



# Time and Space: The Language Clinch<sup>1</sup>

Zdeněk Starý

## ABSTRACT:

The fact that languages use the same means to express temporal as well as spatial distinctions might be a symptom of a deeper interconnectedness of Time and Space in language.

The article focuses on aspect as a category that molds time into the language. Communicative acts with an imperfective verb can signal imperfectivity as well as perfectivity of the communication, and vice versa: communicative acts with a perfective verb can be interpreted not only perfectly, but imperfectly as well. Morphological aspect (i.e. aspect given by the morphological make-up of the verb) is thus to be distinguished from aspect as an aspectual construal of the communication (sentence). Factors which contribute to the constitution of the aspectual construal of the communication are located not only within the verb itself (its morphological make-up), but also outside of the verb, or even beyond the realm of language means.

On the basis of the study of aspectual construals of communication, the notion of perfectivity is classified in regard to event/state flow into five types. The underlying principle of this classification is asymmetry (point(s) of asymmetry) instaurated into the event/state flow. While in cases where Time and Space share means of expression, their relationship is metaphorical (one input domain is talked about in terms of the other), the Time–Space link in perfectives does not facilitate the communication of temporal meanings in terms of spatial ones. In this sense its “metaphoricity” is “deponent”.

Perfectivity as a temporal category emerges directly from the asymmetry as a spatial concept: the temporal *cogitandum* is determined by the spatial *cogitatum*.

## KEYWORDS:

aspect, aspect in Czech, perfectivity, aspectual construal of communication, time–space relationship in language, metaphor

## 1. INITIAL OBSERVATIONS

It is quite common and quite commonly recognized that the same language means are used to express temporal as well as spatial distinctions, as is obvious from the following examples.

- (1) *přes* plot ‘over (a/the) fence’ — *přes* hodinu ‘over an hour’
- (2) *před* domem ‘in front of (a/the) house’ — *před* polednem / hodinou / časem ‘before noon / an hour / (some) time’
- (3) *do* domu ‘into (a/the) house’ — *do* dvou dnů / do hodiny ‘in two days / an hour’

---

1 I would like to thank Ilona Starý Kořánová for reading the first draft of this paper and commenting on it. Any mistakes, of course, are mine. I would like to thank both reviewers. Their comments prompted some amendments and contributed to the explanatory clarity of the text.



Example (1) uses the same preposition to express the surpassing of a spatial as well as temporal extension. Identical prepositions are used to express location in space as well as “location” in time (2). Similarly, in example (3), the preposition *do* ‘into’ signals motion into a location (spatial meaning) as well as event/motion within a temporal interval, i.e. metonymically (*totum pro parte*) motion toward the end of the temporal interval.

It is not only prepositions that have the capacity to signal both spatial and temporal meanings.

- (4) *donést balík domů* ‘to bring the package home’ — *dočkat se konce / dne / oběda* ‘to see the end / the day / look forward to / get / have made it to lunch’<sup>2</sup>  
 (5) *dlouhá/krátká cesta* ‘long/short way’ — *dlouhá/krátká doba* ‘long/short time’  
 (6) *hrnec se naplnil* ‘the pot (got) filled up’ — *čas se naplnil* ‘the time is up’.

In the example (4), it is the prefix *do-* which expresses the conclusive phase of the temporal (*dočkat se konce / dne / oběda*) as well as spatial (*donést balík domů*) properties of an event. In (5), it is the same attributes (adjectives) that describe the expressions’ temporal as well as spatial extension. Finally, in (6), the same verb is used to denote the fulfillment of a spatial as well as temporal quantity.

Of course, this phenomenon is not limited to Czech. Examples (1)–(6) have their counterparts for instance in English.

- (7) *over the fence* — *over an hour*  
 (8) *in the house* — *in two days*  
 (9) *towards the home* — *towards the evening*  
 (10) *long/short trip* — *long/short time*  
 (11) *the pot has filled up* — *the time has filled up*  
 (12) *Peter has come* — *the time has come*

In example (7), the same preposition is used to signal the crossing of a spatial or temporal limit. The preposition *in* (8) expresses either spatial or temporal “location” within a spatial (*house*) or temporal (*days*) range. In example (9), the preposition *towards* implies a motion towards a spatial or temporal point. Similarly to example (5), the same attributes (*long/short*) are used to quantify a spatial as well as temporal extension in the English example (10). Also, examples (11), (12) and (6) are analogical in regard to expressing spatial vs. temporal meanings, i.e. the same verbs are used in regard to temporal as well as spatial processes.

The use of the same language means to express the spatial as well as temporal meaning distinctions illustrated above can be thought of as metaphorical in its nature. According to recent metaphor theories, metaphor exhibits the following properties:

2 The verb *čekat*, from which the verb *dočkat* is derived, means to wait. With the prefixation by *do-* (*dočkat*) a feature of “looking forward” emerges plus the meaning that the expectation we have been looking forward to is met (i.e. we have reached the end / the day / we have made it to the lunch).



- i. Metaphor is a phenomenon relating *two domains* of human experience to each other. Sometimes they are called source and target domains (Conceptual Metaphor Theory, e.g. Lakoff & Johnson, 1980, p. 5; Lakoff, 1993, p. 202f; Grady, 2007, p. 190f.), sometimes inputs 1 and 2 (Mental spaces / Blending Theory, Fauconnier & Turner, 2006, p. 308ff.), and the like.
- ii. Metaphor is not a language (use) phenomenon only. It is a way a human *conceptualizes* the world.
- iii. Language is then the realm in which the (conceptualization) operation of metaphor can be ascertained, observed, and thus studied, since to speak metaphorically means to talk *in terms of one domain* (source domain) *about the other* (target domain).

In all of the examples (1)–(12), it is Space and Time that play the role of the domains (inputs). Spatial language means are used to talk about time in them and all of them exhibit all three metaphor properties i–iii. In other words, the language means used to refer to spatial as well as temporal meanings listed in the examples are polysemous and metaphor is the mechanism that constitutes the polysemy, i.e. connects the polysemous items/means.

These language means — prepositions, prefixes, attributes, verbal lexemes and their forms in the examples above — are thus used in temporal as well as spatial domains to express semantic distinctions of each of the domains. This fact suggests that Time and Space might be mutually intimately interwoven in language. The question is, to what extent and to what degree?<sup>3</sup>

We will proceed in the following four major steps:

- to ascertain aspect as a temporal category and present it as a verbal category of its kind (see section 2: Aspect as a temporal category);
- focusing on the imperfective–perfective opposition, to draw attention to (examples of) factors which contribute to the aspectual construal of the communication, some of them being of non-verbal lingual nature, some of them extending beyond the realm of the traditional language means (see section 2.2: Aspectual construal and Morphological aspect);
- since it is perfectives which exhibit internal temporal structuration, to tackle perfectives/perfectivity and its types (see section 3: Perfectivity and its types), first in terms of events and then to make a generalization step to cover the use of more morphological perfectives (see section 4: Perfectivity as Instauration of Point(s) of Asymmetry);

---

3 For more on the place of this observation in linguistics history and present, see Haspelmath (1997, pp. 1–22). Despite the high degree of universality of this observation (*ibid.*, p. 3), there seem to exist languages where spatial terms are not used to express temporal distinctions. Comp. Whorf (1956, p. 146), Haspelmath (1997, p. 2), Sinha et al. (2011).

For the case of Czech, see for instance Saicová Římalová in this issue. For more on Czech prepositions and the relationship between their temporal and spatial meaning, see Konečná (1974).

- finally, to conclude with differences between the rather surface-level metaphorical interconnection of Time and Space in expressing temporal and spatial meanings with shared language means, and the deep underlying connection of Time and Space in perfectives/perfectivity, which does not surface as Time-Space shared language means (see section 5: Conclusion).



## 2. ASPECT AS A TEMPORAL CATEGORY

Setting out to tackle the Time-Space relationship in language, we start with Time in Czech.

