

Identifying and Quantifying Aspectual Ambiguity with LMs

Reversing the NLP Pipeline

Bachelor Thesis

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Abstract

Abstract in English

Zusammenfassung

Zusammenfassung auf Deutsch

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1 Aspectology: an introduction

Many works on the area begin with the assertion that aspect is one of the most studied areas in linguistics [Sasse, 2002], particularly Slavic linguistics (for reasons I will discuss later), and hence a thorough theoretical discussion of the linguistic phenomenon which does full justice to the work on the field is not possible within the constraints of this thesis. Nevertheless, in order to give an introduction to the fundamental elements of the following study and make a productive contribution to the area, I will touch on some of the main findings in the field of aspectology.

1.1 A (short) phenomenology of aspect

The Concise Oxford Dictionary of Linguistics [Matthews, 2014] defines aspect thus:

[Aspect is a g]eneral term, originally of specialists in Slavic languages, for verbal categories that distinguish the status of events, etc. in relation to specific periods of time, as opposed to their simple location in the present, past, or future.

As noted here, one helpful distinction which must be made right away is that between *aspect*, and another temporal phenomenon *tense*. Many works recall Bernard Comrie's differentiation made in *Aspect* [Comrie, 1976] between the deictic nature of tense and the focus on the "internal temporal constituency of a situation" of aspect. In other words: "tense¹ relates the time of the situation referred to, to some other time, usually to the moment of speaking", and thus by relating the time of the situation to the time of the utterance it is deictic [Comrie, 1976]. Aspect on the other hand gives a *situation-internal* description of the events in that situation, such as how they relate to each other temporally or how an individual event is temporally characterised. This introduces another important distinction: that between lexical and grammatical aspect.

1 In many of the world's languages this is grammaticalised as past, present and future; in others such as English by some accounts [Jespersen, 1933] it is a binary distinction such as past and non-past, whereas some languages such as Greenlandic (Kalaallisut) some linguists have even argued to be tenseless Bittner [2005]. See also the contentious debate about Hopi time Whorf [2012], Malotki [1983].

