

# LEXICAL ASPECT CLASSIFICATION FOR UNRELATED LANGUAGES: A CASE STUDY ON SLOVENIAN AND CHINESE LEXICAL ASPECT

**Tina Čok**

Science and Research Centre Koper, Slovenia  
tina.cok@zrs-kp.si

## Abstract

The present paper presents a comprehensive analysis of the verbal aspect in general and with special emphasis on the comparison of Chinese and Slovenian lexical aspect. Recognised discrepancies between the conceptualisation and verbalisation of actions in unrelated languages indicate that deeper cognitive differences affect our perception of reality, which is something that should be more widely recognized when learning and teaching foreign languages. The contribution of this article is a comparative analysis of available studies by authoritative linguists, based on which we have formulated a new and more comprehensive proposal that will help classify verb types in unrelated languages, and can be further exploited in the field of applied linguistic research.

**Keywords:** verbal aspect; lexical aspect classification; verb types; unrelated languages; Standard Chinese

## Povzetek

Pričujoči prispevek ponuja podrobno analizo glagolskega vida na splošno in s posebnim poudarkom na primerjavi kitajskega in slovenskega leksikalnega glagolskega vida. Prepoznana razhajanja med konceptualizacijo in upovedovanjem glagolskih dejanj pri nesorodnih jezikih so pokazala, da globlje kognitivne razlike vplivajo na naše dojetje stvarnosti. Dejstvo, ki ga je potrebno pri učenju in poučevanju tujih jezikov bolj upoštevati. S pričujočo študijo želimo k temu prispevati s primerjalno analizo obstoječih raziskav uglednih jezikoslovcev, s pomočjo katere smo oblikovali nov, bolj obsežen predlog klasifikacije glagolske vrstnosti za nesorodne jezike, ki omogoča nadaljnjo uporabo na področju raziskav iz aplikativnega jezikoslovja.

**Ključne besede:** glagolski vid; klasifikacija leksikalnega vida; glagolska vrstnost; nesorodni jeziki; standardna kitajščina



## 1 Introduction

This article is one of the several studies on verbal aspect, however, it is unique in the respect that it focuses on the category of verbal aspect in languages that are very rarely compared, not only according to the principles of universal grammar (Smith 1991; Orešnik 1991), but also according to the contributions of linguistic relativity. The latter makes this study relevant, because it can throw a new light on how we conceive and understand verbal aspect. Starting from this small but meaningful linguistic cell, we continue to explore more general linguistic and pragmatic questions, such as how lexical and grammatical aspects are verbalised in different languages and how they reflect the respective models of conceptualisation, assuming that verbs help us understand the way the world around us is conceived.

This paper presents a small portion of a broader empirical study on verb conceptualisation and verbalisation in three unrelated languages (Čok, 2019), i.e. Chinese, Italian and Slovenian<sup>1</sup>. The objective of the study was to draw on the well-established theory of foreign language learning, which supports the idea of relying on already spoken languages when learning foreign languages, including the first language, and on the well-explored assumptions that bilingual and multilingual speakers develop an increased awareness of language that helps them acquire additional languages. However, there is a lack of research focusing on cross-language and metalinguistic awareness in unrelated languages, which are usually taught as a third or even fourth foreign language. Accordingly, it has been suggested (Ibid.) that there are significant conceptual differences in the understanding of reality between native speakers of different languages, and that these differences are greater for unrelated languages, making it difficult to bridge these diverging points.<sup>2</sup>

## 2 Approaches and method

Part of the previously mentioned empirical study was to thoroughly examine the already existing verb classifications. By doing this, we found that universal grammar can only be partially applied in this matter (because it helps to identify the category for all existing languages), but that different language combinations and comparisons require different approaches to classification. For this, linguistic relativity has proven to be very insightful, especially for the cross-linguistic perspective.

---

<sup>1</sup> We use the term unrelated languages for languages that have not evolved from the same language family (i.e. Indo-European), the pairs of comparison are thus Slovenian – Standard Chinese and Italian – Standard Chinese.

<sup>2</sup> By diverging points, we mean those critical discrepancies between languages, especially of a syntactic nature, which, without adequate explanation, warning, comparison between languages and metalinguistic consideration, lead to a negative transfer.