How does Czech express temporal distinctions? By means of the verbal tense category (*jdu na pivo* 'I go for a beer' — *šel jsem na pivo* 'I went / have gone for a beer'), by (for instance adverbial) complements (*přišel pozdě* 'he was late'), and by means of the category of aspect: *Když četl, smál se*. 'While he was reading, he laughed.' — both events took place simultaneously vs. *Když to přečetl/dočetl, smál se*. 'After he had read it, he laughed.' — one event took place before the other.

Hereafter, we will focus on aspect, namely on the distinction perfective-imperfective, leaving other aspectual values aside. The temporal nature of the aspect category clearly surfaces in Comrie's (1997, p. 3) widely used definition of aspect: "[aspect is a] way of viewing the internal temporal constituency of a situation".

### 2.1 ASPECT — A "DIFFERENT" VERBAL CATEGORY (SUBJECTIVITY OF ASPECT)

Some linguists dealing with (Czech) aspect draw attention to what could be called the subjectivity of aspect.

Antonín Dostál: "Slovesný vid je schopnost slovesa vyjádřit postoj mluvčího ke skutečné události, k ději (nebo k představě oné události), chápané jako celek nebo opačně [Verbal aspect is the capacity of the verb to express the speaker's attitude to a real event, process or action (or the speaker's perception of it), which is grasped as a whole or the opposite]" (Dostál, 1954, p. 15f).

Bohumil Mathesius: "[Vid je způsob], kterým mluvčí pojímá vyjadřovaný děj vzhledem k jeho průběhu (...) [Aspect is a way in which the speaker perceives an event in regard to its course (...)]" (Mathesius, 1961, p. 68).

Bernard Comrie: "(...) aspect consists in the manner of temporal rendering/layout of the situation" (Comrie, 1976, p. 3).

According to these quotes, aspect consists in the way the speaker understands, perceives or grasps the communicated event or situation. It is the speaker who decides and selects the aspect category value (to be) used in the particular communication. It thus depends on the speaker's subjective understanding of the event, and in this sense, the category of aspect is subjective.



Some other verbal categories do not exhibit this quality. For instance, in the case of the category of person, the speaker does not have comparable freedom to select the value of the category. While in the case of aspect the speaker can decide, speaking about the same real event/situation and having the same interpretation/construal in mind, whether to use imperfective or perfective forms and say *Mirek knihu četl*. ‘Mirek read / was reading [imperfective] the book.’ or *Mirek knihu přečetl*. ‘Mirek has read [perfective] the book.’,<sup>4</sup> the category of person does not permit analogical selection: 1<sup>st</sup> person is always the speaker, 2<sup>nd</sup> person always the addressee. The speaker cannot decide to speak about her/himself in 2<sup>nd</sup> person or use 1<sup>st</sup> person about the addressee (comp. with Starý Kořánová, 2019, p. 8).

## 2.2 ASPECTUAL CONSTRUAL AND MORPHOLOGICAL ASPECT

It is quite commonly claimed that aspect is a verbal category, i.e. the verb is the exponent of aspectual distinctions, aspectual distinctions are expressed by the verb forms. Anticipating our conclusion, this is not the case.

To be able to demonstrate that, let us distinguish, together with Starý Kořánová (2019, pp. 18, 25, 64), between aspect as a category determined by the morphological make-up of the verb from aspect as an aspectual construal of the communication (*komunikát*). They may differ, as is quite often the case in the examples cited in this paper.<sup>5</sup> In other words, “in communication, it is not so much whether the verb IS (morphologically) perfective or imperfective, but rather whether it is USED perfectively or imperfectively” (Starý, 2017, p. 119; comp. also with Starý Kořánová, 2015, 2019, namely pp. iv, 1, 58, 83, 156, 191, 195f). Consequently, we have to be aware of the morphological make-up of the verb on the one hand, but have to focus on the “physiology” of communication construal emergence on the other, and pose questions concerning what are / might be the factors involved in this process, whether they would be, in the traditional sense, of lingual or non-lingual nature.<sup>6</sup> The commonly voiced reference to context here is basically only an acknowledgment that we do not know what the “physiology” might be, that there is a realm of factors we / the respective linguists do not have an articulate picture of or even any idea about.

4 This is not to say that in other instances, the aspectual morphological make-up of the verb *četl/přečetl* could not be used to express an aspectual distinction, i.e. the “free” choice between *četl* and *přečetl* would not be without communicative consequences. *Tu knihu jsem nejen četl, ale i celou přečetl*. ‘I not only (have) read the book, but I have finished it.’ would be, for instance, such a case. Compare also with footnote 7.

5 For the notion of construal in borderline and more general contexts, see for instance Croft & Cruse (2004, chapter 3); Croft (2007, p. 349f, 2012, pp. 13ff, 92ff).

6 The term *lingual* is used here intentionally to express the meaning of “to be related to language” and to avoid confusion linked with possible alternative terminology *linguistic* or *verbal*. The adjective *verbal* brings with it a confusing homonymy: *verbal* as related to *verb* as part of speech vs. *verbal* as expressed by words (we have been using the term *verbal* in the first sense in this article). The adjective *linguistic* is also homonymous: it relates either to *language* or to *linguistics*.

- (13) *Tu knihu jsem četl.*  
'I have read / was reading / read the book.'

Morphologically, the verb in example (13) is imperfective; nevertheless, the aspectual construal of the sentence might be both perfective and imperfective.

It is quite common that a communication including a morphological imperfective is interpreted perfectly, i.e. a morphologically imperfective predicate corresponds to a perfective construal of the communication — example (13) is no peripheral exception.

- (14) *Ten film jsem (už) viděl.*  
'I have seen / was watching / saw [imperfective] the movie (already).'
- (15) *V tom bazénu jsem se (už) koupal.*  
'I have swum / was swimming / swam [imperfective] in the pool (already).'
- (16) *Už jsem v Baltu plaval.*  
'I have swum / was swimming / swam [imperfective] in Baltic Sea already.'
- (17) *Neklepejte, sestra vychází.*  
'Do not knock (on the door), the nurse is coming out / comes out [imperfective].'

Examples (14)–(16) are the same as example (13):<sup>7</sup> all of them include a morphologically imperfective verb, but can be interpreted perfectly (the perfective construal seems to be foregrounded by the adverb *už* 'already': I have had the experience of watching the film, of swimming in the pool, of swimming in the Baltic Sea).<sup>8</sup> The example (17), a sign on the door of a doctor's office in a Prague hospital, is a bit more complicated since its construal is potentially imperfective, perfective and/or iterative. The verb *vychází* as a lexeme 'to leave, walk out of (a room/space)' is aspectually homonymous — it is imperfective or iterative. This ambiguity is resolved by the insertion of the adverb *pravidelně* 'regularly' in a recent update of the sign: in (18), the iterative interpretation of *vychází* is foregrounded.

<sup>7</sup> Examples (13)–(16) expand the set of examples sometimes given to illustrate that imperfective as the unmarked member of the privative perfective–imperfective opposition can be used in a communicative act which conveys perfective meaning. Comp. for instance with Karlík, Nekula & Rusínová (1995, p. 318) specifically for Czech, or Jakobson (1932, pp. 74, 76, 1971, pp. 3, 6, 1984, pp. 1, 3f) on the general level.

<sup>8</sup> Imperfective construals of examples (15) and (16) are: *V tom bazénu jsem se už koupal, když přišel.* 'I was swimming in the pool when he came.', *V Baltu jsem už plaval, když loď kotvila.* 'I was swimming in the Baltic Sea when the boat dropped its anchor.', respectively. In (14) the situation is more complex since Czechs do not *vidí film*, but *dívají se na* or *sledují film*, i.e. a different verb has to be used in an imperfective situation, similarly as in English, where different verbs are used as well: *I have seen the movie.* vs. *I watched the movie.*



(18) *Neklepejte, sestra pravidelně vychází.*

‘Do not knock (on the door), the nurse comes out regularly.’

