different categories, they serve my purpose of making generalisations. I will use the terms \(\text{state}, \text{activity}, \text{accomplishment}\) and \(\text{achievement}\) in the sense used in Vendler (1967). As a cover term I will use \(\text{event}; i.e., verbs belonging to any of the four Vendler classes denote events. An event may thus be either static or dynamic, either durative or punctual, and either telic or atelic. Note that this use of \(\text{event}\) differs from how it is used in e.g. Mourelatos (1978), for whom an event is always telic.

In the next section, I present the framework on which I will base my analysis.

\[(18)\] Activity: \(\text{Run}\)

\(a.\) Mary ran \# in five minutes. \([-\text{telic}]\)

\(b.\) Mary was running. \([+\text{dynamic}]\)

\(c.\) Mary ran for five minutes. \([+\text{durative}]\)

Accomplishments are events which have an inherent endpoint, may occur in the progressive, and have temporal duration, i.e., which are \([+\text{telic}], [+\text{dynamic}], \text{and} [+\text{durative}].\) The prototypical accomplishment \(\text{draw the circle}\) in (19) illustrates this:

\[(19)\] Accomplishment: \(\text{Draw the circle}\)

\(a.\) Mary drew the circle in twenty seconds. \([+\text{telic}]\)

\(b.\) Mary was drawing the circle. \([+\text{dynamic}]\)

\(c.\) It took Mary twenty seconds to draw the circle. \([+\text{durative}]\)

Achievements have an inherent endpoint, do not occur in the progressive, and do not have temporal duration, i.e., they are \([+\text{telic}], [-\text{dynamic}], [-\text{durative}].\).\(^3\) The prototypical achievement \(\text{win (the race)}\) illustrates this in (20):

\[(20)\] Achievement: \(\text{win the race}\)

\(a.\) Mary won the race in twenty seconds. \([+\text{telic}]\)

\(b.\) # Mary was winning the race.\(^4\) \([-\text{dynamic}]\)

\(c.\) Mary won the race at noon sharp. \([-\text{durative}]\)

\(^3\)Note that Vendler (1967) sees achievements as stative, or at least as not allowing for the progressive, while Smith (1997) sees achievements as dynamic, since they involve change, see table 2.1.

\(^4\)An ‘about to’ reading is available with the progressive here, but it is irrelevant for the present purpose, i.e., to test for dynamicity.
Finally, states do not have an inherent endpoint, they do not occur in the progressive, and they have temporal duration, i.e., they are \([-\text{telic}], [-\text{dynamic}], \text{and} [+\text{durative}].\) This is illustrated in (21):

(21) **State:** *believe*
    
    a. Mary believed in the stork \# in twenty seconds. \([-\text{telic}]\)
    b. \# Mary was believing in the stork. \([-\text{dynamic}]\)
    c. Mary believed in the stork for many years. \([+\text{durative}]\)

The four categories activities, accomplishments, achievements and states play an important role in linguistic research and form the basis of many accounts of lexical verbal aspect following Vendler (1967), see e.g. Comrie (1976), Dowty (1979), Moens and Steedman (1988), Krifka (1989), Krifka (1992). Sometimes, a new category is added, for example, Smith (1997) adds the category of *semelfactives* (which is presented in the next chapter, in section 2.6.3), and sometimes two categories, usually accomplishments and achievements, are collapsed into one, e.g., in Mourelatos (1978).

In this thesis, I will often refer to the Vendler classes, because they are well established. Although there may be disagreement as to how the division is made and exactly where to draw the line between the different categories, they serve my purpose of making generalisations. I will use the terms *state, activity, accomplishment* and *achievement* in the sense used in Vendler (1967). As a cover term I will use *event*; i.e., verbs belonging to any of the four Vendler classes denote events. An event may thus be either static or dynamic, either durative or punctual, and either telic or atelic. Note that this use of *event* differs from how it is used in e.g. Mourelatos (1978), for whom an event is always telic.

In the next section, I present the framework on which I will base my analysis.
2.5 Ramchand (2008): a model of event structure

The event structure model in Ramchand (2008) builds on the idea that constructions are systematically generated from smaller parts, which may be thought of as lexical items. Each lexical item is tagged with certain features in its lexical entry. Some of these features are particularly useful in accounting for the generalisations concerning keep in keep V-ing structures. As I will show in chapter 4, verbs with the same feature setup give rise to similar types of readings in the context of keep. Also, the way Ramchand’s model accounts for telicity is appealing, because it clearly shows how telicity can arise in different ways. These different ways of yielding telicity correspond to important differences in the behaviour of keep. That telicity arises in different ways is not a new observation, but it is the way in which it is modelled which has proved particularly useful for the present study.

2.5.1 Initiation, process and result features

In this model, verbs are assumed to carry one or more of the following features: initiation, process and result. The initiation feature indicates that the predicate expresses an event which involves some kind of causation, but which does not necessarily involve an animate agent. The initiation feature resembles, but does not completely correspond to, the feature of agentivity. For example, predicates such as melt are tagged with an initiation feature, and thus are seen as denoting initiation or causation even in structures such as the sun melted the ice, where the subject referent the sun is the initiator of the melting event, even though it is not an agent.

The process feature corresponds to what others have referred to as a dynamicity feature (e.g. Comrie 1976, Smith 1997, Olsen 1997),
indicating that the event involves change over time. It is important to note that the presence of a process feature does not necessarily mean that the event is durative; the process feature may correspond to either an extended process or a “single minimal transition” (Ramchand, 2008:40). This means that in this model, all dynamic events have a process feature, irrespective of whether they are durative, as in the case of activities and accomplishments, or punctual, as in the case of achievements. The model assumes that durativity is an emergent feature: a verb which has both a process feature and a result feature denotes a punctual event, while a verb which does not have both a process feature and a result feature denotes a durative event.

Finally, the result feature resembles the feature of telicity discussed in relation with the Vendler classes in section 2.4 above, and indicates that the event has an inherent endpoint. However, as will become evident in section 2.5.4, the result feature is not a necessary feature for expressing a telic event.

2.5.2 Decomposing the functional sequence

Ramchand (2008) is couched within the generative framework and uses tree diagrams to illustrate linguistic generalisations. A tree diagram is a representation of the syntactic structure of a phrase or a sentence. Ramchand (2008) assumes a functional sequence, that is, a sequence of functional projections, which is universal. Ramchand’s model is concerned with the lowest part of the tree, which is where the verb phrase is built up. This is generally assumed to consist of a VP (verb phrase), or sometimes a combination of a vP (little vP, or light verb phrase) and a VP. In Ramchand’s model, this part of the functional sequence is decomposed into three projections, each one representing a subevent: the initP (initiation phrase) represents the initiating or causing subevent, the procP (process phrase) represents the process ...
subevent, and the resP (result phrase) represents the result subevent. This is illustrated in (22):

(22) initP
    / 
   /   
init  procP
    / 
   /   
proc  resP
    / 
   /   
res  XP

2.5.2.1 Event structure

By decomposing the functional sequence in this way, and by assuming that verbs are tagged with category features in their lexical entries, the model is able to handle generalisations concerning event structure. Such generalisations are often claimed to reside in the lexicon, but this model places them within the syntactic component. A verb is tagged with one or more of the categorial features [init] (*initiation*), [proc] (*process*), and [res] (*result*), and it is these categorial features which decide what kind of functional sequence will be built and thus what the event structure will be.

The reason for decomposing the structure into precisely these three projections is primarily empirical. The idea is that if these three projections are assumed, all the generalisations about verb meaning, including restrictions and flexibilities, can be captured. Furthermore, Ramchand argues, the part-whole structure of events which is proposed here captures the intuition that events do consist of a core process event with or without initial and/or final stages (Ramchand, 2008:41).
2.5.2.2 Argument structure and participant roles

The extended functional sequence also captures generalisations regarding argument structure. There are no theta role specifications in the lexical entry, but the number and types of participants follow from the functional sequence that the verb builds (which in turn follows from the categorial features on the verb).

Each subevent, or each projection, hosts a participant in its specifier position: the INITIATOR, the participant which initiates or causes the event (the external argument) is licensed in the specifier position of \textit{init}P, the UNDERGOER of change is licensed in the specifier of \textit{proc}P, and the holder of the result state, the RESULTEE is licensed in the specifier position of \textit{res}P. The maximal extended functional sequence, including the three participant roles, is illustrated in (23):

\begin{equation}
\text{(23)} \vphantom{\begin{array}{c}
\end{array}}
\end{equation}

\begin{align*}
\text{initP} & \\
& \quad \text{INITIATOR} \\
& \quad \quad \text{init} \quad \text{procP} \\
& \quad \quad \quad \text{UNDERGOER} \\
& \quad \quad \quad \quad \text{proc} \quad \text{resP} \\
& \quad \quad \quad \quad \quad \text{RESULTEE} \quad \text{res} \quad \text{XP}
\end{align*}

Each participant is the subject of that particular subevent: the INITIATOR is the subject of the initiation subevent, the UNDERGOER is the subject of the process subevent, and the RESULTEE is the subject of the result subevent. The meaning relation of subjecthood comes from the syntactic structure: all three participants are located in the specifier position of their respective subevent projections.
2.5.2.3 Insertion under multiple nodes

The model relies on the assumption that lexical items can insert under multiple nodes. In this way, a single lexical item may be associated with more than one position simultaneously. Apart from allowing for verbs to be interpreted as consisting of several subevents, this also allows for the participants of the event to have multiple roles. For example, a verb like *run* has both an [init] feature and a [proc] feature, and it will project both an *initP* and a *procP*, and will reside in the head positions of both of these projections. At the same time, the participant of the event of ‘running’ will have multiple roles, and reside in both the specifier of *initP*, where it carries the role of INITIATOR, and in the specifier of *procP*, where it carries the role of UNDERGOER. This captures the intuition that verbs such as *run* “have a single DP [determiner phrase\(^5\)] argument which undergoes change, but which is also self-initiating.” (Ramchand, 2008:71) This is illustrated in (24):\(^6\)

\[
\text{(24)}
\]

\[
\begin{tikzpicture}
  \node {\textit{initP}}
  \node {\textit{John}}
  \node {\textit{init}}
  \node {\textit{run}}
  \node {\textit{procP}}
  \node {\textit{proc}}
  \node {\textit{XP}}
  \node {\textit{<John>}}
  \node {\textit{<run>}}
\end{tikzpicture}
\]

\(^5\)A phrase consisting of a noun and a determiner, such as *the book* is sometimes labelled a noun phrase (NP) and sometimes labelled a determiner phrase (DP) depending on which word is considered to be the head. Within the generative framework, such phrases are generally labelled DPs, even in cases where there is no overt determiner, such as bare plurals (*books*) or proper names (*John*).

\(^6\)A lexical item put within <> is associated with that position, but spelled out elsewhere.
2.5.2.4 **Rhematic material**

Not all participants of events are initiators, undergoers or resultees. For example, direct objects of creation and consumption verbs, exemplified by *a cake* in (25a), are analysed not as undergoers but as rhemes, or paths (which is a subtype of rHEME). Compare with the object *the potato* in (25b), which is an undergoer.

(25)  

<table>
<thead>
<tr>
<th></th>
<th>(25)</th>
<th>RHEME (PATH)</th>
<th></th>
<th>(25)</th>
<th>UNDERGOER</th>
</tr>
</thead>
</table>

(Ramchand, 2008:69)

The difference between the two direct objects in (25) is that while the undergoer *the potato* in (25b) refers to a DP which is already in existence, and which undergoes change as a result of the event expressed by the verb, the path *a cake* in (25a) refers to a DP which comes into being as a result of the event expressed by the verb. Because it does not undergo change, a DP path object cannot be analysed as associating with the specifier position of the procP. Instead it is assumed to reside in the complement position of the procP. This is illustrated in (26a). Compare with the position of the undergoer *the potato* in (26b).

(26)  

(26a) a. \[initP  

\[John  

\[init  

\[baked  

\]<John>  

\[procP  

\]<baked>  

\[DP  

\]<baked>  

\[a cake \]
2.5. Ramchand (2008): a model of event structure

There are a number of ways to distinguish paths from undergoers:

- **DP paths** do not co-occur with PP paths:
  - (29)
    - a. John pushed the cart (undergoer) to the store (PP path).
    - b. *I rang the number (DP path) through to her (PP path).
  (Ramchand, 2008:67)
- **DP paths** do not take resultative secondary predication:
  - (30)
    - a. *John painted a picture red.
    - b. John painted the wall red.
  (Ramchand, 2008:69)
- **DP paths** allow for benefactives:
  - (31)
    - a. John painted me a picture.
    - b. *John painted me a wall.
  (Ramchand, 2008:69)

2.5.3 The semantic interpretation of structure

An important assumption of this model is that the syntactic structure is interpreted in a systematic way. The idea is that the semantics of event structure and argument structure comes from the syntactic structure, and not from the lexical items themselves (Ramchand, 2008:42). The semantic interpretation of the structure is systematic and predictable: the relations between the different projections, and between the different positions within each projection, are predictable. First, there is the relation of causation or initiation, which relates paths to events.

It is not always the case that path direct objects refer to DPs which come into existence as a result of the event, but what is important is that they do not undergo change in the way that undergoers do. Ramchand refers to rhemes as “non-event-denoting complements”, and states that they have to “co-describe the eventuality identified by the head” (Ramchand, 2008:107). Also, a rheme has to unify with the event, meaning that a dynamic event head can only be modified by a rheme which has an extended structure, such as a part-whole structure, as in (27). Conversely, a stative event head can only be modified by a rheme which does not have a path structure, as in (28).

(27) a. John read the article.
    b. Mary ate the mango.
  (Ramchand, 2008:66)

(28) a. Katherine fears nightmares.
    b. The two rivers meet at the end of the field.
  (Ramchand, 2008:106)
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  (29)  
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  b. *I rang the number (DP path) through to her (PP path).
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  (30)  
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the initiation projection and the process projection. Here, the initiating subevent is “the causing or instigating force” which initiates or causes the second subevent (Ramchand, 2008:42). Secondly, there is the semantic relation of adding a result. This is sometimes referred to as telic augmentation. Here, the process subevent leads to a result subevent. Ramchand calls this relation a “leads-to relation” (Ramchand, 2008:43). The parallel between these two semantic relations leads Ramchand to assume that they are the result of the same semantic combinatorial process, and thus the same notation is used for both relations. By assuming two primitive predicates over events, given in (32), and one event composition rule, given in (33), these two relations can be accounted for, and the initiation and result subevents can be derived from the primitive predicates over events.

(32) Primitive predicates over events:
   a. State(e): e is a state
   b. Process(e): e is an eventuality that contains internal change
   (Ramchand, 2008:44)

(33) Event Composition Rule
   e=e1 → e2: e consists of two subevents, e1, e2 such that e1 causally implicates e2
   (Ramchand, 2008:44)

The initiation subevent and the result subevent are both assumed to be states. Whether a state is interpreted as causational or resultative depends on its position in the structure. How the two different subevents are derived is illustrated in (34) and (35):
2.5. Ramchand (2008): a model of event structure

(34) IF $\exists e_1, e_2 [\text{State}(e_1) \& \text{Process}(e_2) \& e_1 \rightarrow e_2]$, then by definition Initiation($e_1$)
(If there is an event which consists of the two subevents $e_1$ and $e_2$, where $e_1$ is a state and $e_2$ is a process, and $e_1$ leads to $e_2$, then by definition $e_1$ is an initiation subevent.)

(35) IF $\exists e_1, e_2 [\text{State}(e_1) \& \text{Process}(e_2) \& e_2 \rightarrow e_1]$, then by definition Result($e_1$)
(If there is an event which consists of the two subevents $e_1$ and $e_2$, where $e_1$ is a state and $e_2$ is a process, and $e_2$ leads to $e_1$, then by definition $e_1$ is a result subevent.)

(Ramchand, 2008:44)

The primitive participant roles of INITIATOR, UNDERGOER, and RESULTEE are defined in terms of relations between objects and events, shown in (36):

(36) Primitive role types
   a. Subject ($x, e$) and Initiation($e$) entails that $x$ is the INITIATOR of $e$.
   b. Subject ($x, e$) and Process($e$) entails that $x$ is the UNDERGOER of the process.
   c. Subject ($x, e$) and Result($e$) entails that $x$ is the RESULTEE.

(Ramchand, 2008:44-45)

What is important here is that the model allows for semantic interpretations to be read off the syntactic structure in a predictable and systematic way, without making use of any lexical-encyclopaedic information.
2.5.4 Telicity

In Ramchand’s model, telicity refers to the “attainment of a result state” or a “final state” (Ramchand, 2008:27). Verbs are not specified as telic or atelic, but telicity arises from other features either on the verb or on some other linguistic element in the context. Telicity arises in three different ways in Ramchand’s model: it may be encoded by a result subevent, illustrated in (37a), by a bounded PATH in the complement of procP, illustrated in (37b), or it may arise from real world knowledge, illustrated in (37c) (Ramchand, 2008:77).

(37)  
   a. John broke the stick. (result subevent)  
   b. John read the book. (bounded PATH)  
   c. Karena melted the chocolate in the pan. (real world knowledge)

The different sources of telicity are presented in the following three subsections.

2.5.4.1 Telicity encoded by a result subevent

Verbs such as break in (37a) are obligatorily telic, i.e., they obligatorily denote telic events. These are verbs which “resist the atelicity test [the for x time test] because their objects are already defined as holders of a final state. They don’t just undergo some change, they also end up in a final state as specified by the verb itself.” (Ramchand, 2008:32) Such verbs are tagged with the categorial feature [res]. Two obligatorily telic verbs are illustrated in (38):

(38)  
   a. John broke the stick in a second/*for seconds.  
   b. Mary arrived in two minutes/*for two minutes.  

(Ramchand, 2008:32)
In (38a), the stick reaches a final state when it is broken. This is specified by the verb break, and the interpretation is that the event is telic. Similarly, in (38b), Mary reaches a final state when arriving. The reaching of a final state is specified by the verb arrive, and the interpretation is that the event is telic.

As we saw in section 2.5.2 above, Ramchand’s model assumes a decomposed VP, where verbs which obligatorily denote telic events project a result projection, which hosts a resultee in its specifier position. Both break and arrive are tagged with a [res] feature in their lexical entries, and thus they project a resP. The DPs the stick and Mary receive a resultee role by associating with the specifier position of the resP. Thus, the interpretation that the stick and Mary reach a final state is encoded in the syntax. The structures for (38a) and (38b) are given in (39a) and (39b) below:

(39)  

   a. John broke the stick in a second.

\[
\begin{align*}
\text{initP} & \\
John & \quad \text{init} \quad \text{procP} \\
\text{broke} & \quad \text{proc} \quad \text{resP} \\
\text{the stick} & \quad \text{res} \quad \text{XP} \\
\{\text{broke}\} & \quad \{\text{the stick}\} \quad \text{in a second}
\end{align*}
\]
2.5.4.2 Telicity encoded by a bounded path

In (37b), repeated below in (40), we saw that an activity verb, such as \textit{read} may occur in a structure which denotes a telic event if there is linguistic context which denotes that a final state is reached.

(40) John read the book.

In (40), it is the quantized DP object \textit{the book} which gives rise to a path, which in turn gives rise to a telic interpretation of the event. The verb \textit{read} in itself denotes an atelic event, since it does not denote a transition into a final state. Smith (1997) characterises atelic events as having “arbitrary final endpoints” (Smith, 1997:19). In (40) the telicity comes from the quantized DP \textit{the book} rather than from the verb itself. The DP denotes a bounded scale with a natural endpoint. Ramchand refers to elements such as the DP \textit{the book} in (40) as \textit{bounded DP paths} (Ramchand, 2008:36).
The notion of path is central to the account of telicity. A path can be a physical path, such as the PP to the end of the garden in (41a), or it can be “derived from the object as in the case of creation/consumption”, as in (41b), where the object an apple constitutes the boundaries of the eating event, or it may “come from the scale that can be inferred from a gradable adjective” as in (41c), where the adjective phrase bone dry is responsible for the telic interpretation of the event (Ramchand, 2008:30).

(41)  a. John pushed the cart to the end of the garden.
     (Ramchand, 2008:30)
     b. John ate an apple.
     c. Mary dried the cocoa beans bone dry.
     (Ramchand, 2008:30)

The idea is that the bounded nature of the path carries over to the event. This idea is not new; it has been suggested by e.g. Krifka (1992) and Borer (2005). In each of the examples in (41), the boundedness of the path carries over to the event: since there is an end to the path, there is also an end to the event. In (41a), the physical path denoted by to the end of the garden is the path which the internal object the cart travels along. When it has reached the end of the path, the event is interpreted as having reached a final state. In (41b), it is the internal argument itself which constitutes the path. If the internal argument is quantized, as in the case of the DP an apple, then the boundedness of the object, which results from its quantizedness, carries over to the event and thus gives the event a telic interpretation. This phenomenon has been discussed under different names, e.g., incremental theme (Dowty, 1991), specified quantity of A (SQA) (Verkuyl, 1993), measuring out (Tenny, 1994), incrementality (Krifka, 1998). In Ramchand’s view, this is only possible if “the nature of change relates
directly to the material extent of the object” (Ramchand, 2008:29). This is typically the case for creation/consumption verbs. Finally, in (41c), it is the adjective phrase bone dry which provides the scale which constitutes the path. In this case, the scale has a bound, denoted by the DP bone which serves to grade the adjective dry, and this boundedness carries over to the event, and the event is interpreted as telic.

The notion of quantization is also important, but in this model the link between a quantized internal argument and telicity is less straightforward than has sometimes been suggested in the literature (see e.g. Krifka 1998 and citations therein). Often, the telic reading of an event depends on the internal argument being quantized, as in (38a) above, repeated below in (42a). The minimal pair in (42) illustrates that quantization has an effect on the telicity of the event. The event in (42a), where the internal argument is quantized, gets a telic interpretation, while the event in (42b), where the internal argument is not quantized, gets an atelic interpretation.

(42)  
\begin{align*}
\text{a.} & \quad \text{John broke the stick in a second/*for minutes.} \\
\text{b.} & \quad \text{John broke sticks *in a second/for minutes.}
\end{align*}

However, there is no one-to-one relationship between telicity and the presence of a quantized internal argument. Ramchand illustrates this point with examples such as those in (43), both of which denote telic events although there are no quantized internal arguments, and (44), which does not denote a telic event although the internal argument is quantized:
2.5. Ramchand (2008): a model of event structure

(43)  a. John stood up in a second. (*no internal argument)
     b. They found gold in three hours. (*mass term internal argument)

(Ramchand, 2008:25)

(44)  John pushed the cart for hours. (Ramchand, 2008:26)

2.5.4.3 Telicity arisen from real world knowledge

In (37c), repeated below in (45), neither the verb nor the linguistic context specifies whether or not the argument which undergoes change attains a final state.

(45)  Karena melted the chocolate in the pan.

A verb such as melt denotes an event of change along a scale. The scale has a definite endpoint which the internal argument may or may not reach, illustrated in (46), where the final state is reached in (46a) but not in (46b). Such verbs are often referred to as degree achievements in the literature (see e.g. Dowty 1979).

(46)  a. Karena melted the chocolate in the pan.
     b. The chocolate melted for three minutes in the back seat
        (before we rescued it).

(Ramchand, 2008:27)

The different readings in (46) come from our real world knowledge of 'melt' and 'chocolate'. We know that when you melt chocolate in a pan, it reaches a final state, namely that of liquid chocolate. We also know that chocolate may melt without reaching a final state of being completely liquid, as in (46b). In both cases, the chocolate gradually changes along the scale denoted by melt, but only in (46a) does it reach a final state.
2.5.4.4 Tests for telicity

To test for telicity, and to some extent to identify the source of the telic interpretation, Ramchand assumes two tests: the *in x time* test and the *for x time* test. The *in x time* test distinguishes telic events from atelic events: only telic events allow for modification with a temporal adverbial phrase with *in*. In this sense (47a) is telic, whereas (47b) is not.

(47)  a. John broke the stick in a second.
     b. *Karena danced in an hour. (Ramchand, 2008:202)

The *for x time* test identifies a result subevent: events with a result subevent resist modification with *for x time*, illustrated in (48a). Note that an event such as *read the book* in (48b) may get either a telic or an atelic interpretation, and is compatible with modification with either *in x time* or *for x time*. According to Ramchand’s analysis, this is because it does not have a result subevent, but its telicity stems from something else, namely a bounded DP *path* (*the book*).

(48)  a. Mary arrived in two minutes/*for two minutes.
     b. John read the book in three hours/for three hours.

Note also that for the *for x time* test to work, it is important to make sure that the *for x time* phrase really measures the process portion of the event. Witness example (49) below, where (49a) is fine if ‘for two minutes’ measures the duration of the repetitive reading of *hit*, (which also includes the result subevent), and (49b) is fine if ‘for two minutes’ measures the duration of the result state, but not if it measures the duration of the process portion of the event (Ramchand, 2008:76).

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7These are standard telicity tests, used by e.g. Vendler 1967, Dowty 1979, Smith 1997 and many others.
2.5. Ramchand (2008): a model of event structure

(49)  a. # Michael hit the stick for two minutes.
     b. # Ariel entered the room for two minutes.
     (Ramchand, 2008:77)

2.5.4.5 Telicity vs. boundedness

Ramchand notes that telicity may refer to either “predicational and relational properties” or be a “purely temporal notion” (Ramchand, 2008:30-31). The telicity discussed in this section is of the former kind: it concerns the situation aspect, or the aktionsart, of the event building part of the clause. The latter kind of telicity concerns purely temporal bounds which are independent of event structure and is a notion which concerns viewpoint aspect.

To maintain this important distinction between telicity as a property of situation aspect/aktionsart and telicity as a property of viewpoint aspect, I will reserve the term telicity for the former kind of telicity, i.e., that of situation aspect. I will use the term boundedness to refer to the other kind, namely that of telicity as a property of the viewpoint aspect of an event. In the literature, this distinction is often made. For example, Depraetere (1995) states that while telicity refers to a potential endpoint, which is inherent in the verb itself, boundedness refers to an actual temporal endpoint (see e.g. Depraetere 1995 and references therein). Drawing on this distinction, I take telicity to refer to a potential endpoint encoded in the event building part of the clause, namely the vP/VP complex of the clause. This endpoint may be inherent in the verb itself, or it may be encoded by some other linguistic element in the vP/VP. The notion of boundedness is reserved

8In Ramchand’s system the vP/VP complex corresponds to the initP or the procP depending on whether there is an initP or not. I will refer to this part of the clause as the vP/VP complex, since it is a more well known and more transparent term.
to actual temporal boundedness, i.e., it is a notion which concerns the viewpoint aspect of an event. Boundedness is encoded higher up in the structure.

(50) Definitions of telicity and boundedness:

a. **Telicity**: the existence of a potential endpoint or final state, which is encoded or arises in the event building part of the clause. Part of situation aspect/aktionsart.

b. **Boundedness**: actual temporal boundedness. Part of viewpoint aspect.

According to Depraetere (1995), telic as well as atelic events may be either bounded or unbounded. In (51) we see that an event expressed by a telic predicate may get either a bounded reading, as in (51a), or an unbounded reading, as in (51b). The unbounded reading in (51b) comes from the progressive form of the verb, which prevents reference to the attainment of a final state.

(51) a. John opened the parcel. (telic bounded)

b. John was opening the parcel. (telic unbounded)

(Depraetere, 1995:5)

In (52) we see that an event expressed by an atelic predicate may get either an unbounded reading, as in (52a), or a bounded reading, as in (52b).

(52) a. John plays football. (unbounded atelic)

b. John has played football. (bounded atelic)

(Depraetere, 1995:13)

In both cases, the verb *play* is inherently atelic, but the reading in (52b) is bounded, since there is reference to the final point of the
playing event (as a result of the perfect tense). This is possible since atelic events have arbitrary endpoints, i.e., endpoints which are not specified by the verb itself.

My definition of telicity builds on Depraetere (1995), who defines telicity as the existence of a potential, inherent endpoint. According to my definition, the endpoint does not have to be inherent in the verb, but it may be encoded by some other linguistic element in the event building part of the clause. What sets it apart from the notion of boundedness is that telicity is necessarily encoded within the event building part of the clause (the vP/VP). The telic examples in (37) above, repeated below in (53), illustrate that telicity can be an inherent feature of the verb, as in (53a), or not, as in (53b) and (53c), where the telicity is encoded by a DP PATH or arises from our real world knowledge relating to the nature of the scale of change denoted by the verb. In all of the examples in (53), it is encoded in the vP/VP that the events have a potential endpoint, which is why it is a case of telicity rather than boundedness.