The study is based on the hypothesis that the nature of the Chinese verb, in its most basic monomorphemic form, allows a broad freedom of interpretation of the degree of completion, i.e. it is more oriented towards the process than towards the result of the action performed. Based on our knowledge of aspectual systems and their functioning in the three languages, we assumed that the Chinese verb emphasises more the processual phase of an action than the same verb in Slovenian (as well as in Italian), causing the speaker to respectively transfer this emphasis in the process of verbalisation of foreign languages as well as in conceiving reality. The empirical study and its results are not the focus of this paper, so we will not go into further detail on this matter. For details see Čok (2019).

This paper focuses on the theoretical analysis of the lexical aspect for two syntactically very different languages: Standard Chinese and Slovenian. For this purpose, we examined the established aspectual classifications of verbs as proposed by Vendler (1967), Smith (1991), Xiao and McEnery (2004), Peck et al. (2013) and Koenig and Chief (2008). Based on these classifications, we developed and proposed a refined verb classification that could encompass all features of the two investigated languages. The selected studies on verb aspect were analysed with a comparative method, by which verb features and proposed classifications were reviewed and integrated into a new classification according to the objectives of this study.

### **3 Previous studies**

#### **3.1 Verb types and features**

In many languages, the verb is inflected and encodes tense, aspect, mood and voice. It often also helps convey person, gender and number of the subject or object. Nevertheless, not all of the languages in the world present these features. It has been previously proposed that different languages take different perspectives on activities and events. Scholars like Ikegami (1985) have worked on the difference between Japanese and English, arguing that Japanese is a process-oriented and English is a result-oriented language. Basically, the perspective on how we understand an action being focused on the process, which might or might not end up in a change of state or towards a result made possible by this change, depends on how this action is expressed through the use of the verb. Nevertheless, not only the verb can be the carrier of this perspective. Language is full of more or less subtle mechanisms, i.e. implicit references, word order, pauses between words etc. which even subconsciously convey what is the conveyer's standpoint or what segment of the action she or he is focusing on.

Verbs in the Indo-European linguistic tradition have been, following Vendler's classification (1967), divided into four main types according to their inherent property of (semantic) eventuality; verbs which express state, activity, achievement,

accomplishment and semelfactive as a separate category, subsequently added to Vendler's classification by Bernard Comrie in 1976.

This four (plus one) folded categorization represents a long-standing linguistic standard in the scope of classification of verbal aspect. Only recently, the study of verbal aspect has flourished due to the increased interest in the subject by linguists with different linguistic backgrounds. New research and studies on the features of the Chinese lexical aspect, especially in the cross-linguistic perspective, have proposed new verb features and consequently new classifications (Smith, 1991; Koenig & Chief, 2008; Peck et al., 2013; Thepkanjana & Uehara, 2009, 2010; Xiao & McEnery, 2004). For Chinese especially, the standard division seemed not to fit entirely, especially in terms of the categories of achievements and accomplishments. On the other hand, when we try to classify verbs in Slovenian, we are dealing with a great interconnectivity between verb class and aspectual pairs, which makes it difficult to directly apply Vendler's classification. Slovenian presents a pretty elaborate system made complex by the grammatical aspect of the verb, for which every verb has two forms, the perfective (*dovršnik*) and the imperfective (*nedovršnik*). To translate Vendler's test phrases used to classify verbs (in English) to Slovenian, we would need to switch from the perfective to the imperfective form and vice versa. In Chinese, a single verb is very often not enough to express completion of an action. In these cases, the Chinese language employs resultative and compound causative constructions, which are, simply put, either a combination of two verbs or a verb and an adjective, where the first one conveys the activity and the second one the realisation that transfers the focus from the activity in process to its result. We can find more evidence of the lack of real accomplishment verbs in Chinese in Zhao (2005). Besides the resultative and compound causative construction, a maybe even more common way of changing aspect in Chinese is by employing the aspectual marker *le*. But since it sometimes also affects only the tense, its reliability in this concern is, so to speak, weak. What can be deduced from previous studies on the ambiguities and peculiarities in the interpretation of the expressed completion of some Chinese verbs (Koenig & Chief 2008; Peck et al., 2013; Thepkanjana & Uehara 2009, 2010) is that they comprise a very wide and ambiguous scale of degree of completion, which is often open to interpretations.