To use an imperfective in the perfective sense fits the theory of markedness as it was conceived by Trubetzkoy (1931, p. 97, 1939, p. 67) in phonology and by Jakobson (1932, p. 74, 1984, p. 1) in morphological correlations. But the opposite is also possible, i.e. a communication (a sentence) containing a morphologically perfective predicate can be understood imperfectively. Examples such as (19) and (20) illustrate this.

(19) *Udělá (stále) sto kliků.*

‘He/she still does / is able to do 100 push-ups.’

(20) *Stále se uživí.*

‘He/she still/yet makes a living / is able to make a living.’

Morphological perfectives *udělá* ‘he/she will do [perfective] (it)’, *uživí* ‘he/she will be able to support / feed / provide living to [perfective] (him/her...)’, etc. express the agent’s ability to perform the activities referred to by the verb (“doing” and “making a living” in the given examples). They do not express an event, activity, or process, but refer to a state. States, similarly as imperfectives, exhibit an unbounded temporal extension, and there is no point which would limit, divide or structure the temporal extension of the event referred to by the verb, as is common in the case of perfectives.<sup>9</sup> Again, these instances are not exceptional cases. They represent a whole class of constructions which does not limit itself to the so-called capacitives, as might be erroneously inferred from examples (19) and (20) in which the verbs do fit the traditional definition of capacitives (see Starý Kořánová, 2019, namely chapters 4 and 5, which are based on extensive corpus data).<sup>10</sup>

9 States and imperfectives are not identical. States, as well as imperfectives, exhibit unbounded duration and as such, similarly to imperfectives, they last. States, on the other hand, are either valid or not (comp. with Starý Kořánová, 2019, p. 30f). Duration implies the possibility to be structured. Duratives are compatible with phasal auxiliary verbs (*začít plakat* ‘to begin to cry’, *začít běžet* ‘to begin to run’) and phasal prefixes (*rozplakat se* ‘to begin to cry’, *rozběhnout se* ‘to begin to run’). The states described above do not exhibit this quality, despite the fact that their meaning implies durativity. In other words, unlike imperfectives, states exhibit limited ability to be temporally (i.e. as far as the time dimension is concerned) structured: for instance *začal pracovat* ‘he started to work’ vs. *\*začal unést pytel s moukou* ‘he began to be able to carry [perfective] the flour bag’; but the periphrastic *začal být schopen pytel s moukou unést* is possible.

For other aspects of the state vs. (actual) event / process relationship, see Starý Kořánová (2019, p. 31).

10 The term *capacitive* was introduced by Poldauf in his discussion with Kopečný (Poldauf, 1964, p. 50) and is usually used for verbs such as *ujít, ujet, uběhnout, uplavat, uletět, urazit, unést, uvězt, utáhnout, uzvednout, uzdvihnout, udržet, uživit, ubránit, uchránit, uhlídat, udržet v tajnosti* a *utajit* (the list quoted from Veselý, 2014, p. 55). Capacitives are thus perfective verbs derived with the prefix *u-* which express the subject’s ability to fulfill the event/ac-



Not only can a (morphologically) perfective predicate contribute to an imperfective interpretation of the particular communication and vice versa, but there are also instances in which aspect is irrelevant from the point of view of the communication and its construal — it simply does not matter.

- (21) *Tato kniha uvedené / uváděné klišé nepopírá.*  
 ‘This book does not deny the cliché mentioned [perfective] / mentioned [imperfective].’
- (22) (...) *lidský život se — jak vidno — dá zredukovat na pár klíčových informací / lidský život se — jak vidno — dá redukovat na pár klíčových informací.*  
 ‘(...) human life — obviously — can be reduced [perfective] to a few key bits of information / human life — obviously — can be reduced [imperfective] to a few key bits of information.’
- (23) (...) *jak jsou tyto kategorie vymezeny / vymečovány v lingvistice (...)*  
 ‘(...) as these categories are defined [perfective] / defined [imperfective] in linguistics (...)’

In the examples (21)–(23), it does not matter whether the speaker uses the perfective or imperfective form of the respective verbs, the content of the communication remains the same. In this sense, the morphological aspect is irrelevant in these instances.<sup>11</sup>

Of course, the fact that perfectives might be understood imperfectively and vice versa has been noticed by scholars dealing with (Czech) aspect.<sup>12</sup> For instance, examples such as (13) are commonly mentioned in Czech grammars (Petr et al., 1986, p. 181; Karlík et al., 1995, p. 318, and the like). But most of the time (nearly exclusively), they are examples where, in structuralist terminology, the non-marked imperfective member of the privative perfective–imperfective opposition is used instead of the marked one, i.e. instead of the perfective. Sentences like (19) and (20) are described from the point of view of aspect as special instances different from the regular ones: Kopečný thus speaks about these examples and verbs like *ten se nadělá* ‘he works very hard, or idiomatically, makes a fuss over’, *vejde se to tam* ‘it fits in there’, *vydrží* ‘he

---

tivity referred to by the verb to a certain degree, therefore they are (sometimes implicitly) complemented by the degree to which the event is fulfilled. For an innovative approach to capacitives, which casts some doubts on the way they have been conceived and treated so far, as well as for more details on the nature and history of the notion of capacitives, see Starý Kořánová (2019, p. 63ff).

11 Comp. with Starý (2017a, p. 114). The first two examples are from Reiner (2014). *Básník / román o Ivanu Blatném*. Praha: Torst (p. 11f). Examples before the slash are quotes from the novel. Examples following the slash are modifications by ZS. The last example has been taken from a linguistics presentation.

12 It is only the above-described irrelevance of aspect values in communication which has so far not been noticed, as far as I know.



manages to, endures', etc. as "neaktuální perfektiva" (non-current perfectives, i.e. perfectives which do not express any ongoing event / process / activity). Kopečný in his polemics with Seidl (Kopečný, 1948)<sup>13</sup> refers to them as to "dokonavý přezens" [perfective present (tense)] (Seidl, 1939, pp. 12, 16ff). Similarly, Poldauf (1964, p. 50) (and many others after him, for instance Veselý, 2009, p. 113) singles out verbs he calls *kapacitiva* [capacitives], including examples (19) and (20), among others (*uplavat* '(be able to) swim (a distance)', *uběhnout* '(be able to) run (a distance)', *ujet* '(be able to) go (a distance)', *uletět* '(be able to) fly (a distance)', *ujít* '(be able to) walk (a distance)', *uvést* '(of a vehicle) be able to transport something', *utáhnout* '(be able to) pull something (a distance)', *udržet* 'hold (a weight)').

All of these definitions (from the noetic point of view) cherry-pick instances that do not conform to the description or theory of aspect by these authors and aberrate from predictions of their theory. In this sense, delineation of such special groups of verbs demarks areas that are outside of the applied description/theory's scope, areas where the respective theory does not operate in an expected way and does not provide an explanation for the observed phenomena.

To take the "exceptions" listed above seriously, i.e. to abolish the usual bias in dealing with aspect, two steps are to be taken:

1. to internalize the necessity to distinguish between morphological aspect (i.e. aspect given by the morphological make-up of the verb) on the one hand and the aspectual construal of the communication (for instance, the sentence) on the other,<sup>14</sup> and
2. to reflect that the aspectual value of the communication does not derive from the morphological make-up of the verb alone.

The first step has been taken and addressed earlier in this paper. Let us now turn to the second step.

### 2.3 NON-VERBAL FACTORS IN THE VERBAL CATEGORY OF ASPECT

The ambiguities of aspectual construals in examples (13)–(23) prompt a quest for the kinds of factors that might contribute to a (possibly unequivocal) aspectual interpretation of a communicative act / sentence. The following are examples of factors which are not based on the aspectual morphological make-up of the verb, and, in this sense, are non-verbal<sup>15</sup> in nature. This list merely contains some examples. As broad as it is, it does not aspire to be a complete list.

<sup>13</sup> Unlike Kopečný, Seidl focuses not on verb categories, but rather on the way verbs are used in communication, i.e. in our terms, on aspectual (temporal) construals of communications, part of which are morphologically perfective predicates.