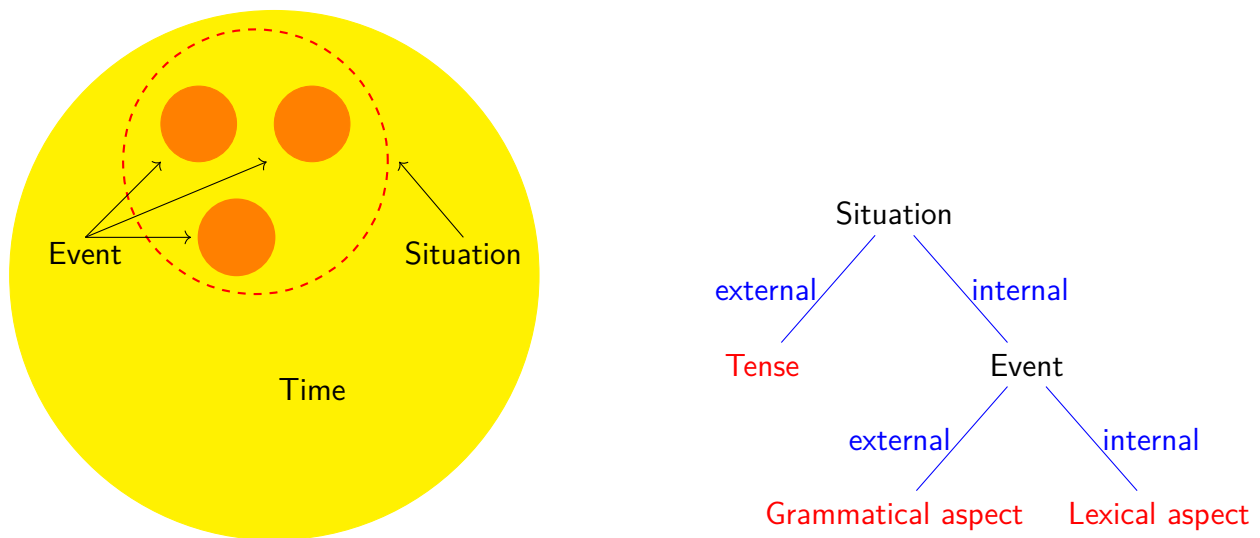


Figure 1: A visual representation of the relationship between time, situation and event (left), along with the categorisation of the three temporal phenomena discussed (right). Here each situation is a (non-empty) set of events ($\text{situation} \subseteq \text{events}$), and events (and by derivation situations) are anchored in time. In this (very simple) model, timeless generic statements such as "2+2=4" are also anchored in time, however this time period is infinite. This model serves purely for the visualisation of tense and aspect and will not be further employed.

1.1.1 Lexical and grammatical aspect

The polysemy of the term “aspect” in the linguistic community is unfortunate. In an area of language which seems to have surprisingly far-reaching interactions with other parts of linguistic systems these ambiguities are particularly unhelpful.² As already mentioned, aspect³ is an umbrella term often used to refer to two slightly different phenomena: lexical and grammatical aspect. Lexical aspect (also referred to as *Aktionsart*, *situation aspect* or *inner aspect*) is the inherent property of a verb or verb phrase which “characterizes the temporal profile of event descriptions” [van Hout, 2016]. For example, to “crack open an egg” is inherently a short, irreversible event describing the change of one state (the egg being whole) to another (the egg being cracked). Grammatical aspect (or *viewpoint aspect*, *outer aspect*), on the other hand, describes the “internal temporal constituency” [Comrie, 1976] of an event in a situation context, such as its habituality or ongoing nature, which is not an inherent feature of the events itself but can be seen rather as

² Among other things, aspect is also intertwined with case, mood and voice (cf. Franks [2005] and Kiparsky [2004]).

³ Boogaart uses the term *aspectuality* to remove the aforementioned ambiguity [Boogaart, 2004]. However, I will stick with the term *aspect* due to its prevalence in the literature, further specifying where necessary.

an external lens imposed on a (usually) verbal phrase.⁴ In English, one example of this lens is the progressive, which is formed by the verb *be* + *gerund*, as in 1.

- (1) Sue was running.

Figure 1 provides a visual representation of the concepts introduced in this section for clarity.

The concrete linguistic realisation of these categories is very often unclear or not explicit and exhibits a relatively wide variety of encodings throughout the world's languages [Dahl, 1985]. It therefore proves tricky to uphold this distinction in empirical studies "in the real world". This has led some to question to what extent this distinction makes sense [Sasse, 2002]. Those who question the contrast between these two semantic dimensions, described as unidimensionalists in Sasse [2002], claim that aspectual distinctions in both dimensions can be reduced to a common set of semantic primitives, which can be applied to all levels of analysis, i.e. the boundedness of lexical aspect is the same as the boundedness which marks the distinction between the perfective and imperfective parameters.

I have chosen to introduce this distinction in order to introduce the terminology and clarify key concepts, however for reasons of pragmatism I will not strictly uphold the theoretical differentiation between these two in the experimental part of this study.

1.1.2 Lexical aspect parameters

Telicity

A fundamental distinction of lexical aspect is that of telicity (from Ancient Greek *télos* meaning "end"). Telicity describes whether an event has an inherent goal or end-point after which the event can be regarded as completed: for example "go climbing" would be atelic (seeing as going climbing has no inherent goal), whereas "climb the mountain" is telic (since it involves the agent reaching the summit of a mountain). A classic test for telicity⁵ is whether the verb phrase admits

4 To simplify matters, in this study I will focus on verbal events, though others such as Van Gysel et al. [2021] take a broader definition of event, including nominal events.

5 Though Xiao and Mcenery [2006] note that this test is flawed and propose an alternative test scheme.

a completing adverb such as "in an hour" and does not admit a durative adverb such as "for an hour" [Krifka, 1998].

Dahl takes a different definition, defining telicity as "involv[ing] the presence of a boundary or the attainment of a specific result-state" [Östen Dahl, 2015], which, however can lead to confusion with the term *(un)boundedness* (see 1.1.4).