The methodology employed in our empirical study required a classification of verbal actions able to comprise as much as possible the features of Chinese, Italian and Slovenian language and at the same time preserve as high as possible the degree of universality to keep the features abstract while interpreting the results. We designed our classification of lexical aspect on the basis of Smith (1991), Xiao and McEnery (2004), Peck et al. (2013) and Koenig and Chief (2008). While all of these classifications contributed a great deal to ours, they did not entirely fit the language combinations of our choice. Hence the need for a newly adjusted categorisation, which, in our opinion, best comprises the features of verbal actions in general.

Before presenting the revised classification, we will examine the features and approaches of previous proposals, for it is a revealing and useful diachronic developmental process, that can help to better understand the linguistic implications of lexical aspect and justify our adjustments.

### **3.2 Approaches to classifications of verbal actions for unrelated languages**

How we understand whether an action focuses on the process that ends in a change of state or with a result that represents that change of state, depends on how that action is verbalised or expressed through another argument. To express this bias with the verb means to do so explicitly, whereas it is not always the verb that defines the perspective of an activity. Language is full of more or less subtle mechanisms, sometimes even unconsciously reflecting our perspective on activities. In addition to verbs and arguments, such mechanisms may include the syntactic structure of the sentence, noun properties, the presence or absence of the subject, and some language-specific mechanisms of expression.

When studying the focus of verbal actions in different languages, we must, first of all, consider the two basic aspectual components of the verb, its verbal aspect (also known as grammatical aspect) and the nature of the verbal action (also known as Aktionsart or lexical aspect)<sup>3</sup>, each language having a very specific way of functioning and using the two components. In Miklič, for example, we find that "unlike the situation in the Romance languages, the Slavic aspectual opposition shows certain interdependence with the nature of the verbal action". (Miklič, 2007, p. 92)

In the Indo-European tradition, the inherent semantic property of verbal action (lexical aspect) is most often defined according to Vendler's classification (1957) in four main types, namely verbs expressing state, activity, accomplishment and achievement. Vendler's classification was supplemented with the category of semelfactives<sup>4</sup> in 1967 by Bernard Comrie and further refined by Smith (1991). Although Vendler's classification is perfectly suited to provide the basic framework for classification, it is too loose for cross-linguistic studies, especially when comparing unrelated languages that show large linguistic discrepancies.

In the following pages, we will outline five main classifications of verbal actions, emphasizing aspects that are in our opinion unsuitable for classification in a cross-linguistic perspective.

---

<sup>3</sup> Smith (1991) uses the terms situation aspect for grammatical aspect and viewpoint aspect for lexical aspect. In the present paper, we will use the terms grammatical and lexical aspect.

<sup>4</sup> Semelfactives comprise one-time atelic actions that last a very short time, a moment. They are also found in some classifications as a subcategory of achievement verbs.

The first of its kind is Vendler's distribution of verbs (1957), which is based on sample questions (for English) and is intended to help classify verb types according to how they occur within a time interval.<sup>5</sup>

- (1) I. For how long did he ...? (activity)
- II. How long did it take to ... ? (accomplishment)
- III. At what time did you ... ? (achievement)

However, when these sample questions are applied to languages other than English, they show certain weaknesses. Vendler's tests for the classification of Slovenian verbs, for instance, are not directly transferable due to the strong interaction between lexical and grammatical aspects. In order to make the sentences meaningful, the verbs must actually shift between the perfective and imperfective form, which also means shifting between unmarked and marked usage.

- (2) a) Koliko časa **je potiskal** voziček? (activity)  
    'For how long did he push IMPRF the cart?'
- b) Koliko časa je porabil, da **je narisal** krog? (accomplishment)  
    'How long did it take him to draw PERF the circle?'
- c) Ob kateri uri **je dosegel** vrh gore? (achievement)  
    'At what time did he reach PERF the top of the mountain?'