<sup>14</sup> The distinction between morphological aspect and aspectual construal of the communication (sentence) opens a quite broad new thematic territory of aspectual homonymy and polysemy. It is systematically tackled on Czech corpus data in Starý Kořánová (2020).

<sup>15</sup> The use of the expression (*non-*)*verbal* is not to be confused here with its other meaning "expressed in words".

## 2.3.1 ASPECT AND TENSE

(24) *Tu knihu jsem četl.*  
 ‘I have read / read [imperfective] the book.’

(25) *Tu knihu budu číst.*  
 ‘I will read [imperfective] the book.’

Let us start with examples (24) (earlier given as example (13)) and (25). While (24) is often interpreted as perfective, despite the fact that it contains an imperfective predicate, sentence (25) is imperfective not only morphologically, but also in its construal. From the point of view of language exponents, they differ only in tense. Tense is thus a factor that participates in the aspectual construal of the sentence.

(26) *Aljašský malamut (...) utáhnul 2570 kg, sám přitom váží padesát kilo.*  
 ‘An Alaskan malamute (...) has pulled / pulled [perfective] 2570 kg, while he himself weighs fifty kilos.’

(27) *Aljašský malamut (...) utáhne 2570 kg, sám přitom váží padesát kilo.*  
 ‘An Alaskan malamute (...) pulls [perfective] 2570 kg, while he himself weighs fifty kilos.’

Examples (26) and (27) are drawn from Starý Kořánová (2019, 66f). The first sentence refers to an event (*utáhnul*), the latter to a state, specifically a dog’s ability to pull sleds of certain weight. Both examples differ not only in their aspectual value, but also in their tense: *utáhnul* vs. *utáhne*. The tense is the factor which co-determines the aspectual construal of these sentences.<sup>16</sup>

## 2.3.2 ASPECT AND NOMINAL NUMBER

(28) *Vyhazuje knihu oknem.*  
 ‘He throws / is throwing [imperfective] the/a book out of the window.’

(29) *Vyhazuje knihy oknem.*  
 ‘He throws / is throwing [imperfective] the/Ø books out of the window.’

16 For past tense as a factor codetermining (namely) the perfective construal of communication, see for instance Trávníček (1923, pp. 272, § 214), Kopečný (1962, pp. 8f, § 4, 56, § 57), Starý (2017, p. 117), Chromý (2014, pp. 94–97) etc. for Czech, and in a general, sort of universal, i.e. language-independent sense, see Dahl (1985): “There is a strong tendency for PFV [i.e. perfective] categories to be restricted to past time reference” (p. 79) and a prototype of PFV “verb will typically denote a single event, seen as an unanalyzed whole, with a well-defined result or end-state, located in the past.” (p. 78). The underlining is mine, ZS. For an analysis of Tense–Aspect correlation, see also Dostál (1954, pp. 247, 598ff, 603ff, 606).



Sentence (28) has an imperfective (but not iterative) meaning, in sentence (29) the nominal plural foregrounds the iterative construal. It is thus the nominal number of the object (in this case) that works as a factor co-determining the iterativity of the latter example.

### 2.3.3 ASPECT AND ADVERBIAL COMPLEMENT

By adding an adverbial complement to example (29), we obtain

- (30) *Vyhazuje knihy oknem často / pravidelně / občas.*  
 ‘He throws / is throwing books out of the window often, regularly, from time to time.’

In this case, it is the adverbial complement that facilitates the state-like, namely habitual construal. The adverbial complement thus functions here as a factor co-determining the aspectual construal of the sentence. A similar situation is shown in examples (31) vs. (32) and (33) vs. (34).

- (31) *Tu knihu jsem četla.*  
 ‘I have read / read [imperfective] the book.’
- (32) *Tu knihu jsem pomalu / stále / ještě četla.*  
 ‘I read [imperfective] the book slowly / continually / still.’

While the first sentence is aspectually ambiguous — as we have said already, it can be understood perfectly as well as imperfectively — the latter suggests, thanks to the adverbial complements *pomalů / stále / ještě*, an imperfective reading.

- (33) *Uplaval 100 metrů.*  
 ‘He has swum / swam [perfective] 100 meters.’
- (34) *I když mu bylo už 70, stále ještě uplaval 100 metrů.*  
 ‘Even though he was already 70, he has swum / swam / was able to swim [perfective] 100 meters.’

While example (33) is aspectually unspecified — it can refer to an event (*I když mu docházely síly, uplaval 100 metrů a dostal se na břeh.* ‘Even though his strength was diminishing, he swam 100 meters and managed to get to the shore.’) or a state (the ability to swim 100 meters), example (34) suggests a state-like reading, i.e. he was still able to swim 100 meters.

### 2.3.4 ASPECT AND LEXICAL MEANING OF THE VERB

Let us start this paragraph with an elementary school joke: Two brothers, one totally blind, the other blind in one eye, go to visit their granny. The one-eyed brother is lead-



ing the way. They are making their way through shrubs. Suddenly, a branch leaps out and lashes out the boy's healthy eye. The boy says: "Tak jsme došli," and the other brother adds: "Ahoj babi." [Hi granny.]

The sentence *Tak jsme došli.*, given here as example (35), has two meanings in Czech: we have stopped walking (suspension of the activity) or we have reached our goal/destination, i.e. the granny's place in our example. The leading boy has the first meaning in mind, the other, who was already blind before the trip, understands it in the latter sense and greets granny. Example (35) is thus aspectually ambiguous: it either means the suspension of an activity or reaching its internal goal, which is the usual perfective meaning in Czech.

- (35) *Tak jsme došli.*  
'Well, we have stopped walking / lost the ability to walk [perfective].'

Let us compare this example with examples (36) and (37).

- (36) *Tak jsme dolétali.*  
'So, we have finished flying / lost the ability to fly [imperfective].'

- (37) *Tak jsme dolétli.*  
'So, we have flown [perfective] (here).'

While (36) foregrounds the aspectual meaning of activity suspension,<sup>17</sup> sentence (37) expresses, in the communicator's interpretation, rather the reaching of the internal activity goal, i.e. the perfective aspectual meaning. The aspectual ambiguity we have encountered in example (35) does not hold in examples (36) and (37). The difference is related to the lexical meaning of the verbs.

The interconnectedness of the aspectual construal and the lexeme is also suggested by example (14): while *Ten film jsem (už) viděl.* is commonly interpreted perfectly, the imperfective counterpart usually uses a different verb: Czechs do not *vidí film*, but *dívají se na* or *sledují film*, similarly as in English: *I have seen the movie.* vs. *I watched the movie.*

The lexical meaning of the verbs thus turns out to be a factor in shaping the aspectual construal of the communication.

---

17 Let us give more examples of situations in which a communication with a morphologically perfective predicate expresses activity suspension. The sentence *Tak jsme dolétali.* 'Flying is over for us (for now),' is interpreted as activity suspension for instance in situations when a wing of the airplane we have been flying got broken off. Our reaction then might be *Tak jsme dolétali.* Similarly, if our paragliding parachute got torn, we cannot continue paragliding and react with a sigh *Tak jsme dolétali*; the aspectual construal is suspension. Other situation where the suspension construal applies is when we hurt our knee or break our leg while skiing and utter *Tak jsme (pro tuto sezónu, pro tyto hory) dolyžovali.* 'Skiing is over for us for this season / this mountain trip.', it is to express disappointment caused by the activity suspension.



### 2.3.5 ASPECT – BEYOND THE LANGUAGE MEANS

- (38) Husband describes the plot of a book. Wife interrupts him: *Já vím, tu knihu jsem (už) četla.* ‘I know, I have read [imperfective] the book.’

There is no morphological perfective in the wife’s turn (*číst* – *četla* is imperfective); nevertheless, the construal of the communication is clearly perfective. Its perfectivity derives from the ordering of the bits of information in the communication, from the way the story is narrated and from the communicants’ experience: the wife knows the book’s plot, *eo ipso* she has read it.<sup>18</sup>

Let us return to example (17), which we repeat here as (39), a door sign in a Prague hospital.