(53)

a. John broke the stick. (inherent: verb tagged with [res])

b. John walked the trail. (encoded by bounded DP PATH)

c. Karena melted the chocolate in the pan. (telicity arises from real world knowledge)

But see Dahl (1981) for a different account, where an atelic event (a situation without property T in Dahl’s terms) is always imperfective (lacks property P in Dahl’s terms). Telic events (events with property T) can be either perfective or imperfective, depending on whether they also have property P. Depraetere (1995) suggests that (un)boundedness in her account is not synonymous with Dahl’s property P. Because nothing in the present work hinges on whether an atelic event can also be bounded, I will not go into details concerning differences between (un)boundedness and the property P.
2.6 Verb classes based on categorial features

In Ramchand (2008)'s model, all dynamic verbs have a [proc] feature, and may or may not also have an [init] and/or a [res] feature. Based on the possible combinations of the three category features [init], [proc] and [res], and the assumption that all dynamic verbs have a [proc] feature, the model thus gives us four major natural classes of dynamic verbs: (1) [init, proc] verbs, (2) [proc] verbs, (3) [init, proc, res] verbs, and (4) [proc, res] verbs. Some of these classes are subdivided into subclasses depending on transitivity, kinds of participants, and whether or
2.6. Verb classes based on categorial features

not a participant has multiple roles. The verb classes and subclasses are listed in (57), where co-indexation is used to indicate that the same participant carries multiple participant roles.

(57) Verb classes:

1. [init, proc] verbs
   (a) *Push*-class
   Lexical entry: [init, proc]
   Transitive: INITIATOR, UNDERGOER
   \(John_{\text{INITIATOR}}\) pushed the cart_{\text{UNDERGOER}}
   (b) *Read*-class\(^{10}\)
   Lexical entry: [init\(_i\), proc\(_i\)]
   Transitive: INITIATOR\(_i\), UNDERGOER\(_i\), PATH
   \(John_{\text{INITIATOR}\(_i\), \text{UNDERGOER}\(_i\)}\) read the book_{\text{PATH}}
   (c) *Run*-class
   Lexical entry: [init\(_i\), proc\(_i\)]
   Intransitive: INITIATOR\(_i\), UNDERGOER\(_i\)
   \(John_{\text{INITIATOR}\(_i\), \text{UNDERGOER}\(_i\)}\) ran

2. [proc] verbs
   *Roll*-class
   Lexical entry: [proc]
   Intransitive: UNDERGOER
   The ball_{\text{UNDERGOER}} rolled

\(^{10}\)Read belongs to this class when it is transitive. When it is intransitive, it belongs to the run-class. The read-class consists of verbs with the same feature specification as those in the run-class ([init\(_i\), proc\(_i\)]), but they form a separate subclass when they are constructed with a PATH object, such as the book.
2.6. Verb classes based on categorial features and aspectual properties. Before that, it is important to note that verbs may be vague between subclasses. For example, the verb eat may belong to either the run-class (class 1c) or to the read-class (class 1b). The verb eat has the lexical entry shown in (58), but since it may occur in intransitive as well as transitive structures, it may belong to either the run-class or to the read-class. The difference between the run-class and the read-class is that the latter is constructed with a path object, such as the DP an apple in (58b).

(58) Lexical entry for eat:

a. John ate. (1c: Run-class. Lexical entry: [init, proc])

b. John ate an apple. (1b: Read-class. Lexical entry: [init, proc])

In both (58a) and (58b), the subject John has multiple roles: initiator and undergoer. In (58b) the internal argument an apple is a DP path in the complement of proc.

Another example of a verb which is vague between two subclasses is the creation verb paint, which may belong to the push-class (class 1a) or the read-class (class 1b):

(59) a. John painted the house. (1a: Push-class. Lexical entry: [init, proc])

b. John painted a picture. (1b: Read-class. Lexical entry: [init, proc])

In (59a), the internal argument the house carries the role of undergoer, while in (59b), the internal argument a picture is a DP path.

For more on the classification of creation and consumption verbs, see Ramchand (2008:68-70).

Finally, Ramchand (2008:79-81) assumes that verbs such as jump, hiccup and trip, often referred to as semelfactives, are ambiguous.

In the following subsections the classes and subclasses in (57) are presented in more detail with regard to their syntactic characterist-

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11It is not clear to me how this structure is analysed in terms of participant roles. As it is not relevant for the present work, I have chosen not to specify participant roles for this structure.
ics and aspectual properties. Before that, it is important to note that verbs may be vague between subclasses. For example, the verb *eat* may belong to either the *run*-class (class 1c) or to the *read*-class (class 1b). The verb *eat* has the lexical entry shown in (58), but since it may occur in intransitive as well as transitive structures, it may belong to either the *run*-class or to the *read*-class. The difference between the *run*-class and the *read*-class is that the latter is constructed with a path object, such as the DP *an apple* in (58b).

(58) Lexical entry for *eat*: \([\text{init}_i, \text{proc}_i]\)

a. John ate. (1c: *Run*-class. Lexical entry: \([\text{init}_i, \text{proc}_i]\))

b. John ate an apple. (1b: *Read*-class. Lexical entry: \([\text{init}_i, \text{proc}_i]\))

In both (58a) and (58b), the subject *John* has multiple roles: INITIATOR and UNDERGOER. In (58b) the internal argument *an apple* is a DP PATH in the complement of procP.

Another example of a verb which is vague between two subclasses is the creation verb *paint*, which may belong to the *push*-class (class 1a) or the *read*-class (class 1b):

(59) a. John painted the house. (1a: *Push*-class. Lexical entry: \([\text{init}, \text{proc}]\))

b. John painted a picture. (1b: *Read*-class. Lexical entry: \([\text{init}_i, \text{proc}_i]\))

In (59a), the internal argument the house carries the role of UNDERGOER, while in (59b), the internal argument a picture is a DP PATH. For more on the classification of creation and consumption verbs, see Ramchand (2008:68-70).

Finally, Ramchand (2008:79-81) assumes that verbs such as *jump*, *hiccup* and *trip*, often referred to as semelfactives, are ambiguous.
between two verb classes: the run-class ([init\textsubscript{i}, proc\textsubscript{i}]) and the arrive-class ([init\textsubscript{i}, proc\textsubscript{i}, res\textsubscript{i}]). This ambiguity is especially noteworthy, since it assumes that two different lexical entries are possible for semelfactive verbs: either with or without a \[res\] feature. In the previous two cases, eat and paint, the lexical entry is (probably) the same, at least in terms of categorial features. The difference lies in the transitivity or the co-indexation of the participants of the verbs. Because of this special status of semelfactive verbs, they are discussed in more detail in section 2.6.3.

2.6.1 Verbs without a \[res\] feature

Two of the four major classes presented in (57) above lack a \[res\] feature: the class of [init, proc] verbs and the class of [proc] verbs. The first of these consists of three subclasses: (a) the push-class, (b) the read-class, and (c) the run-class. The second class consists of one class only: the roll-class. In this section, the four classes without a \[res\] feature are presented, paying attention to their syntactic characteristics, notated in their lexical specification in terms of categorial features, and their aspectual properties, which are derived from the categorial features. To show that verbs belonging to different classes have different aspectual properties, some of the tests introduced in section 2.5.4 above, such as the \textit{in x time} test, are used. When applicable, parallels are drawn to the Vendlerian classes of dynamic verbs; \textit{activities}, \textit{accomplishments} and \textit{achievements}.

The first subclass is the push-class, consisting of transitive verbs with an \textsc{undergoer} object. A typical verb is \textit{push}, illustrated in (60):
2.6. Verb classes based on categorial features

(60) 1a: *Push-class
Lexical entry: [init, proc]
Transitive: INITIATOR, UNDERGOER
John_{INITIATOR} pushed the cart_{UNDERGOER}.

The push-class consists of verbs belonging to Vendler’s class of activities, denoting dynamic, durative and atelic events. In section 2.5.4, the in x time test was introduced as a test for telicity. According to this test, only events with an endpoint allow for modification with in x time. The atelicity of the event in (61) is shown by the fact that it resist modification with in x time:

(61) * John pushed the cart in 30 minutes.
(1a: push-class. Lexical entry: [init, proc])

We also saw in section 2.5.4 that telicity can be encoded by other elements in the context and not just by a res subevent. This means that verbs without a [res] feature may also participate in structures which denote telic events. This is typical for verbs belonging to the second subclass, the read-class, illustrated by read the book in (62). Such predicates correspond to Vendler’s class of accomplishments, and I will sometimes refer to them as accomplishments with DP PATH.

(62) 1b: *Read-class.
Lexical entry: [init, proc]
Constructed with DP PATH
Mary_{INITIATOR, UNDERGOER} read the book_{PATH}.

The telicity of these predicates is illustrated in (63) by the ability to take in x time modification:

(63) Mary read the book in an hour.
The telic reading of the event in (63) stems from a quantized DP object, which Ramchand refers to as a bounded DP path (Ramchand, 2008:36, 65-66). Verbs in the read-class all take path objects. This way they differ from the transitive verbs in the push-class above, whose objects are undergoers. The read-class verbs have the same feature setup as verbs in the third subclass, the run-class, namely [initi, proc], and verbs in the read-class also have an intransitive version, belonging to the run-class. Example (58) above illustrated this point with the verb eat, and the same point is illustrated for the verb read in (64):

(64) a. Mary could read all day. (1c: run-class)
b. Mary read the book. (1b: read-class)

It was also mentioned above that creation verbs such as paint can occur either with a path object or with an undergoer object. It is not entirely clear how this is accounted for in Ramchand’s model. For example, one may wonder if there are two different lexical entries for paint, one where the [init] and the [proc] feature are co-indexed, and one where they are not. Without committing myself to either analysis, I will assume that predicates such as paint can occur with two different kinds of object, and thus be seen as belonging to two different verb classes. Also, I will assume that a consumption verb such as read behaves in the same way as paint, that is, the object in read the book can be seen as either a path or an undergoer. In the latter case, the object the book does not measure out the reading event, but it simply specifies what kind of reading event it is, namely that of reading books rather than reading something else, such as newspapers or scientific reports (see also Smith 1997:115 for a similar idea). When the object is an undergoer object, the reading is atelic and readily allows for modification by for x time, illustrated in (65):

(65) Mary \textit{(initiator)} read the book \textit{(undergoer)} for an hour.
The verb class identified here, labelled the *read*-class, consists of verbs such as *read* and *paint* when they are constructed with a *path* object. When they are constructed with an *undergoer* object, they belong to the *push*-class, and when they are intransitive, they belong to the *run*-class.

The third subclass is, as already mentioned, the *run*-class. Verbs in this class are intransitive, and the subject carries multiple roles: *initiator* and *undergoer*. The prototypical verb is *run*, illustrated in (66):

\[
\text{(66) 1c: Run-class} \nonumber \\
\text{Lexical entry: } [\text{init}_i, \text{proc}_i] \\
\text{Intransitive: } \text{INITIATOR}_i, \text{UNDERGOER}_i \\
\text{John}_{(\text{INITIATOR, UNDERGOER})} \text{ ran.}
\]

Verbs in the *run*-class are *activities*, and denote dynamic, durative and atelic events, illustrated by the *in x time* test in (67):

\[
\text{(67) * John ran in an hour.} \\
(1c: \text{run-class. Lexical entry: } [\text{init}_i, \text{proc}_i])
\]

The final verb class, the *roll* class, illustrated in (68), consists of verbs with only a *proc* feature.

\[
\text{(68) 2: Roll-class} \nonumber \\
\text{Lexical entry: } [\text{proc}] \\
\text{Intransitive: } \text{UNDERGOER} \\
\text{The ball}_{(\text{UNDERGOER})} \text{ rolled.}
\]

According to Ramchand (2008), some predicates in verb class (2) (the *roll*-class) get a telic interpretation as a result of our real world knowledge. In the literature, such predicates are often referred to as *degree achievement*. 
Both examples in (69) involve events of change along a bounded scale, the end of which is not necessarily reached. The butter in (69a) may melt to a certain extent, or it may melt completely, and similarly, the soup in (69b) may become cooler or become completely cool (Rothstein, 2008b:17). This means that the events may be interpreted as either telic or atelic.

Verbs in this class are intransitive, with an UNDERGOER subject, but they often allow for a causative alternation. This is illustrated in (70), where in (70a), there is no causing or initiating subevent, only a process, and in (70b), a causing subevent has been added.

(70) 2: Roll-class
Lexical entry: [proc]
   a. The ball rolled.
   b. Karena rolled the ball.

In both (70a) and (70b), the DP the ball has the participant role of UNDERGOER, although it is the subject in (70a) and the object in (70b). In (70b), the subject DP Karena is interpreted as the initiator of the event, and is analysed as residing in the specifier position of a default null init head in the syntax. Rather than assuming that a verb such as roll is in fact [init, proc], and that in a case like (70a), the subject DP is also an INITIATOR, Ramchand assumes that causativazation is a general process in English, and that there is a default null init head in the structure. If this head is not filled by an init verb, as in the case of roll in (70), which does not have an [init] feature, it may still
host an INITIATOR participant in its specifier position, as in (70b). By assuming that roll lacks an [init] feature, it is possible to avoid having to argue that the ball in (70a) is somehow responsible for the causation or initiation of the rolling event. The structure of (70b) is illustrated in (71a). Here, the init head is empty, but there is nevertheless an INITIATOR in its specifier. In (71b), where there is no initiating subevent, the initP is not projected at all. The subject referent the ball is the UNDERGOER of the rolling event.

\[(71)\]

a. Karena rolled the ball (2. Roll-class. Lexical entry: [proc])

\[
\text{initP} \\
Karena \\
\text{init} \\
\phi_{\text{cause}} \\
\text{the ball} \\
\text{procP} \\
\text{proc} \\
\text{rolled} \]

b. The ball rolled. (2. Roll-class. Lexical entry: [proc])

\[
\text{procP} \\
\text{the ball} \\
\text{proc} \\
\text{rolled} \]

(Cf. Ramchand 2008:86-87)

By assuming that verbs which lack an [init] feature may still sometimes allow for an INITIATOR participant, it is possible to account for the fact that some verbs resist the kind of transitive alternations seen in (70) and (71) above. Only verbs which lack an [init] feature allow for such alternations. The examples in (72) and (73) show that verbs such as run and arrive, which contain an init component, do not causativize:
2.6. Verb classes based on categorial features

to in the PP to the store. This means that I assume different syntactic structures for predicates whose telicity stems from a bounded DP path and those whose telicity stems from a bounded PP path. In the former case, illustrated in (75a), the quantized DP object the book has the participant role of path and associates with the complement position of proc P, while in the latter case, illustrated in (75b), the PP to the store projects a res P.

(75)
a. Mary read the book. (1b: Read-class)

\[\text{initP} Mary \text{init} \text{read} \text{procP} < \text{Mary} > \text{proc} < \text{read} > \text{DP} \text{the book}\]

I will not go into detail concerning the internal structure of the PP, but the structure proposed in Ramchand (2008) is that the preposition to occupies both the head of res P and the head of the following PlaceP. For more on this, see Ramchand (2008:117-121).

This gives us a good test for whether an intransitive verb contains an [init] feature or not: if the verb allows for causativization, as in the case of melt in (70) above, it does not have an [init] feature. If the verb does not allow for causativization, as in the case of run and arrive in (72) and (73) above, then it has an [init] feature.

Before moving on to the verb classes with a [res] feature, it needs to be pointed out that some verbs in the push-class and the run-class are able to participate in structures denoting telic events. When a verb from the push-class or the run-class is modified by a PP denoting a bounded path, such as to the end of the garden, the event gets a telic interpretation. As we saw in section 2.5.4, modification by a bounded PP path is a possible source of telicity in Ramchand’s system. In (74) the PP to the store denotes a scale with an endpoint, i.e., a bounded scale, along which the subject referent travels. Again, the in x time test shows us that these events are telic:

(74) a. 1a: Push-class

Lexical entry: [init, proc]
John pushed the cart to the store in an hour.

b. 1c: Run-class

Lexical entry: [init_i, proc_i]
John ran to the store in an hour.

Ramchand (2008) suggests that the preposition to heads its own resPs. I will build on that idea and assume that the result subevent in the examples in (74) above comes from a [res] feature on the preposition

48
to in the PP to the store. This means that I assume different syntactic structures for predicates whose telicity stems from a bounded DP path and those whose telicity stems from a bounded PP path. In the former case, illustrated in (75a), the quantized DP object the book has the participant role of PATH and associates with the complement position of procP, while in the latter case, illustrated in (75b), the PP to the store projects a resP.\textsuperscript{12}

(75)  
\begin{itemize}
  \item a. Mary read the book. (1b: Read-class)
  \end{itemize}

\textsuperscript{12}I will not go into detail concerning the internal structure of the PP, but the structure proposed in Ramchand (2008) is that the preposition to occupies both the head of resP and the head of the following PlaceP. For more on this, see Ramchand (2008:117-121).
b. John ran to the store. (1c: Run-class)

\[
\text{\(\text{initP}\)}
\]
\[
\quad \text{\(\text{John}\)}
\]
\[
\text{\(\text{init}\) ran}
\]
\[
\text{\(<\text{John}>\) procP}
\]
\[
\quad \text{\(\text{proc}\) \(<\text{ran}>\) resP}
\]
\[
\quad \text{\(\text{res}\) \(<\text{John}>\) PP to the store}
\]

Note that both (75a) and (75b) denote telic events although neither verb is inherently telic. In each case, the element which encodes telicity (the DP the book and the PP to the store respectively) occurs within the vP/VP\textsuperscript{13} complex of the clause, i.e., in both cases the interpretation that a final state is attained is a result of situation aspect.

Within the push-class and the run-class I will make a further distinction between cases when the verb occurs with a PP with [res] and cases when it does not. The examples in (76) and (77) illustrate that push and run may occur in structures with or without modification with a PP with [res].

(76) 1a: Push-class

Lexical entry: [init, proc]

a. Without PP [res]

Lexical entry: [init, proc]

John pushed the cart.

\textsuperscript{13}Recall that the vP/VP complex corresponds to the initP/procP complex in Ramchand’s model.
2.6. Verb classes based on categorial features

b. With PP [res]
   Lexical entry for *push*: [init, proc]
   Lexical entry for *to*: [res]
   John pushed the cart to the store.

(77) 1c: *Run*-class
   Lexical entry: [init, proc]
   a. Without PP [res]
      John ran.
   b. With PP [res]
      Lexical entry for *run*: [init, proc]
      Lexical entry for *to*: [res]
      John ran to the store.

The constructions with a PP with a [res] feature in (76b) and (77b) do not really constitute separate subclasses, since the verbs have the same lexical entries as those in the *push*-class and the *run*-class respectively. I will nevertheless distinguish combinations of lexical items belonging to the *push*-class or the *run*-class and the lexical item *to* as separate subclasses for ease of reference. As we proceed we will see that the presence of a [res] feature has bearing on the aspectual interpretation of an event in the complement of *keep*, irrespective of whether the [res] feature is in the lexical specification of the verb itself or in the lexical specification of the preposition *to*. Verb class number 5, illustrated in (78), consists of combinations of verbs without a [res] feature and the lexical item *to*, which is tagged with a [res] feature. Note that this is not really a verb class, only a group of combinations which is useful to be able to refer to in my analysis. Note also that predicates belonging to this class are predicates which are often referred to as

\[14\text{[res] is not the only feature in the lexical entry for *to*, but the only feature which is relevant here.}\]
accomplishments (e.g. Smith 1997). I will sometimes refer to them as accomplishments with PP [res].

(78) 5. Combinations of verbs without [res] and to [res]
   (a) *Push + to-class*
   Lexical entry for *push*: [init, proc]
   Lexical entry for *to*: [res]
   John pushed the cart to the store.
   (b) *Run + to-class*
   Lexical entry for *run*: [init, proc]_
   Lexical entry for *to*: [res]
   John ran to the store.

2.6.2 Verbs with a [res] feature
The remaining two major verb classes presented in (57) above have a [res] feature: the class of [init, proc, res] verbs and the class of [proc, res] verbs. A verb with a [res] feature in its lexical specification projects a resP, and thus the event is interpreted as having a result subevent. The event is interpreted as telic - recall that a result subevent is a source of telicity in Ramchand’s system. Verbs with a [res] feature correspond to Vendler’s class of achievements.

The [init, proc, res] class consists of four subclasses: (a) the *defuse*-class, (b) the *enter*-class, (c) the *arrive*-class, and (d) the *give*-class, illustrated in (79). The first subclass, the *defuse*-class, consists of transitive verbs with UNDERGOER-RESULTEE objects, illustrated in (79a). The second subclass is the *enter*-class, which also consists of transitive verbs, but where the object is not an UNDERGOER-RESULTEE, but a RESULT-RHEME. The *enter*-class is illustrated in (79b), where the subject DP *John* carries all three roles INITIATOR, UNDERGOER, and RESULTEE. The third subclass is the *arrive*-class, which consists of
intransitive verbs, and where the subject carries all three roles, illustrated in (79c). Finally, the fourth subclass, the give-class, consists of ditransitive verbs, illustrated in (79d).

(79) 3. [init, proc, res] verbs

a. Defuse-class
Lexical entry: [init, proc, res]
Transitive (the object is an UNDERGOER/RESULTEE)
John_{(INITIATOR)} defused the bomb_{(UNDERGOER, RESULTEE)}.

b. Enter-class
Lexical entry: [init, proc, res]
Transitive (the object is a RESULT-RHEME)
John_{(INITIATOR, UNDERGOER, RESULTEE)} entered the room_{(RESULT-RHEME)}.

c. Arrive-class
Lexical entry: [init, proc, res]
Intransitive
John_{(INITIATOR, UNDERGOER, RESULTEE)} arrived^{15}.

d. Give-class
Lexical entry: [init, proc, res]
Ditransitive
John gave Mary a book.

What the verbs in (79) have in common is that there is an INITIATOR, John, who causes or initiates the event in the procP, and that there is a result state. They differ in terms of the participants in the process and

^{15}Ramchand points out that arrive is often considered an unaccusative verb. Unaccusative verbs in this system do not have an initiation component (verbs such as melt or break which allow for causative-inchoative alternation). Since arrive does not allow for causativatization, Ramchand analyzes it as having an [init] feature (Ramchand, 2008:78-79).
result subevents: in (79a), the object the bomb is both UNDERGOER and RESULTEE, in (79b), the subject John carries all three roles of INITIATOR, UNDERGOER and RESULTEE, while the object the room is a RHEME. In (79c), the subject John carries all three roles, i.e., he is the UNDERGOER and RESULTEE as well as the INITIATOR, but there is no RHEME object. Finally, in (79d), Mary is the RESULTEE, and the book is analysed as being in the complement position of resP\textsuperscript{16} (Ramchand, 2008:74-79, 103-104).

The final class is the break-class, consisting of [proc, res] verbs. Similarly to the [proc] verbs which were presented in section 2.6.1, [proc, res] verbs may occur in either intransitive or transitive structures. This is illustrated in (80), where (80a) exemplifies an event where there is no causing or initiating subevent, only a process and a result, and (80b) exemplifies an event where there is also a causing subevent.

(80) 4. Break-class
Lexical entry: \([\text{proc}_i, \text{res}_i]\)
    a. The vase\textsubscript{(UNDERGOER, RESULTEE)} broke.
    b. Mary\textsubscript{(INITIATOR)} broke the vase\textsubscript{(UNDERGOER, RESULTEE)}.

For verbs in the break-class, the UNDERGOER and the RESULTEE roles are always carried by the same participant. In the examples in (80), the DP the vase is both UNDERGOER and RESULTEE, irrespective of whether there is also an INITIATOR, as in (80b), or not, as in (80a). In (80b), the INITIATOR Mary is assumed to occupy the specifier position of a default null init head in the syntax. The idea of a default null init head was introduced in section 2.6.1.

\textsuperscript{16}It is not entirely clear to me how this structure is analysed, but it is beyond the scope of this thesis. For further information, see Ramchand (2008:100-105).
2.6. Verb classes based on categorial features

2.6.3 Semelfactives

Semelfactive verbs are systematically ambiguous between a reading where a punctual event occurs once, as in (81a), and a reading where a series of punctual events occur over and over again without pause, as in (81b):

(81)  a. Mary jumped (once) when she saw me.
     b. The children jumped (for 10 minutes).

The term *semelfactive* was introduced by Comrie (1976:42) and later used by for example Smith (1997), who argued that semelfactives constitute their own aspectual verb class, alongside the Vendler classes of *states, activities, accomplishments* and *achievements*. The view in the present study is that semelfactives do not constitute their own separate verb class, but are ambiguous between two classes. This view builds on Rothstein (2004, 2008a, 2008b) and Ramchand (2008).

2.6.3.1 Semelfactives according to Rothstein (2004, 2008a, 2008b)

Contrary to Smith (1997), Rothstein (2004) argues that semelfactives do not constitute their own verb class. Instead, the view in Rothstein (2004) is that semelfactive verbs are specific uses of predicates which traditionally are seen as activities: “Semelfactive verbs, or semelfactive uses of verbs, are verbal predicates used to denote single instances of events usually considered to be activities.” (Rothstein, 2004:184) A predicate such as *jump* can occur with both *for x time*, as in (82a), where *jump* denotes an extended event, or with *at x time*, as in (82b), where *jump* denotes one single punctual event.
2.6. Verb classes based on categorial features

The activity reading of a semelfactive predicate is seen as the result of a semantic operation referred to as S-summing or singular summing (Rothstein, 2008a:3). S-summing “sums activity events in P with no temporal gap between them, and forms a new singular event out of this sum, which is also in P.” (Rothstein, 2008a:3) The S-summing operation has two constraints: the events which are to be S-summed have to be temporally adjacent and they have to involve the same participants (Tungseth, 2008:134).

In practice, the temporal adjacency constraint means that the events which are to be summed with S-summing need to have identical starting points and endpoints. Rothstein (2008a:3) exemplifies how the operation works with the activity predicate run: one running event from 9 o’clock until 10 o’clock and one running event from 10 o’clock until 11 o’clock can be S-summed into one single running event from 9 o’clock until 11 o’clock (example from Rothstein 2008a:3). In the case of semelfactives, the S-summing operation takes a series of punctual jumping events and S-sums them into a single event of an extended jumping activity.

A crucial difference between an activity and an activity reading of a semelfactive predicate (or however you choose to define this) is that while the latter can be divided into minimal subevents corresponding to the semelfactive reading (each individual jumping event), the former cannot. Although you may argue that a running event consists of smaller parts, such as the movement of your legs in a certain way, it is not possible to divide a running event into minimal parts each of 17 length.

While Smith (1997) sees semelfactives as denoting atelic events, Rothstein (2004) claims that they are in fact telic. She gives the examples in (83) to argue this point:

(83) a. John was laughing when he saw me, so he turned it into a cough (and didn’t laugh). (Rothstein, 2004:184)
   b. Mary was winking at her friend when the teacher shouted at her (so she turned the wink into a grimace instead). (Rothstein, 2004:184)
   c. John jumped in three seconds. (Rothstein, 2004:185)
   d. The bird flapped its wings in an instant. (Rothstein, 2004:185)

Firstly, the examples in (83a) and (83b) show that semelfactives invoke the imperative paradox, i.e., when a semelfactive occurs in the progressive, we may get a reading where the event is not completed. This is an argument in favour of seeing semelfactives as telic. Secondly, the examples in (83c) and (83d) show that semelfactives allow for modification with in x time, which is a standard test for telicity. (See also Rothstein 2008a:5-6.)

It is important to point out that although semelfactives are telic, they do not denote a change from ¬φ to φ (not φ to φ). They are considered to be telic because they denote events with a clear endpoint, although reaching that endpoint does not denote a change from ¬φ to φ. In Rothstein’s view, telicity is defined in terms of atomicity and countability (see e.g. Rothstein 2004:157-182, Rothstein 2008a, Rothstein 2008b).

56
The activity reading of a semelfactive predicate is seen as the result of a semantic operation referred to as *S-summing* or *singular summing* (Rothstein, 2008a:3). S-summing “sums activity events in P with no temporal gap between them, and forms a new singular event out of this sum, which is also in P.” (Rothstein, 2008a:3) The S-summing operation has two constraints: the events which are to be S-summed have to be temporally adjacent and they have to involve the same participants (Tungseth, 2008:134). In practice, the temporal adjacency constraint means that the events which are to be summed with S-summing need to have identical starting points and endpoints. Rothstein (2008a:3) exemplifies how the operation works with the activity predicate *run*: one running event from 9 o’clock until 10 o’clock and one running event from 10 o’clock until 11 o’clock can be S-summed into one single running event from 9 o’clock until 11 o’clock (example from Rothstein 2008a:3). In the case of semelfactives, the S-summing operation takes a series of punctual jumping events and S-sums them into a single event of an extended jumping activity.