As can be seen in the above examples, the Slovenian language is specific because of its elaborated verbal system, in which grammatical properties of the aspect are recognized in two separate verbal forms: *dovršnik* (perfective) and *nedovršnik* (imperfective). Since the verbal aspect is expressed lexically, the same verbal action can occur in several categories of the verbal aspect by transforming the perfective into an imperfective verb form and vice versa. This is also the reason why Slovenian, with the exception of biaspectual verbs (Žele, 2011), does not allow such ambiguities in the interpretation of the verbal aspect.

Chinese verbs can also be applied to Vendler's sample questions (3) but there are some divergencies between how these are employed in Standard Chinese compared to other languages.

---

<sup>5</sup> We only include the verb types that are relevant to this study.

## (3) I. 他看了电视多长时间?

Tā kàn-le diànshì duō cháng shíjiān?

'For how long did he watch TV?'

## II. 他花了多长时间画一个圆圈?

Tā huā-le duō cháng shíjiān huà yī ge yuánquān?

'How long did it take him to draw the circle?'

## III. 他什么时候到达了山顶?

Tā shénme shíhòu dàodá-le shāndǐng?

'When did he reach the top of the mountain?'

To express the difference in the grammatical aspect (between perfective and imperfective verbs) in Standard Chinese, a lexically independent (monomorphemic) verb often does not suffice. In cases where it must be clearly stated that the action has reached its goal or endpoint, in Standard Chinese we must employ resultative verb compounds (RVC), which, simply put, are a combination of two verbs or a verb and an adjective, the former expressing the activity and the latter the result. The problem of the inconsistency of verbs in Standard Chinese with Indo-European languages is also found in Zhao, who states that "Chinese does not have accomplishment verbs (Chu, 1976; Smith, 1997; Sybesma, 1997; Tai, 1984). Since all predicates, except states, are activities, which are dynamic and have an open range, an accomplishment that denotes a bounded event is always a complex consisting of an activity/cause predicate, and a result/state predicate." (Zhao, 2005 pp. 65–66). In Zhao, we see accomplishment verbs being considered as RVC. Similar to Zhao, Tai (1984) does not distinguish between accomplishment and achievement verbs, but considers them as actions expressed by resultative verb compounds. In fact, Tai suggests that all monomorphemic verbs in Chinese are either state verbs or activity verbs, whereas if we want to express a result, we must use RCV, which always conveys a completed or finished action. We argue, however, that there is a fundamental difference between achievement and accomplishment verbs on the one hand and RCV on the other. In addition to what previous studies (Petrovčič, 2009; Xiao & McEnery, 2004) have shared on this topic, namely distinguishing between the two verb types by using them as the complement of stop, which sounds normal with accomplishments but odd with achievements, and that RCV do not function in the same way as accomplishment and achievement verbs because RCV are incompatible with imperfective markers *zai* and *-zhe*, while the use of the two markers for accomplishment and achievement verbs, followed by the perfective marker *le*, is perfectly grammatical, our empirical research has shown that there is a fundamental difference in the degree of completeness expressed by activities and accomplishments or achievements. RCV as a language category should therefore be considered as a feature of the grammatical aspect, just like the perfective marker *le*.

### 3.3 Verb types and classifications of the lexical aspect

A breakthrough with regard to the aspectual studies following Zeno Vendler is the work proposed by Carlota S. Smith (1991). Her contrastive analysis of the verbal aspect in English, French, Russian, Chinese and Navajo laid the foundation not only for further research on the verbal aspect, but especially for cross-linguistic research. Although Smith based her study heavily on Vendler's (1957) and Comrie's (1976) classification of the lexical aspect, her parallel comparison of several language systems enabled her to put forward new potential interpretations of the functioning of verbal actions, also by applying the principles of linguistic relativism.

Smith takes verbal actions and classifies them into five types or categories according to their inherent semantic nature. Unlike Vendler, Smith analyses not only the bare verb, but also the entire situation in the sentence. Therefore, she divides situation types into states, activities, accomplishments, semelfactives, and achievements, based on the specific characteristics that the corresponding verb types possess. Smith identifies three basic features, by which she classifies the verbs into categories of lexical aspect: [ $\pm$  static], [ $\pm$  durative] and [ $\pm$  telic].

[ $\pm$  Stative] is a property that divides verbs into two major sub-groups: states and others (activities, accomplishments, achievements and semelfactives). "States are the simplest of the situation types. In temporal schema they consist only of a period of undifferentiated moments, without endpoints [...]." (Smith, 1991, p. 28).