- (39) *Neklepejte, sestra vychází.*  
 ‘Do not knock (on the door), the nurse is coming out / comes out [imperfective].’

A patient reads the sign, there is no nurse around, therefore he does not interpret it imperfectively, i.e. that the nurse is just coming out, but iteratively, i.e. the nurse regularly or repeatedly comes out. The aspectual construal is thus brought up on the basis of the patient’s observation of the situation the communication is part of, not on the basis of any language means used. Our conclusion is supported by the recently updated version of the sign: *Neklepejte, sestry pravidelně vychází.* ‘Do not knock, the nurses come out regularly.’

### 2.3.6 SUMMARY

We have gone through the following factors which participate in the aspectual construal of the communication. As we stated beforehand: as broad as this list of factors is, it does not aspire to be a complete list.

- Tense, i.e. non-aspectual morphology of the verb.
- Nominal number of event participants, i.e. language exponents outside of the verb.
- Lexical meaning of the verb, i.e. non-grammatical (non-morphological) language means related to the verb.
- Narration of the communicated event, experience with or observation of the situation that the communication is part of, i.e. means or factors which are non-linguistic in nature, which are beyond the horizon of traditional language means.
- Finally, means of the aspectual morphology communicated, i.e. the aspectual morphological make-up of the verb.

<sup>18</sup> But let us not overgeneralize. The existence of examples such as (38) does not imply that the imperfectives used in preterit would be necessarily interpreted as perfective.

The morphological make-up of the verb is thus only one of numerous factors that constitute the aspectual construal of the communication.



### 3. PERFECTIVITY AND ITS TYPES

By widening the scope of factors that participate in the emergence of the aspectual construal of the communication, we have cleared the pitch of traditional enchantment with perceiving aspect exclusively as a phenomenon of verbal morphology.

One of the core aspectual distinctions (at least in Czech and Slavic languages in general) is the opposition of imperfective vs. perfective. Leaving other aspectual values aside here, we will focus namely on perfectives/perfectivity since it is perfectivity which implies a temporal structuration, as the following usual characteristics suggest. A lack of such structuration is then linked with imperfectives/imperfectivity.

Perfectivity, its *internal temporal constituency* (comp. the definition of aspect in Comrie, 1979, p. 3; see also section 2 above), is traditionally and probably most commonly linked with the following meaning properties:

- a) **Event completion.** Trávníček (1923, p. 3) links perfectivity with “vědomí dokonání děje [awareness of event completion]” and speaks about the event referred to by a perfective as about “děj skonaný [finished/fulfilled event]” (*ibid.*, p. 292). Similarly, Kopečný (1962, p. 9) speaks about “děj dokonaný,” resp. “dokonaná činnost [finished event, fulfilled activity, i.e. activity brought to its end/goal]”. Bybee et al. (1994, p. 276) mention “completed action” in connection with perfectives, Givón (1984, p. 288) even uses the term “completive” to characterize perfectives.
- b) **Temporal boundary/boundedness.** This property is connected with perfectivity by Givón (1984) and Bybee et al. (1994). According to Givón (1984, p. 276), the opposite of a perfective, i.e. an imperfective, does not exhibit any “temporal boundary”. Similarly, Bybee et al. (1994, p. 5, 86, 301) consider the lack of “temporal boundedness” to be the defining quality of imperfectives. Jakobson speaks about “absolute Grenze der Handlung [absolute limit of the action]” (Jakobson, 1932, p. 76, 1971, p. 6, 1984, p. 3).
- c) **Achievement of event result/goal.** Another characteristic of perfectivity is linked with the achievement of an event (internal) goal, “dosažení výsledku děje [achieving of an event result/goal]” (Petr et al., 1986, p. 181). Dahl (1985, p. 78) speaks about the perfective as about a verb that denotes “a single event, seen as an unanalyzed whole with a well-defined result”. This interpretation/meaning seems to overlap with a) above, since achievement of event result/goal seems to imply its completion (meaning a) above).
- d) **Event as a whole, in its complexity.** Finally, the core of perfectivity is seen in the fact that the communicated event is conceived as a whole, in its complexity: Kopečný (1962, p. 9): a perfective presents the event as “děj celkový, souborný [a whole, aggregate event]”; Dostál (1954, p. 16): a perfective presents the event “jako celek [as a whole]”; Comrie (1997, p. 16): “perfectivity indicates the view of



a situation as a single whole”; Dahl (1985, p. 78): “A PFV [i.e. perfective] verb will typically denote a single event, seen as an unanalyzed whole”. Metaphorically, imperfectives imply that we as communication participants are standing in the middle of the event / action / process, perfectives grasp the event / action / process as a whole, i.e. they do not permit (us) “standing in the middle” of the event / action / process (comp. with Dostál, 1954, p. 15). The event thus takes place / is performed / is ongoing / occurs before the communication (in this sense it is “behind” the communication participants) or is ahead of the communication, i.e. ahead of the communication participants.<sup>19</sup>

The semantic property d) differs from the meaning a) in the following way: while a) perceives the event, so to say, from the inside as an event which aims to the point of its completion and is thus perceived as a vector (*za jak dlouho knihu přečetl* ‘how long it took to him to finish the book’ refers to the length of the event), property d) approaches the event from the outside, as a whole: *za jak dlouho si posedíme* ‘in what time are we going to hang out together’ refers to the time before the event proper begins.

The problem with these descriptions and characteristics is that communicative acts / utterances which include a morphological perfective in their predicates do not have to exhibit any, let alone all of these properties.

Let us start with the following set of examples, all of them with morphologically perfective verbs in the predicate.

- (40) *Postavil dům.* ‘He has built [perfective] a/the house.’;  
*Rozbil vázu.* ‘He has broken [perfective] a/the vase.’;  
*Přečetl knihu.* ‘He has read [perfective] a/the book.’

- (41) *mával křídly* ‘he flapped [imperfective] his wings’ — *domával křídly* ‘he stopped flapping [perfective] his wings’  
*létal* ‘he flew [imperfective] / had the ability to fly’ — *dolétal* ‘he ceased flying [perfective] / he lost the ability to fly’<sup>20</sup>

- (42) *poznat* ‘to learn/recognize [perfective]’ — *znát* ‘to know [imperfective]’<sup>21</sup>  
*(po)kleknout* ‘to get on one’s knees [perfective]’ — *klečít* ‘to kneel [imperfective]’

<sup>19</sup> We have mostly quoted rather contemporary authors. Nevertheless, these or similar characteristics of perfectivity have been around for some time, i.e. they can be found in the work of older, i.e. 19<sup>th</sup> century authors as well. For references, see for instance Seidl (1936, 1939) or Dostál (1954, p. 10ff).

<sup>20</sup> Besides interpreting these examples as event/activity suspension, an interpretation as an end of state is also possible: he lost the ability to flap his wings, he lost the ability to fly (Starý Kořánová, personal communication and Starý Kořánová, 2020).

<sup>21</sup> For more on these kinds of examples see Kořánová (2014) and Starý Kořánová (2019, p. 148ff).

*postavit se* ‘to stand up [perfective]’ — *stát* ‘to stand [imperfective]’  
*sednout si* ‘to sit down [perfective]’ — *sedět* ‘to sit [imperfective]’  
*zmlknout* ‘to fall silent [perfective]’ — *mlčet* ‘to be silent [imperfective]’  
*pochopit* ‘to grasp [perfective]’ — *chápat* ‘to understand [imperfective]’

- (43) *(stále) unese 100 kilo* ‘he is still able to lift [perfective] 100 kg’<sup>22</sup>  
*(ještě) se o sebe postará* ‘he still sustains / is able to take care [perfective] of himself’  
*(pořád) se najde dost bláznů* ‘enough nuts can be still found [perfective] around’
- (44) *posedět (si)* ‘to sit [perfective] around for a while’  
*poklábosit (si)* ‘to chat [perfective] for a while’  
*pobejt* ‘to be [perfective] (together) for a while’

Let us analyze these examples and comment on them from the point of view of the perfectivity properties a) — d) listed above.