A crucial difference between an activity and an activity reading of a semelfactive predicate (or however you choose to define this) is that while the latter can be divided into minimal subevents corresponding to the semelfactive reading (each individual jumping event), the former cannot. Although you may argue that a running event consists of smaller parts, such as the movement of your legs in a certain way, it is not possible to divide a running event into minimal parts each of

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17 Rothstein (2008a) talks about *temporal overlap* while Tungseth (2008:150) talks about *temporal adjacency* (“singular events can be concatenated under *S-summing* to form a new singular event if they are temporally adjacent (not overlapping) and share the same participants.”). I assume that they mean the same thing. Rothstein (2008a:3) gives the example of two adjacent running events (from 9-10 and from 10-11) mentioned here, and says that they “overlap temporally”. I will use *temporal adjacency*. 

57
which also denotes a running event. This characteristic is referred to as *atomicity* (or *natural atomic function*) (Rothstein, 2004:186).

- **Semelfactives:**
  - Telic
  - Do not denote a change from \( \neg \phi \) to \( \phi \)
  - Natural atomicity
- **S-summing:**
  - Restricted to events which are temporally adjacent
  - Restricted to events which share the same participants

### 2.6.3.2 Semelfactives according to Ramchand (2008)

Ramchand (2008) follows Rothstein (2004) and argues that semelfactives should not be treated as constituting a separate aspectual verb class. In Ramchand (2008), semelfactives are ambiguous between verb class (1c), the *run*-class, and verb class (3c), the *arrive* class.

The single-occurrence use of a semelfactive is represented by the *arrive*-class. The *arrive*-class consists of intransitive and punctual verbs with the features \([\text{init}_i, \text{proc}_i, \text{res}_i]\). In (84), the subject referent is INITIATOR, UNDERGOER and RESULTEE, and the reading is that of one punctual jumping event. Ramchand argues that semelfactives denote a result state (and thus project a resP) by showing that a locative PP (such as *in the lake* in (84) below) may “get a result interpretation” (but see Tungseth 2008 for a different account).
2.6. Verb classes based on categorial features

(84) Katherine jumped in the lake.

\[
\begin{array}{ccc}
\text{initP} & \text{procP} & \text{resP} \\
\text{Katherine} & \text{jumped} & \text{in the lake} \\
\end{array}
\]

(Ramchand, 2008:80)

The extended activity reading of a semelfactive predicate is represented by the \textit{run}-class. The \textit{run}-class consists of intransitive, dynamic, durative and atelic predicates, with the features \([\text{init}_i, \text{proc}_i]\). When a semelfactive verb belongs to this class, i.e., when it is tagged with the features \([\text{init}_i, \text{proc}_i]\), the reading is that of a dynamic, durative and atelic event. In the case of \textit{jump}, the \([\text{init}_i, \text{proc}_i]\)-reading is that of a jumping activity. The example in (85) denotes an activity consisting of a series of jumping subevents.
2.6. Verb classes based on categorial features

Therefore she rejects the idea that the activity reading of a semelfactive "is a result of S-summing which is effected by a higher aspectual operator outside the first phase." (Ramchand, 2008:81) Instead, semelfactives are assumed to be tagged as ambiguous between [init, proc, res] and [init, proc] in their lexical entries.

2.6.4 Stative verbs

So far, only dynamic verb classes have been discussed. Stative verbs do not have a proc element, and thus cannot have an undergoer object. The assumption is that stative verbs consist only of an initiation projection. This init P is not interpreted as causational (since there is no proc P), but simply as a state. In (87), the internal argument nightmares is analysed as a rheme, which resides in the complement of init P, and not as an undergoer. The subject, Katherine, is interpreted as the holder of the state. (Ramchand, 2008:55)

(87) initP
    Katherine
    init
    jumped
    procP
    <Katherine>
    proc
    <jumped>
    (XP)
    (into the field)

(Ramchand, 2008:82)

Note that one important difference between (84) and (85) is that the former denotes a transition while the latter denotes a process (Ramchand, 2008:81). Recall from the previous section that Rothstein (2004) argues that the durative, activity reading of a semelfactive involves a semantic operation called S-summing, which allows for several individual punctual events to join together and form one larger event. Only events whose starting points and endpoints are identical allow for S-summing. This is because in order for the S-summing operation to work, the joined events need to be “S-summed ‘seamlessly’ without any temporal or spatial gaps.” (Ramchand, 2008:80) This is what sets semelfactives apart from other kinds of iterations, such as habituals, as in (86a), or “iteratives proper” (Ramchand, 2008:81), as in (86b), where there are often considerable gaps between the iterated events:

(86) a. John would go swimming each Sunday for years.
    b. Jane kept forgetting my name.

Ramchand proposes that “genuine iterativity”, as in (86b) above, is the result of “an aspectual head outside the first phase proper”, and argues that it is an advantage to propose two different analyses for semel-
factives and “iteratives proper”. Therefore she rejects the idea that the activity reading of a semelfactive “is a result of S-summing which is effected by a higher aspectual operator outside the first phase.” (Ramchand, 2008:81) Instead, semelfactives are assumed to be tagged as ambiguous between [init, proc, res] and [init, proc] in their lexical entries.¹⁸

2.6.4 Stative verbs

So far, only dynamic verb classes have been discussed. Stative verbs do not have a proc element, and thus cannot have an UNDERGOER object. The assumption is that stative verbs consist only of an initiation projection. This initP is not interpreted as causational (since there is no procP), but simply as a state. In (87), the internal argument nightmares is analysed as a RHEME, which resides in the complement of initP, and not as an UNDERGOER. The subject, Katherine, is interpreted as the holder of the state. (Ramchand, 2008:55)

18But see Tungseth (2008:154, 172) for a different view, where the flexibility in interpretation of semelfactive predicates results from different syntactic structures. Contrary to Ramchand (2008), Tungseth (2008) assumes that there is an S-summing operator represented by an aspectual head (Asp_{−sum}) outside the first phase. Structures with this S-summing operator give rise to the activity interpretation, while structures without it give rise to the single-occurrence interpretation (Tungseth, 2008:154, 172).
2.6.5 Summary verb classes

To sum up, the different verb classes are presented in (88). Note that the summary includes classes (5) and (6), which are not really separate classes. At the end, stative verbs are included as a separate class (7).

(88) Verb classes:

1. [init, proc] verbs
   (a) Push-class
      Lexical entry: [init, proc]
      Transitive: INITIATOR, UNDERGOER
      *John pushed the cart.*
   (b) Read-class
      Lexical entry: [init, proc]
      Transitive: INITIATOR, UNDERGOER, PATH
      *John read the book.*
   (c) Run-class
      Lexical entry: [init, proc]
      Intransitive: INITIATOR, UNDERGOER
      *John ran.*

2. [proc] verbs
   Roll-class
   Lexical entry: [proc]
   Intransitive: UNDERGOER
   *The ball rolled.*

3. [init, proc, res] verbs
   (a) Defuse-class
      Lexical entry: [init, proc, res]
      Transitive: INITIATOR, UNDERGOER, RESULTEE
      *Mary defused the bomb.*


2.6. Verb classes based on categorial features

(b) *Enter*-class
Lexical entry: \([\text{init}_i, \text{proc}_i, \text{res}_i]\)
Transitive: \(\text{INITIATOR}_i, \text{UNDERGOER}_i, \text{RESULT-RHEME}\)
Mary entered the room.

(c) *Arrive*-class
Lexical entry: \([\text{init}_i, \text{proc}_i, \text{res}_i]\)
Intransitive: \(\text{INITIATOR}_i, \text{UNDERGOER}_i, \text{RESULTEE}_i\)
Mary arrived.

(d) *Give*-class
Lexical entry: \([\text{init}, \text{proc}, \text{res}]\)
Ditransitive: \(\text{INITIATOR}, \text{UNDERGOER}, \text{RESULTEE}\)
Mary gave the dog a bone.

4. \([\text{proc}, \text{res}]\) verbs

*Break*-class
Lexical entry: \([\text{proc}_i, \text{res}_i]\)
Intransitive: \(\text{UNDERGOER}_i, \text{RESULTEE}_i\)
The vase broke.

5. Combinations of verbs without \([\text{res}]\) and \(\text{to [res]}\)

(a) *Push + to*-class
Lexical entry for *push*: \([\text{init}, \text{proc}]\)
Lexical entry for *to*: \([\text{res}]\)
John pushed the cart to the store.

(b) *Run + to*-class
Lexical entry for *run*: \([\text{init}_i, \text{proc}_i]\)
Lexical entry for *to*: \([\text{res}]\)
John ran to the store.

6. Semelfactive verbs

Lexical entry: \([\text{init}_i, \text{proc}_i, \text{res}_i]\)
The children skipped.
7. Stative verbs

Lexical entry: [init]

*Katherine fears nightmares.*

2.6.6 Ramchand’s accomplishments

Ramchand (2008) does not use the term *accomplishment* in her verb classification, but she discusses which of her verb classes correspond to Vendler’s accomplishments. Firstly, within the class of transitive verbs with the features [init] and [proc], there are verbs which may take a bounded DP path as object, for example *read the book*. Secondly, within the same verb class, there are verbs which may occur with a PP with a [res] feature, such as *push the cart to the store*. Finally, within the class of intransitive verbs with the features [init] and [proc], there are verbs which may occur with a PP with a [res] feature, such as *run to the store*. In all of these cases, the bounded path expressed by the DP or the PP measures out the event and makes it telic. The three different kinds of accomplishments are listed in table 2.2.

Table 2.2: Accomplishments in Ramchand’s model

<table>
<thead>
<tr>
<th>Transitivity</th>
<th>Features</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td>[init, proc] + DP path</td>
<td><em>Read the book</em></td>
</tr>
<tr>
<td>Transitive</td>
<td>[init, proc] + PP [res]</td>
<td><em>Push the cart to the store</em></td>
</tr>
<tr>
<td>Intransitive</td>
<td>[init, proc] + PP [res]</td>
<td><em>Run to the store</em></td>
</tr>
</tbody>
</table>

2.7 Durativity and processuality

As we have seen, the *process* feature in Ramchand (2008) does not correspond directly to the feature of durativity. Instead, the presence of a *process* feature indicates *dynamicity*; all dynamic verbs have a
process feature. Durativity is an emergent feature and arises if there is no result feature, meaning that [proc] verbs and [init, proc] verbs are durative, while [proc, res] and [init, proc, res] verbs are punctual. Note specifically that although both accomplishments (89a) and achievements (89b) have a process feature, only accomplishments are durative. This results from the fact that achievements also have a result feature.

(89)  
\begin{enumerate}
\item Read the book [init, proc] + path \quad \text{durative}
\item Enter [init\_i, proc\_i, res\_i] \quad \text{punctual}
\end{enumerate}

So, although both read the book in (89a) and enter in (89b) have a process feature, only read the book has what I will refer to as a process part, that is, a durative part preceding the culmination. Enter only has a transition. As we proceed, we will see that the internal structure of the process part of an event affects how we interpret the event in the context of keep. Therefore, it is important to point out that the presence of a process feature does not actually tell us anything about what the process part of the event looks like. Generalisations about the internal structure of the process part of an event are not considered part of the information which is relevant to the syntax in Ramchand’s model. Instead, such generalisations are considered part of our encyclopaedic knowledge. Nevertheless, as such generalisations seem to be of importance when accounting for the meaning of keep V-ing constructions, I will bring up some important distinctions which can be made regarding the internal structure of the process part of an event.

Many authors have noted that durative events may differ regarding the internal structure of the process part. Christensen (1995) notes that a durative event may consist of smaller parts, or stages, which follow one after the other. Such durative events are said to be process-
Pluractionality with different kinds of event pluralities. The study of the phenomenon of pluractionality, or verbal plurality, goes back to Dressler (1968). The term pluractionality was coined by Newman (1980), who defines pluractionality as "plurality or multiplicity of the verb's action" (Newman, 1990:53-54). This plurality or multiplicity can be manifested in different ways: it could involve an event occurring several times, either at one moment or over time, it could involve several subjects or several objects, or it could involve verbal action occurring in several different places. The kind of pluractionality which is of interest for the present study is that involving an event occurring several times (or, as we shall see, continuing over time), rather than that involving a plurality of referents or places.

In some languages, pluractionality is expressed with morphology on the verb, e.g. in Hausa, there are "simplex/pluractional pairs" such as bug`aa/bubb`ugaa 'beat' (Newman, 1990:90-91). In English, where there is no pluractional morphology, the pluractional variant has to be expressed by periphrastic constructions such as keep on beating or beat over and over again.

An important distinction for my account of keep is that between event-internal and event-external pluractionality (Cusic, 1981). Event-internal pluractionality, illustrated in (90a), involves repetition "within the boundary of one event" (Tovena, 2010:1), while event-external pluractionality, illustrated in (90b), involves repetition of "the same event [\ldots] in a number of different situations" (Bertinetto and Lenci, 2012:852). A similar distinction is made between multiplicative and iterative events in Xrakovskij (1997).

Chapter 2. Theoretical background

sual, and carry the feature processuality. An example of this is chop wood (Christensen, 2010:12). An example of a non-processual event is rule, which consists of a number of different subevents, but which crucially is not dependent on the subevents in order to be happening. Vendler (1967) gives the example that even if the King of Cambodia is sleeping, which is not a necessary subevent of ruling, he is still ruling Cambodia (Vendler 1967:109, Christensen 1995:71). For the present work, the distinction between processual and non-processual events is not of key importance, but what will be important is whether or not an event consists of identical, or at least similar, segments rather than more disparate segments. Rothstein (2012) discusses this in connection with accomplishments, and notes that the process part of an accomplishment may be “characterized by the same kind of activity going on at all times”, or be “constructed from a variety of different kinds of subevents” (Rothstein, 2012:88). The former kind of accomplishment is exemplified by read the book, which consists of a number of subevents which all involve reading, and the latter kind by build a house, which consists of a number of different subevents, such as digging, scaffolding, brick-laying etc. Christensen (1995:70) points out that activities too, and not just accomplishments, differ with regard to the internal structure of the process part. She gives the examples of run and bake, which are both activities, and which both consist of internal stages, meaning that they are both, in Christensen’s terminology, processual. The difference between the two is that run consists of an iteration of identical stages (one step after the other), while bake consists of more disparate subparts, such as mixing the ingredients, kneading the dough, moulding the dough etc. The idea that events can sometimes be perceived as iterations of smaller events is interesting from the point of view of the study of keep. Iteration is sometimes discussed as part of the study of pluractionality, which is concerned
with different kinds of event pluralities.

### 2.8 Pluractionality

The study of the phenomenon of pluractionality, or verbal plurality, goes back to Dressler (1968). The term *pluractionality* was coined by Newman (1980), who defines *pluractionality* as “plurality or multiplicity of the verb’s action” (Newman, 1990:53-54). This plurality or multiplicity can be manifested in different ways: it could involve an event occurring several times, either at one moment or over time, it could involve several subjects or several objects, or it could involve verbal action occurring in several different places. The kind of pluractionality which is of interest for the present study is that involving an event occurring several times (or, as we shall see, continuing over time), rather than that involving a plurality of referents or places.

In some languages, pluractionality is expressed with morphology on the verb, e.g. in Hausa, there are “simplex/plurational pairs” such as *bugàa/bubbugàa ‘beat’* (Newman, 1990:90-91). In English, where there is no pluractional morphology, the pluractional variant has to be expressed by periphrastic constructions such as *keep on beating* or *beat over and over again*.

An important distinction for my account of *keep* is that between *event-internal* and *event-external pluractionality* (Cusic, 1981). Event-internal pluractionality, illustrated in (90a), involves repetition “within the boundary of one event” (Tovena, 2010:1), while event-external pluractionality, illustrated in (90b), involves repetition of “the same event [...] in a number of different situations” (Bertinetto and Lenci, 2012:852). A similar distinction is made between *multiplicative* and *iterative* events in Xrakovskij (1997).
2.8. Pluractionality

Single bounded event [\ldots] is repeated on a single occasion, illustrated in (92a), while an event is occasion-external "if a single bounded event is repeated on several occasions", illustrated in (92b) (Cusic 1981, cited in Cabredo Hofherr 2010:17). Note that occasion-external pluractionality may include instances of habitual aspect. (91) gives you an example of event-internal pluractionality for comparison.

(91) Event-internal

a. The mouse nibbled and nibbled the cheese.

(92) Event-external

a. Occasion-internal: The mouse bit the cheese again and again.

b. Occasion-external: The mouse was always nibbling at the cheese.


Assuming this division into three types of pluractionality, we can say that iterations of achievements are examples of event-external pluractionality. When an achievement iterates, there is a series of telic events, each one including a culmination, which means that it has to be a case of event-external pluractionality (recall that event-internal pluractionality does not allow for enough downtime for an event to culminate). At the same time, a series of achievements may well occur on one occasion, and the downtime may be fairly short. In such cases, it is a case of occasion-internal pluractionality. An example of this is seen in (93a), where an iteration of entering events, each one including a culmination and thus requiring at least some downtime, is yielded. The achievement enter can also occur in iterations which are occasion-external, illustrated in (93b), where the entering events take place on different occasions, in this case on different days.

Event-internal pluractionality involves several contiguous subevents, meaning that there are little or no pauses, or downtime, between the subevents (Henderson, 2012:35). Cross-linguistically, event-external pluractionality is less restrictive than event-internal pluractionality concerning the aspectual properties of the predicate. While event-internal pluractionality is restricted to achievements and semelfactives, event-external pluractionality arises with activities and accomplishments as well as with achievements and semelfactives (Henderson, 2012:35-37).

The idea that iterated achievements yield event-internal pluractionality can perhaps be questioned, as the iteration of a number of telic events would require at least some downtime between each event in that iteration. Henderson also says that the events in an event-internal pluractionality need to be atelic: "each events [sic!] in the event plurality must be so temporally contiguous that there is no time for their result states to hold, blocking their culmination" (Henderson, 2012:103). To be able to account for the kind of pluractionality found with achievements, we need yet another distinction, namely that between occasion-internal and occasion-external pluractionality, which has been suggested by Cusic (1981). Both occasion-internal and occasion-external pluractionality are instances of event-external pluractionality, that is, the kind of pluractionality which allows for downtime between the iterated events. An event is occasion-internal "if a
2.8. Pluractionality

single bounded event [...] is repeated on a single occasion", illustrated in (92a), while an event is occasion-external “if a single bounded event is repeated on several occasions”, illustrated in (92b) (Cusic 1981, cited in Cabredo Hofherr 2010:17). Note that occasion-external pluractionality may include instances of habitual aspect. (91) gives you an example of event-internal pluractionality for comparison.

(91) Event-internal
   a. The mouse nibbled and nibbled the cheese.

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   a. Occasion-internal: The mouse bit the cheese again and again.
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Section 2. Theoretical background

(93)  
a. She kept entering the room again and again without pause.
b. She kept entering the room every day, although I asked her not to.

The split into occasion-internal and occasion-external pluractionality will not be of importance to the account which I will propose for keep V-ing constructions, but it is important to understand the split in order to understand why iterations of achievements are instances of event-external pluractionality rather than event-internal pluractionality.

So far, I have discussed pluractionality in terms of iteration, and it is typical for accounts of pluractionality to involve examples of repeated events. For example, the definition of event-external pluractionality in Bertinetto and Lenci (2012:852) is “the same event repeats itself in a number of different situations”. Van Geenhoven (2005) extends the concept of pluractionality to include also instances of “non-stop continuity” (Van Geenhoven, 2005:107). Her proposal is built on West Greenlandic Eskimo (WG), which expresses continuative, frequentative and gradual aspect by overt markers on the verb, and it also includes English examples which show that the same semantic or aspectual values can be expressed in English too, although not with verbal morphology as in WG. Crucially, van Geenhoven argues that atelicity can be seen as resulting from pluractionality, and she argues that the inherent atelicity of activities as well as the atelicity of the imperfective aspect can be seen as “instances of unbounded pluractionality” (Van Geenhoven, 2005:108). According to Van Geenhoven (2005), the continuative aspect, illustrated in (94), the frequentative

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20 Frequentative corresponds to what I call iterative.
aspect, illustrated in (95), and the gradual aspect, illustrated in (96), result from pluractionality.

(94) Continuative aspect
   a. He kept dancing.
   b. He danced and danced.
   (Van Geenhoven, 2005:109)

(95) Frequentative aspect
   a. John went by once in a while.
   b. John went by again and again.
   (Van Geenhoven, 2005:110)

(96) Gradual aspect
   a. John got bigger and bigger.
   b. The kitchen was gradually becoming a mess.
   (Van Geenhoven, 2005:112)

The examples in (94), Van Geenhoven (2005:109) argues, involve events which are continued nonstop, and both the *keep V-ing* construction and the *V-and-V* coordination are seen as explicit markers of continuity.\(^{21}\) The examples in (95) involve events which are repeated again and again, and the temporal adverbs *once in a while* and *again and again* are seen as explicit markers of frequentative aspect (Van Geenhoven, 2005:110). Finally, the examples in (96) involve events which express increase\(^{22}\), and the *ADJ-er and ADJ-er* coordination and the adverbial *gradually* are seen as explicit markers of gradual aspect (Van

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\(^{21}\)Note, however, that Van Geenhoven (2005) does not take into account that *keep V-ing* as a marker of continuity is restricted to activity predicates, which I will show in chapter 4. I will return to this in section 7.5.

\(^{22}\)Gradual aspect can also express decrease, but these two particular examples both express increase.
2.9 Summary

This chapter has provided the theoretical background of the present study. I assume that there is only one module, the syn-sem computation, that is, there is no separate lexicon module with its own computations (Ramchand, 2008). This means that generalisations regarding event structure, which are of particular interest for the present study, are found within the syntactic component and not within the lexical component. Also, I assume a clear distinction between linguistic and encyclopaedic meaning.

I distinguish between situation aspect, which concerns aspectual properties of situations or events, and viewpoint aspect, which concerns different perspectives on events (Smith, 1997). I also assume a distinction between telicity, which is concerned with potential endpoints, and is part of situation aspect, and boundedness, which concerns actual temporal endpoints, and is part of viewpoint aspect.

The model of event structure in Ramchand (2008) builds on the idea that the verb phrase is decomposed into three separate parts: the initiation part, the process part and the result part. A verb is tagged with one or more of the categorial features [init], [proc] and [res], and it is these features which decide what parts of the verb phrase the verb will associate with in the syntactic tree. The analyses in the present work are based on the model of event structure in Ramchand (2008).
and on the verb classes identifiable by the categorial features assumed in this model.

The idea that events can sometimes be seen as iterations of their internal parts is interesting from the point of view of the study of *keep*. Therefore, the concept of *pluractionality* was presented in this chapter. I argued that the distinction between *event-internal* and *event-external* pluractionality is particularly important for the present work.

Having presented some central concepts and established some important assumptions, we now turn to the construction under study. The next chapter provides an account of previous research on the aspectual verb *keep* in *keep V-ing* structures.
Chapter 3

Previous accounts of the aspectual verb *keep*

The meaning contribution of *keep* has been discussed in the literature, usually in connection with other similar aspectual verbal expressions, such as *continue* or *keep on*, or in relation with the progressive. Sometimes, *keep* is brought up in passing, for example to provide comparison in order to prove a point about another verb, and there is to my knowledge no comprehensive analysis of the meaning contribution of *keep*. In this section, I go through the accounts which bring up *keep*, present their view on the meaning contribution of *keep*, and point out potential problems with these accounts.

3.1 Freed (1979)

An early contribution is Freed (1979), who provides a comprehensive account of aspectual complementation in English. *Keep* is just one of many aspectual verbs that she brings up, and she treats it alongside three other aspectualizers: *continue*, *resume* and *repeat*, although it is...
primarily compared to *continue* (Freed, 1979:88-99). First, it is noted that both *keep* and *continue* take scope over the *nucleus*\(^1\) of the event, and that both create durative readings. To illustrate this, Freed gives the following examples, where (98) is a *consequence*\(^2\) of both (97a) and (97b):

(97) a. Carol kept talking even though we asked her to be quiet.
    b. Carol continued talking even though we asked her to be quiet.

(98) Carol talked for an unspecified amount of time.

Both *keep* and *continue* in (97), Freed (1979) argues, involve the continuation of an event which has already been initiated, but while *continue* always yields such a reading, it is often the case that *keep* yields a reading where the event in the complement clause has not already been initiated. Freed (1979) argues that when the event in the complement clause consists of a *series*, as in (99), only *continue* has to refer to the continuation of an already initiated event. According to Freed (1979), (100) is a *presupposition*\(^3\) of (99b), but not of (99a).

(99) a. Someone kept slamming the door all night.
    b. Someone continued slamming the door all night.

(100) Someone had been slamming the door earlier.

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\(^1\)Freed’s term *nucleus* refers to what I have called the *process part* of an event, see e.g. section 2.7.

\(^2\)Freed’s term *consequence* refers to “information which is conveyed by the speaker and learned by the hearer”. This is contrasted to *presupposition*, which refers to information which is “prior knowledge shared by speaker and hearer” (Freed, 1979:4).

\(^3\)Presupposition refers to information which is “prior knowledge shared by speaker and hearer” (Freed, 1979:4).
3.1. Freed (1979)

Freed (1979:91-92) notes that *continue* behaves differently from *keep* when the complement verb is an accomplishment. When *continue* is followed by an accomplishment, as in (103), then *continue* takes scope over the nucleus of the event, similarly to what she claimed for *keep* when followed by an activity. This means that neither (103b) nor (103c) yields an interpretation where there is a series of reviewing events (Freed, 1979:92). Such a reading, where the aspectualizer takes scope over the nucleus of an accomplishment, is unavailable for *keep*, according to Freed (1979).

(103)

a. Linda continued reviewing articles about Goytisolo.

b. Linda continued reviewing an article about Goytisolo.

c. Linda continued reviewing the article about Goytisolo.

(Freed, 1979)

Finally, Freed (1979) argues that *keep* and *continue* differ in terms of the ability to refer to the continuation of an event which has been interrupted. This is claimed to be impossible for *keep*, marginally possible for *continue V* -ing, and fine with *continue to* -infinitive, illustrated in (104) (Freed, 1979:95):

(104)

a. If they stop now, they won’t continue to work later.

b. *If they stop now, they won’t continue working later.*

c. *If they stop now, they won’t keep working later.*

(Freed, 1979:91)

In (99a), where *keep* is followed by a series, Freed (1979:91) argues that “the initial ‘slamming of the door’ is included as part of the referent of this sentence”, and the reading, or the consequence, in Freed’s terms, is that in (101a) or (101b):

(101)  

a. Someone slammed the door repeatedly all night.

b. The door slammed repeatedly all night.

According to Freed (1979), achievements, as in (99a), as well as accomplishments, as in (102), have to allow for a serial reading in order to be compatible with *keep*. In such cases *keep* takes scope over the entire event and not just the nucleus (Freed, 1979:92). The examples in (102) are from Freed (1979:91), and the argument is that (102a) is fine because the event of reviewing articles is interpreted as a series, (102b) is marginally ok since it allows for a reading where the same article is reviewed again and again, i.e., where there is a series of reviewing events. Finally, (102c) cannot be interpreted as an accomplishment, but only as an activity. As such it is “paraphrasable by Linda kept going over the article about Goytisolo” (Freed, 1979:91).

(102)  

a. Linda kept reviewing articles about Goytisolo.

b. *Linda kept reviewing an article about Goytisolo.*

c. *Linda kept reviewing the article about Goytisolo.*

(Freed, 1979:91)

It is not quite clear to me why the examples in (102b) and (102c) are marked as ungrammatical. Freed (1979) notes that both sentences are fine given that the event in the complement clause has shifted into an activity through iteration. I interpret the ‘?’ and the ‘*’ in (102b) and (102c) as referring to an intended reading where the event in the complement clause is still interpreted as an accomplishment, that is, where there is no iteration.
3.1. Freed (1979)

Freed (1979:91-92) notes that \textit{continue} behaves differently from \textit{keep} when the complement verb is an accomplishment. When \textit{continue} is followed by an accomplishment, as in (103), then \textit{continue} takes scope over the nucleus of the event, similarly to what she claimed for \textit{keep} when followed by an activity. This means that neither (103b) nor (103c) yields an interpretation where there is a series of reviewing events (Freed, 1979:92). Such a reading, where the aspectualizer takes scope over the nucleus of an accomplishment, is unavailable for \textit{keep}, according to Freed (1979).