[ $\pm$  Telicity] connects a subset of actions that differ according to whether or not they are aimed at achieving a goal or a result. "... when the goal is reached, a change of state occurs and the event is completed [...]. The goal is intrinsic to the event, constituting its natural final point." (Smith, 1991, p. 29). Therefore, telic events can either be only completed or completed and at the same time accomplished.

The [ $\pm$  duration] property divides events into those that start and end at the same time in an internal time structure and those that have at least a minimum unit of duration to make the start and end points stand-alone events.

If we apply these features to the verb situations, states are defined as [+ static], [-telic] and [+ durative]. Activities are actions that are [+ durative], but their duration is homogeneous, so they are [-telic]. Accomplishments are also [+ durative], which unlike activities are [+ telic], as they are defined by a succession of different phases that progress to the end point when the goal is reached and, consequently, a new situation arises. Achievements are instantaneous [- durative] actions, their starting and ending point overlap, which leads to a new situation, so they are also [+ telic]. Semelfactives differ from achievements only in that their realization does not bring about any change or new situation, and therefore they are [-telic] and [-durative] actions.



For studies dealing with the Chinese verbal aspect as is the case of this paper, the findings of Richard Xiao and Tony McEnery (2004) are extremely valuable. The authors base their findings on authentic corpus data, which they interpret using statistical analysis. They also refine the categorization of the lexical verbal aspect. Instead of the three basic features of the verb situation as suggested by Smith (1991), Xiao and McEnery (2004) propose a five-way classification system; in addition to [ $\pm$  dynamic], [ $\pm$  durative] and [ $\pm$  telic], they also recognise the features of [ $\pm$  bounded] and [ $\pm$  result]. By adding these two features, Xiao and McEnery try to solve ambiguities and class overlaps, because verbs that are telic have at most the potential to elicit the result or not, they therefore suggest a model in which, "[t]he feature [ $\pm$  telic] is associated with the presence or absence of a final spatial endpoint." (Xiao & McEnery, 2004, p. 46).

Moreover, unlike Smith (1991), who addresses lexical aspect through a verb situation, Xiao and McEnery establish it using the so-called two-level model, "in which situation aspect is modelled by 'verb classes' at the lexical level and as 'situational types' at the sentential level." (Xiao & McEnery, 2004, p. 33).

The main contribution of Xiao and McEnery, which is also relevant for the present study, is the fundamental difference between the accomplishment and achievement verbs. The authors argued that this divergence reflects "mainly in whether they do or not encode a result. [...] By the [ $\pm$  result] criterion, accomplishment verbs place emphasis on the process leading up to a result [...], but verbs themselves do not provide any information concerning the success in the achieving of the result; they imply but do not encode a result. [...] In contrast, achievement verbs encode a result themselves." (Xiao & McEnery, 2004, pp. 55–56). The main difference between the achievement and accomplishment verbs is thus seen in the fact that the temporal and spatial ends are encoded in the verb itself. For achievement verbs, these two points are said to already exist in the verb itself, whereas in the case of the accomplishment verbs, the endpoint is to be defined by verb arguments or complements.

The importance attached to the feature of [ $\pm$  telicity] and how much it is lacking, especially with regard to the properties of the Chinese verb, was again acknowledged in a study proposed by Peck et al. (2013). For this reason, the authors introduce a new feature called [ $\pm$  scalarity], whose characteristics are closely related to those of [ $\pm$  telicity]. The verb has the property of [+ scalarity] when it conveys a scalar change. This scalar property of a verb can be defined as open/closed, which corresponds to the feature of telic/atelic, for it tells us whether an action has an endpoint or not. In addition, they suggest that for durative and punctual actions, these should be defined as multi-point and two-point actions respectively. Finally, they propose four binary features for the Chinese verb ( $\pm$  dynamic,  $\pm$  scalar,  $\pm$  telic in  $\pm$  punctual) and identify six classes, among which the so-called class of multi-point closed scalar verbs, equivalents of accomplishment verbs displaying [+ dynamic], [+ scalar], [+ telic] and [- punctual] features.