Stativity

Another important parameter of lexical aspect is stativity, which describes a state of being such as "know", "love" or "be", rather than an action [Binnick, 1991], which is usually described as *dynamic*. A classic test for stativity in English is non-admittance of the progressive or the imperative [McIntosh, 1975].⁶ Consider the following examples:

- (2) She resembles her grandmother.
- (3) * She is resembling her grandmother.

The counterpart of states, *dynamic* events, in the other hand, are used to describe situations that change or where action is present.

Durativity

Durativity denotes whether an event takes time (i.e. has duration) or happens in an instant, and this can be checked in English by the compatibility of durative adverbs such as "for an hour" [Wilhelm, 2007]. For example:

- (4) Andrea was painting a picture for an hour.
- (5) * Andrea was reaching the summit for an hour.
- (6) ? Andrea was cracking an egg for an hour.

⁶ Interestingly, however, Granath and Wherrity [2013] find that, assuming a functional-semantic definition of stativity, the usage of stative verbs with the progressive is much higher in spoken language, than in written language and indeed seems to be characteristic of Modern American English (cf. the McDonald's tagline: "I'm loving it." [Freund, 2016])

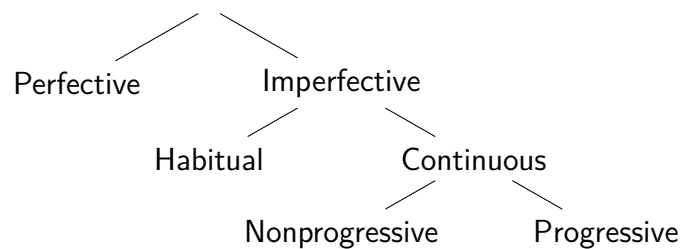


Figure 2: Comrie's classification of aspectual oppositions. Reproduced from Comrie [1976].

1.1.3 Grammatical aspect parameters

Grammatical (or *viewpoint*) aspect provides a lens through which a particular event is viewed, and it "is typically expressed by overt grammatical morphemes (hence the label grammatical aspect)" [Patard et al., 2019]. Comrie [1976] provides a hierarchical classification of aspectual oppositions shown in 2, and in the following section I will briefly describe some of the main oppositions described in this classification: the perfective vs. imperfective opposition, (un)boundedness and habituality,

(Im)Perfectivity

The main aspectual distinction made by Slavic languages and, as can be seen in figure 2, one of the main distinctions made in theoretical aspectology generally is that between perfective and imperfective. As noted by Dahl [1985], the theoretical distinction between perfectivity and imperfectivity is different to their concrete realisation in the Slavic language group. To avoid confusion, I will therefore henceforth use the terms to 'perfective' and 'imperfective' to refer to the theoretical binary opposition, and only refer to the Slavic (im-)perfectivity explicitly.

Returning to the definition of grammatical aspect as *situation-internal* but *event-external* [Kibort, 2008], perfectivity can be seen as a focus on the event as a whole indivisible entity (i.e. its result), and imperfectivity implies a focus on its internal temporal constituency [Comrie, 1976, Östen Dahl and Velupillai, 2013]. In practice this often means that perfective verbs refer to "completed" events such as 7, and imperfective verbs to incomplete or long-lasting events like 8, however note that this is not always the case.

(7) We walked the Camino de Santiago.

(8) It was raining for weeks.

Habituality

Habitual events refer to events which happen with regularity or often. They are closely related to generic statements and can indeed be both at once in what [Dahl, 1985] calls "habitual generics", such as 1.1.3.

- (9) Cherry trees bloom in April.

While usually still coming under the broad umbrella of aspectual phenomena,⁷ habituality is generally considered to be located at a different level to other aspect features. Dahl [1985] notes that the prevalence of habituals in his questionnaire was low, which corroborates my findings in the dataset I used (see table ??), and that most languages that explicitly mark it using periphrastic means.