All examples (40)–(42) imply a change in the situation they communicate. But they differ in what has changed.

In (40), it is the newly built house, broken vase and the fact that the book was read from cover to cover. In (41), the change consists in the suspension of the event/activity itself.<sup>23</sup> Nothing else has changed in the communicated situation, but that the event has ceased (he stopped flapping his wings, stopped flying). The nature of the difference between (40) and (41) stands out namely in the example (35) above. While in (41) different construals are signaled by the use of different expressions (*mával křídly* — *domával křídly*, *létal* — *dolétal*), in (35) there is one expression with two different construals: the brothers reached granny’s house — the brothers ceased walking.

In examples (42), the nature of the change is different again. It consists in the commencement of an “imperfective” event: after I have learned (the thing), I know it; after I have stood up on my knees, I stand on them; after I have risen up, I stand on my feet, etc. The change thus does not consist in the emergence of new entities as in (40), or of the suspension of the communicated event or activity (41), but in the commencement of a new event referred to by an imperfective.

In contrast to (40)–(42), examples (43) and (44) do not imply any change. The examples in (43) can be interpreted as a reference to a *state*, i.e. the subject’s ability (capacity) to perform the event referred to by the verb (*unést 100 kilo* ‘lift 100 kg’, *postarat se o sebe* ‘take care of himself’), or the possibility of an event occurrence (*pořád se najde dost bláznů* ‘enough nuts can be still found around’).

22 Examples (43) are drawn from Starý Kořánová (2019), where there is more on these examples interpreted as states, namely in chapters 4 and 5. As mentioned already, these cases are not peripheral among Czech constructions, they are based on a quite common (productive) pattern (*ibid.*).

23 The suspension of the activity *létat* ‘to fly’ or *mávat křídly* ‘to flap the wings’ might also be interpreted as a loss of the ability to fly / flap the wings; the activity might be hampered by the facts that, for instance, the wings got hurt / broken off, etc.



The examples in (44) are sometimes referred to as *omezovací slovesa* [curbing verbs]. They refer to an activity (sitting, chatting, and being (around together) / hanging out together in our examples) which is temporally curbed, i.e. it takes place in some kind of interval, but the interval is totally unspecified. We know it begins and ends, but its beginning or end are not determined, the construction does not imply any specific beginning or ending points in time. The existence of these points distinguishes curbing verbs from imperfectives, despite the fact that otherwise they exhibit some properties of imperfectives. For instance, their adverbial complementation is similar (e.g. *dlouho jsme si popovídali*<sup>24</sup> ‘we chatted [perfective] for a long time’ — *dlouho jsme si povídali* ‘we chatted [imperfective] for a long time’ — *\*dlouho jsme postavili dům* ‘we have completed/built [perfective] the house for a long time’ — *dlouho jsme stavěli dům* ‘we built [imperfective] the house for a long time’).<sup>25</sup> Also, *Pár hodin (si) poklábosili*. ‘They chatted [perfective] for few hours.’ is the answer to the question *Jak dlouho (...)?* ‘For how long (...)?’, i.e. a question about the course/duration of the event, as with imperfectives, while the question about the course/duration of the event compatible with examples (40)–(43) are *Za jak dlouho?* ‘In what time?’, *Za jak dlouho postavil dům?* ‘In what time he has built the a/the house?’, *Za jak dlouho domával křídly?* ‘In what time he has stopped flapping the wings?’, *Za jak dlouho (to) poznal?* ‘In what time has he figured it out?’, *Za jak dlouho unese 100 kilo?* ‘In what time he will be able to lift 100 kilos?’, which in the case of the examples in (44) would mean a question about the beginning (not the course) of the event of *posezení* ‘sitting together’, *popovídání* ‘chatting together’, or *pobytí* ‘being/hanging out together’.<sup>26</sup>

Let us have a look at the relation of the characteristics of perfectivity (paragraphs a) — d) above) to the set of examples (40)–(44) just discussed. The best fit can be found in (40): *Postavil dům*. ‘He has built [perfective] a house.’ implies completion of the activity of *stavět* ‘build’, it contains a temporal boundary (boundedness) that is given by the moment of finishing the building, it signals the achievement of an event internal/inherent result/goal, i.e. the complete, finished construction of the house, and the “building” event is presented as a whole, as *a fait accompli*: the communication participants are not present during the ongoing process of construction, it either

<sup>24</sup> The example *dlouho jsme si popovídali* appears strange or different to some native speakers, they claim they would not say it. Nevertheless, the example has been attested in corpus data. In the corpus Syn v8 (Křen et al., 2019) the collocation *dlouho — popovídat* occurs 18 times (7 times in preterit, 8 times in infinitive, and 3 times in present), in 3 of these examples with the comparative form *déle* ‘longer’ (once in present, once in preterit and once in infinitive). More occurrences can be found in the Omnia Bohemica corpus (Benko, 2017): 65 instances of the collocation *posedět si dlouho*, out of which is 39 in comparative and one in superlative. Common is also the collocation *posedět si dlouze* (84 occurrences in Omnia Bohemica and 21 in Syn v8) as well as collocations with other temporal adverbials (*popovídat si na chvíli*, *trošku si popovídat*, *hodinu si popovídat*, *celé odpoledne si popovídat* etc.)

<sup>25</sup> On adverbial complementation in connection with aspect, see for instance Bermel & Kořánová (2008), Kořánová (2011), and Cvrček & Fidler (2017).

<sup>26</sup> The question test was brought to my attention by Starý Kořánová, personal communication.



has been finished already (it is thus “behind” them), or is planned in the future, i.e. it is, so to say, “ahead” of them.

The perfectives in examples (41) and (35) signal suspension of the activity referred to by the morphologically perfective verb. In this sense, there is a temporal boundary/boundedness (b), the boundary is set by the point of the event suspension. But there is no achievement of any internal goal (result), no point of completion (c). The suspension is a punctual event, and in this sense, it is hard to imagine the communicator stepping into the middle of the event (d).

The examples in (42) are, similarly to (41) and (35), punctual, therefore they are conceived as a whole, i.e. it is hard to imagine stepping into the middle of the event. While in (42) and (35) the result of the event is event suspension, in (42) a new event (expressed by an imperfective in our examples) is launched (*znát* ‘know’, *klečēt* ‘kneel’, *stát* ‘stand’, *mlčet* ‘be silent’, *chápat* ‘understand’). There is thus a temporal boundary involved, namely the temporal point from which the new event starts. If the beginning of the new event is perceived as the internal goal of the event referred to by the perfective verb, then it makes sense to speak about the perfectives in (42) as completives, achieving an internal goal/result.

The examples in (43) differ considerably from the rest of the examples. We can interpret the respective sentences, i.e. the perfectives in their predicate, as referring to states, not events. The difference between state- and event-like interpretations shows if we compare the following two situations:

- i. Talking about the physical potential of Peter: *Petr (stále) unese 100 kilo*. ‘Peter still lifts / can carry 100 kg.’ is understood as a statement of Peter’s ability to lift 100 kg.
- ii. Peter carries a 100 kg package. Comment: *Podívej se, Petr (stále) unese 100 kilo*. ‘Have a look, Peter still lifts / can carry 100 kg.’

While the construal of i. is a state / state-like (“nothing”, no event is going on), the construal of ii. is event-like: Peter performs the act of lifting 100 kg, and while performing the act he demonstrates his ability to lift the weight, i.e. he instaurates/manifests the state.

Finally, an even stranger *sub species* from the point of view of the perfectivity characteristics a) — d) are the examples in (44), the so-called curbing verbs.<sup>27</sup> There is nothing to be completed, there is no internal goal to be achieved. As far as the temporal boundary is concerned, curbing verbs imply two temporal points, namely the beginning and end of the event — they refer to an interval. But these points, as already mentioned above, are totally unspecified by the event itself. Consequently, since the curbing verbs’ events assume beginning and ending points, the only characteristics applicable to the curbing verbs is thus the fact that they conceive the event as a whole, i.e. an event which communication participants cannot “enter”. The event referred to by the verb takes place before or after the communication.