(103)  
\begin{enumerate}[a.]
  \item Linda continued reviewing articles about Goytisolo.
  \item Linda continued reviewing an article about Goytisolo.
  \item Linda continued reviewing the article about Goytisolo.
\end{enumerate}
(Freed, 1979:91)

Finally, Freed (1979) argues that \textit{keep} and \textit{continue} differ in terms of the ability to refer to the continuation of an event which has been interrupted. This is claimed to be impossible for \textit{keep}, marginally possible for \textit{continue} V-\textit{ing}, and fine with \textit{continue} to-infinitive, illustrated in (104) (Freed, 1979:95):

(104)  
\begin{enumerate}[a.]
  \item If they stop now, they won’t continue to work later.
  \item If they stop now, \textit{?} they won’t continue working later.
  \item If they stop now, \textit{*} they won’t keep working later.
\end{enumerate}
Freed (1979) summarised:

- When the event in the complement clause is an activity, *keep* targets the nucleus of the event.
- When the event in the complement clause is interpreted as a series, *keep* takes scope over the entire event and not just the nucleus.
- *Keep* may not take scope over the nucleus of the event when the event is an accomplishment.
- *Keep* creates a durative reading.
- *Keep* may, but does not have to, denote the continuation of an event which has already been initiated.
- When *keep* is followed by a series, it does not have to presuppose prior initiation.
- *Keep* may not refer to the continuation of an event which has been interrupted.

There are a few points in Freed (1979)’s account which are problematic. Firstly, the suggestion that *keep* cannot denote continuation of an event which has been interrupted seems strange considering authentic examples such as that in (105). I will return to the issue of resumption in section 6.2.

(105) We can keep reading later, this diary is amazing.\(^4\)

\(^4\)From Campbell, Jamie (2012) *Gifted.*

78
Secondly, the generalisation that \textit{keep} cannot take scope over the nucleus of the event when the event in the complement clause is an accomplishment will be scrutinized in greater detail in section 4.5.2. I will show that there are examples which at first glance seem to contradict Freed (1979)’s generalisation, and I will discuss why this is and offer an account of such examples, where it seems that accomplishments give rise to \textit{continuative} readings in the context of \textit{keep}.

3.2 \textbf{Brinton (1988)}

Another comprehensive work on aspectual complementation in English is Brinton (1988). Here too, \textit{keep} is one of many aspectual verbs which are brought up. Brinton (1988) states that continuative aspectualizers resemble the progressive in that their meaning depends on the aktionsart of the complement verb. \textit{Keep} yields a \textit{continuative} reading with states\footnote{States are, in Brinton (1988)’s view, allowed with \textit{keep} under certain restrictions (Brinton, 1988:88).}, (106a), and activities, (106b), and an \textit{iterative} reading with semelfactives\footnote{Labelled \textit{iterative activities or series} by Brinton (1988:87).}, (106c).

\begin{enumerate}[a.]
    \item He keeps loving her.
    \item It kept snowing.
    \item She kept coughing all night.
\end{enumerate}

(Brinton, 1988:87)

Regarding accomplishments and achievements, Brinton (1988) claims that these do not freely occur with \textit{keep}. Achievements, as in (107a), may be acceptable if one assumes that there is a series where Susan pins the same notice to the wall again and again, while accomplishments, as in (107b) are claimed not to be acceptable at all.

\begin{enumerate}[a.]
    \item We can keep reading later, this diary is amazing.
    \item We accomplished reading later, this diary is amazing.
\end{enumerate}
3.3 Cappelle (1999)

Cappelle (1999) offers a comparison between *keep* and *keep on*, arguing that although often listed as synonyms in dictionaries, there is a slight difference in meaning between the two. The focus of the article is on teasing out what this meaning difference is, rather than thoroughly discussing the meaning components of *keep* and *keep on* respectively. Cappelle (1999:3) notes the following meanings for *keep on*: “persevere, carry on, not give up, continue”, and claims that this meaning is “a full, lexical sort of meaning”, while the meaning of *keep* is “an incomplete sort of meaning”. The argument for assuming this is that *keep on* can occur on its own in sentences such as those in (109), while *keep* is dependent on another verb in its immediate context.

(109)  
| a. I think after the initial check’s been made it’s important to keep on (*keep) and maintain a check on it (Example from ICE-GB: S2A-064-048, cited in Cappelle 1999:3) |
| b. She sits down again in the total dark and asks me to please keep on (*keep) and so I do. (Example from Cobuild corpus, cited in Cappelle 1999:3) |

Furthermore, Cappelle (1999) argues that even when *keep on* is followed by an -ing form, it still maintains this “full, lexical sort of meaning”, and that this is why *keep* cannot occur with accomplishments as in (107b). She notes that the “indefinite article seems marginally better than the definite article since it allows the interpretation ‘a different’ and hence a serial reading.” (Brinton, 1988:88) She also notes that *continue* is fine with accomplishments, as in (108), since *continue*, unlike *keep*, presupposes the prior initiation of the situation denoted by the complement verb.

(108) I continued painting the picture. (Brinton, 1988:87)

Brinton (1988) summarised:

- *Keep* denotes *continuation* with states and activities.
- *Keep* denotes *iteration* with semelfactives, and to some extent with achievements and possibly also with accomplishments.
- *Keep* does not generally occur with accomplishments. If it does, it denotes *iteration*.
- *Keep* only occurs marginally with achievements. When it does, it denotes *iteration*.
- *Keep* does not presuppose prior initiation.

Brinton (1988)’s account of *keep* and accomplishments is problematic in that it is unclear why the suggestion that *keep* does not presup-
pose prior initiation should imply that it cannot occur with accomplish-
ments. As mentioned above in relation with Freed (1979), I will
discuss *keep and accomplishments in further detail in section 4.5.2 and
show that if certain constraints are met, it may at first glance seem
possible for *keep to take scope over the process part of a telic event,
and thus occur with accomplishments and yield a continuative reading
without iteration.

3.3 Cappelle (1999)

Cappelle (1999) offers a comparison between *keep and *keep on, ar-
suming that although often listed as synonyms in dictionaries, there
is a slight difference in meaning between the two. The focus of the
article is on teasing out what this meaning difference is, rather than
thoroughly discussing the meaning components of *keep and *keep on
respectively. Cappelle (1999:3) notes the following meanings for *keep on: “persevere, carry on, not give up, continue”, and claims that this
meaning is “a full, lexical sort of meaning”, while the meaning of *keep
is “an incomplete sort of meaning”. The argument for assuming this is
that *keep on can occur on its own in sentences such as those in (109),
while *keep is dependent on another verb in its immediate context.

(109)  a. I think after the initial check’s been made it’s important
to keep on (*keep) and maintain a check on it (Example
from ICE-GB: S2A-064-048, cited in Cappelle 1999:3)

b. She sits down again in the total dark and asks me to
please keep on (*keep) and so I do. (Example from
Cobuild corpus, cited in Cappelle 1999:3)

Furthermore, Cappelle (1999) argues that even when *keep on is fol-

81
Palmer (2009) discusses six different aspectualizers, or verbs of aspect, as he calls them: begin, start, continue, keep, stop, and finish. Palmer labels keep and continue verbs of progressivity, and claims that keep "suggests progressivity with iteration" and continue "suggests progressivity with resumption (of a situation already in progress)" (Palmer, 2009:19). One of Palmer’s main points is that continue but not keep suggests that the situation denoted by the complement clause is already in progress, illustrated by the examples in (111), where continue in (111a) suggests that the subject referent had been ill before the treatment, while keep in (111b) does not. In (111b), the reading is that the subject referent started feeling ill after the treatment (Palmer, 2009:26).

(111) a. After the treatment, Sue continued to feel ill.
   b. After the treatment, Sue kept feeling ill.

Although Palmer (2009) strongly argues that there is no suggestion of prior initiation in (111b), he acknowledges that such interpretations are sometimes available even with keep, in which case it is the context which enables them. An example of this is shown in (112). The argument is that in (112a), the reading is that the object referent, ‘Sue’, had been talking before the subject referent, ‘I’, asked her to be quiet, while in (112b), there is nothing within the denotation of keep which suggests that ‘Sue’ had been talking before, but "the context may allow that she had [been talking]" (Palmer, 2009:26).

(112) a. I advised Sue to be quiet but she continued to talk.
   b. I advised Sue to be quiet but she kept talking.

Another of Palmer’s main points about keep is that it often has a reading of iteration, which continue does not (Palmer, 2009:27-28).

Cappelle (1999) summarised:

- *Keep on* means “persevere, carry on, not give up, continue”.
- *Keep V-ing* constitutes one verb phrase, while *keep on V-ing* constitutes two independent verb phrases.
- *Keep* has an “incomplete sort of meaning”, while *keep on* has a “full, lexical sort of meaning”.

Although it seems reasonable to conclude that *keep on* is less grammaticalized than *keep*, it is not clear to me how this is manifested in their respective meaning components. The meaning proposed for *keep on*, “persevere, carry on, not give up, continue”, is to my mind just as present in *keep* as in *keep on*. I return to the question of the meaning of *keep* in chapter 4.

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7 Cappelle (1999:4-5) offers a convincing argument for *keep* being more grammaticalized than *keep on* based on a diachronic account of *keep* and *keep on* respectively.
3.4 Palmer (2009)

Palmer (2009) discusses six different aspectualizers, or verbs of aspect, as he calls them: begin, start, continue, keep, stop and finish. Palmer labels keep and continue verbs of progressivity, and claims that keep “suggests progressivity with iteration” and continue “suggests progressivity with resumption (of a situation already in progress)” (Palmer, 2009:19). One of Palmer’s main points is that continue but not keep suggests that the situation denoted by the complement clause is already in progress, illustrated by the examples in (111), where continue in (111a) suggests that the subject referent had been ill before the treatment, while keep in (111b) does not. In (111b), the reading is that the subject referent started feeling ill after the treatment (Palmer, 2009:26).

(111) a. After the treatment, Sue continued to feel ill.  
b. After the treatment, Sue kept feeling ill.

Although Palmer (2009) strongly argues that there is no suggestion of prior initiation in (111b), he acknowledges that such interpretations are sometimes available even with keep, in which case it is the context which enables them. An example of this is shown in (112). The argument is that in (112a), the reading is that the object referent, ‘Sue’, had been talking before the subject referent, ‘I’, asked her to be quiet, while in (112b), there is nothing within the denotation of keep which suggests that ‘Sue’ had been talking before, but “the context may allow that she had [been talking]” (Palmer, 2009:26).

(112) a. I advised Sue to be quiet but she continued to talk.  
b. I advised Sue to be quiet but she kept talking.

Another of Palmer’s main points about keep is that it often has a reading of iteration, which continue does not (Palmer, 2009:27-28). An
example of this was seen in (111b) above, where the feeling of illness is repeated again and again. While noting the feature of iteration with keep, Palmer claims that it is even stronger with keep on, and non existent with continue (Palmer, 2009:28).

Palmer (2009) summarised:

- *Keep* denotes progressivity with iteration.
- *Keep* does not denote continuation of a previously initiated event, although this may be implied by the context.
- *Keep on* suggests iteration even stronger than *keep*.
- *Continue* does not suggest iteration.

In view of Palmer’s suggestion that *keep* always suggests iteration and that *continue* never does, examples such as (113), where *keep* yields a reading without iteration, and (114), where *continue* yields a reading where there is iteration, seem problematic.

(113)  
\[ \begin{align*}  
\text{a.} & \quad \text{She ignored him and kept running until she reached the road. (BNC CEY)} \\
\text{b.} & \quad \text{She ignored her hurts, and kept walking, dragging her feet a little, but still walking. (BNC CH0)} 
\end{align*} \]

(114)  
\[ \begin{align*}  
\text{a.} & \quad \text{The patient is likely to continue coughing for some time after the antibiotics have been stopped. (BNC ARH)} \\
\text{b.} & \quad \text{I think it’s really important we continue winning and 1991 doesn’t become a one-off year. (BNC CB3)} 
\end{align*} \]

An account of the meaning components of *keep* must also allow for examples likes those in (113). In chapter 4, I propose an account which
takes into consideration the fact that *keep* may give rise to different readings.

### 3.5 Toivonen (2006)

Toivonen (2006) states that both *keep* V-*ing* and V *on* structures denote “continuation or onward movement through space or time” (Toivonen, 2006:181). The meaning difference between the simple past in (115a) and the V *on* structure in (115b) is that in (115b) “the talking is *continuing* activity” (Toivonen, 2006:183).

(115)  
\[\begin{align*}
\text{a.} & \quad \text{The people talked.} \\
\text{b.} & \quad \text{The people talked on.}
\end{align*}\]  
(Toivonen, 2006:183)

A similar meaning difference is seen in (116), where the *keep* V-*ing* structure in (116b) denotes a continuing activity, while the simple past in (116a) does not.

(116)  
\[\begin{align*}
\text{a.} & \quad \text{The people talked.} \\
\text{b.} & \quad \text{The people kept talking.}
\end{align*}\]

Toivonen (2006) notes that V *on* is more restrictive than *keep* V-*ing* in two regards. Firstly, V *on* is more restrictive regarding the aspectual features of the verb. The particle *on* can only occur with verbs denoting atelic, dynamic and durative events. The examples in (117) illustrate that *on* is fine with a verb such as *talk* which is atelic, dynamic and durative, illustrated in (117a), but not with a verb such as *win*, which is telic, dynamic and punctual, illustrated in (117b).

(117)  
\[\begin{align*}
\text{a.} & \quad \text{The people talked on.} \\
\text{b.} & \quad \ast \text{They won on.}
\end{align*}\]
Keep is less restrictive, and readily combines with telic and punctual verbs. The examples in (118) and (119) show that keep yields an iterative reading with telic predicates such as win and die, while the particle on does not.

(118) a. They kept winning.
     b. *They won on.

(119) a. On the battle field, soldiers kept dying.
     b. *On the battle field, soldiers died on.
     (Toivonen, 2006:219)

Although an iterative reading cannot arise in V on structures with telic predicates, Toivonen notes a similar kind of iterative reading in connection with semelfactives, which in Toivonen’s analysis are punctual and atelic verbs. The examples in (120) show that when on occurs with a semelfactive, there is some kind of aspect shift which yields what Toivonen calls an iterative interpretation (Toivonen, 2006:184).

(120) a. The cart bounced on over the rutted road. (BNC, cited in Toivonen 2006:184)
     b. The children skipped on. (Toivonen, 2006:184)

Secondly, unlike keep, the particle on places argument restrictions on the verb (Toivonen, 2006:187, 219). The particle on can only occur in intransitive contexts, while keep may take either intransitive or transitive complements. This is illustrated with the verb read, which may

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8Toivonen (2006:184) does not use the term aspect shift, but notes that “on forces an activity interpretation when it is used with a potential semelfactive”.

9This is a somewhat simplified account of the argument restrictions proposed for V on by Toivonen (2006). When on is predicated of the object, Toivonen (2006) notes that it is possible for transitive verbs to occur with the particle on. Jordan encouraged Lisa on is fine, since on is predicated of the object ‘Lisa’, but *Jordan loved Lisa on is not fine, since on is predicated of the subject ‘Jordan’.
occur with either *keep* or *on* when it is intransitive, as in (121), but only with *keep* when it is transitive, as in (122).

(121)  
   a. Jack kept reading.  
   b. Jack read on.

(122)  
   a. Jack kept reading the paper.  
   b. *Jack read on the paper.

(Toivonen, 2006:219)

Toivonen (2006) does not discuss the issue of prior initiation in relation with *keep*, but argues that the particle *on* entails prior initiation of the event denoted by the verb (Toivonen, 2006:223).

Toivonen (2006) summarised:

- *Keep* denotes “continuation or onward movement through space or time”.

- *Keep* V-ing, but not V on, may denote iteration of a punctual and telic event.

- The verb in V on has to be intransitive, while *keep* may take either intransitive or transitive complementation.

- V on entails that the event denoted by the verb has already been initiated.

One potential problem with the account in Toivonen (2006) is that no distinction is made between the kind of iteration which arises with semelfactive predicates, such as *bounce* and *skip* (illustrated in (120) above), and the kind of iteration which arises with achievement predicates, such as *win* and *die* (illustrated in (118) and (119) above).
In chapter 4, I will propose an analysis where the kind of iteration which Toivonen (2006) notes for semelfactives is not seen as iteration. Such an analysis will enable an important generalisation, namely that unlike keep, V on consistently resists continuation through iteration.

3.6 Duffley (2006)

Duffley (2006) provides a comprehensive account of -ing clauses in English, which he refers to as gerund-participles. He discusses keep alongside continue, go on, and resume, and labels them verbs referring to the middle of an event, as opposed to verbs referring to the beginning of an event, such as start and begin, and verbs referring to the end of an event, such as stop and finish. He notes two different uses of keep: one which closely resembles continue, where the lexical meaning is “not interrupting an activity”, illustrated in (123a), and one which does not, where the sense is that of “doing something repeatedly”, often evoking the “impression of inability to get out of a habit”, illustrated in (123b) (Duffley, 2006:100).

(123)  a. I turned back after a while, but he kept walking.
       b. I keep forgetting it’s December.

(Duffley, 2006:100)

A common denominator of the two uses, Duffley (2006:113) suggests, is that “keep expresses the notion of its subject maintaining itself in the situation evoked by the -ing.” Two examples are given to illustrate this:

(124) a. Outside it was blowing a blizzard. I had to watch where I put my feet in case I fell. (...) The only thing I knew with absolute certainty was that I had to keep going. (Brown University Corpus L12 165, cited in Duffley 2006:114)

b. I kept falling asleep during the concert. (Freed 1979, cited in Duffley 2006:114)

In both (124a) and (124b), Duffley (2006) argues that there is the sense of the “subject maintaining itself in the situation evoked by the -ing” (Duffley, 2006:113). In (124a), this manifests itself in the continuation of an event which has already been initiated, and in (124b), it is manifested as the subject being “conceived as unable to get out of the situation evoked by the -ing complement during the duration of the concert” (Duffley, 2006:113-114). In the latter case, the interpretation does not involve the continuation of an event which has already been initiated; i.e., it does not imply that the subject referent had been falling asleep before the concert. Also, in (124b), keep and continue are not interchangeable, since continue always has to refer to the continuation of an event which has already been initiated (Duffley, 2006:113-114). Finally, Duffley argues that keep differs from continue in yet another way, namely in that continue may refer to the continuation of an interrupted event, illustrated in (125) while keep may not.

(125) Last week on the bus I saw a young mother spank her little boy when he used the F-word. “Good for her,” I thought. She then continued talking to her friend in a conversation which was peppered with exactly the same word. (BNC CBC 12259, cited in Duffley 2006:112)
Meulen (2005:561) argues, keep and continue have different presuppositions. Keep presupposes that the event denoted by the verb in the complement clause is actually going on: “you cannot keep reading, unless you are reading at this very moment” (ter Meulen, 2005:561). This presupposition is not shared by continue: “if you continue to read this book after a break, you resume reading and then presumably keep reading it.” (ter Meulen, 2005:561)

Duffley (2006) summarised:

- *Keep* has the lexical meaning of “maintaining oneself in the situation evoked by the subject complement [= the -ing clause].”
- *Keep* may either denote continuation or iteration.
- *Keep* may, but does not have to, presuppose prior initiation of the event in the complement clause.
- *Keep* cannot refer to the continuation of an event which has been interrupted.

There is one point in particular which is problematic in this account. Duffley (2006) argues that *keep* cannot be used in contexts where the intended meaning is that of continuation of an event which has been interrupted. In example (105) above, we saw an authentic example where *keep* clearly refers to the continuation of an event which has been interrupted. In section 6.2, I will discuss the issue of interruptions further.

3.7 ter Meulen (2005)

The account in ter Meulen (2005) is not a comprehensive study of *keep* or of aspectualizers, but a discussion of the semantics of temporal reference, where *keep* and *continue* are used to illustrate that fairly similar verbs may have different presuppositions. ter Meulen (2005:561) claims that both *keep V-ing* and *continue V-ing* are “equivalent to not start not V-ing” and both denote continuation of an event which has already been initiated. Despite these similarities, ter
Meulen (2005:561-562) argues, *keep* and *continue* have different presuppositions. *Keep* presupposes that the event denoted by the verb in the complement clause is actually going on: “you cannot keep reading, unless you are reading at this very moment” (ter Meulen, 2005:561). This presupposition is not shared by *continue*: “if you continue to read this book after a break, you resume reading and then presumably keep reading it.” (ter Meulen, 2005:561)

<table>
<thead>
<tr>
<th>ter Meulen (2005) summarised:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <em>Keep V-ing</em> means “not start not V-ing”.</td>
</tr>
<tr>
<td>• <em>Keep</em> denotes continuation of an event which has already been initiated.</td>
</tr>
<tr>
<td>• <em>Keep</em> cannot refer to the continuation of an event which has been interrupted.</td>
</tr>
</tbody>
</table>

As mentioned in relation with Freed (1979)’s and Duffley (2006)’s accounts, I find the generalisation that *keep* cannot denote continuation of an interrupted event problematic, and I will discuss this in more detail in section 6.2. The account in ter Meulen (2005) differs from the ones presented above in that it fails to recognize the ability which *keep* has to refer to an event which has not already been initiated. This may be because ter Meulen (2005) focuses solely on the non-iterative reading associated with *keep*.

### 3.8 Verspoor (1999)

Verspoor (1999) discusses *to*-infinitives, and in connection with the difference between *continue V-ing* and *continue to*-infinitive she makes a
brief comparison to keep on. The argument is that continue V-ing “implies an uninterrupted action in process (intention in action)”, while continue to V “implies an interrupted action and a ‘prior intention’ of beginning again” and keep on expresses “‘action already in process’ (intention in action)” (Verspoor, 1999:523).

Verspoor (1999) summarised:

- *Keep (on)* expresses an “action already in process”, i.e., that the event in the complement clause has already been initiated.
- *Keep (on)* cannot denote the continuation of an event which has been interrupted.

As already mentioned, both of these claims are problematic. The issues of prior initiation and interruptions will be discussed in chapter 6.

3.9 Egan (2008)

Egan (2008) presents a usage-based study of infinitive and -ing clauses in English. A large number of verbs are included, one of which is *keep*. Egan (2008:106, 184) categorizes *keep* as a matrix verb occurring in what he labels *Same-time Aspect constructions*, and notes that there is an overlap between the meaning of the verb *keep* and the -ing clause, since both *keep* and the -ing form “profile the complement situation as extended in time.” Egan (2008) notes both a continuative and an

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10 The notions of prior intention and intention in action go back to Searle (1983). In Verspoor (1999)’s words, a prior intention is expressed by “I will do A” or “I am going to do A”, while an intention in action is expressed by “I am doing A” (Verspoor, 1999:522).
iterative reading for *keep*. The study is quantitative in nature, and it is claimed that “*keep* is less commonly used than *continue* to encode continuative as opposed to iterative constructions.” 20 % of the tokens of *keep* V-*ing* denoted continuation, while 38 % of the tokens of *continue* V-*ing* denoted continuation (Egan, 2008:186).

Egan (2008) summarised:

- *Keep* occurs in same-time constructions.
- *Keep* profiles the event in the complement clause as extended in time.
- *Keep* is used to denote iterative situations more often than continuative situations.
- *Keep* is used less often than *continue* to denote continuative situations.

Egan (2008) does not provide an analysis of the meaning components of *keep*, but he presents some statistical results regarding which readings arise in the context of *keep*. As the present study is not quantitative, it is not directly comparable to the study in Egan (2008). For the present purposes it suffices to note that Egan (2008) acknowledges both an iterative and a continuative reading for *keep*.

### 3.10 Summary

Summing up the different accounts, we see that there is agreement on the claim that *keep* cannot denote continuation of an event which has been interrupted. Not all authors bring up this point, but those who
do claim that it is not possible (Freed 1979, Verspoor 1999, ter Meulen 2005, Duffley 2006). As mentioned above, I will suggest that keep can indeed denote continuation of an event which has been interrupted, and I will discuss this in section 6.2.

Another claim which I will argue against is the claim that keep presupposes prior initiation. As we saw above, there is disagreement on this in the literature: Verspoor (1999) and ter Meulen (2005) claim that it does, while Palmer (2009) claims that it does not, but that a reading of prior initiation is sometimes present due to the context. Freed (1979) and Duffley (2006) claim that keep may, but does not have to, presuppose prior initiation. They both base this claim on the idea that prior initiation is only necessary when the reading is that of continuation. When the reading is that the event in the complement clause is iterated, there is no implication that the event has already been initiated. The issue of prior initiation is discussed in section 6.1.

In the accounts where both an iterative and a continuative reading are acknowledged, there is often more focus on their differences than on what unifies them. Freed (1979) and Brinton (1988) note that the meaning contribution of keep is dependent on the aktionsart of the complement verb, and they observe important differences between the different readings which arise, but they do not suggest any meaning components which are shared by both readings. Duffley suggests that keep always has the lexical meaning of “maintaining oneself in the situation evoked by the subject complement [= the *-ing clause]” (Duffley, 2006:114). This, Duffley (2006) argues, is a meaning which is present for both the continuative and the iterative reading.

In chapter 4, I will propose an account of the meaning contribution of keep. I will argue that some of its meaning components are present for both the continuative and the iterative reading, while others are specific to each of the readings. I will propose some generalisations
regarding the distribution of the two different readings based on the verb classes presented in section 2.6. I will suggest that \textit{keep} is able to combine with verbs of different aktionsarts, but that there are restrictions. These restrictions, I will argue, are related to the features of the complement verb.

In chapter 4, I will propose an account of the meaning contribution of \textit{keep}. I will argue that some of its meaning components are present for both the continuative and the iterative reading, while others are specific to each of the readings. I will propose some generalisations.
Chapter 4

Aspectual contributions of keep

In this chapter, I take a closer look at the meaning contribution of keep in keep V-ing structures. I suggest a working hypothesis for the meaning of keep, which is further discussed in chapters 5 and 6. I propose that keep may give rise to two different kinds of readings, depending on the aktionsart of the complement verb, and I present my hypotheses regarding the distribution of these two different readings.

4.1 A continuative aspectualizer

In the literature, keep is often grouped with other predicates which have an aspectual effect on the verb with which they occur, such as begin, continue and stop. Many different labels have been used for these predicates in the literature, for example auxiliaries of aspect (Poutsma 1926:297, Kruisinga 1931:226), begin-class, aspectual verbs (Newmeyer, 1975), ‘aspectual’ complement verbs (Dowty, 1979:68), ‘aspectual’ semi-auxiliaries (García, 1967), catenatives (Palmer 1974:16,
Quirk et al. 1985, Huddleston and Pullum 2002:1176-1177, 1198, 1228), aspectual lexical verb (Aarts, 2011:273). I follow Freed (1979) and Brinton (1988:53) and use the label aspectualizers. Brinton (1988) uses this term because, unlike many of the labels previously used, some of which were exemplified above, it is neutral with regard to the status of the predicates in terms of whether they are auxiliaries, lexical verbs or something in between. Keep is often assumed to belong to a subgroup of the aspectualizers denoting continuation, which Brinton (1988) labels continuative aspectualizers. Other predicates often found in this subgroup are continue, go on and resume. As we saw in section 3.5, Toivonen (2006) also includes the V on construction in the class of continuative aspectualizers. The main focus in this thesis is on keep, but comparison will often be made to two other continuative aspectualizers, namely continue and V on. The reason for comparing with continue is that continue is nearly always brought up alongside keep when continuative aspectualizers are discussed. Keep and continue are often considered to be close in meaning and use (although continue but not keep also allows for to-infinitival complementation). The reason for comparing with the V on construction is that it too seems to be close in meaning to keep V-ing. At the same time, it seems reasonable to suspect that it may behave slightly differently from keep V-ing because on is a particle while keep is a verb. It would perhaps be fruitful to include even more continuative aspectualizers for comparison, but because of the limited scope of the present work, I have chosen to limit the number to two.
4.2 The meaning of keep: continuation

An investigation of a large number of dictionaries reveals that most of them single out the so-called aspeclual verb usage of *keep*. Some only give the reading “continue to do”, but most dictionaries note that *keep V-ing* can yield two different readings, one which involves iteration, and one which does not. For example, *The Collins English Dictionary* states that “[i]f you keep doing something, you do it repeatedly or continue to do it” and gives the two examples in (126):

(126)   a. I keep forgetting it’s December ...  
     b. I turned back after a while, but he kept walking ...
     (The Collins English Dictionary, 2014)

According to *Merriam-Webster*, to *keep doing* something means either “to persist in a practice”, illustrated in (127a), or “to continue usually without interruption”, exemplified in (127b):

(127)   a. kept bothering them  
     b. keep talking  
     (Merriam-Webster.com, 2014)

We saw in the previous chapter that most authors who bring up *keep* note that *keep* may give rise to either a *continuative* or an *iterative* reading (e.g. Freed 1979, Brinton 1988, Egan 2008). Some add a more
elaborate description of the meaning of keep. For example, Duffley (2006:100, 114) argues that keep has the lexical meaning of either “not interrupting an activity” or “maintaining oneself in the situation evoked by the subject complement [= the -ing clause]”, and Toivonen (2006:181, 183) suggests that keep denotes “continuation or onward movement through space or time” or “continuing activity”.