1.1.4 Boundedness

(Un)boundedness refers to whether a situation described has reached a temporal boundary or not [Depraetere, 1995]. For example, while the act of crossing the road in 10 has no temporal bound on it (i.e. it is unclear when or if the event was ended), in 11 it does have a definite end (bound). It is hard to fit into either of the categories of lexical or grammatical aspect, since it is neither an inherent feature of an event, nor is it usually imposed through grammatical means, but rather a derived feature of a predicate in context.

- (10) We were crossing the road yesterday, when [...].

- (11) We had crossed the road yesterday, when [...].

Boundedness must be distinguished from telicity⁸ in order to avoid the so-called 'Imperfective Paradox' highlighted by Dowty [2012], here verbalised by Zucchi [2020]:

⁷ However, Boneh and Doron [2010] argue that it is a first and foremost a *modal* category "which can only indirectly be characterized in aspectual terms".

⁸ Friedrich et al. [2023] seem to mistakenly conflate the two, stating that "[t]elicity is also sometimes referred to as boundedness (e.g., by Loáiciga and Grisot, 2016)" referring to Loáiciga and Grisot [2016], which, however, clearly distinguishes between the two notions.

How is it possible that a statement of the form *x was F-ing* is true and yet there is no time at which *x was F-ed* is true?

More concretely, it asks the question why (12) entails (13), but (14) doesn't entail (15) in the examples below:

- (12) The man was running.
- (13) The man ran.
- (14) The man was building a house.
- (15) The man built a house.

Depraetere [1995] shows that this apparent "paradox" can be resolved by distinguishing between these two concepts of telicity and boundedness,⁹ and this further serves to show the dangers of misuse of terminology. Table 1.1.4 visualises the relationship between the reference time (temporal boundaries) and the run-time (the inherent "time schema" of the verb phrase). This allows for a clearer definition of boundedness, namely whether the right-hand side of the run-time boundary lies within the reference time or not.

1.1.5 Some attempts at event classification

Vendler [1957]

It was the seminal paper *Verbs and Times* [Vendler, 1957] of philosopher Zeno Vendler which initiated the discussion on inner aspect in the linguistic tradition.¹⁰ Vendler begins his discussion in the paper with the following premise:

9 I.e. by definition of telicity as whether an event has an inherent end-point, and boundedness as whether it has a temporal boundary (separate from its intended end-point) we can distinguish between whether an event has reached its termination or whether it was ended before reaching this end-point. Therefore while it is the case that the both (12) and (13) are bounded, only (14) and (15) contain telic events, and it seems to be the case that the progressive's focus on temporal boundary nullifies the end-point inherent in the verb phrase "build a house". This serves as an interesting example of the interaction between grammatical and lexical aspect.

10 A similar classification was also developed independently by Anthony Kenny in *Action, Emotion and Will* [Kenny, 1963], however combining Achievement and Accomplishment into one single class [Mourelatos, 1978]. Hence, it is sometimes referred to as the Vendler-Kenny scheme of verb-types.

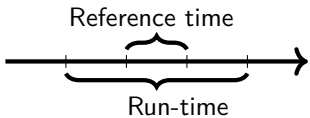
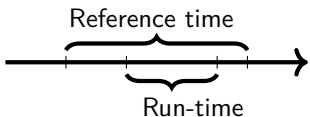
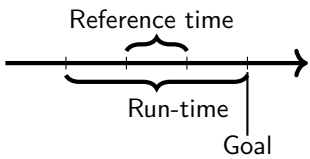
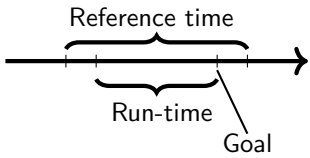
Sentence	Representation	Telicity	Boundedness
The man was running.	 <p>A horizontal timeline with an arrow pointing right. A bracket labeled 'Reference time' spans a portion of the timeline. Inside this bracket, another bracket labeled 'Run-time' spans a smaller, unbounded interval that does not reach the end of the reference time.</p>	atelic	unbounded
The man ran.	 <p>A horizontal timeline with an arrow pointing right. A bracket labeled 'Reference time' spans a portion of the timeline. Inside this bracket, another bracket labeled 'Run-time' spans a smaller, bounded interval that reaches the end of the reference time.</p>	atelic	bounded
The man was building a house.	 <p>A horizontal timeline with an arrow pointing right. A bracket labeled 'Reference time' spans a portion of the timeline. Inside this bracket, another bracket labeled 'Run-time' spans a smaller, unbounded interval that reaches a point labeled 'Goal' but does not reach the end of the reference time.</p>	telic	unbounded
The man built a house.	 <p>A horizontal timeline with an arrow pointing right. A bracket labeled 'Reference time' spans a portion of the timeline. Inside this bracket, another bracket labeled 'Run-time' spans a smaller, bounded interval that reaches a point labeled 'Goal' and the end of the reference time.</p>	telic	bounded