The claim that the beginning and end points of curbing verbs are totally unspecified by the event itself requires some explanation. A possible objection one might

27 See also Starý (2017b).



raise is that in real communication they can be specified: *Dnes v jednu posedíme, pobudeme, poklábosíme*. ‘Today at one, we will sit, be together, have a chat.’ or *Dnes mezi jednou a druhou posedíme, pobudeme, poklábosíme*. ‘Today between one and two we will sit, be together, have a chat.’ But these specifications of the beginning and end points of the event are brought in from outside, they are not derived from the event referred to by the verb, unlike in the examples in (41)–(43), where it is the event itself that defines the point of temporal boundary (point of asymmetry, see below): *Postavil dům*. ‘He has built a/the house.’ — the point is given by finishing the process of building; *domával křídly* ‘he has stopped flapping the wings’ — the point is determined by the moment of suspension of the event; *poznat* ‘learn’ — *znát* ‘know’ — the boundary point (the point of asymmetry, see below), i.e. the beginning of the situation in which we know, is determined by the punctual event of *poznat*.

In the examples in (43), for instance in the example *stále unese 100 kilo*, the situation is slightly opaque, but the temporal boundary points are still derived from the event referred to by the verb itself. The construal of the example is a state, specifically the subject’s ability to lift 100 kilos. In general, these kinds of states cannot be observed directly, we detect them through events: he lifted the 100 kilos, therefore he is able to lift that much, i.e. *stále unese 100 kilo*; on the other hand, these states are necessary preconditions to the respective events: to make the event of lifting 100 kilos happen, he has to be able to do so, i.e. the state *stále unese 100 kilo* has to hold (Vendler, 1967, p. 115f; Starý Kořánová, 2019, pp. 31, 32, 53, 194f).

## SUMMARY

Figure 1 summarizes the possible construals of morphological perfective predicates as they occur in examples (40)–(43). The scale of meanings linked with the use of perfectives is thus wider and more finely structured than the commonly given characteristics.

Figure 1 describes the perfectivity in terms of events. Nevertheless, it appears to be insufficient since it does not include the morphologically perfective so-called curbing verbs.

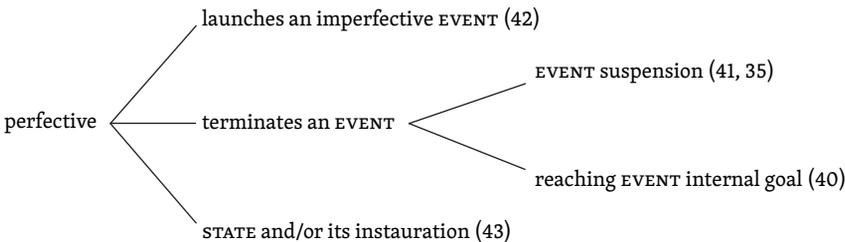


FIGURE 1.

#### 4. PERFECTIVITY AS INSTAURATION OF POINT(S) OF ASYMMETRY

As we said above, examples (40)–(42) imply a change in the communicated situation. As such, they imply a point of asymmetry: the situation before and after the change differs. The house was not there before it was built, the vase was in one piece before it was broken, the book had not been read by the subject before he has read it; the subject was flapping its wings before he stopped doing so, and was flying before he ceased flying or lost the ability to fly; the subject knew something after he has learned it, stood after he has stood up, sat after he has sat down, was silent after he had fallen silent, understood something after he had grasped it. In this sense the core of perfectivity consists in examples (40)–(42) in the inherent asymmetry of the event that is being referred to.

The situation is similar in the case of the states in (43). The fact that the respective state holds, i.e. the subject is able to lift/carry 100 kg, to take care of himself, or there is enough nuts to be found around, does not imply any change of the situation, but it presupposes that the subject (specific or generic) involved has demonstrated these abilities, i.e. he has already (once) lifted/carried the 100 kg, he has been able to take care about himself, and nuts have been found around. Events which have instaured respective states have thus established points of asymmetry of the situations referred to by the example sentences/communications. But since these events are unspecified (it is not clear when, where etc. they have (supposedly) occurred), the points of asymmetry determined by them are unspecific (generic) as well. As far as the perfectivity characteristics a) — d) above are concerned, none of them are met in instances such as those in (43): there is no event / process / activity to be finished, no specific temporal boundedness of its course, no goal it would fulfill or achieve. We could find ourselves in the middle when the states described by these sentences hold true.

The non-specificity of point(s) of asymmetry as well as the absence of change incurred to the situation communicated is also characteristic for the curbing verbs, i.e. the examples in (44). But unlike the situations in (43), the situations referred to in (44) operate with two unspecific points of asymmetry — the beginning and end of the interval in which the referred event (sitting together, chatting together, or being / hanging out together) goes on. Moreover, these points are not, again, unlike in the cases in (43), relatable to the event that the verb refers to (see above).

#### SUMMARY

The core of the perfective construal of the communication is the instauration of a point of asymmetry into the communicated situation/event. The point of asymmetry is a vector: it distinguishes the situation before and after the perfective event which instaures the point of asymmetry. It either involves change of the communicated situation or is unspecified (see above) as far as the asymmetry point is concerned.

The types of perfectivity thus appear as depicted in Figure 2.



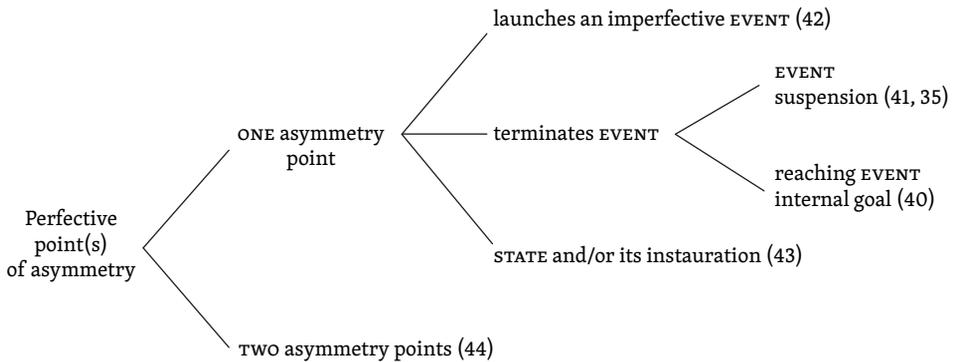


FIGURE 2.

## 5. TIME AND SPACE: THE LANGUAGE CLINCH – CONCLUSION

Language commonly shares means to express temporal and spatial relationships/meanings. We have shown that prepositions, attributes, adverbials, events (verbs), etc. can be used in this way. In terms of Space, we talk metaphorically about Time.

As we have mentioned earlier, according to recent metaphor theories, metaphor exhibits the following properties:

- i. Metaphor is a phenomenon relating *two domains* of human experience to each other. Sometimes they are called source and target domains, sometimes inputs 1 and 2, and the like.
- ii. Metaphor is not a language (use) phenomenon only. It is a way a human *conceptualizes* the world.
- iii. Language is then the realm in which (where) the (conceptualization) operation of metaphor can be ascertained, observed, and thus studied, since to speak metaphorically means to talk *in terms of one domain* (source domain) *about the other* (target domain).

The commonly shared language means used to express spatial as well as temporal meanings fulfill all three of these properties.

In the case of perfectivity, it is not so. The core of perfectivity was shown to consist in the instauration of point(s) of asymmetry into the communicated situation/event. (A)symmetry is primarily a geometric notion: it appertains to shapes and certain qualities of shapes. As such, (a)symmetry is a spatial notion.

*Per contra*, the opposition of imperfective vs. perfective as an aspectual opposition is of temporal nature. However, its temporal meaning is based on / consists in an asymmetry in/of the event (situation) referred to by the respective verb/predicate. A spatial property is thus the basis for temporal meaning. A temporal distinction/meaning emerges from a spatial one. A temporal property of an event stems from its underlying spatial quality/arrangement.