As a working hypothesis, I will adopt the proposal by Toivonen (2006) that keep V-ing denotes ‘continuing activity’. The aspectual verb keep in keep V-ing structures contributes the meaning component CONTINUATION. The complement verb in turn denotes an activity. This means that the event in the complement clause is interpreted as being continued, irrespective of whether, in the words of The Collins English Dictionary, “you do it repeatedly or continue to do it”. Example (128a) illustrates the former case, while (128b) illustrates the latter. In both cases, keep denotes CONTINUATION.

(128)  a. She kept entering the room.
       b. She kept running.

In (128a), the event in the complement clause is interpreted as continued because the entering event is perceived as occurring again and again. It is not a single entering event which is continued, but a series of entering events. In (128b), the event in the complement clause is interpreted as continued because the process part of the running event is perceived as continued. A running event is already durative and atelic, and the addition of keep does not lead to a change in akta-
sart, but only to a change in interpretation of the entire event. Note also that in both examples in (128), the keep V-ing construction as a whole denotes a durative and atelic event, irrespective of the aspectual properties of the predicate in the complement clause.
4.3 The meaning of V-ing: activity

Toivonen (2006) defines *continuation* as “onward movement through space or time” (Toivonen 2006:181). Given that continuation involves movement through time, we can assume that in order for an event to be perceived as continued, it has to be dynamic and durative. Also, if something is continued, it should not involve a change of state. Rather, it should involve carrying on in the same fashion as before. Therefore, it seems reasonable to assume that in order for an event to be perceived as continued, it has to be atelic. Another way of stating that an event has to be dynamic, durative and atelic in order to be perceived as continued is to say that it has to belong to the category of activities. If this is the case, we expect *keep* to occur in contexts such as those in (129), where the predicate in the complement clause expresses a dynamic, durative and atelic event, but not in contexts such as those in (130), where the predicate in the complement clause expresses a dynamic, punctual and telic event.

(129)  

a. John kept running.  
b. Mary kept singing.
4.3. The meaning of V-ing: activity

(130)  a. John kept entering the room.
       b. Mary kept winning.

Clearly, this is not the case, since the sentences in (130) are equally felicitous as those in (129). As we have already seen, for example in (128a) above, when *keep* occurs in a context where the complement predicate is punctual, it seems to have the ability to shift the punctual event into an activity by iterating it. The examples in (130) both involve a complement verb belonging to the class of achievements, i.e., a predicate denoting a punctual and telic event. The only way that such an event can occur in the context of *keep* is if it is iterated. The iteration results in a series of punctual and telic events, which in itself is durative and atelic. Because the series is durative and atelic, it is compatible with *keep*.

The fact that *keep* may occur with complement verbs of different aktionsarts has been noted by many authors, as we saw in the previous chapter (Freed 1979, Brinton 1988, Duffley 2006, Toivonen 2006). Some note that the meaning changes depending on the aktionsart. For example, Brinton (1988:87) assumes two distinct meanings of *keep*, which are “crucially dependent on the aktionsart of the complement verb”. Others suggest a unifying meaning component which is independent of the aktionsart of the complement verb. For example, Duffley (2006:114) proposes that the lexical meaning of *keep* is always “maintaining oneself in the situation evoked by the subject complement [= the *-ing* clause]”. In what follows, I want to pin down what restrictions there are on the two different readings which seem to be available for the *keep* V-*ing* construction, and at the same time identify the unifying meaning component.
4.4 Two readings of *keep* V-\textit{ing} 

In the previous two sections, I have shown that *keep* V-\textit{ing} may yield two slightly different readings, depending on the aktionsart of the verb in the complement clause. Example (131a) illustrates the first reading, where the verb in the complement is already an activity. Here, the reading is that the event in the complement clause is continued. Example (131b) illustrates the second reading, where the verb in the complement is not an activity. Here, the reading is that the event in the complement clause is iterated and thus continued.

(131)  
\begin{itemize}  
\item a. She kept running. (activity)  
\item b. She kept entering the room. (achievement)  
\end{itemize}

I argued above that *keep* needs to combine with an activity, or with an event which can be interpreted as an activity. How is that possible, when there are examples such as that in (131b)? One way of seeing it is that what happens in such cases is that *keep* turns the event in the complement clause into an activity. This is often referred to in the literature as *aspect shift*, *situation type shift* or *aspectual type coercion* (see e.g. Moens and Steedman 1988, Smith 1997, de Swart 1998, Zucchi 1998, de Swart 2000). So far we have seen that achievements have this ability, but we will see as we proceed that there are other verb classes which also allow for this.

Summing up what we have seen so far, *keep* + V-\textit{ing} denotes a durative and atelic event, with the meaning of ‘continuing activity’. *Keep* denotes continuation, whereas the embedded predicate denotes an activity. *Keep* in *keep* V-\textit{ing} constructions seems able to combine with predicates which are not activities because it has the power to induce aspect shift. Typically, when *keep* combines with telic predicates, an iterative reading (in addition to continuation) is present. I will
henceforth refer to the two readings as the *continuative* reading (kept running) and the *continuative-iterative* reading (kept winning). On the basis of the distribution already observed and Ramchand (2008)’s analysis of the different verb classes reviewed in section 2.6, we are now in a position to formulate hypotheses about exactly where one or the other reading arises in *keep V-ing* structures.

### 4.5 Distribution of the two readings of *keep V-ing*

We have seen that when *keep* combines with an activity verb, such as *run*, it yields a reading where the event in the complement clause is continued. This reading was referred to as the *continuative* reading. We have also seen that when *keep* combines with a telic predicate, it induces aspect shift in the form of iteration, yielding a reading where the event in the complement clause is iterated and thus continued. This reading was referred to as the *continuative-iterative* reading. From these observations we can form the hypotheses in (132).

(132)  

a. The *continuative* reading arises with activity predicates.  
b. The *continuative-iterative* reading arises with telic predicates.

In order to form predictions about which verb classes will yield which reading, recall that telicity in Ramchand (2008)’s model arises in different ways. Either there is a [res] feature on the predicate, as in (133a), or there is an entailment of telicity resulting either from a bounded PATH element in the verb phrase, as in (133b), or from a [res] feature on some other element in the verb phrase, as in (133c).
4.5. Distribution of the two readings of keep

b. The continuative-iterative reading:

• Verbs with bounded path:
  – Read-class \([\text{init}_i, \text{proc}_i]\)
  – Defuse-class \([\text{init}, \text{proc}_i, \text{res}_i]\)
  – Enter-class \([\text{init}_i, \text{proc}_i, \text{res}_i]\)
  – Arrive-class \([\text{init}_i, \text{proc}_i, \text{res}_i]\)
  – Give-class \([\text{init}, \text{proc}, \text{res}_i]\)
  – Break-class \([\text{proc}_i, \text{res}_i]\)

• Combinations of verb + PP with [res]:
  – Push + to-class \([\text{init}, \text{proc}] + \text{PP}[\text{res}_i]\)
  – Run + to-class \([\text{init}_i, \text{proc}_i] + \text{PP}[\text{res}_i]\)

In order to test the hypotheses in (132) and see if the predictions in (134) are borne out, I will investigate each of the verb classes in detail in the subsections below. Since what seems to be important are the feature [res] and the concept of path, I will take Ramchand (2008)'s categorization of English verbs into verb classes (which was introduced in section 2.6, see also Ramchand 2008:108-109) as a point of departure. Table 4.1 lists the relevant verb classes, where the first nine classes (1a - 4) are proper dynamic verb classes. The subsequent three classes (5a - 6) are not separate verb classes, but are presented as such for ease of reference. The push + to-class and the run + to-class consist of combinations of verb + PP with [res], and the skip-class consists of verbs which are systematically ambiguous between the run-class and the arrive-class. Finally, class (7) consists of states.

(133) a. Predicates with a [res] feature:
   Enter the room.

b. Predicates with a bounded PATH element:
   Read the book.

c. Combinations of a predicate and a PP with [res]:
   Run to the store.

In (133a), telicity is encoded in the verb: the [res] feature projects a resP which denotes the culmination into a final state. In (133b), telic-ity comes from entailment patterns which result from the bounded PATH element the book. In (133c), telicity arises from entailment patterns resulting from the [res] feature on the PP. Without the PP, the event is atelic: run.

The hypotheses in (132) predict that all situations in (133) above yield the continuative-iterative reading. In other words, predicates with either a [res] feature (either on the verb itself, or on a PP within the verb phrase) or a bounded PATH element will yield the continuative-iterative reading. Predicates without [res] or bounded PATH will yield the continuative reading. What this means for Ramchand (2008)'s classes is seen in (134), where the continuative reading is predicted for the verb classes listed in (134a), the continuative-iterative reading is predicted for the verb classes listed in (134b), and an optionality of either the continuative or the continuative-iterative reading is predicted for the verb class in (134c).

(134) a. The continuative reading:
   • Verbs with neither [res] nor bounded PATH:
     – Push-class \([\text{init}, \text{proc}]\)
     – Run-class \([\text{init}_i, \text{proc}_i]\)
     – Roll-class \([\text{proc}]\)
b. The continuative-iterative reading:
   - Verbs with bounded path:
     - Read-class \([init_i, \ proc_i]\)
   - Verbs with \([res]\):
     - Defuse-class \([init, \ proc_i, \ res_i]\)
     - Enter-class \([init_i, \ proc_i, \ res_i]\)
     - Arrive-class \([init_i, \ proc_i, \ res_i]\)
     - Give-class \([init, \ proc, \ res]\)
     - Break-class \([proc_i, \ res_i]\)
   - Combinations of verb + PP with \([res]\):
     - Push + to-class \([init, \ proc] + PP[res]\)
     - Run + to-class \([init_i, \ proc_i] + PP[res]\)

b. Either the continuative or the continuative-iterative reading:
   - Verbs with optional \([res]\):
     - Skip-class \([init_i, \ proc_i, \ (res_i)]\)

In order to test the hypotheses in (132) and see if the predictions in (134) are borne out, I will investigate each of the verb classes in detail in the subsections below. Since what seems to be important are the feature \([res]\) and the concept of path, I will take Ramchand (2008)’s categorization of English verbs into verb classes (which was introduced in section 2.6, see also Ramchand 2008:108-109) as a point of departure. Table 4.1 lists the relevant verb classes, where the first nine classes (1a - 4) are proper dynamic verb classes. The subsequent three classes (5a - 6) are not separate verb classes, but are presented as such for ease of reference. The push + to-class and the run + to-class consist of combinations of verb + PP with \([res]\), and the skip-class consists of verbs which are systematically ambiguous between the run-class and the arrive-class. Finally, class (7) consists of states.
4.5. Distribution of the two readings of *keep*

4.5.1 *Keep* and activities

Predicates belonging to the class of activities readily occur with *keep*, and give rise to the continuative reading. In Ramchand (2008)'s system, activity predicates belong to the push-class, the run-class, and the roll-class, exemplified in (135).

(135)

a. Verb class: push-class

Lexical entry: [init, proc]

He kept pushing the cart.

b. Verb class: run-class

Lexical entry: [init, proc]

He kept running.

c. Verb class: roll-class

Lexical entry: [proc]

The ball kept rolling.

Predicates belonging to these classes are not tagged with [res] and they are not constructed with bounded path elements, and just like the predictions stated, they yield a continuative reading. The reading in all three examples in (135) is that an already durative and atelic activity is continued.

4.5.2 *Keep* and accomplishments with DP path

A number of predicates belonging to Vendler’s class of accomplishments are found in Ramchand (2008)’s read-class, which consists of predicates constructed with a bounded path object, which specifies

2 In this class we also find so called degree achievements, e.g. *melt*. As mentioned in section 2.5.4 and 2.6.1, *melt* may give rise to either a telic or an atelic reading. Just as predicted, such predicates may yield either a continuative or continuative-iterative reading with *keep*.

Table 4.1: Verb classes and their feature specifications, transitivity and participants

<table>
<thead>
<tr>
<th>No</th>
<th>Verb class</th>
<th>Features</th>
<th>Transitivity</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Push-class</td>
<td>[init, proc]</td>
<td>Transitive</td>
<td>INITIATOR, UNDERGOER</td>
</tr>
<tr>
<td>1b</td>
<td>Read-class</td>
<td>[init₁, proc₁]</td>
<td>Transitive</td>
<td>INITIATOR₁, UNDERGOER₁, PATH</td>
</tr>
<tr>
<td>1c</td>
<td>Run-class</td>
<td>[init₁, proc₁]</td>
<td>Intransitive</td>
<td>INITIATOR₁, UNDERGOER₁</td>
</tr>
<tr>
<td>2</td>
<td>Roll-class</td>
<td>[proc]</td>
<td>Intransitive</td>
<td>UNDERGOER</td>
</tr>
<tr>
<td>3a</td>
<td>Defuse-class</td>
<td>[init, proc₁, res₁]</td>
<td>Transitive</td>
<td>INITIATOR, UNDERGOER₁, RESULTEE₁</td>
</tr>
<tr>
<td>3b</td>
<td>Enter-class</td>
<td>[init₁, proc₁, res₁]</td>
<td>Transitive</td>
<td>INITIATOR₁, UNDERGOER₁, RESULT-RHEME</td>
</tr>
<tr>
<td>3c</td>
<td>Arrive-class</td>
<td>[init₁, proc₁, res₁]</td>
<td>Intransitive</td>
<td>INITIATOR₁, UNDERGOER₁, RESULTEE₁</td>
</tr>
<tr>
<td>3d</td>
<td>Give-class</td>
<td>[init, proc, res]</td>
<td>Ditransitive</td>
<td>INITIATOR, UNDERGOER, RESULTEE</td>
</tr>
<tr>
<td>4</td>
<td>Break-class</td>
<td>[proc₁, res₁]</td>
<td>Intransitive</td>
<td>UNDERGOER₁, RESULTEE₁</td>
</tr>
<tr>
<td>5a</td>
<td>Push + to-class</td>
<td>[init, proc] + [res]</td>
<td>Transitive</td>
<td>INITIATOR, UNDERGOER</td>
</tr>
<tr>
<td>5b</td>
<td>Run + to-class</td>
<td>[init₁, proc₁] + [res]</td>
<td>Intransitive</td>
<td>INITIATOR₁, UNDERGOER₁</td>
</tr>
<tr>
<td>6</td>
<td>Skip-class</td>
<td>[init₁, proc₁, (res₁)]</td>
<td>Intransitive</td>
<td>INITIATOR₁, UNDERGOER₁, (RESULTEE₁)</td>
</tr>
<tr>
<td>7</td>
<td>States</td>
<td>[init]</td>
<td></td>
<td>HOLDER, RHEME</td>
</tr>
</tbody>
</table>
4.5. Distribution of the two readings of keep V-ing

4.5.1 Keep and activities

Predicates belonging to the class of activities readily occur with keep, and give rise to the continuative reading. In Ramchand (2008)’s system, activity predicates belong to the push-class, the run-class, and the roll-class, exemplified in (135).

(135)  

a. Verb class: push-class
Lexical entry: [init, proc]
He kept pushing the cart.

b. Verb class: run-class
Lexical entry: [init\textsubscript{i}, proc\textsubscript{i}]
He kept running.

c. Verb class: roll-class
Lexical entry: [proc]
The ball kept rolling\textsuperscript{2}.

Predicates belonging to these classes are not tagged with [res] and they are not constructed with bounded PATH elements, and just like the predictions stated, they yield a continuative reading. The reading in all three examples in (135) is that an already durative and atelic activity is continued.

4.5.2 Keep and accomplishments with DP path

A number of predicates belonging to Vendler’s class of accomplishments are found in Ramchand (2008)’s read-class, which consists of predicates constructed with a bounded PATH object, which specifies

\textsuperscript{2}In this class we also find so called degree achievements, e.g. melt. As mentioned in section 2.5.4 and 2.6.1, melt may give rise to either a telic or an atelic reading. Just as predicted, such predicates may yield either a continuative or continuative-iterative reading with keep.
the endpoint of the event and thus is the source of telicity. For these predicates, telicity is not encoded in the verb, but it is the result of semantic entailments. It has been suggested in the literature that accomplishments cannot occur as complements of *keep*, unless it is possible to get an iterative interpretation, in which case it is marginally acceptable (Freed 1979:91, Brinton 1988:87-88). The hypotheses in (132) predicted that accomplishments yield the continuative-iterative reading. However, a closer look at a predicate such as *read the book* reveals that there seems to be a choice between the continuative and the continuative-iterative reading: either the entire event, including the attainment of a final state, is iterated again and again, yielding the continuative-iterative reading, as in (136a), or there is no entailment of a result, yielding the continuative reading, as in (136b).

(136) Verb class: Read-class
Lexical entry: [init\textsubscript{i}, proc\textsubscript{i}]

a. Mary kept reading the book (again and again).
b. Mary kept reading the book, but she never finished it.

In (136a), the interpretation is that a series of reading events, each one involving the attainment of the final state of finishing the book, is continued. In (136b), the interpretation is that an atelic reading event, without any reference to the attainment of the final state of finishing the book, is continued.

At first glance, it seems that accomplishment predicates such as *read the book* allow for a choice between the two readings, but recall from section 2.6.1 that *read the book* can be constructed with an undergoer object instead of a path object. In cases such as (136b), *read* is really an activity, and belongs to the push-class. The difference between (136a) and (136b) is that in the former, the object *the book* measures out the event, i.e., it provides a path along which the event
travels. As such, *the book* specifies the endpoint of the reading event. In the latter, the DP *the book* does not measure out the event. Here it acts as an UNDERGOER of the reading event, much in the same way as the object DP *the cart* does in (135a) above. Ramchand (2008:68-70) mentions this in connection with *creation verbs* such as *bake* and *paint*, for which we can get a reading where the object measures out the event as well as a reading where it does not. Rather than seeing the examples in (136) above as two instances of the predicate *read the book* of the *read*-class, the (a)-example should be seen as belonging to the *read*-class and the (b)-example should be seen as belonging to the *push*-class. This is illustrated in (137):

(137)  

a. Verb class: *Read*-class  
    Lexical entry: \([\text{init}_i, \text{proc}_i]\)  
    Mary kept reading the book (again and again).  
    \((\text{the book} = \text{PATH})\)  

b. Verb class: *Push*-class  
    Lexical entry: \([\text{init}, \text{proc}]\)  
    Mary kept reading the book, but she never finished it.  
    \((\text{the book} = \text{UNDERGOER})\)

Assuming that *read the book* does not belong to the *read*-class when it is atelic, the predictions in (134) above are borne out. Since *the book* in (136b) is an UNDERGOER and not a bounded PATH, we can generalise and say that predicates with a bounded PATH element yield the continuative-iterative reading, while predicates with an UNDERGOER object yield the continuative reading. Under this analysis of the two

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3For example, in *John baked the cake*, *bake* is constructed with a PATH object and the event is measured out by the DP *the cake*, while in *John baked the potato*, *bake* is constructed with an UNDERGOER object and the event is not measured out by the DP *the potato* (see section 2.5.2.4 or Ramchand 2008:68-70).
readings of *read the book*, the predictions are borne out nicely.

### 4.5.3 *Keep* and achievements

Predicates belonging to the *defuse*-class, the *enter*-class, the *arrive*-class, the *give*-class, and the *break*-class are all tagged with a [res] feature. In Vendlerian terms they are achievements. We saw above in (132) and (134) that they are predicted to yield the continuative-iterative reading in the context of *keep*. As the examples in (138) show, they all undergo aspect shift in the form of iteration of the entire event, yielding the continuative-iterative reading.

\begin{enumerate}
\item a. Verb class: *Defuse*-class  
Lexical entry: [init, proc\textsubscript{i}, res\textsubscript{i}]
Mary kept defusing the bomb (again and again).
\item b. Verb class: *Enter*-class  
Lexical entry: [init\textsubscript{i}, proc\textsubscript{i}, res\textsubscript{i}]
Mary kept entering the room (again and again).
\item c. Verb class: *Arrive*-class  
Lexical entry: [init\textsubscript{i}, proc\textsubscript{i}, res\textsubscript{i}]
Mary kept arriving (again and again).
\item d. Verb class: *Give*-class  
Lexical entry: [init, proc, res]
Mary kept giving the dog a bone (again and again).
\item e. Verb class: *Break*-class  
Lexical entry: [proc\textsubscript{i}, res\textsubscript{i}]
The vase kept breaking (again and again).
\end{enumerate}

The verb classes in (138) differ in terms of transitivity and/or participant relations. What they have in common is that they are all tagged with a [res] feature. The only reading available is one where the entire
event, including the attainment of a final state, is repeated again and again, which is in line with the predictions.

### 4.5.4 *Keep* and accomplishments with PP [res]

As we saw in section 2.6.1, some verb classes allow for modification with a PP with *to*. The preposition *to* has a [res] feature, and thus projects its own resP. In section 2.6.1, two subclasses were identified, which are not proper verb classes, but consist of combinations of verbs without [res] and a PP with [res]: the *push* + *to*-class and the *run* + *to*-class. Predicates belonging to these subclasses are often referred to as accomplishments (e.g. Smith 1997).

Verbs belonging to the *push* + *to*-class, that is, the same verbs as in the *push*-class, but with modification with a bounded PP with [res], are predicted to induce aspect shift in the form of iteration, and yield the *continuative-iterative* reading. That this prediction is borne out is illustrated in (139a).

(139) **Verb class: Push + to-class**

Lexical entry for *push*: [init, proc]

Lexical entry for *to*: [res]

a. Mary kept pushing the cart to the store (again and again).

b. Mary kept pushing the cart to the store, but she never reached the store.

However, as (139b) illustrates, the reference to the attainment of a final state can be cancelled. In (139b), the addition of *but she never reached the store* brings out an interpretation where the reference to the attainment of the final state of reaching the store is cancelled. The reading in (139b) is that the pushing event was continued for some time.
time, but that the result state of having arrived at the store was never reached, that is, keep has the continuative reading. This suggests that predicates modified with a PP with a [res] feature can undergo aspect shift either through iteration or through stripping away the reference to the attainment of a final state, yielding either the continuative-iterative reading or the continuative reading. This is not what we expected, given the hypotheses in (132) and the predictions in (134) above.

In the run + to-class we find the same verbs as in the run-class, but with modification by a bounded PP with [res]. These verbs are similar to those belonging to the push + to-class in that they allow for aspect shift either in the shape of iteration, yielding the continuative-iterative reading, illustrated in (140a), or in the shape of cancellation of the reference to the attainment of a final state, yielding the continuative reading, illustrated in (140b).

(140) Verb class: Run + to-class
Lexical entry for run: [init, proc]
Lexical entry for to: [res]
  a. John kept running to the store (again and again).
  b. John kept running to the store, but he never got to the store.

4.5.5 Keep and semelfactives

Semelfactives are seen as ambiguous between the run-class and the arrive-class in Ramchand (2008)’s model. In (141), the two different uses of a semelfactive are exemplified. Firstly, (141a) illustrates the activity use of jump, where the interpretation is that there is a jumping activity which lasts for some time. There is no reference here to each individual jump. Secondly, (141b) illustrates the punctual reading
4.5. Distribution of the two readings of keep V-ing

(sometimes called the semelfactive reading). Here the interpretation is that of one single punctual jumping event.

(141) a. The children jumped (for 10 minutes).
   The run-class: \textit{Jump} [init\textsubscript{i}, proc\textsubscript{i}]
   
   b. Mary jumped (once) when she saw me.
   The arrive-class: \textit{Jump} [init\textsubscript{i}, proc\textsubscript{i}, res\textsubscript{i}]

The hypotheses in (132) predicted that verbs from the semelfactive class are compatible with both readings when combined with \textit{keep}. As the examples in (142) show, this prediction is borne out.

(142) a. The children kept jumping for another 10 minutes.
   
   b. Mary kept jumping each time she saw me.

The example in (142a) illustrates the continuation of an activity use of \textit{jump}, i.e., where the predicate \textit{jump} belongs to the \textit{run}-class and lacks a [res] feature. The reading in (142a) is \textit{continuative}. The example in (142b) illustrates the continuation of the iteration of a punctual activity, i.e., where the predicate \textit{jump} belongs to the \textit{arrive}-class and has a [res] feature. Here, the punctual jumping event in the complement clause has shifted into an activity through iteration and the reading is \textit{continuative-iterative}.

Recall that Toivonen (2006) claims that semelfactive verbs are allowed in \textit{V on} constructions since the particle \textit{on} forces the semelfactive verb to shift\textsuperscript{4} into an activity through iteration. I will argue against this and claim that the interpretation of continuing activity in examples such as \textit{the children skipped on} is not the result of iteration. Instead I will claim that a semelfactive which occurs with the particle \textit{on} is already an activity. Just like \textit{jump} in (142a), \textit{skip} in the

\textsuperscript{4}Toivonen (2006) does not actually use the term \textit{shift}, but she says that \textit{on} “forces an activity interpretation” (Toivonen, 2006:184).
children skipped on belongs to the run-class and lacks a [res] feature. This means that the continuation expressed by the children skipped on corresponds to the kind of continuation we saw in (142a) above and not to the kind of continuation we saw in (142b). The examples below confirm this view by showing that the continuative reading of keep V-ing in (142a), repeated below in (143), can be paraphrased as V on, but the continuative-iterative reading of keep V-ing in (142b), repeated in (144), cannot.

(143) a. The children kept jumping.
    b. → The children jumped on.

(144) a. Mary kept jumping each time she saw me.
    b. ̸→ Mary jumped on each time she saw me.

4.5.6 Keep and states

I claimed above that keep V-ing denotes continuing activity, and that consequently keep needs to combine with an activity, or an event which can be interpreted as an activity. Therefore, we do not expect keep to allow for stative predicates. Purely stative verbs are infelicitous, illustrated in (145):

(145) a. *He kept being intelligent.
    b. *She kept knowing the answer.

One may object that some states are in fact possible in the context of keep. For example, (146) is fine:

(146) John kept being polite.

5One could perhaps argue that the examples in (145) are ok, but this would require a forced stage level reading.
4.5. Distribution of the two readings of *keep V-ing*

However, the reason why (146) is fine is that *being polite* is a *stage level* state predicate, referring to a transitory state which can come and go (see e.g. Carlson 1977 and Kratzer 1995 for more on the distinction between *stage level* and *individual level* predicates). The reading in (146) is that John behaved in a polite manner again and again, not that he was permanently a polite person. The possibility for some stative predicates to allow for an eventive reading has been discussed in the literature, for example in connection with the progressive (see e.g. Smith 1983, Brinton 1988, Smith 1997, de Swart 2000, and Croft 2012). Brinton (1988) notes that when a stative verb is used with the progressive, the state is interpreted either as “temporary (limited/passing) and contingent rather than permanent and essential”, as in (147a), or it is interpreted as having an *activity* or *event* reading, as in (147b) and (147c) (Brinton, 1988:39).

(147)  

a. She is living with her parents.  
b. I’m feeling more and more pleased with that paper.  
c. She is being awkward.  