Table 1: Representation of (12),(13),(14) and (15) with regards to the reference time referred to by the utterance and inherent run-time of the event. Concept adapted from van Hout [2016].

Indeed, as I intend to show, if we focus our attention primarily upon the time schemata presupposed by various verbs, we are able to throw light on some of the obscurities which still remain in these matters. [...] There are a few such schemata of very wide application. Once they have been discovered in some typical examples, they may be used as models of comparison in exploring and clarifying the behavior of any verb whatever.

That is to say, the "time schema" of any verb can be described through comparison with a set of prototypical classes (see 3), which can be easily identified. In order to arrive at these prototypical "schemata" he uses an analytical method consisting of classifying verbs according to their behaviour regarding certain elements of English grammar, as was also used to outline the aspectual parameters above.¹¹ For example, the first distinction he makes is between English verbs that permit the progressive and those that don't. This signals the first class of events known as *states*. The article then goes on to outline the other three Vendlerian classes *activity*, *accomplishment* and *achievement*, and their character is summarised thus:

- **State** - non-dynamic, static and durative situation
- **Activity** - open-ended, dynamic and durative processes without an end-point
- **Accomplishment** - dynamic and durative processes with a natural end-point
- **Achievement** - instantaneous or near-instantaneous events (such as semelfactives¹²)

Or to use the parameters of lexical aspect introduced above:

	Static	Durative	Telic
State	+	+	-
Activity	-	+	-
Accomplishment	-	+	+
Achievement	-	-	+

Table 2: Classification of Vendlerian event types by binary aspectual parameters [Smith, 1991].

-
- 11 The issue of anglocentrism is one which has plagued many a linguistic theory throughout the years, with work such as Chomsky's generative grammar [Chomsky, 1965] or the speech act theory paradigm developed by Searle, Austin, and Grice [Searle, 1969, Austin, 1962, Grice, 1975] being criticised for their too heavy focus on English and anglophone norms, and hence the lack of applicability to other languages [Levisen, 2019].
- 12 A semelfactive is a type of verb that denotes an action that is typically instantaneous and easily repeatable since the event ends returning to its initial state. Examples include "sneeze," "blink", or "knock" [Smith, 1991, Filip, 2012]

State	Activity	Accomplishment	Achievement
know	running	paint a picture	reach the summit
understand	pushing	build a house	spot the plane
love	smoking	deliver a sermon	recognise

Table 3: Some example verb phrases given in Vendler [1957] for the classification of events.

Vendler states in his introduction that verbs "presuppose" certain time schemata and hence assigns a category to each verb (as in table 3). However it must also be stated that the true profile of a verb phrase such as those listed in table 3 depends heavily on the context. Hence a typical semelfactive such as "sneeze" could also be used reinterpreted as a process when combined with a progressive auxiliary as in "Harry was sneezing when they took the photo." [Moens and Steedman, 1988]. Thus, the verbs (or verb phrases) mentioned by Vendler as belonging to a certain category are ones that are prototypical for the particular class. This is a fact that will become important later on (see table 1.3.2), since it is not a trivial question whether all verb phrases inherently tend towards one particular lexical aspect which is saved in the mental lexicon, or whether some verb phrases have an under- or unspecified aspectual class. This is a question I will attempt to shed some light on with the experiments in this study.