For Peck et al. (2013), the need to introduce the feature of [ $\pm$  scalarity] was motivated by the difficulty of defining telicity for verbs that exhibit a measurable scalar change (i.e. cool, darken, lengthen ...), often referred to in the literature as degree achievement verbs. However, we have also encountered similar classification problems with other verbs that cannot be classified with the standard test for telicity, such as *in one hour* for telic actions and *for one hour* for atelic actions.

For us, employing *for-* and *in-* adverbials to test [ $\pm$  telicity] for three very different languages has proven unreliable in several cases, which shows that the analysis of a verbal action alone is sometimes deceptive, so that a broader sentence situation should be examined or that the same verbal actions in different languages comprise some fundamental intrinsic semantic discrepancies. For example, the Italian verb to choose (*scegliere*) allows the use of both adverbials in the case of achievement verbs.

(4) Caterina ha scelto i vestiti per / in un'ora.

'Caterina chose the dresses in / \*for an hour.'

Due to the unreliability of the test with *for-* and *in-* adverbials for cross-linguistic studies, the introduction of the feature of [ $\pm$  scalarity] to distinguish between verbs of activity, accomplishment and achievement has proven to be extremely valuable. In order to use a unified classification for more different languages with divergent syntactic and semantic properties, applying the feature of [ $\pm$  scalarity] resolved the ambiguities that arose during verb type analyses.

However, we did not fully follow what Peck et al. (2013) proposed in their study. Instead of subdividing verbs into scalar closed/open actions and scalar multi-point/two-point actions and replacing the traditional features for the lexical verb aspect, namely [ $\pm$  telic] and [ $\pm$  durative], we propose a compromise, namely the preservation of the two features and the introduction of a new distinguishing feature of [ $\pm$  scalarity]. Unlike Peck et al. (2013), we do not consider scalarity in its strictly mathematical meaning as a series of stages, points or intervals that indicate measurement values on a particular dimension, but as a change that occurs gradually, step by step, over time and causes a certain visible change, even on an object on which an action is performed, or a general change in the situation. By introducing scalar change, we not only solve the classification of degree achievement verbs, but we can also better define and distinguish between activity and accomplishment verbs, since it is in the latter pair that most disagreements and inconsistencies are found in previous studies.

Another important study on scalarity and the change of state for Chinese aspect was proposed by Koenig and Chief (2008). The authors offer an interesting explanation for cases in which cross-linguistic analyses of certain actions did not show semantic correspondence in achieving the result and onsetting a change of state. They explain

their findings using examples they found online with the search engines Google and Baidu:

- (5) 须眉和孙码字把老罗杀了没杀死。

Xūméi hé Sūn Mǎzì bǎ Lǎo Luó shā-le méi shāi.

'Xu Mei and Sun Mazi killed Lao Luo, but didn't make him die (lit).'

Intended meaning: Xu Mei and Sun Mazi tried to kill Lao Luo, but he didn't die.

- (6) 我盖了新房子，房子还没盖完。

Wǒ gài-le xīn fángzi, fángzi hái méi gài-wán.

'I build a new house, but it is not finished.'

- (7) 托尔斯泰的战争与和平我不喜欢，读了几次都没读完。

Tuōěrsītài-de Zhànzhēng yǔ Héping wǒ bù xǐhuān, dúle jǐcì dōu méi dú-wán.

'I don't like Tolstoy's *War and Peace*, I read it several times, but never finished reading it.'

For the examples above where the verb is used with the aspectual marker *le*, Koenig and Chief note that they are read "as if, in those languages, there are described killings in which no death occurred, repairs in which nothing gets fixed, persuasions in which nobody was persuaded... We call this phenomenon the *Incompleteness Effect* (in short, the IE), meaning that the described killings, repairs or persuasions need not be completed." (Koenig & Chief, 2008, p. 243).