(Brinton, 1988:39)

A similar effect of the progressive on stative verbs has been noted by Croft (2012), who claims that *disposition predicates* such as *be polite* may give rise to a *single-occasion construal* (Croft, 2012:96). I take this behaviour of stative verbs to be a more general phenomenon, and not necessarily relevant for the present study. In the cases where states are possible in the context of *keep*, they have shifted into dynamic verbs, and are thus no longer states. How this shift comes about is beyond the scope of this study. Since only dynamic readings of stative verbs are allowed in the context of *keep*, stative verbs will not be included in the present study.
4.5.7 Summary

We have seen that the predictions formulated in (134) above were only partially borne out. The verb classes which did not behave as predicted were the classes which I refer to as the ‘Push + to-class’ and the ‘Run + to-class’. In section 4.5.4, I showed that predicates belonging to these classes have a choice between the two readings, rather than only allowing for the continuative-iterative reading, as was predicted. In other words, what we seem to find is the distribution in (148):

(148) a. The continuative reading:
   - Verbs with neither [res] nor PATH:
     - *Push-class [init, proc]*
     - *Run-class [init_i, proc_i]*
     - *Roll-class [proc]*
   b. The continuative-iterative reading:
      - Verbs with PATH:
        - *Read-class [init_i, proc_i]*
      - Verbs with [res]:
        - *Defuse-class [init, proc_i, res_i]*
        - *Enter-class [init_i, proc_i, res_i]*
        - *Arrive-class [init_i, proc_i, res_i]*
        - *Give-class [init, proc, res]*
        - *Break-class [proc_i, res_i]*
   c. Either the continuative or the continuative-iterative reading:
      - Combinations of verb + PP with [res]:
        - *Push + to-class [init, proc] + PP[res]*
        - *Run + to-class [init_i, proc_i] + PP[res]*
4.5. Distribution of the two readings of keep V-ing

- Verbs with optional [res]:
  - Skip-class [initᵢ, procᵢ, (resᵢ)]

It was shown in section 4.5.2 that predicates belonging to the read-class seemed to allow for either a continuative-iterative or a continuative reading. However, under the assumption that predicates such as read the book can belong to either the read-class, where they are constructed with a bounded PATH element, or the push-class, where they are constructed with an UNDERGOER object, the generalisation is that predicates belonging to the read-class yield a continuative-iterative reading, while predicates belonging to the push-class yield the continuative reading, that is, just as predicted.

The distribution stated in (148) is also illustrated in table format in table 4.2. The general pattern is that predicates with neither a [res] feature nor a bounded PATH element yield the continuative reading, while predicates tagged with a [res] feature or constructed with a bounded PATH element yield the continuative-iterative reading. Predicates constructed with a PP tagged with a [res] feature as well as predicates with an optional [res] feature (that is, predicates which are systematically ambiguous between the run-class, consisting of predicates without a [res] feature, and the arrive-class, consisting of predicates with a [res] feature) can yield either the continuative or the continuative-iterative reading. Finally, states do not occur with keep at all, unless stage level states.
In this chapter, I compare keep \(V\)-ing\((149a)\) to the progressive construction \(\text{be} \ V\)-ing\((149b)\) and the continuative constructions continue \(V\)-ing\((149c)\) and \(V\) on\((149d)\) in terms of the scope of the aspectualizer and the ability to induce aspect shift.

(a) The children kept skipping.
(b) The children were skipping.
(c) The children continued skipping.
(d) The children skipped on.

The reason for comparing with the progressive \(\text{be}\) is that, like keep, the progressive needs to combine with an activity, or an event which can be interpreted as an activity, and it is often suggested that it has the ability to induce aspect shift (e.g. Moens 1987, Moens and Steedman 1988, Smith 1997). Do progressive \(\text{be}\) and keep allow for the same kinds of shifts, and do they give rise to the same kinds of readings? The reason for comparing with continue and on is that these aspectualizers seem to have a very similar meaning to keep, and they too need to combine with activities, or events which can be interpreted.

### Table 4.2: The distribution of the two readings of keep \(V\)-ing: the continuative-iterative reading (‘C-I’) and the continuative reading (‘C’).

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Features</th>
<th>C-I</th>
<th>C</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push-class</td>
<td>[init, proc]</td>
<td>−</td>
<td>+</td>
<td>kept pushing the cart</td>
</tr>
<tr>
<td>Run-class</td>
<td>[init, proc]</td>
<td>−</td>
<td>+</td>
<td>kept running</td>
</tr>
<tr>
<td>Roll-class</td>
<td>[proc]</td>
<td>−</td>
<td>+</td>
<td>kept rolling</td>
</tr>
<tr>
<td>Read-class</td>
<td>[init, proc] + PATH</td>
<td>+</td>
<td>−</td>
<td>kept reading the book</td>
</tr>
<tr>
<td>Defuse-class</td>
<td>[init, proc, res]</td>
<td>+</td>
<td>−</td>
<td>kept defusing the bomb</td>
</tr>
<tr>
<td>Enter-class</td>
<td>[init, proc, res]</td>
<td>+</td>
<td>−</td>
<td>kept entering the room</td>
</tr>
<tr>
<td>Arrive-class</td>
<td>[init, proc, res]</td>
<td>+</td>
<td>−</td>
<td>kept arriving</td>
</tr>
<tr>
<td>Give-class</td>
<td>[init, proc, res]</td>
<td>+</td>
<td>−</td>
<td>kept giving the dog a bone</td>
</tr>
<tr>
<td>Break-class</td>
<td>[proc, res]</td>
<td>+</td>
<td>−</td>
<td>kept breaking the stick</td>
</tr>
<tr>
<td>Push + to-class</td>
<td>[init, proc] + [res]</td>
<td>+</td>
<td>+</td>
<td>kept pushing the cart to the store</td>
</tr>
<tr>
<td>Run + to-class</td>
<td>[init, proc] + [res]</td>
<td>+</td>
<td>+</td>
<td>kept running to the store</td>
</tr>
<tr>
<td>Skip-class</td>
<td>[init, proc, (res)]</td>
<td>+</td>
<td>+</td>
<td>kept skipping</td>
</tr>
<tr>
<td>States</td>
<td>[init]</td>
<td>−</td>
<td>−</td>
<td>*kept knowing the answer</td>
</tr>
</tbody>
</table>

It is clear from the account above that predicates tagged with a [res] feature or constructed with a bounded PATH systematically resist the continuative reading. One could perhaps attempt to explain this by suggesting that predicates tagged with a [res] feature or constructed with a bounded PATH in principle do not allow for an interpretation where the result part of the event is suppressed. However, I will show in the next chapter that such an explanation does not hold. In the context of progressive \(\text{be}\) it is often possible to get an interpretation where \(\text{be}\) takes scope over the part of the event which precedes the culmination and ignores the result part, even when the predicate in the complement clause is tagged with a [res] feature or constructed with a bounded PATH.
Chapter 5

Scope and aspect shift

In this chapter, I compare *keep V-ing* (149a) to the progressive construction *be V-ing* (149b) and the continuative constructions *continue V-ing* (149c) and *V on* (149d) in terms of the scope of the aspectualizer and the ability to induce aspect shift.

(149)  a. The children kept skipping.
       b. The children were skipping.
       c. The children continued skipping.
       d. The children skipped on.

The reason for comparing with the progressive *be* is that, like *keep*, the progressive needs to combine with an activity, or an event which can be interpreted as an activity, and it is often suggested that it has the ability to induce aspect shift (e.g. Moens 1987, Moens and Steedman 1988, Smith 1997). Do progressive *be* and *keep* allow for the same kinds of shifts, and do they give rise to the same kinds of readings? The reason for comparing with *continue* and *on* is that these aspectualizers seem to have a very similar meaning to *keep*, and they too need to combine with activities, or events which can be interpreted...
as activities. As mentioned in chapter 3, some scholars have identified similarities between these aspectualizers (e.g. Freed 1979, Brinton 1988, Toivonen 2006).

5.1 *Keep* and aspect shift

In chapter 4, I showed that *keep* needs to combine with an activity, or with an event which can be interpreted as an activity. I argued that when *keep* occurs with a telic predicate, the predicate in the complement clause may undergo aspect shift to yield an activity reading, either by iterating the entire telic event, or by stripping away the reference to the attainment of a result state. Which kind of aspect shift is possible is dependent on the aktionsart of the complement verb. Predicates whose telicity stems from a [res] feature on the verb, illustrated in (150a), and predicates whose telicity stems from entailments resulting from a bounded PATH element, illustrated in (150b) systematically yield an iterative reading.\(^1\) When *keep* combines with a predicate whose telicity stems from entailments resulting from a PP tagged with [res], illustrated in (151), there is often the choice between iterating the entire event, illustrated in (151a), or restricting the reference to the part of the event preceding the culmination into a result state and thus ignoring the result part, illustrated in (151b).

(150)  
\begin{itemize}
  \item a. We kept winning (again and again).
  \item b. Mary kept reading the book (again and again).
\end{itemize}

\(^1\)Recall that *kept reading the book* in (150b) may also yield a *continuative* reading, but in such a case, the object DP *the book* is an *undergoer* rather than a *path*. The generalisation stated here is only true if this distinction is taken into account. This was discussed in detail in section 4.5.2.
(151) a. John kept running to the store (again and again).
b. John kept running to the store, but he never reached the store.

5.2 The progressive and aspect shift

The progressive in English yields an interpretation where the event in the -ing’ clause is in progress or in other terms viewed from within (see e.g. Comrie 1976:33, Smith 1997:271-276, Frawley 1992:313, Rothstein 2004:36, Allerton 2006, Binnick 2006:250). The progressive be V-ing in English is similar to keep V-ing in that it requires that the event denoted by the -ing clause is an activity, or can be interpreted as an activity (see e.g. Moens 1987:79, Moens and Steedman 1988, Smith 1997).

If the event in the complement clause is not already an activity, progressive be, just like keep, has the ability to shift the event in the complement clause into an activity. Usually, this is done by be taking scope over a part of the event which precedes the point where the event reaches its final state. In other words, a telic event is shifted into an activity by suppressing the culmination (Moens, 1987:62). The example in (152) shows that when the predicate in the complement clause is an accomplishment, such as read the book, be may restrict the reference to the reading event preceding the culmination of finishing the book, yielding a reading where the activity part of the event is in progress.

(152) Mary was reading the book (when she fell asleep).

Accomplishments are durative and telic, and there is thus a part of the event which precedes the culmination, which be focuses on in (152).
With punctual events, where there is nothing preceding the culmination, we do not expect the progressive to be possible. However, progressive *be* sometimes has the ability to restrict reference to the part of the event preceding the culmination, even when the predicate is punctual. What happens then is that the reference is restricted to the *preliminary stages* of the event (referred to as *preparatory process* by Moens 1987) (Smith, 1997). Such a reading is not always possible, but it is restricted to events for which such preliminary stages are possible to conceptualize. An example of this is given in (153).

(153) Susan was arriving at the station.

In (153), the event denoted by the predicate in the complement clause consists only of a culmination; an arriving event is punctual and does not denote anything preceding the culmination into a result state. The progressive is possible here because it focuses on the preliminary stages of the arriving event, i.e., we get an interpretation where the activity which immediately precedes the arriving event is in progress. Rothstein (2004:44) notes that examples such as (153) may be paraphrased with ‘about to’: *Susan was about to arrive at the station*. This use of the progressive *be* is sometimes referred to as the *prospective aspect* (see e.g. Binnick 2006). That the reference is restricted to the activity preceding the culmination and that the culmination is suppressed can be illustrated using “interruption’ scenarios”, illustrated in (154) (Rothstein, 2004:38):

(154) Susan was arriving at the station when she heard that trains to Jerusalem had been cancelled because of the state of the line. (Rothstein, 2004:36)

Not all achievements allow for an interpretation where the preliminary stages are in progress, meaning that not all achievements may occur
in the progressive. For verbs such as recognize and spot, it is difficult to conceptualize any preliminary stages. The examples in (155) are strange, unless you force a so called slow motion or film strip reading, that is, a reading where the actual culmination is perceived as outstretched in time (see Rothstein 2004:31, 37, 56-58, who refers to Sandro Zucchi as the one to first note this reading).

(155)  
   a. # Mary is recognizing the painting.  
   b. # Mary is spotting her friend at the party.  
(Rothstein, 2004:36)

In examples such as those in (155), it is not the preliminary stages of the event which are in progress, but it is the momentary event which is interpreted as outstretched and thus in progress. For more on the slow motion reading, see Rothstein (2004:56-58). Also, note that the progressive may yield an iterative reading with punctual events, such as kick in (156a), where the reading involves a series of kicks. As (156b) shows, kick may also yield the ‘about to’ reading in the progressive (Rothstein, 2008a). The example with arrive in (157) shows that iteration is possible also for punctual predicates which do not have a semelfactive reading.

(156)  
   a. Bill was kicking him (for at least five minutes).  
   b. Bill was kicking him when he saw the referee watching him, so he stopped midway and didn’t kick him.  
(Rothstein, 2008a)

(157) Susan was arriving late (again and again).
5.3 \textit{Continue} and aspect shift

Just like progressive \textit{be}, \textit{continue} needs to combine with an activity, or with an event which can be interpreted as an activity. When the complement is not an activity, \textit{continue} has the ability to induce aspect shift. Just like we saw in connection with \textit{keep}, when there is a [res] feature on the verb, \textit{continue} only allows for aspect shift in the shape of iteration, illustrated in (158).

\begin{align*}
\text{(158) The team continued winning (again and again).}
\end{align*}

When the complement is telic as a result of either a bounded \textit{path} element or a PP with a [res] feature, illustrated in (159a) and (159b) respectively, \textit{continue} has the ability to restrict reference to the process part of the event.

\begin{align*}
\text{(159) a. John continued building the house (for several weeks before he decided he was stopping).}
\text{b. John continued walking to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).}
\end{align*}

Both (159a) and (159b) involve a reading where the process part of the event is continued. In neither case is there any reference to the attainment of the final state of having finished building the house or having reached the store.

Note that when \textit{continue} occurs with an accomplishment with a DP \textit{path}, such as \textit{read the book}, or with an accomplishment with a PP [res], such as \textit{walk to the store}, it is also possible to get an interpretation where the entire event, including the culmination, is iterated again and again. Consider the examples in (160):

\begin{align*}
\text{(160) a.}
\text{b.}
\end{align*}
5.4. \textit{V on} and aspect shift

Just like \textit{be} and \textit{continue}, the continuative particle \textit{on} can only occur with activities. There is an important difference between \textit{be}, \textit{continue} and \textit{keep} on the one hand and \textit{on} on the other regarding the issue of aspect shift: while \textit{be}, \textit{continue} and \textit{keep} allow for predicates belonging to any kind of dynamic aktionsart, \textit{on} is much more restrictive. When the predicate is tagged with a [res] feature, both \textit{keep} and \textit{continue} can shift the event in the complement clause into an activity by iteration, illustrated in (161a) and (161b), but the particle \textit{on} does not allow for such an aspect shift, illustrated in (161c):

(161)  
a. We kept winning (again and again).
b. We continued winning (again and again).
c. # We won on (again and again).

Toivonen (2006) shows that apart from activity predicates, \textit{on} only allows for combination with semelfactives, which are then interpreted as activities. The examples in (162) show that just like \textit{keep} and \textit{continue} in (162a) and (162b), \textit{on} in (162c) yields an activity reading of the semelfactive \textit{jump}. The reading is that of the continuation of a durative and atelic jumping event.

(162)  
a. The children kept jumping.
b. The children continued jumping.
c. The children jumped on.

The analysis of examples such as (162c) in Toivonen (2006:184) is that \textit{on} forces an iterative interpretation of the punctual event. As
mentioned in section 4.5.5, I follow Ramchand (2008) and argue that semelfactives are ambiguous between activities (belonging to the run-class) and achievements (belonging to the arrive-class). This means that in my view, a semelfactive with an activity reading, as in (162c), has not undergone aspect shift - it is already an activity. I will reserve the terms iterative and iteration for examples such as those in (161), and argue that the readings in (162) all involve what Rothstein (2004) refers to as S-summing, i.e., an operation by which several punctual events are joined together to form a larger event. The result of S-summing is a new event which is an activity. The difference between iteration and S-summing is that under S-summing the subevents are seamlessly joined together, while under iteration there may well be considerable gaps between the subevents (see section 2.6.3 for more on semelfactives, S-summing and iteration).

Turning to predicates whose telicity stems from entailments caused by a bounded DP path, such as read the book, the comparison is complicated by the fact that such predicates are impossible with on for reasons unrelated to aspectual factors. Although the examples in (163) are infelicitous, it is not necessarily due to any telicity entailments. Consider the examples in (164), where the DP bread is unbounded, which means that it does not entail telicity.

(163)  a. *She read on the book.
b. *She read the book on.
(164)  a. *Susan ate on bread.
b. *Susan ate bread on.

(Toivonen, 2006:187)

The infelicity of the examples in (164) is not related to telicity entailments, but it results from the fact that on is restricted to intransitive contexts (see Toivonen 2006 and references therein for more on the
argument restrictions of *on*, including some exceptions to the transitivity restriction\(^2\)). It is thus impossible to know from examples such as those in (163) if *on* is compatible with the aspectual features of an accomplishment such as *read the book*, because testing this is blocked by the argument restrictions of *on*.

Finally, looking at complements consisting of a verb and a PP tagged with [res], we find that *on* differs from *keep* and *continue* in that it does not yield an iterative reading. This is illustrated in (165).

(165) He ran on to the store (*again and again).*\(^3\)

It seems that *on* in *ran on to the store* can only take scope over the process denoted by *run* and not over the entire verb + PP complex. As long as *on* modifies the running event, it is possible to use it in the context of *again and again*, but we cannot get a reading where *on* modifies the entire verb + PP complex, the way *again and again* does. Thus, the reading that we get is one where *on* takes scope over the process part of the event and yields a reading where the process part is continued. Often, the culmination denoted by the PP is reached, as in (166a), but it is also possible to get a reading where it is not

---

\(^2\) *On* can be used in transitive contexts “only if the entity denoted by [the] NP is what continues movement through space or time” (Toivonen, 2006:189). For example, *she spurred the horse on* is fine, but not *she read the book on*. The kind of predicates which are of interest for the present purpose are predicates where the DP object measures out the event and thus has an effect on the telicity of the event. Such predicates are not represented among the exceptions noted by Toivonen (2006), e.g., *the horse in she spurred the horse on* does not measure out the event.

\(^3\) The intended reading here is that the subject referent continued an activity which consisted of running to the store again and again. A reading such as ‘he ran on all the way to the store, and he did that again and again’ is available. In such a case, *on* modifies the process part of *run to the store* and makes it continuous, rather than modify the entire event and iterate it. It is only the addition of *again and again* which is responsible for the iterative interpretation.
reached, as in (166b).

(166)  

a. John ran on to the store (and bought some bread).

b. John ran on to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

To conclude, the continuative particle *on* does not have the ability to induce any kind of aspect shift. It takes scope over the process part of an activity verb and yields an interpretation where that process is continued. In addition, only a narrow scope reading is available. This means that when V *on* is combined with a verb and a PP tagged with [res], a reading where *on* takes scope over the entire verb + PP complex is unavailable.

5.5 Comparison

Having established what abilities *be*, *continue*, and *on* have to shift the aspect of the predicate with which it occurs, I will now compare these abilities to those of *keep*. This section is organized as follows: first, I compare the aspect shift possibilities for each of the verbal elements when occurring with an achievement, then I present a similar comparison of aspect shift possibilities with accomplishments with a DP path, and then with semelfactives, and finally with accomplishments with a PP with a [res] feature.

5.5.1 Achievements

Achievements are predicates with a [res] feature. We saw above that the progressive yields an ‘about to’ reading with achievements, that is, a reading where the preliminary stages of the event are in progress. We also saw that neither *keep* nor *continue* can restrict reference to
the preliminary stages of an achievement in the way that progressive be can. In other words, these aspectualizers differ from the progressive in that a prospective reading (‘be about to’) is not available. This difference is illustrated in (167) by the addition of the clause but in the end we lost, which limits reference to the preliminary stages of the event. As we see, this addition is possible with progressive be, but unavailable with keep and continue. Recall that on cannot occur with achievements at all, that is, it does not allow for any kind of aspect shift with achievements.

(167)  

a. # Our team kept winning the game for a long time, but in the end we lost.  
b. # Our team continued winning the game for a long time, but in the end we lost.  
c. Our team was winning the game for a long time, but in the end we lost.

The intended reading in the examples in (167) is that during one game, for example a football game, our team was about to win for a long time, but in the end we lost. As the examples show, this reading is available with the progressive, but not with keep or continue. Note that an iterative reading is available with keep and continue, for example if we picture a series of games which were won, as in (168) below.

(168)  

a. Our team kept winning for a long time, but in the end we lost. (Intended reading: a series of games where each game was won.)  
b. Our team continued winning for a long time, but in the end we lost. (Intended reading: a series of games where each game was won.)
5.5. Comparison allows for a reading where scope is taken over the activity part of the accomplishment, ignoring the culmination part. That the progressive as well as continue, but not keep, allow for this kind of reading is illustrated in (170):

(170)  a. John kept building the house (for several weeks before he decided he was stopping). (Built on example 3.42b in Rothstein 2012)

b. John continued building the house (for several weeks before he decided he was stopping). (Built on example 3.42b in Rothstein 2012)

c. John was building the house (when he had a heart attack).

The intended reading in (170a) is the continuative, where it is the process part of the building event which is continued. Note that a reading where the entire building event is iterated is available, although far-fetched for pragmatic reasons. As shown in examples (170b) and (170c), both continue and progressive be easily allow for a reading where the process part of the building event is continued or in progress.

I suggest that this difference is due to the fact that continue and be are less restrictive than keep when it comes to taking scope over a part of the event rather than the entire event. Recall from section 4.5.2 that when keep occurs with accomplishments with a DP path, it is restricted to the continuative-iterative reading, that is, a reading where the entire event, including the culmination, is iterated again and again. This is illustrated in (171a). Both continue and progressive be can yield iterative readings too, illustrated in (171b) and (171c).

The difference between the progressive on the one hand and keep and continue on the other is that when the event in the complement clause is an achievement, both keep and continue entail that the event in the complement clause takes place, while the progressive does not, illustrated in (169).

(169)  a. ‘Our team kept winning’ entails ‘Our team won’.

b. ‘Our team continued winning’ entails ‘Our team won’.

c. ‘Our team was winning’ does not entail ‘Our team won’.

The reason why the iterative readings in (168) are available is that the interpretation involves a series of events where a game is actually won, even though the last one is lost. In the examples in (167), the intended reading is that there is only one game, which our team is about to win but does not actually win. Therefore, keep and continue cannot be used.

5.5.2 Accomplishments with DP path

Accomplishments with DP path, that is, telic predicates whose telicity stems from entailments resulting from a bounded DP path in the verb phrase, do not occur in V on structures, but are unproblematic in the progressive as well as with keep and continue. As we saw in section 5.2, when an accomplishment occurs in the progressive, the interpretation is that the part of the event which precedes the culmination is in progress. Typically, an accomplishment consists of an activity part and a culmination part, and the progressive takes scope over the activity part and gives it a reading of being in progress. I have argued, in section 4.5.2, that keep cannot take scope over the process part of an accomplishment with a DP path and yield a reading where the process part is continued. However, we saw in section 5.3 that continue
allows for a reading where scope is taken over the activity part of the accomplishment, ignoring the culmination part. That the progressive as well as continue, but not keep, allow for this kind of reading is illustrated in (170):

(170)  

<table>
<thead>
<tr>
<th></th>
<th>John kept building the house (#for several weeks before he decided he was stopping). (Built on example 3.42b in Rothstein 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>John continued building the house (for several weeks before he decided he was stopping). (Built on example 3.42b in Rothstein 2012)</td>
</tr>
<tr>
<td>b.</td>
<td>John was building the house (when he had a heart attack).</td>
</tr>
</tbody>
</table>

The intended reading in (170a) is the continuative, where it is the process part of the building event which is continued. Note that a reading where the entire building event is iterated is available, although far-fetched for pragmatic reasons. As shown in examples (170b) and (170c), both continue and progressive be easily allow for a reading where the process part of the building event is continued or in progress. I suggest that this difference is due to the fact that continue and be are less restrictive than keep when it comes to taking scope over a part of the event rather than the entire event. Recall from section 4.5.2 that when keep occurs with accomplishments with a DP path, it is restricted to the continuative-iterative reading, that is, a reading where the entire event, including the culmination, is iterated again and again. This is illustrated in (171a). Both continue and progressive be can yield iterative readings too, illustrated in (171b) and (171c).
5.5. Comparison

accomplishments are made up from an activity part and a culmination part. The differences in telicity patterns result from differences in the activity subevent. She exemplifies this with the predicate **read the book**, the activity part of which “is characterized by the same kind of activity going on at all times” (Rothstein, 2012:88). This is contrasted with the predicate **build a house**, whose activity part is “constructed from a variety of different kinds of subevents” (Rothstein, 2012:88).

While **read the book** and **build a house** both involve some kind of progression related to the DP object, they differ regarding whether or not the same thing is going on all the time during the time leading up to the culmination. The process part of a predicate such as **read the book** consists of a number of subevents which all involve reading. In contrast, the process part of a predicate such as **build a house** consists of a number of different subevents, such as digging, scaffolding, brick-laying etc.

Building on this insight, I suggest that **keep** can yield the continuative **reading with accomplishments** for which it is possible to conceptualize a process part consisting of similar subparts. This is certainly possible with **read the book**, which we have already seen. It may perhaps also be possible with **build a house**, if we conceptualize the building process as consisting of a number of identical building events, without going into details about how the building is actually done. This, I suggest, is why we can say something like that in (174a), although we cannot say (170a), repeated here in (174b).

(174) a. Bobby kept building the house bit by bit, after work and on weekends and holidays.
   b. #John kept building the house for several weeks before he decided he was stopping.

(171) a. Mary kept reading the book again and again.
   b. Mary continued reading the book again and again.
   c. Mary was reading the book again and again.

In section 4.5.2, I claimed that it sometimes seems as if **keep** can take scope over the process part of an accomplishment with a DP path and ignore the culmination. I gave the example with **read the book**, repeated here in (172a), and I claimed that the reason why **keep** can yield a continuative reading in sentences such as (172a) is that the object **the book** is interpreted as an undergoer rather than a path, that is, the object does not measure out the event and make it telic. That **read the book** allows for either an atelic or a telic reading can easily be shown by using different temporal modifications, as in (172b).

(172) a. Mary kept reading the book, but she never finished it.
   b. Mary read the book for an hour/in an hour.

It is well known that within the class of accomplishments, you find predicates which behave differently with regard to telicity. For example Tenny (1994), Smollett (2005) and Rothstein (2012) have all noted that some accomplishments allow for either telic or atelic readings. The examples in (173) show that an accomplishment such as **walk the trail** can have either an atelic reading, as in (173a), or a telic reading, as in (173b), shown by the different temporal modifications.

(173) a. Sue walked the trail for an hour.
   b. Sue walked the trail in an hour.

(Smollett, 2005:47)

Recall from section 2.7 that Rothstein (2012) suggests that accomplishments differ with regard to their internal structure. She proposes that
accomplishments are made up from an activity part and a culmination part. The differences in telicity patterns result from differences in the activity subevent. She exemplifies this with the predicate *read the book*, the activity part of which “is characterized by the same kind of activity going on at all times” (Rothstein, 2012:88). This is contrasted with the predicate *build a house*, whose activity part is “constructed from a variety of different kinds of subevents” (Rothstein, 2012:88). While *read the book* and *build a house* both involve some kind of progression related to the DP object, they differ regarding whether or not the same thing is going on all the time during the time leading up to the culmination. The process part of a predicate such as *read the book* consists of a number of subevents which all involve reading. In contrast, the process part of a predicate such as *build a house* consists of a number of different subevents, such as digging, scaffolding, brick-laying etc.

Building on this insight, I suggest that *keep* can yield the continuative reading with accomplishments for which it is possible to conceptualize a process part consisting of similar subparts. This is certainly possible with *read the book*, which we have already seen. It may perhaps also be possible with *build a house*, if we conceptualize the building process as consisting of a number of identical building events, without going into details about how the building is actually done. This, I suggest, is why we can say something like that in (174a), although we cannot say (170a), repeated here in (174b).

\[(174) \quad \begin{align*}
\text{a.} & \quad \text{Bobby kept building the house bit by bit, after work and on weekends and holidays.}^4 \\
\text{b.} & \quad \text{\# John kept building the house for several weeks before he decided he was stopping.}
\end{align*}\]

In (174a), the addition of ‘bit by bit’ helps us to conceptualize the process part of building the house as consisting of identical subevents. Another way of facilitating this kind of reading is by imagining that you are building something out of Lego, in which case it is easy to think of the building process as consisting of identical building subevents (assembling a number of Lego bricks). The Lego effect has been noted by Smollett (2005:49-50), who claims that although a sentence such as that in (175a) is usually judged as infelicitous when it is given out of context, a sentence such as that in (175b) is fine.