Moens and Steedman [1988]

Moens and Steedman take a slightly different approach, focussing on the sentence level, where each sentence has a predicative *nucleus*, either a state or a process. While the former has no definitive start or end point, in the latter these are present, and processes can be divided up into four classes by whether they are atomic or extended, and whether they imply a consequent state, i.e. the state after the action is different to the one before (see table ?? for the relationship between these classes and other classification schemata). Figure 3 provides a visualisation of these different event and state types.

1.2 Aspect in Slavic languages

The Slavic language group has a special place on the study of aspectology due to its overt encoding of aspectual phenomena, otherwise rather uncommon [Tomelleri, 2010].¹³ Verbs in

¹³ Tomelleri [2010] also notes that Georgian and Ossetian exhibit some similar properties with preverbs (mostly of spatial origin) used to denote aspectual meaning.

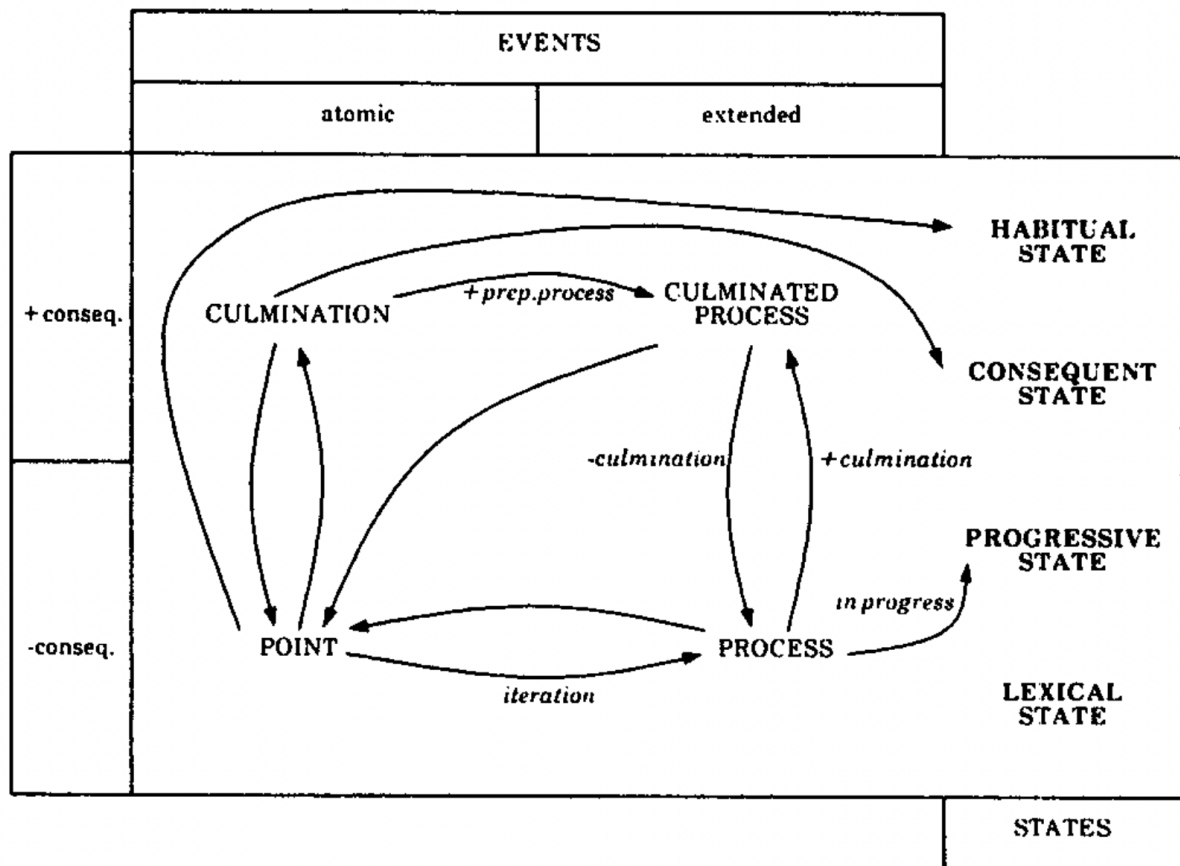


Figure 3: A visualisation of event and state types with their corresponding transitions [Moens and Steedman, 1988]

Slavic languages, with few exceptions,¹⁴ are either perfective or imperfective, meaning the speaker must explicitly state the aspect of the verb event referenced. Consider the following sentences:

- (16) Ja pročita-ju ètu knig-u.
 I read.PERF-FUT this book-ACC
 'I will read this book.'
- (17) Ja budu čita-t' ètu knig-u.
 I will read.IMPF-INF this book-ACC
 'I will read (be reading) this book.'