Besides the three verbs in the examples, they gave a full list of verbs which in their opinion display similar properties in regard to the IE: (*jiǎn* 剪 'to cut with scissors', *xiū* 修 'to repair', *quàn* 劝 'to persuade', *shā* 杀 'to kill', *guān* 关 'to close', *niàn* 念 'to read', *chī* 吃 'to eat', *hōng* 烘 'to dry (clothes)', *xǐ* 洗 'to wash', *zhǔ* 煮 'to cook', *dú* 读 'to read', *xiě* 写 'to write', *bèi* 背 'to recite (memorize)', *chàng* 唱 'to sing', *xiàzài* 下载 'to download', *jiāo* 教 'to teach', *gài* 盖 'to build', *zhì* 治 'to cure', *zhuā* 抓 'to catch', *diǎn* 点 'to light up' ...).

In analysing the effect, Koenig and Chief relied on three already established hypotheses about 1) the influence of one or more sentence arguments on the understanding of the verb aspect, 2) the actual meaning and effect of the *le* aspectual marker, and 3) the influence of the inherent meaning of the verbal action. On the basis of online examples related to the three hypotheses, they rejected the first two and confirmed the third one. They identify the third hypothesis as the most plausible, but argue that all existing studies have failed in proving it. What is most troubling is the fact that neither study succeeds in answering two important questions: "(1) How can the

class of incomplete stems be defined in Mandarin (or Hindi or Thai)? and (2) Do incomplete stems belong to a natural semantic class?" (Koenig & Chief, 2008, p. 251).

In addition, Koenig and Chief (2008) supplement the confirmed hypothesis of intrinsic semantic differences between languages with the scalar hypothesis, which is very similar to the theory presented by Peck et al. (2013), but is presented in much more detail and extended to all verbs that somehow involve an incremental change of properties.

The identified degrees of change are defined as the highest degree on the scale, such as for the verb 杀 'to kill', where the threshold represents the lowest possible degree of health or the highest possible degree of wounding. In other cases, the degree is defined culturally or individually, such as for the verb 煮 'to cook', which can represent the highest degree at different levels, depending on the type of food, culture or individual taste. Based on the findings, Koenig and Chief propose: "Only those stems that denote the induced normative gradable changes can lead to the IE." (Koenig & Chief, 2008, p. 252).

In the proposed classification of change, the relation between change and the unit of time is crucial. In this, they followed Krifka (1989), who emphasizes the interplay between the change of state and the progression of the event over time, so that the activity can progress to different stages over time, which in turn affects the state of completion of the action. Koenig and Chief distinguish between actions where there is a correlation between the change in degree and the progression of the event over time (the longer we read the book, the more pages have been read) and actions where there is no such correlation (the longer we repair the computer, the more it is repaired). These changes are referred to as "*non-incremental* (non-IC), as the degree of change does not incrementally follow the temporal progression of the event." (Koenig & Chief, 2008, p. 254).

In addition to considering the progression of the event over time, Koenig and Chief (2008) also emphasise the fundamental distinction between the scales used. They also distinguish between three types of scales according to three types of incremental change, depending on whether the degree of change includes the affected object part-whole structure, the distance traversed by the theme since the event's inception, or the degree to which the affected object has a dimensional property (such as being tall, long, or hot).

In their study, although they allow the existence of incomplete stems in other languages, such as English and French, they conclude that "the main difference would be that in Mandarin, but not English, induced non-incremental gradable change of state stems (e.g. shā 'kill'), are incomplete." (Koenig & Chief, 2008, p. 259).

The classifications of verb types studied above and the identification of new features that define the intrinsic nature of the verbal action are by no means exhaustive,

but they are most relevant in cross-linguistic research because they help to establish a classification that can encompass, as far as possible, the characteristics of several languages at once, while maintaining the highest possible degree of universality in its interpretation.

#### 4 Proposed classification and conclusions

Below, we present an adapted classification of lexical aspect, a proposal that we consider to be the most optimal encompassing of properties of verbal actions in different languages. We agree with those experts whose classification of the lexical aspect is based on lexemes as the main carriers of the meaning of the verbal action, even in the context of a broader sentence situation, although we are aware that different arguments can, under certain conditions, cause a change in the verb type. In the table below, the proposed features mainly consider the meaning of the verb as a lexeme, although they can also be applied to a broader sentence situation.