(175)  
  a. ? Jack built a house for a month. (Smollett, 2005:49)  
  b. Steven built a Lego tower for three hours.  
      (Smollett, 2005:50)

5.5.3 Semelfactives

As we saw in section 4.5.5, semelfactives are ambiguous between the run-class and the arrive-class. When a semelfactive belongs to the run-class, it is an activity, that is, it is durative and atelic, and readily occurs in the progressive as well as with all the aspectualizers investigated here. When a semelfactive belongs to the arrive-class, that is when it is tagged with a [res] feature, it patterns with other achievement predicates and allows for aspect shift in the shape of stripping away the culmination point and focusing on the preliminary stages in the progressive, but not with keep or continue. As the example in (176a) shows, the progressive is able to focus on the preliminary stages of the jumping event. The preliminary stages of the jumping event are in progress, and there is no entailment of attaining a final state. The
interpretation is something like the paraphrase in (176b).\footnote{There is disagreement in the literature on whether the semelfactive use (single occurrence reading) of a semelfactive verb actually allows for this interpretation. For example, Smith (1997:172) claims that “semelfactives do not accept the progressive”, meaning that the semelfactive use of predicates such as *jump* do not occur in the progressive. The examples in (1) cannot “refer to a single knock or a single cough”.

(1)  
   a. Jane was knocking at the door. (Smith, 1997:172)  
   b. Allan was coughing. (Smith, 1997:172)

However, Rothstein (2008b:182) claims that semelfactives do allow for the progressive even under the semelfactive reading, and that they induce the imperfective paradox, illustrated in (2) (Not all scholars agree on this. For example, Kearns 2000:167 claims that semelfactives in the progressive have the entailments of atelic predicates: *Jones was rapping the table* entails *Jones rapped the table*.)

(2)  
   a. John was knocking hard when he saw me, so he turned it into a tap instead (and didn’t knock hard). (Rothstein, 2008b:182)  
   b. Bill was kicking him when he saw me, so he stopped midway (and didn’t kick him). (Rothstein, 2008b:182)
have a semelfactive use, i.e., when they belong to the *arrive*-class.

\[(177)\quad \text{Jump } [\text{init}_i, \text{proc}_i, \text{res}_i]\]
   a. Mary kept jumping (*for another few seconds before I managed to stop her and she didn’t jump).\(^6\)
   b. Mary continued jumping (*for another few seconds before I managed to stop her and she didn’t jump).\(^7\)
   c. Mary was jumping, but I managed to stop her at the last minute.

### 5.5.4 Accomplishments with PP [res]

The investigation into aspect shift in contexts where the verb is modified by a PP tagged with a [res] feature shows that *continue* and *on* as well as progressive *be* all behave like *keep* and allow for a reading where scope is taken over the activity part only, ignoring the culmination denoted by the PP. This is illustrated in (178):

\[(178)\quad \text{Run + to-class}\]
   Lexical entry for *run*: [\text{init}_i, \text{proc}_i]
   Lexical entry for *to*: [res]
   a. John kept running to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

---

\(^6\)The intended reading here is that Mary did not jump at all, but she went on with the preliminary stages of the jumping event for a few seconds before I managed to stop her from actually jumping.

\(^7\)The intended reading here is that Mary did not jump at all, but she went on with the preliminary stages of the jumping event for a few seconds before I managed to stop her from actually jumping.
b. John continued running to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

c. John ran on to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

d. John was running to the store when he was hit by a truck (so he never reached the store).

None of the sentences in (178) entail that the subject referent reaches the final point denoted by the PP to the store. However, if we remove the context which cancels the interpretation of reaching the result state, such as when he was hit by a truck or but when the thunder started he decided to turn around, an interpretation where the result state is reached is probably just as likely as one where it is not reached. Consider (179):

(179) a. John kept running to the store.
b. John continued running to the store.
c. John ran on to the store.
d. John was running to the store.

For keep, continue and the progressive, but not for on, there is also the option of aspect shift in the shape of iteration, illustrated in (180).

(180) a. John kept running to the store (again and again).
b. John continued running to the store (again and again).
c. John ran on to the store (#again and again).
d. John was running to the store (again and again).

I argued in section 5.4 that on cannot take scope over the PP, but only over the activity part of the predicate, and that this is why it cannot
yield an iterative reading such as the intended reading in (180c). To help identify the difference in scope taking between keep and continue on the one hand and on on the other, consider the examples in (181).8

(181)  a. You’ve got to keep going to the bank every week.
b. You’ve got to continue going to the bank every week.
c. You’ve got to go on to the bank every week.

There is a crucial difference in interpretation here: in example (181a) and (181b), keep and continue modify the series of events of going to the bank. It is the iteration which has to be continued. In (181c), on modifies each of the individual events of going to the bank. The meaning is that every week, the subject referent has to go on to the bank, rather than stopping somewhere. A possible context could be something like ‘every week, rather than being able to withdraw cash from the cash machine, you have to go on to the bank to make the withdrawal’. On cannot denote that the iteration of the events of going to the bank was continued.

5.5.5 Intermediate summary

It is clear from the account above that the aspectualizer on is more restrictive than the other aspectualizers and the progressive. I have argued that on does not, in fact, allow for any kind of aspect shift. To the extent that it may occur with semelfactives, I argued that this is because the semelfactive is actually an activity when it occurs in the context of on.9

8(181a) is built on an authentic example from the BNC.
9Recall that semelfactives are ambiguous between the run class ([init, proc]) and the arrive class ([init, proc, res]) - in my account I have chosen to present semelfactives as their own class, with an optional [res] feature: the skip-class ([init, proc, (res)]). Only the variant without the [res] feature (i.e., when it really belongs to the run-class) can occur in the context of on.
Turning to the verbal expressions which do allow for aspect shift, the principal difference between the progressive on the one hand and *keep* and *continue* on the other hand is that while the progressive always has the ability to focus on an activity preceding the culmination, *keep* and *continue* are more restrictive in this respect. *Continue* has this ability when the telicity results from entailments stemming from a DP path or from a PP with a [res] feature, but not when it stems from a [res] feature on the verb. *Keep* is even more restrictive than *continue*, since it only seems able to take scope over a part of the event which precedes the culmination when the telicity stems from entailments resulting from a PP with a [res] feature. When telicity results from entailments stemming from a DP path or from a [res] feature on the verb, such a reading is unavailable. (182) to (184) illustrate these generalisations.

(182) Source of telicity: [res]
   a. # Our team kept winning the game for a long time, but in the end we lost.
   b. # Our team continued winning the game for a long time, but in the end we lost.
   c. Our team was winning the game for a long time, but in the end we lost.

(183) Source of telicity: DP path
   a. John kept building the house (#for several weeks before he decided he was stopping).
   b. John continued building the house (for several weeks before he decided he was stopping).
   c. John was building the house (when he had a heart attack).
Table 5.1 provides a summary of all possible shifts for be, continue, keep and on respectively when they occur with a telic complement. Three types of telic complements are represented: firstly, a punctual predicate tagged with a [res] feature, exemplified in the table by arrive, secondly, a durative predicate with a bounded DP path, exemplified in the table by read (the book), and finally a durative predicate with a PP tagged with a [res] feature, exemplified in the table by run to (the store). For the instances where suppression of the culmination is possible, I have noted which part of the event the aspectualizer takes scope over. There is also a reference to an example which illustrates if a shift is possible or not.

(184) Source of telicity: PP [res]

a. John kept running to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

b. John continued running to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

c. John was running to the store when he was hit by a truck, (so he never reached the store).
Table 5.1: Possible shifts of telic predicates

<table>
<thead>
<tr>
<th>Telic complement</th>
<th>Suppression of culmination</th>
<th>Iteration of whole event</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>be</em></td>
<td><em>arrive</em></td>
<td>Yes, pred. stages (154)</td>
</tr>
<tr>
<td></td>
<td><em>read</em></td>
<td>Yes, process part (152)</td>
</tr>
<tr>
<td></td>
<td><em>run to</em></td>
<td>Yes, process part (178d)</td>
</tr>
<tr>
<td><em>continue</em></td>
<td><em>arrive</em></td>
<td>No (167b)</td>
</tr>
<tr>
<td></td>
<td><em>read</em></td>
<td>Yes, process part (159a)</td>
</tr>
<tr>
<td></td>
<td><em>run to</em></td>
<td>Yes, process part (178b)</td>
</tr>
<tr>
<td><em>keep</em></td>
<td><em>arrive</em></td>
<td>No (167a)</td>
</tr>
<tr>
<td></td>
<td><em>read</em></td>
<td>No* (170a)</td>
</tr>
<tr>
<td></td>
<td><em>run to</em></td>
<td>Yes, process part (178a)</td>
</tr>
<tr>
<td><em>V on</em></td>
<td><em>arrive</em></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td><em>read</em></td>
<td>No (transitive) (163)</td>
</tr>
<tr>
<td></td>
<td><em>run to</em></td>
<td>Yes, process part* (166b)</td>
</tr>
</tbody>
</table>

*a* Note that when *read* is constructed with an UNDERGOER object, an atelic reading is possible. It is then not a question of suppressing the culmination, since there is no culmination in the first place.

*b* I actually argue that there is no shift here, but that *on* can only take scope over the process part to begin with.

In the table we see that *be* allows for both kinds of shift, that is, both suppression of the culmination and iteration of the entire event, irrespective of the source of telicity. *Continue* allows for both types of shift with *read* and *run to*, but not with *arrive*, where it resists suppression of the culmination. *Keep* allows for both shifts only with *run to*; with the other two predicates, *arrive* and *read*, it is restricted to the iterative shift and does not allow for the suppression of the culmination. Finally, *on* does not allow for any kind of shift. In the table, it says that *on* allows for suppression of the culmination with predicates such as *run to*, but this is only to illustrate that *on* can occur with *run to* without making reference to the culmination. It is not really a case of aspect shift, since *on* can never take scope over the
entire event, but is always restricted to taking scope over the process part. This was discussed in section 5.4.

Table 5.2 sums up the ability of the different verbal expressions to ignore or suppress the culmination of a telic event. We see that be has the ability to suppress the culmination irrespective of the source of telicity, continue can suppress the culmination unless the telicity stems from a [res] feature on the verb, and keep and on can only suppress the culmination when telicity stems from a PP [res].

<table>
<thead>
<tr>
<th>Source of telicity</th>
<th>Example of verb class</th>
<th>be</th>
<th>continue</th>
<th>keep</th>
<th>V on</th>
</tr>
</thead>
<tbody>
<tr>
<td>[res]</td>
<td>Arrive-class</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>PATH</td>
<td>Read-class</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>PP[res]</td>
<td>Push + to-class</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+(^a)</td>
</tr>
</tbody>
</table>

\(^a\)Recall that although on does not induce aspect shift, it does allow for a reading where the culmination into the final state is ignored when it occurs with a predicate with a PP tagged with [res].

5.6 Keep and accomplishments revisited

There are two verb groups which behave in a less straightforward manner in the context of keep. Firstly, there are the predicates which occur with a bounded DP path object which measures out the event and thus makes it telic. These predicates have been referred to as accomplishments with DP path, and an example is seen in (185a). Secondly, there are the predicates which occur with a PP tagged with a [res] feature, which measures out the event and makes it telic. These predicates have sometimes been referred to as accomplishments with
5.6. *Keep* and accomplishments revisited

PP [res], and an example is seen in (185b). This section takes a closer look at these two verb classes.

(185) a. Read the book.
    b. Run to the store.

I argued in section 4.5.2 that predicates such as *read the book* can be seen as belonging to two different verb classes, depending on the role which the object *the book* plays in the verb phrase. Either, *the book* is a DP path, in which case it measures out the event denoted by *read* and makes it telic, or *the book* is an undergoer, in which case it does not measure out the event. In the latter case, *read the book* is an activity rather than an accomplishment. I argued that in the cases where it seems as if an accomplishment may occur in the context of *keep* and yield the continuative reading, that is, a reading where there is no culmination into a result state, the predicate in the complement of *keep* is in fact an activity. This, I argued, is not a case of aspect shift, but a question of the verb already being an activity.

Turning to the other verb class, I argued in section 4.5.4 that in the context of *keep*, predicates with a PP with a [res] feature can undergo aspect shift either through iteration, yielding the continuative-iterative reading, or through taking scope over the process part of the event and stripping away the culmination, yielding the continuative reading. The behaviour of these predicates is unexpected, since other predicates with a [res] feature do not allow for the kind of aspect shift which strips away the culmination into a result state.

In sections 5.4 and 5.5.4, I argued that when a predicate with a PP with a [res] feature occurs with the continuative particle *on*, the only interpretation available is one where *on* takes scope over the process part of the event only, thus excluding the PP and the culmination into a result state, illustrated in (186a). An argument for this was that...
Unlike *keep*, *on* cannot yield an iterative reading of a predicate with a PP with a [res] feature, illustrated in (186b).

(186)  a. John ran on to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).

   b. John ran on to the store (#again and again).

What if the predicate *run to the store* in the examples in (186) is not an example of a predicate with a PP with [res]? What if these predicates too can be seen as either measuring out the event, in which case the PP denotes a bounded path and is tagged with a [res] feature, or as not measuring out the event, in which case the PP denotes an unbounded path? There are different views on whether predicates such as *run to the store* can yield atelic readings. Levin and Rappaport Hovav (2005:91) argue that they cannot, while Smith (1997:42-45) marks sentences such as *Mary walked to school for an hour* as odd rather than completely wrong, noting that accomplishments such as *walk to school* can be interpreted as “derived Activities, in which there is no intention of reaching the goal” when occurring with atelic adverbials (such as *for an hour*) (Smith, 1997:45).

Recall from section 2.6.6 that in Ramchand’s model, both predicates with a bounded DP *PATH* object and predicates with a PP with [res] are predicates which are typically seen as accomplishments (e.g. Smith 1997). In this study, I have not treated predicates such as *run to the store* as belonging to the same group as predicates such as *read the book*, because they have different feature setups. In my model, *walk to school* differs from *read the book* in that its telicity comes from a PP with a [res] feature rather than from a bounded DP *PATH*. Let us for a moment consider the similarities between these two verb groups instead of their differences: both groups consist of predicates which
5.6. *Keep* and accomplishments revisited

denote events which could be seen as having an activity part (reading or walking) and a culmination into a result state (finishing the book or arriving at the school). Building on this similarity, I will now try to see if verbs belonging to these two groups could perhaps be seen as subject to the same restrictions in the context of *keep*.

I would like to suggest that when a predicate such as *read the book* or *run to the store* allows for a *continuative* reading, that is, a reading where the culmination is not realized, as in (187), it is in fact an activity. This means that it is not constructed with a bounded DP PATH or a PP with a [res] feature. When a predicate such as *read the book* or *run to the store* is constructed with a bounded DP PATH or a PP with a [res] feature, it only allows for the *continuative-iterative* reading.

(187)  

a. John kept running to the store even when it started to rain, but when the thunder started he decided to turn around (and never reached the store).  
b. Mary kept reading the book for another ten minutes before she fell asleep (and never finished the book).

In section 5.5.2, I argued that not all accomplishments with a DP PATH have an activity counterpart, that is, not all accomplishments with a DP PATH allow for a reading where the DP object is interpreted as an UNDERGOER rather than a PATH. I gave the example *build a house*, which does not readily allow for an interpretation where the DP *the house* does not measure out the event. Compare this to *read the book*, which alongside its accomplishment reading also has an interpretation where *the book* does not measure out the event, but rather specifies what kind of reading event is intended.

In section 5.5.2, I suggested that the *continuative* reading of *keep V-ing* is restricted to accomplishments for which it is possible to con-
ceptualize a process part consisting of similar subparts. This idea was built on Rothstein (2012), who proposes three different types of accomplishments (two major classes, one of which consists of two subclasses). First she distinguishes between lexically specified accomplishments (read the book) and non-lexically specified accomplishments, and later the non-lexically specified accomplishments are subdivided into “complex accomplishments” (build a house) and “change-of-state accomplishments” (open the door). The characteristics of a lexically specified accomplishment is that the semantics of the verb specifies what kind of activity the accomplishment consists of. In the example of read the book, it is clear that the activity part of the accomplishment must consist of a reading event. Compare this to build a house, which is a non-lexically specified accomplishment. Here, the semantics of the verb build does not specify what kind of activity the accomplishment consists of. The process part of the accomplishment build a house consists of many different kinds of activities, such as digging, scaffolding, brick laying etc. Rothstein (2012) labels these complex accomplishments.

What is interesting for the present study is that the lexically specified accomplishments seem to correspond to the predicates which I have shown are able to yield the continuative reading in the context of keep. In this group we find predicates such as read the book as well as walk to the store. Although Rothstein does not mention walk to the store, I think it has to belong to this group, along with other predicates in the classes which I have labelled the run + to-class and the push + to-class, since I think that the activity part (the running or the pushing) is lexically specified, in Rothstein’s terms.

If a case like this can be made regarding the predicates with a PP, such as run to the store, then the generalisation would be that when the PP is interpreted as bounded, the reading with keep will always
be continuative-iterative. When the PP is interpreted as unbounded, the reading with keep is continuative. This would require different analyses for cases when there is a [res] feature on the verb itself and cases when there is a [res] feature on a PP in the verb phrase. In the latter case, keep seems able to allow for an atelic reading of the predicate, even though there is a resP in the syntactic structure. This seems to me to be a conceivable solution, since the resP in such cases is “further away” from the verb, which could mean that it is easier to cancel its implication of telicity.

Another possible analysis would be to assume that when the PP is interpreted as unbounded, it does not project a resP. Perhaps one could assume that like other unbounded PP paths, such as towards the store, it projects a pathP, illustrated in (188). This is the analysis suggested for the Norwegian preposition til ‘to’ in Tungseth (2008:65), even in cases where the PP is interpreted as a bounded path. The structure for a predicate with a PP which projects a resP is given in (189) for comparison.

(188) John ran to the store. (unbounded interpretation)
This chapter has shown that unlike progressive and continue, keep always has to take scope over the entire event when the event is telic. This generalisation builds on an analysis where accomplishments with DP path (read the book) and accomplishments with PP [res] (run to the store) also allow for atelic readings. In the case of read the book, I argued that an atelic reading arises when the object the book is an undergoer and not a DP path. In the case of run to the store, I tentatively suggested that it is possible to get an interpretation where the path denoted by the PP is unbounded, in which case the predicate is interpreted as an activity and thus yields the continuative reading in the context of keep.

The next chapter will discuss the meaning component continuance and to what extent a keep V-ing construction denotes continuation.

An important consequence of viewing the unbounded interpretation of a predicate with a PP, such as run to the store (188) as not projecting a resP is that we can generalise and say that keep always takes scope over the entire event when the event is telic. When the PP has a bounded interpretation, as in (189), keep creates a series of telic events, yielding the continuative-iterative reading. I argued in section 5.5.4 that when keep occurs with predicates with a PP with [res], it is also possible to take scope over the process part and thus yield the continuative reading. Under the analysis suggested here, there is no need to allow for such an option, since the continuative reading arises when the PP has an unbounded interpretation, as in (188). In such cases, the event is atelic, and the continuative reading is expected. I will return to the issue of scope with atelic predicates in chapter 7.
5.7 Summary

This chapter has shown that unlike progressive be and continue, keep always has to take scope over the entire event when the event is telic. This generalisation builds on an analysis where accomplishments with DP path (read the book) and accomplishments with PP [res] (run to the store) also allow for atelic readings. In the case of read the book, I argued that an atelic reading arises when the object the book is an undergoer and not a DP path. In the case of run to the store, I tentatively suggested that it is possible to get an interpretation where the path denoted by the PP is unbounded, in which case the predicate is interpreted as an activity and thus yields the continuative reading in the context of keep.

The next chapter will discuss the meaning component continuation and to what extent a keep V-ing construction denotes continuation.
Chapter 6

Continuation

This chapter focuses on the meaning component of CONTINUATION. In section 4.2, I adopted the proposal in Toivonen (2006) that keep V-ing denotes ‘continuing activity’, but in this chapter I will show that this needs to be problematized. Typically, the continuation of an event involves the prolongation of something which has already begun. Compare the examples in (190) below. In (190a), the reading event has already been initiated at some point before noon, while in (190b) it has not.

(190)  a. She continued reading the book at noon.
       b. She began reading the book at noon.

In the first part of this chapter, section 6.1, the continuative aspectualizers keep, continue and on are compared regarding whether they presuppose prior initiation of the event which they modify. In the second part, section 6.2, the comparison is concerned with whether or not the event which is continued may have been interrupted and then resumed.
6.1 Prior initiation

Comparing *keep* V-i*ng* to other continuative aspectualizers, such as *continue V-i*ng* and V *on* shows that there is variation regarding whether or not prior initiation is presupposed. Example (191a) shows that *keep* does not presuppose the prior initiation of the event denoted by the complement verb, while (191b) and (191c) show that both *continue* and V *on* do.

(191)  a. She kept coughing during her speech although she hadn’t coughed before.
       b. She continued coughing during her speech # although she hadn’t coughed before.
       c. She coughed on during her speech # although she hadn’t coughed before.

As we saw in chapter 3, the issue of prior initiation is often mentioned in the literature in connection with *keep* and other continuative aspectualizers. Toivonen (2006:223) does not discuss *keep* in this respect, but notes that V *on* entails that the event denoted by the verb with which *on* occurs has already been initiated. Verspoor (1999:523) and ter Meulen (2005:561) argue that both *keep* and *continue* presuppose prior initiation of the event in the complement clause, while Palmer (2009) argues that *continue* but not *keep* presupposes that the event in the complement clause has already been initiated. It is sometimes suggested that there is a difference between the two different readings associated with *keep* with regard to whether or not prior initiation is presupposed. Freed (1979:90-91) and Duffley (2006:114) note that when *keep* has what I refer to as the *continuative-iterative* reading, it does not necessarily presuppose that the event in the complement
6.1. Prior initiation

The baby was awake when we got there, but she kept sleeping during the concert.

It thus appears to be the case that continue and on always presuppose prior initiation, irrespective of whether the event is iterated, as in (191b) and (191c), or continued, as in (193b) and (193c), while keep only presupposes prior initiation when the reading is continuative, as in (193a), and not when the reading is continuative-iterative, as in (191a). Note that keep V-ing may, but does not have to, refer to an event which has already been initiated also when the reading is continuative-iterative, as in (194):

(194)  I kept jumping well. (Freed, 1979:91)

If the continuative-iterative reading associated with keep does not presuppose prior initiation of the event in the complement clause, then it cannot denote the prolongation of something which has already begun. Yet there is a sense of continuation. Following Freed (1979) and Duffley (2006), I will argue that this sense of continuation is not necessarily the result of the continuation of something which has already been initiated; it may refer to the continuation of an iterated event whose first occurrence is part of the event denoted by the complement predicate. The meaning is something like 'start and then continue'. It differs from that of start V-ing in that it necessarily implies continuation, which start V-ing does not. Consider the examples in (195):

(195)  a. I kept falling asleep during the concert. (Freed, 1979:91)
    b. I kept quiet for a few minutes. (Duffley, 2006:114)

Duffley argues that in (192a), keep gives rise to an interpretation where the subject is “maintaining [itself] in the situation evoked by the subject complement falling” (Duffley, 2006:114). He compares this to an example where keep has an adjectival complement, given in (192b), where keep evokes a similar meaning, namely that of the subject “maintaining itself in a state of quietness” (Duffley, 2006:114). Neither of these situations presupposes that the situation was already initiated; the subject referent in (192a) had not necessarily been falling asleep before the concert, and the subject referent in (192b) was not necessarily quiet before the beginning of the few minutes. Freed (1979:92) captures this sense by saying that when keep has what is here referred to as the continuative-iterative reading, “the first occurrence of the event is included as part of the referent”.

According to Freed (1979) and Duffley (2006), prior initiation is not presupposed on the continuative-iterative reading, as in (191). Consider now the example in (193a), where the reading is continuative, i.e., where there is no iteration. Here, keep seems to pattern with continue (193b) and V on (193c) and presuppose that the event has already been initiated.

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1In the account in Freed (1979:90), keep never presupposes prior initiation, but there is a consequence (“information which is conveyed by the speaker and learned by the hearer” Freed 1979:4) of prior initiation under the continuative reading which is not necessarily present under the continuative-iterative reading.
(193) a. The baby was awake when we got there, #but she kept sleeping during the concert.
   b. The baby was awake when we got there, #but she continued sleeping during the concert.
   c. The baby was awake when we got there, #but she slept on during the concert.

It thus appears to be the case that *continue* and *on* always presuppose prior initiation, irrespective of whether the event is iterated, as in (191b) and (191c), or continued, as in (193b) and (193c), while *keep* only presupposes prior initiation when the reading is *continuative*, as in (193a), and not when the reading is *continuative-iterative*, as in (191a). Note that *keep* V-*ing* may, but does not have to, refer to an event which has already been initiated also when the reading is *continuative-iterative*, as in (194):

(194) ‘Maybe,’ Erika said. ‘But it’s a big maybe. I’ve got to keep jumping well.’ ‘And why shouldn’t you?’ Fritz said. ‘If you can do a thing once you can do it again. Right, Rosa?’ (BNC A7A)

If the *continuative-iterative* reading associated with *keep* does not presuppose prior initiation of the event in the complement clause, then it cannot denote the prolongation of something which has already begun. Yet there is a sense of continuation. Following Freed (1979) and Duffley (2006), I will argue that this sense of continuation is not necessarily the result of the continuation of something which has already been initiated; it may refer to the continuation of an iterated event whose first occurrence is part of the event denoted by the complement predicate. The meaning is something like ‘start and then continue’. It differs from that of *start* V-*ing* in that it necessarily implies continuation, which *start* V-*ing* does not. Consider the examples in (195):
Chapter 6. Continuation

(195)  
   a. She started coughing, but stopped straight away.
   b. She kept coughing, #but stopped straight away.

To conclude, we have seen that only the *continuative* reading of *keep* \textit{V-ing} patterns with *continue* \textit{V-ing} and \textit{V on} in presupposing that the event in the complement clause has already been initiated. When *keep* has the *continuative-iterative* reading, the interpretation may be the continuation of an iterated event, whose first occurrence is within the denotation of the event in the complement clause. This reading does not arise with either of the other two continuative aspectualizers investigated in this section.

### 6.2 Resumption

Another issue which is often brought up in the literature in relation with *keep* and other continuative aspectualizers is *resumption*. As we saw in chapter 3, it is often suggested that *keep* cannot refer to the continuation of an interrupted event, while *continue* can. For example, Freed (1979) offers the examples in (196) to show that *keep* cannot be used to imply continuation of an event which has been interrupted, and ter Meulen (2005:561) states that “you cannot keep reading, unless you are reading at this very moment”. However, consider (197), which shows an authentic example where *keep reading* refers to the resumption of a reading activity.

(196)  
   a. If they stop now, they won’t continue to work later.
   b. ? If they stop now, they won’t continue working later.
   c. * If they stop now, they won’t keep working later.
   (Freed, 1979:95)
We can keep reading later, this diary is amazing.²

Since the example in (197) is fine, it must be something other than the fact that keep is referring to the continuation of an interrupted event which makes the example in (196c) infelicitous.

As we saw in chapter 3, Duffley (2006:112) follows Freed (1979) and argues that keep V-ing may not refer to the continuation of an interrupted event, confirming this with data. In Duffley’s data, there was only one example which might seem to involve the resumption of an interrupted event, given in (198).

Shayne said briskly, “Grab another drink if you want it. We’ve got one other call to make before I meet Alvarez.” “Where?” “It’s out in the Northeast section. Have you got my car here?” “It’s parked in front.” Rourke hastily slopped whiskey into his glass on top of half-melted ice cubes. “I’d better keep on driving yours,” Shayne decided, “because I’ll be going on over to the Beach. I can drop you back here to pick up mine.” He went over to the closet to get a light jacket, and took his hat from beside the door.

(Brown U. Corpus L05 0130, cited in Duffley 2006:114-115)

This example, Duffley argues, does not in fact constitute a counter-example to the claim that keep cannot denote the resumption of an event which has been interrupted, because the driving event in (198) has not really been interrupted: “the -ing’s event appears to be interpreted as being under way even though the person is not physically performing it at the moment of utterance” (Duffley, 2006:114). An argument for this is that Shayne can say “I’m driving Rourke’s car right now” although right now he is standing in his living room (Duffley,

²From Campbell, Jamie (2012) Gifted.
The question of whether or not an event is still going on even though it is in some way interrupted is related to whether a sentence is seen as generic or episodic (see e.g. Carlson 2009). It is possible that the ability of *keep* to occur in contexts where it seems that the event is continued after an interruption is dependent on whether the sentence is interpreted as generic or episodic. The distinction between the two is not always easy to make, and it is beyond the scope of this work to go into this in any detail. It suffices to point out that *keep* V-*ing* may sometimes have the interpretation of continuation of an interrupted event.