¹⁴ Note that there is a small group of Polish verbs which can be used as either imperfective or perfective (for more details see Kipka [1990])

While both are in the future tense, the former uses the perfective form of the verb "to read", implying that the speaker will read the book *and* finish it (i.e. read it from the beginning to the end), whereas the second uses the imperfective form and thus expresses that the speaker will be reading the book at some point in the future, but not necessarily finish it.

As mentioned, the opposition between these two lexical categories differs slightly from the "purer" theoretical distinction discussed in 1.1.3. A classic example where the Slavic categories do not correspond to the semantic ones is the pair 18 and 19, where the former is a prototypical usage of the perfective to denote a whole completed event, the latter sentence using the imperfective form denotes that the event has since been undone, although the window-opening event was perfective [Franks, 2005].

- (18) Kto otkry-l okno?
Who open.PERF-PST.SG.MASC window?
'Who opened the window?'
- (19) Kto otkryva-l okno?
Who open.IMPF-PST.SG.MASC window?
'Who opened the window?'

It is also interesting to note that modern Slavic aspect, now usually seen as a *grammatical* feature, developed from spatial prefixes [Dickey, 2017]. The most common perfectivising prefix *po-* used to refer to "up to", "across", or "at" in Proto-Slavic [Derksen, 2008], however slowly developed into a temporal marker and finally into a grammaticalised aspect marker. The gradual lexicalisation of aspect systems in Slavic languages (i.e. the development from a system based more on contextual information, such as in other Indo-European languages, to one where grammatical aspect information is encoded in prefixes and sometimes even in the main lexeme) is further evidence in favour of a less clear distinction between grammatical and lexical aspect.

It is due to this relatively unique covert aspect marking that I decided to include Slavic languages in this study.

1.3 Aspectual ambiguity

While some verb phrases, such as "to tend to", overwhelmingly only express one certain aspect (in this case a *habitual* event), in many situations they can be ambiguous:

- (20) Your soul was made to be **filled** with God Himself. (*Brown corpus, cited by Friedrich and Palmer [2014]*)

In this example the verb 'filled' can be read as both a stative and a dynamic event.¹⁵ Nevertheless, in many cases the reader tends to prefer a particular interpretation, such as in 21, where the sentence is most likely to be a habitual, a common use of the English simple present, and yet could also be interpreted as a historical present used by someone narrating a story orally as in 22.

- (21) He walks to school.

- (22) So he walks to school, and guess who he sees on the way!

This poses a practical problem for annotators when asked to provide a single class for a sentence (or sometimes even just for a verb phrase as in Siegel and McKeown [2000]), but also an interesting theoretical question for linguists. For simplicity, most studies have assumed that aspect is unambiguous. While some have mentioned the topic as problem during annotation (cf. Croft et al. [2016], Friedrich and Palmer [2014]), there have been no studies to date looking aspect ambiguity [Friedrich et al., 2023], despite this being a not too uncommon occurrence in language (see ??). Some, such as Van Gysel et al. [2021] (see ??), have got around this problem by classifying aspect in a lattice structure, allowing for more coarse grained categories when necessary. While perhaps doable in practice, this is an unsatisfactory solution to describe several semantically distinct interpretations of a particular utterance.

1.3.1 Contexts frequently triggering aspectual ambiguity in English

While possessing an inventory of tools to specify aspectual features, there are many times in English where the aspectual interpretation of a verb phrase is less evident. This section aims to outline the most common contexts where some English verb phrases are ambiguous with respect to their aspectual reading.