At the same time, there is no sharing of language means in the case of perfectivity conceived as asymmetry of the event referred to by the verb/predicate, i.e. using perfectives does not imply using spatial language means to express temporal meanings. Consequently, the metaphorical relationship of Space and Time in perfectives is lacking the property iii. of metaphor. The temporal and spatial domains are interconnected here in a more fundamental, intimate way, they are more deeply ingrained in language than can be detectable on the surface as the sharing of language means to express temporal and spatial meaning; in other words, their relationship does not surface as spatial-temporal polysemy of language expressions.

In perfectivity, the spatial concept, i.e. asymmetry, produces a temporal distinction, namely the aspectual construal value of the communication: a temporal *cogitandum* is defined by a spatial *cogitatum*. Time and Space are “grown” together at first to emerge from a shared “singularity”.<sup>28</sup>

## REFERENCES

- Barbour, J. (1999). *The End of Time*. Phoenix, AZ: Phoenix Books.
- Benko, V. (2017). *Omnia Bohemica II*. Available from <http://unesco.uniba.sk/aranea/>.
- Bermel, N., & Kořánová, I. (2008). From adverb to verb: Aspectual choice in the teaching of Czech as a foreign language. In C. Cravens, M. U. Fidler & S. C. Kresin (Eds.), *Between Texts, Languages, and Cultures* (pp. 53–70). Bloomington, IN: Slavica Publishers, Indiana University.
- Bybee, J. (1985). *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: John Benjamins.
- Bybee, J., Perkins, R., & Pagliuca, W. (1984). *The Evolution of Grammar: Tense, Aspect, and Modality in Languages of the World*. Chicago, IL: University of Chicago Press.
- Comrie, B. (1997). *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
- Croft, W. (2007). The origins of grammar in the verbalization of experience. *Cognitive Linguistics*, 18, 339–382.
- Croft, W. (2012). *Verbs: Aspect and Causal Structure*. Oxford: Oxford University Press.
- Croft, W., & Cruse, D. A. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Cvrček, V., & Fidler, M. (2017). Probing aspectual context with keyword analysis. In A. Makarova, S. Disckey & D. Divjak (Eds.), *Each Venture a New Beginning: Studies in Honour of Laura A. Janda* (pp. 279–298). Bloomington, IN: Slavica Publishers, Indiana University.
- Dahl, Ö. (1985). *Tense and Aspect Systems*. Oxford: Basil Blackwell.
- Dostál, A. (1954). *Studie o vidovém systému v staroslověštině*. Praha: Státní pedagogické nakladatelství.
- Fauconnier, G., & Turner, M. (1998). Mental spaces. *Cognitive Science*, 22(2), 133–187.
- Givón, T. (1984). *Syntax: A Functional-Typological Introduction. Volume I*. Amsterdam: John Benjamins.
- Grady, J. E. (2007). Metaphor. In D. Geeraerts & H. Cuyckens, *The Oxford Handbook of Cognitive Linguistics* (pp. 188–213). Oxford: Oxford University Press.
- Haspelmath, M. (1997). *From Space to Time. Temporal Adverbials in the World's Languages*. München, Newcastle: LINCOM Europa.
- Chromý, J. (2014). Impact of tense on the interpretation of bi-aspectual verbs in Czech. *Studies in Applied Linguistics*, 5(2), 87–97.
- Jakobson, R. (1932). Zur Struktur des russischen Verbums. In *Charisteria Gvilelmo Mathesio*

28 To be compared with Barbour (1999).



- quingvagenario a discipulis et Circuli Lingvistici Pragensis sodalibus oblata, *TLCP V* (pp. 74–84).
- Jakobson, R. (1971). *Selected Writings II: Word and Language*. Berlin, New York, NY, Amsterdam: Mouton Publishers.
- Jakobson, R. (1984). Structure of Russian Verb. In L. R. Waugh & M. Halle (Eds.), *Russian and Slavic Grammar Studies 1931–1981* (pp. 1–14). Berlin, New York, NY, Amsterdam: Mouton Publishers.
- Karlík, P., Nekula, M., & Rusínová, Z. (1995). *Příruční mluvnice češtiny*. Praha: Nakladatelství Lidové noviny.
- Kopečný, F. (1948). Dva příspěvky k vidu a času v češtině. *Slovo a slovesnost*, 10(3), 151–170.
- Kopečný, F. (1949). K neaktuálnímu významu dokonavých sloves v češtině. *Slovo a slovesnost*, 11(2), 64–68.
- Kopečný, F. (1962). *Slovesný vid v češtině*. Praha: Nakladatelství Československé akademie věd.
- Kořánová, I. (2011). Vid pro nevidomé aneb teorie signálních slov. In J. Hasil & M. Hrdlička (Eds.), *Pšáno do oblak. Sborník k nedožitým sedmdesátinám prof. Jana Kuklíka* (pp. 327–333). Praha: Karolinum.
- Kořánová, I. (2014). Vyjadřování přechodu mezi dvěma stavy v češtině s ohledem na výuku cizinců. *Studies in Applied Linguistics*, 5(1), 83–91.
- Křen, M., Cvrček, V., Čapka, T., Čermáková, A., Hnátková, M., Chlumská, L., Jelínek, T., Kovářková, D., Petkevič, V., Procházka, P., Skoumalová, H., Škrabal, M., Truneček, P., Vondříčka, P., & Zasina, A. (2019). *Korpus SYN, verze 8 z 12. 12. 2019*. Praha: Ústav Českého národního korpusu FF UK. Available from <https://www.korpus.cz/>.
- Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and Thought*, 2nd edition (pp. 202–251). Cambridge: Cambridge University Press.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Mathesius, V. (1961). *Obsahový rozbor současné angličtiny*. Praha: Nakladatelství ČSAV.
- Petr, J., Komárek, M., Kořenský, J., & Veselovská, J. (1986). *Mluvnice češtiny — Tvarosloví 2*. Praha: Academia.
- Poldauf, I. (1964). Souhrnný pohled na vid v nové češtině. *Slovo a slovesnost*, 25(1), 46–56.
- Seidl, E. (1936). Zu den Funktionen des Verbalaspekts. *TLCP*, 6, 111–129.
- Seidl, E. (1939). Zur Futurbedeutung des Praesens perfectivum im Slavischen. *Slavie*, 17, 1–32.
- Sinha, C., da Silva Sinha, V., Zinken, J., & Sampaio, W. (2011). When time is not space: The social and linguistic construction of time intervals and temporal event relations in an Amazonian culture. *Language and Cognition*, 3(1), 137–169.
- Starý, Z. (2017a). Biaspectuals revisited. *Studies in Applied Linguistics*, 8(1), 111–123.
- Starý, Z. (2017b). *Akomodace vidu: Pojďme posedět, poklábosit, prostě pobejt*. Paper presented at the occasion of 80<sup>th</sup> birthday of Professor J. Kořenský, Olomouc.
- Starý Kořánová, I. (2015). *States and perfectives in Czech*. Paper presented at Slavic Cognitive Linguistics Conference, Sheffield-Oxford.
- Starý Kořánová, I. (2019). *Vidová kolokabilita*. Ph.D. Dissertation, Charles University, Prague.
- Starý Kořánová, I. (2020). *Homonymy and Polysemy in Verbal Aspect*. Unpublished manuscript.
- Trávníček, F. (1923). *Studie o českém vidu*. Praha: Česká akademie věd a umění.
- Trubetzkoy, N. (1931). Die phonologischen Systeme. *TLCP*, 4, 96–116.
- Trubetzkoy, N. (1939). Grundzüge der Phonologie. *TLCP*, 7.
- Vendler, Z. (1967). *Linguistics and Philosophy*. New York, NY: Cornell University Press.
- Veselý, L. (2009). K takzvaným kapacitivům. *Naše řeč*, 92(3), 113–121.
- Whorf, B. L. (1956). *Language, thought and reality: Selected writings of Benjamin Lee Whorf*. Cambridge: MIT Press.