Regarding Freed (1979)’s suggestion that *continue to* is preferable to *continue V-*ing* when referring to the continuation of an interrupted event (hence the ‘?’ in (196b) above), this is refuted by both Duffley (2006:112), who uses authentic examples such as that in (199) to show that *continue V-*ing* may indeed refer to the continuation of an interrupted event, and Egan (2008:192), who found in his material that both *continue V-*ing* and *continue to V* occur in contexts where there was an interruption after which the situation was resumed, although it was rare for either construction to imply such an interruption.

(199) Last week on a bus I saw a young mother spank her little boy when he used the F-word. “Good for her,” I thought. She then continued talking to her friend in a conversation which was peppered with exactly the same word.
(BNC: CBC 12259, cited in Duffley 2006:112)

Turning finally to V *on*, there has not to my knowledge been any suggestions in the literature as to whether or not it can refer to the continuation of an interrupted event. Judging from authentic examples, such as that in (200), it seems that V *on* too has the ability to refer to the continuation of an event which has been interrupted.

(200)
‘Poor bloke,’ she said soberly, and read on, her expression registering distaste. (BNC CKE)

To conclude, all three aspectualizers *keep*, *continue* and *on* may be used to refer to the continuation of an interrupted event.

### 6.3 Summary

We have seen in this chapter that unlike the other two continuative aspectualizers, *keep* has the ability to refer to the continuation of an event which has not already been initiated. We also saw that all three continuative aspectualizers can refer to the resumption of an event which has been interrupted. The generalisations concerning these two features are illustrated in table 6.1.

Table 6.1: Prior initiation and resumption

<table>
<thead>
<tr>
<th></th>
<th>Requires prior initiation</th>
<th>Allows for resumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>keep V-ing</em> continuative-iterative</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td><em>keep V-ing</em> continuative</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><em>continue V-ing</em></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><em>V on</em></td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

The most important finding in this chapter is that *keep V-ing* does not necessarily mean continuation of a previously initiated event. Often, *keep V-ing* denotes continuation of a series of events, the first of which is also within the denotation of the *keep V-ing* structure (as has been suggested by Freed 1979 and Duffley 2006). So, rather than meaning ‘continuation of something which has already been initiated’, *keep V-ing* means ‘start and then continue’. I argued that this type of interpretation of continuation is only present for the *continuative-iterative*...
reading of \textit{keep V-ing}, showing that the \textit{continuative} reading seems to presuppose that the continued event has already been initiated.

### 6.4 \textit{Keep V-ing} - intermediate conclusion

I stated in the introduction that the principal aim of this thesis was to provide a comprehensive account of the meaning of \textit{keep V-ing} constructions. In chapters 4 to 6, I have sought to capture the meaning of \textit{keep V-ing}.

By systematically studying predicates of different aktionsarts in the complement of \textit{keep}, I showed that \textit{keep} can give rise to two different readings which share the overall meaning of ‘continued activity’. Under the first reading, the \textit{continuative-iterative} reading, illustrated in (201a), a reading of continued activity is created through an iteration of the entire event. Under the second reading, the \textit{continuative} reading, illustrated in (201b), a reading of continued activity is created through a prolongation of the process part, without iteration.

\begin{itemize}
  \item[(201)]
  \begin{enumerate}
    \item a. Mary kept winning (again and again).
    \item b. John kept running (for another ten minutes).
  \end{enumerate}
\end{itemize}

I suggested that \textit{keep} needs to combine with an activity, that is, with a dynamic, durative and atelic event, or with an event which can be interpreted as an activity, in which case \textit{keep} forces aspect shift. In (201a), a punctual and telic winning event is iterated again and again, creating a series which in itself is durative and atelic and thus compatible with \textit{keep}. In (201b), there is no need for aspect shift since a running event is already durative and atelic.

I showed that unlike progressive \textit{be} and \textit{continue}, \textit{keep} always has to take scope over the entire event when the event is telic. Both \textit{continue} and \textit{be} sometimes have the option of taking scope over the
part of the event which precedes the culmination into a result state. This is illustrated in (202), where the progressive be takes scope over the part of the house building event which precedes the culmination into the result state of having finished the house.

(202) John was building a house when he had a heart attack (and never finished the house).

Finally, in the present chapter, I discussed the meaning components of *keep V-ing* in relation with *continue V-ing* and *V on*. I argued that although *keep V-ing*, *continue V-ing* and *V on* all denote ‘continuing activity’, they are not synonymous. Crucially, I showed that *keep* does not necessarily denote continuation of an event which has already been initiated, while both *continue* and *on* do. Also, I proposed that the need for *keep* to denote the continuation of an event which has already been initiated is different for the two different readings.
Chapter 6. Continuation

Chapter 7
What is keep?

In the previous three chapters I have examined the meaning of the keep-<i>ing</i> construction. In this chapter, I discuss my findings and propose an account of the meaning contribution of <i>keep</i> which takes into account the characteristics of <i>keep</i> which were presented in the above chapters.

7.1 <i>Keep</i> is an aspectualizer

I have suggested that <i>keep</i> is an aspectualizer. As such it modifies the aspectual structure of its complement. Smith (1997:48-50) discusses aspectualizers under the label of super-lexical morphemes, which are morphemes which “modulate the focus of a situation” (Smith, 1997:48). Smith does not discuss <i>keep</i> specifically, but notes that continue focuses on internal stages of a situation (Smith, 1997:49). I agree with Smith, and assume the same function for <i>keep</i> as she suggests for continue, namely that it operates on its complement and modulates the focus of the situation denoted by the complement verb.

<i>Keep V-ing</i> summarised:

- <i>Keep V-ing</i> denotes ‘continuing activity’.
- <i>Keep V-ing</i> denotes a durative and atelic event.
- <i>Keep</i> needs to combine with an activity or with an event which can be interpreted as an activity.
- <i>Keep</i> may induce aspect shift, and can thus occur with a telic complement.
- <i>Keep</i> always has to take scope over the entire event when the event is telic.
- <i>Keep</i> does not presuppose prior initiation of the event in the complement clause.
Chapter 7

What is *keep*?

In the previous three chapters I have examined the meaning of the *keep V-ing* construction. In this chapter, I discuss my findings and propose an account of the meaning contribution of *keep* which takes into account the characteristics of *keep* which were presented in the above chapters.

### 7.1 *Keep* is an aspectualizer

I have suggested that *keep* is an aspectualizer. As such it modifies the aspectual structure of its complement. Smith (1997:48-50) discusses aspectualizers under the label of *super-lexical morphemes*, which are morphemes which “modulate the focus of a situation” (Smith, 1997:48). Smith does not discuss *keep* specifically, but notes that *continue* focuses on internal stages of a situation (Smith, 1997:49). I agree with Smith, and assume the same function for *keep* as she suggests for *continue*, namely that it operates on its complement and modulates the focus of the situation denoted by the complement verb.
7.2 Is *keep* an auxiliary or a full lexical verb?

As mentioned in chapter 1, there is no consensus in the literature on whether aspectualizers should be seen as auxiliaries or as full lexical verbs. In my view, there are valid arguments for both analyses. For example, *keep* does not have any selectional restrictions regarding the agentivity of the complement verb. We can see this in examples such as (203), where the restrictions imposed by the verb *ask* skip over *keep* and apply to the verb in the -ing clause.¹ The verb *ask* needs to combine with a verb which expresses a voluntary action, and is therefore fine with *listen* in (203a), but not with *hear* in (203b).

(203)  a. Ask her to keep listening (to the lecture).
       b. *Ask her to keep hearing (the lecture).

Compare this to (204), where the restrictions imposed by the verb *ask* are met by the verb *try*, which expresses a voluntary action, and thus can occur in contexts with both *listen* and *hear*. Note that *keep* itself does not impose any restrictions regarding the agentivity of its complement verb, illustrated in (205).

(204)  a. Ask her to try to listen (to the lecture).
       b. Ask her to try to hear (the lecture).
(205)  a. She kept listening (to the lecture).
       b. She kept hearing (the lecture).

This transparency phenomenon makes *keep* resemble an auxiliary. Auxiliaries too are transparent, and the restrictions of agentivity of the

¹This phenomenon was noted for aspectualizers such as *begin* by Anderson (1968), who calls it *transparency*. See also Brinton (1988:62-66) and Duffley (2006:89-90) for discussions of this phenomenon in relation with aspectualizers. Also, see Newmeyer (1975:29-39) for a similar observation.
verb *ask* skips over *be* in (206). This is why the example in (206b) is infelicitous, although it is clear from the examples in (207) that *be* itself does not impose any restrictions regarding agentivity.

(206)  
\begin{itemize}
  \item a. Ask her to be looking (for something).
  \item b. *Ask her to be seeing (something).
\end{itemize}

(207)  
\begin{itemize}
  \item a. She is looking (for something).
  \item b. She is seeing (something).
\end{itemize}

Other characteristics of *keep* suggest that it is not an auxiliary. For example, unlike auxiliaries, *keep* requires *do*-insertion, illustrated in (208), *keep* does not allow for inversion in questions, illustrated in (209), and *keep* cannot occur as a tag, illustrated in (210).

(208)  
\begin{itemize}
  \item Do-insertion
  \begin{itemize}
    \item a. I don’t keep looking./ * I keepn’t looking.
    \item b. *I don’t be looking./ I am not looking.
  \end{itemize}
\end{itemize}

(209)  
\begin{itemize}
  \item Inversion
  \begin{itemize}
    \item a. *Kept you running?
    \item b. Were you running?
  \end{itemize}
\end{itemize}

(210)  
\begin{itemize}
  \item Tag
  \begin{itemize}
    \item a. You kept running, * keptn’t you?
    \item b. You were running, weren’t you?
  \end{itemize}
\end{itemize}

Based on these observations, I tentatively suggest that the aspectualizer *keep* should be treated as something in between an auxiliary and a full lexical verb. The idea that there is a cline with auxiliary verbs at one end and full lexical verbs at the other end is not new, see for

\footnote{These are standard tests for auxiliaryhood, see e.g. Palmer (1974) or Huddleston (1976).}
example García (1967) and Brinton (1988:73). It is beyond the scope of this work to establish exactly where on this cline keep is found.

7.3 *Keep as a continuative operator*

I concluded in section 6.4 that keep denotes continuation. Depending on the aktionsart of the predicate in the complement clause, this is done by either targeting the process part of the event and giving it a sense of continuation, or by targeting the entire event and iterating it. In the latter case, it is the series of iterated events which is interpreted as continued.

One way of accounting for this could be to view keep as a continuative operator, which gives a continuative reading of the event in the complement clause through iteration. I have argued that when keep occurs with telic predicates, as in (211a), it takes scope over the entire event and iterates it. I will now suggest that the same applies to atelic predicates: when keep occurs with atelic predicates, as in (211b), it takes scope over the entire event and iterates it. Because the event is atelic, and there is no culmination into a result state, this iteration is interpreted as one single event, which is interpreted as continued. This accounts for what I have labelled the continuative reading.

(211)  

a. Mary kept winning. (iteration of telic winning events.)  
b. John kept running. (iteration of atelic running events.)

The main advantage of such a proposal is that keep is an operator which does the same thing irrespective of the aktionsart of the predicate with which it occurs, namely causes some kind of iteration. An obvious disadvantage is that the difference between a durative running event, such as that in (212a), and a continued running event, such as
that in (212b), is obscured, since both cases can be said to involve some kind of iteration.\(^3\)

\[(212)\]

a. John ran.

b. John kept running.

In (212b), the interpretation is that the running event has already been initiated. The proposal given in this section does not tell us where this interpretation comes from.

### 7.4 Keep and iteration

The idea put forward in the previous section, that keep is a continuative operator which always causes iteration, opens for the question of what iteration actually is. The term iteration is used in different ways in the literature. For some, the term iteration is restricted to the kind of iteration involved in an activity reading of a semelfactive verb, illustrated in (213) (e.g. Comrie 1976:42, Bybee et al. 1994, Payne 1997:241).

\[(213)\]

The children kept skipping.

In (213), a series of punctual skipping events are seamlessly joined together, resulting in a new event, which is durative and atelic. Recall from chapter 3 and section 5.4 that iteration was the term which Toivonen (2006) used for this.\(^4\) Other scholars use the term iteration in a broader sense, including also cases where entire events are

\(^3\)Recall that Christensen (1995) argues that an activity predicate such as run is made up from the iteration of minimal events. See also Rothstein (2004) and Rothstein (2008b) for a similar idea.

\(^4\)In section 5.4, I stated that I do not refer to this as iteration, but as a case of what Rothstein (2004) calls S-summing.
repeated, illustrated in (214), where several entire events of running across the street are iterated (e.g. Vanden Wyngaerd 2001, Bertinetto and Lenci 2012, Carlson 2009).

(214) Fred ran across the street all afternoon.
(Vanden Wyngaerd, 2001:77)

I argued in section 5.4 that only the latter kind of repetition, that is, the one illustrated in (214), should be labelled *iteration*. However, the idea put forward in section 7.3, that *keep* always causes iteration, would require that iteration also include the former kind of repetition, that is, the one illustrated in (213). This means that iteration can involve a series of semelfactives which are seamlessly joined together, as in (215a), a series of achievements which are iterated, possibly with considerable downtime between them, as in (215b), or a series of activity events which are seamlessly joined together, yielding a reading where the activity event is interpreted as outstretched in time, as in (215c).

(215) a. The children kept skipping.
   b. Our team kept winning all year.
   c. John kept running.

Within the study of *pluractionality*, or verbal plurality, which was presented in section 2.8 above, similar issues to those brought up in this section are discussed, and there are a number of distinctions which could be useful in relation to seeing *keep* as a marker of continuation through iteration. The next section takes a closer look at pluractionality, in order to see if the concept of pluractionality could be used to account for the behaviour of *keep*. 

166
7.5 Is *keep* a pluractional marker?

Recall from section 2.8 that pluractionality can be divided into two types: event-internal pluractionality (216a) and event-external pluractionality (216b). I also showed that event-external pluractionality can be further subdivided into occasion-internal and occasion-external pluractionality, a division which is of less importance for the present work.

(216) a. Event-internal pluractionality:
Yesterday at 5 o’clock John knocked insistently at the door. (Bertinetto and Lenci, 2012:852)

b. Event-external pluractionality:
John swam daily in the lake.
(Bertinetto and Lenci, 2012:852)

As we have seen in chapters 4 and 5, *keep* can yield the kind of iteration which is referred to as event-internal pluractionality. We saw this in connection with semelfactive verbs, which in combination with *keep* may sometimes yield an activity reading. This is illustrated in (217a). We also saw that *keep* often yields another kind of iteration, which I will argue could be labelled event-external pluractionality. This is illustrated in (217b), where the iteration consists of several individual events which are iterated, and where there may well be considerable gaps between the individual events.

(217) a. The children kept skipping.

b. Our team kept winning (again and again).

The individual winning events in (217b) could occur on the same day, with only minutes or even seconds between them, or they could occur on a weekly basis, or even as seldom as once a year. What is
important, and what distinguishes these readings from event-internal pluractionality, is that there has to be at least some downtime between each winning event: the first winning event has to culminate before the next winning event can begin. Recall that Henderson (2012) claims that each event in an event-internal pluractionality “must be so temporally contiguous that there is no time for their result states to hold, blocking their culmination” (Henderson, 2012:103). Since an iteration like that in (217b) consists of a series of culminating winning events, it has to be a case of event-external pluractionality.

So far, we can summarise the generalisations like this: when keep occurs with a predicate with an optional [res] feature, the reading is that of event-internal pluractionality, as in (217a), and when keep occurs with a predicate with a [res] feature, the reading is that of event-external pluractionality, as in (217b). However, this only accounts for punctual predicates. What about activities and accomplishments, that is, what about predicates which lack a [res] feature?

When keep occurs with an accomplishment with a bounded DP path, I argued above that the reading is continuative-iterative, which in a pluractionality account would correspond to event-external pluractionality. The example in (218) consists of a series of reading events, each involving reaching the result state of finishing the book. It may be that the downtime between each reading event is very short, but since there is a culmination into a result state, I argue that it involves event-external pluractionality rather than event-internal pluractionality.

(218) Mary kept reading the book (again and again).

Following the idea in Van Geenhoven (2005), reported in section 2.8, that continuative activities can be seen as instances of unbounded pluractionality, I will suggest that when keep combines with an activity,
it yields a reading of event-internal pluractionality. Recall example (94a), repeated in (219), where Van Geenhoven (2005) argues that keep acts as a marker of continuative aspect.

(219) He kept dancing. (Van Geenhoven, 2005:109)

The dancing event in (219) does not involve any repetition in the sense of event-external pluractionality, that is, it does not involve iteration of several events with downtime between them. Even so, Van Geenhoven (2005) sees (219) as involving pluractionality. I propose that you could see the dancing event in (219) as consisting of an iteration of dancing events. A crucial feature of this iteration is that there are no pauses between each of the subevents (recall from section 2.8 that this was a crucial feature of event-internal pluractionality). Rothstein (2004) puts forward a similar idea, suggesting that activity predicates are iterations of minimal events which are reanalysed as single events. This is referred to as S-summing. I have introduced the notion of S-summing in connection with semelfactive verbs, for example in section 2.6.3 and section 4.5.5, where the operation of S-summing was applied to punctual events, such as jump, which can be joined together to form a new singular event: a durative and atelic jumping activity. This jumping activity consists of a number of punctual jumping subevents which on their own can form a punctual semelfactive event, which in contrast to the durative and atelic jumping event only consists of one jump. The operation of S-summing can also involve summing together subevents of activities where each individual subevent does not denote an event which differs aspectually from the so called macro event. In section 2.6.3, I used the predicate run as an example, reporting Rothstein (2004)’s example of two running events, one lasting from 9-10 and the other lasting from 10-11, which could be seen as one single running event lasting from 9-11, given that they are temporally...
adjacent. Building on this, dance in (219) could be seen as an instance of several dancing subevents which are joined together to form a new dancing event, which does not differ from the dancing events which it is made up from, except that it lasts for a longer time. If we accept this idea, that activities like run and dance are made up from the iteration of their subevents, then we can say that the example in (219) involves event-internal pluractionality.

My account of keep as a pluractional marker attempts to accommodate the following generalisations:

- When keep occurs with a predicate with neither [res] nor PATH, the reading is that of event-internal pluractionality.
- When keep occurs with a predicate with [res] or PATH, the reading is that of event-external pluractionality.

Table 7.1 illustrates this, showing that activities and activity readings of semelfactives get an event-internal pluractional reading, while accomplishments with a bounded DP PATH and achievements get an event-external pluractional reading. I have also included the single-event reading of a semelfactive predicate, which receives an event-external pluractional reading.

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5 The parallel to an activity made up from several semelfactives can be made even clearer by imagining that there may be a language where the word for ‘dance’ is just like the English word jump, that is, where the word for ‘dance’ can refer to either a punctual dancing event, meaning something like ‘take a dance step’, or to a durative dancing event, meaning something like ‘take a series of dance steps’.

170
7.5. Is *keep* a pluractional marker?

Table 7.1: Pluractional readings for different verbs

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Source of telicity</th>
<th>Event-internal</th>
<th>Event-external</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Semelfactives, activity reading</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Semelfactives, single-event reading</td>
<td>[res]</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Accomplishments with PATH</td>
<td>PATH</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Achievements</td>
<td>[res]</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

I am not sure how to formalize this. Van Geenhoven (2005) argues that the different markers of aspect in WG come with different pluractional operators. For example, the WG continuative affix -tuar- has a specific pluractional operator expressing continuity, which explicitly says that “no hiatus is present between the actions described by the verb to which -tuar- applies” (Van Geenhoven, 2005:116), while the WG frequentative affix -tar- has another pluractional operator, which specifies that there has to be “a hiatus between each subevent expressed by the tar-ed verb” (Van Geenhoven, 2005:113). But my account consists of one and the same ‘marker of aspect’ (if indeed this is what *keep* is) which can act as two different pluractional operators, depending on what features there are on the complement verb. When the complement verb has a [res] feature or a bounded PATH element, *keep* acts as a frequentative operator, and when the complement verb does not have a [res] feature or a bounded PATH element, *keep* acts as a continuative operator, in Van Geenhoven (2005)’s terms.

I have argued that all instances with *keep* V-ing can be seen as instances of verbal pluractionality. I have shown that there is a clear correspondence between atelic predicates and event-internal pluractionality on the one hand, and between telic predicates and event-external pluractionality on the other hand. This account easily accommodates the generalisations which we saw in chapter 4, namely that atelic pre-
Chapter 7. What is *keep*?

dicates yield the *continuative* reading while telic predicates yield the *continuative-iterative* reading. An advantage of a pluractional account is that both readings of *keep* V-*ing* are subsumed under the common denominator of pluractionality. A disadvantage of such an account is that it misses the generalisation that in examples such as *He kept dancing*, which we saw in (219), there is also the implication of prior initiation. I have claimed that the issue of prior initiation is an important difference between the *continuative* and the *continuative-iterative* reading, and I think it may be obscured if both readings are seen as pluractional. Another disadvantage, which I touched upon in section 7.3, is that the difference between a durative activity and a continued activity is obscured: if an activity is seen as an iteration of its subevents, what is the difference between an activity with *keep* (*He kept running*) and an activity without *keep* (*He ran*)?

### 7.6 The syntactic function of *keep*

I have suggested that *keep* is a continuative operator which causes iteration of the entire event. One possible way to account for this syntactically could be to see *keep* as an operator which always takes scope over the entire vP/VP complex\(^6\) and iterates it. If there is a resP or a bounded PATH element inside the vP/VP complex, then the iteration which *keep* gives rise to includes the culmination, and allows for downtime between the iterated events. This corresponds to the *continuative-iterative* reading and is illustrated in (220a), where the box illustrates the scope which *keep* takes. Everything inside the box is iterated. If there is no resP and no bounded PATH element inside the vP/VP complex, then *keep* gives rise to a “seamless” iteration which is

\(^6\)Recall that in Ramchand’s model, the vP/VP complex corresponds to the *initP* or the *procP.*
then reinterpreted as an activity. This corresponds to the continuative reading and is illustrated in (220b). Just like in (220a), keep takes scope over everything inside the box and iterates it.

(220)  

a. John kept breaking the stick.

b. John kept running

In the examples in (220), keep is represented as a pluralizing operator (op pl for short). Its function can be compared to that which Tung-
7.7 Summary

What the \textit{P} represents is causation of the event. A possible effect of this on the analysis presented above would be that in cases where there is an \textit{initiation}, such as (220b), the continuation of the running event is caused by the \textit{initiator}, that is, the external argument, in this case John. Compare this to an example without an \textit{initiation}, such as \textit{the ball kept rolling}, where the continuation of the rolling event is not caused by \textit{the ball}.

What is still unclear is where the different interpretations concerning prior initiation come from. It seems that the pluralizing operator \textit{keep} also somehow gives rise to an interpretation of prior initiation when the iteration is seamless (220b). When the iteration is not seamless, the interpretation of prior initiation is optional (220a). Thus, it seems as if the existence of hiatuses between the iterated events somehow cancels the need for an interpretation of prior initiation. At this point, I have no suggestion as to how this is possible.

7.7 Summary

In this chapter, I have put forward a proposal where \textit{keep} is seen as an operator which always yields iteration. I have suggested that the syntactic function of \textit{keep} is that of a pluralizing operator, which takes scope over the entire vP/VP complex and iterates it. The iteration is interpreted as either seamless or as including downtime depending on the syntactic structure of the event in the vP/VP complex. This way, the pluralizing operator can give rise to either the \textit{continuative} reading, for which there is no downtime, and which is interpreted as a nonstop continuation of the event in the complement of \textit{keep}, or the \textit{continuative-iterative} reading, for which there is downtime between the events, and which is interpreted as the iteration of the entire event in the complement of \textit{keep}.

\textit{S-summing} operator, which she suggests is responsible for the activity reading of semelfactive verbs, namely that of concatenation of singular events (cf. the discussion of semelfactives and S-summing in section 2.6.3). The difference between the pluralizing operator and the S-summing operator is that while the S-summing operator always gives rise to a seamless concatenation of events, the pluralizing operator can give rise to either a seamless concatenation, as in (220b), or a concatenation with downtime between the iterated events, as in (220a). The different readings arise from a difference in the syntactic structure of the events in the complement clause of \textit{keep}: if there is a \textit{resP} or a bounded \textit{PATH} element, then the reading is that there is downtime between the iterated events (recall from sections 2.8 and 7.5 that this downtime may be very short), and if there is no \textit{resP} or bounded \textit{PATH} element, then the reading is that the events are seamlessly concatenated.

\textit{Ramchand} (2008:81) does not assume a syntactic S-summing operator in the way that Tungseth (2008) does. Instead she assumes that the two different readings of a semelfactive verb arise from the fact that semelfactive verbs are ambiguous between two verb classes: one where they are tagged with a \textit{[res]} feature and one where they are not. This is also the position taken in the present work regarding semelfactive verbs. However, even though Ramchand rejects the idea of a syntactic S-summing operator, I think that her model is compatible with the idea of \textit{keep} as a pluralizing operator taking scope over the entire vP/VP complex, as suggested in (220).

One could object that in cases such as (220b), there is an \textit{initiation} which should prevent seamless iteration. In an event such as \textit{he kept running} there is no iteration of the beginning of the running event. However, the \textit{initiation} in Ramchand’s model does not represent the beginning of the event; even events without an \textit{initiation} have a beginning.
What the \textit{initP} represents is causation of the event. A possible effect of this on the analysis presented above would be that in cases where there is an \textit{initP}, such as (220b), the continuation of the running event is caused by the INITIATOR, that is, the external argument, in this case \textit{John}. Compare this to an example without an \textit{initP}, such as \textit{the ball kept rolling}, where the continuation of the rolling event is not caused by \textit{the ball}.

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While this proposal seems to capture many of the generalisations made in this thesis, it fails to explain why the *continuative* reading of *keep* V-ing also involves an interpretation of prior initiation, while the *continuative-iterative* reading does not.
Chapter 8

Concluding remarks

In this thesis I have shown that the meaning of the keep V-ing construction to a large extent can be accounted for by assuming that verbs are tagged with one or several of the features initiation, process and result. When a verb occurs in the context of keep, the interpretation of the whole keep V-ing structure is dependent on which of these features the verb is tagged with. I have proposed that keep acts as a pluralizing operator, and that the two different readings which were proposed for the keep V-ing construction arise as a result of different feature setups for different verb classes. In this way, the present work contributes insights into the interplay between the syntactic features of a verb and the interpretation of the keep V-ing construction. The present work shows that restrictions on which verbs may occur in the context of keep as well as restrictions on which verbs may yield which reading in the context of keep can be accounted for within the syntactic component. The relevant part of the syntactic component is the part which in the model applied here consists minimally of the process phrase, with or without the addition of the initiation phrase and/or
The present work has also discussed parts of the meaning of the keep V-ing construction which cannot be accounted for within the syntactic component. I showed in chapter 5 that the restrictions regarding which predicates can occur in a keep V-ing construction with the continuative reading are sometimes related to the internal structure of the process part of the event. This is not part of the information which is relevant to syntax, and has to be listed somewhere else. I propose that this is part of the lexical-encyclopaedic information of a verb rather than part of its syntactic information. Another take on this would be to propose that there is an additional feature which would be responsible for identifying yet another verb class. For example, one could argue that if the process part of an event consists of a series of identical subevents, then the verb is tagged with a specific feature. This way, all such predicates would be singled out, and the generalisation would be that these predicates may yield either the continuative or the continuative-iterative reading in the context of keep. However, it is important to keep syntactically relevant features apart from those which are not relevant to syntax. The distinction between durative events with identical subevents and durative events with disparate subevents does not seem to be a distinction which is relevant to syntax. What is relevant for the interpretation of a predicate such as read the book is whether or not its object the book is interpreted as measuring out the event, that is, whether or not it acts as a PATH or an UNDERGOER object. This is coded in the syntax. What can be said to result from lexical-encyclopaedic knowledge, or the ‘identical subevents feature’ if you like, is that the predicate read can take either

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1This part of the syntactic structure is often labelled the VP or the vP. In this particular model it has been broken down into three projections: initP, procP and resP.

178
a PATH object or an UNDERGOER object.

I have also shown that there are considerable differences in meaning between *keep* and other continuative aspectualizers such as *continue* and *on*. This has been suggested before, by for example Freed (1979), Brinton (1988) and Duffley (2006), but it has not to my knowledge been explicitly tested in a systematic way, in the way which has been done in this work.
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188


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235. Frédéric A. Mathurin, 2015, *Origin and mobility of major and key trace elements (Cs, YREEs) in fracture groundwater in the upper 1,2 kilometers of coastal granitoids – Implications for future repositories of spent nuclear fuel* (miljövetenskap/environmental science) ISBN: 978-91-87925-86-3.