¹⁵ Indeed, while not specified in English, this is explicitly encoded in other languages such as German where the former interpretation would use the word *sein* (to be) and the latter *werden* (to become). The ambiguity in English therefore stems from the periphrastic marking of the passive with the verb *be*, which is also used as the copula with the past participle.

One example was already introduced in 20 with the identical encoding of the past simple passive and a copular clause with a past participle adjective. Some other examples are semelfactives, which can often be interpreted as being either a repeated or a single event, or motion verbs with a certain set of prepositions which are ambiguous with regard to the telicity of the resulting verb phrase (such as "through", "across" etc.). It is also the case that the past and future simple are sometimes ambiguous in English with regard to their outer aspect (i.e. whether "cover" in the sentence "They covered their faces" refers to the outcome of the action or the action itself). Table 4 summarises these cases.

Context	Ambiguity	Example
repeatable events	[single event/iterative]	Peter knocked on the door [once/three times].
passive / past participle	[stative/dynamic]	The bottles were filled [with juice/in two hours].
motion verbs with ambiguous prepositions	[telic/atelic]	Anna walked through the park [then turned left/for hours].
past simple / future simple	[holistic/ongoing]	The rocks fell down [yesterday/slowly].

Table 4: Some common contexts triggering aspectual ambiguity in English.

Since, as mentioned above in 1.1.3, habituality operates on a different level to the majority of aspectual phenomena discussed so far, the question of when a habitual interpretation is possible is a slightly different one. The number of utterances where a habitual interpretation is feasible (if less likely) is large,¹⁶ and indeed, [Dahl, 1985] finds that, when overtly marked, in many languages habituality is expressed by the simplest, least marked verb form (as in the English present simple), however that this is rarely unequivocal and shares several uses. This further supports the hypothesis of the high general feasibility of a habitual interpretation, and I therefore chose not to cover it in table 4. For example, sentence 23 exhibits the wide applicability of a habitual reading, even if it is not the most likely interpretation.

(23) They also said this court did not **give** the lawyers for the defense due procedure.

There are other cases, such as 24, where the aspect is less clear. Here we have a verb which would usually have a clear stative interpretation, however with a more "holistic" interpretation, i.e. the event is portioned into several bounded events (what Herweg [1991] calls "po-fective").

¹⁶ This is supported by the findings of the manual annotation (see ??), where 24.8-42.7%, depending on the annotator, of sentence-verb pairs had a possible habitual interpretation.

(24) Robert was in New York twice this year.

While Slavic languages do not directly encode dynamicity, telicity, or iterativity, the choice between perfective and imperfective aspects is strongly influenced by boundedness and whether an event is a single occurrence or repeated [Wiemer and Seržant, 2017]. Both aspect parameters express two distinct readings, meaning speakers are forced to choose a particular aspectual type. Apresyan [2024] also finds that L2 Russian speakers are more likely to choose the incorrect aspect if their L1 does not differentiate between these two interpretations in a particular case, corroborating intuition.

1.3.2 Coercion or underspecification?

21 and 22 are an example of how, unless further specified, a verb phrase in a sentence can tend towards a particular aspectual interpretation, while further specification leads to a different interpretation.

In cases where a verb can have several aspect readings depending on the context, a question that currently remains unclear is whether all verbs have an inherent aspect class, which is *overwritten* by the features of the context it occurs in (such as temporal adverbs or other verb phrases forcing a particular class such as *to tend to* etc.), or whether some are simply underspecified in the mental lexicon, and the class is *determined* by these circumstantial features [Gerwien and Herweg, 2017]. It is also often the case that a verb phrase has a particular aspectual interpretation in the overwhelming majority of cases, however it can also be used in a different aspectual context without this sounding strange.

The former view, as put forward by Moens and Steedman [1988] and known as *coercion*, is used as an assumption in many previous works (cf. de Swart [2019]) with little evidence of its uniform validity [Gerwien and Herweg, 2017]. However, some studies from psycholinguistics, such as Lukasek et al. [2017], have suggested the presence of underspecification in certain cases. It is therefore an open question how both humans and language models deal with this aspectual conflict. The following study will aim to shed some light on the behaviour of the latter in such situations, and perhaps provide some insight into possible mechanisms of the former.

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