**Table 1:** Proposed features of verb types and their classification

Verb type <sup>6</sup>	[±dynamic]	[±scalar]	[±bounded]	[±telic]	[±result]	Example
activity	+	-	-	-	-	play
semelfact./iter semelfactive	+	-	±	-	-	sneeze
accomplishment	+	+	+	+	-	build
achievement	+	+	+	+	+	find

The proposed classification is mainly based on that proposed by Xiao and McEnery (2004) and adapted to the feature of scalarity as defined in Peck et al. (2013) and Koenig and Chief (2008). Furthermore, we propose to divide the semelfactive verbs into punctual and iterative readings according to the duration of the action, but we reject the idea of considering repetitive semelfactive actions as activities.

At the sentence level, where arguments must be taken into account, there are two distinctive situations. The first relates to the accomplishment verbs, which in most studies are defined as derived activities when they are not directly related to the object and therefore do not have a final spatial endpoint.

<sup>6</sup> State verbs differ in their features from other classified verbs - they are relatively static and they show no progressive changes through time - for which they are not relevant and have been excluded from the present study.

(8) Mati kuha, oče in sin pa čakata na hrano.

‘Mother is cooking, father and son are waiting for food.’

(9) V kuhinji mama kuha mineštro in peče palačinke.

‘In the kitchen, mum is cooking a minestrone and making pancakes.’<sup>7</sup>

The second relates to achievement verbs, where at the sentence level we have identified two types of viewpoint toward the action. An achievement that we see in its entirety is seen as a punctual action, where the point of onset of the action coincides with the point of completion and the onset of a new state (‘to fall’). However, achievement verbs can also be expressed through the prism of their progression as it takes place (‘falling’). Considering that, in the progressive viewpoint, achievement verbs do not change the feature [+telic] but only the [-result], we have not chosen to follow Xiao and McEnery (2004), who see the change in the telicity and therefore place it among the derived activities at the sentence level.

(10) 爸爸正在杀鸡。

Bàba zhèngzài shā jī.

‘Father is right in the middle of killing the chicken.’

(11) 我在关门。

Wǒ zài guān mén.

‘I’m just closing the door.’

(12) Zaradi njih padajo stvari z mize.

‘Because of them, things are falling off the table.’

(13) Fant pada s stola.

‘A kid is falling off the chair.’<sup>8</sup>

Much more could have been explored and reported in regard to the conceptualisation and verbalisation of the verbal aspect in unrelated languages, but due to space constraints, we focused mainly on the principles of the lexical aspect in two languages that display very different properties and structural discrepancies, because of which they are very difficult to compare or consider with standard

---

<sup>7</sup> The examples have been acquired by native speakers with language tests in the empirical study Čok (2019).

<sup>8</sup> See Čok (2019).

classifications. We therefore suggest a reconsideration of the existing classifications, by proposing a revised one, which is particularly helpful when unrelated languages are compared with ambiguous conceptualisation and verbalisation of actions. In our study, the verbal aspect is the main research category, but the results obtained can be applied to broader linguistic and cognitive research, as in our opinion verb is one of the most fundamental language categories and its verbalisation appears essential for understanding the creation and conception of meanings and behaviours as ongoing processes in the person's mind. Also, we identify this category as one of the more semantically abstract categories, which is why mastering semantic discrepancies between a target and a native language represents one of the biggest challenges for foreign language learning.

## References

- Chu, C. C. (1976). Some semantic aspects of action verbs. *Lingua*, 40, 43–54.
- Comrie, B. (1976). *Aspect. An introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press. <https://user.phil-fak.uni-duesseldorf.de/~filip/Comrie.Aspect.pdf>.
- Čok, T. (2019). Konceptualozacija in upovedovanje glagolskega dejanja v slovenščini, kitajščini in italijanščini. Doktorska disertacija. Koper: Pedagoška fakulteta, Univerza na Primorskem.
- Koenig, J.-P., & Chief, L.-C. (2008). Scalarity and state-changes in Mandarin (and other languages). *Empirical Issues in Syntax and Semantics*, 7, 241–262. <http://www.cssp.cnrs.fr/eiss7/koenig-chief-eiss7.pdf>.
- Krifka, M. (1989). Nominal reference, temporal constitution, and quantification in event semantics. In R. Bartsch, J. v. Benthem, & P. v. Boas (Eds.), *Semantics and Contextual Expressions* (pp. 75–115). Dordrecht: Foris.
- Miklič, T. (2007). Metafore o načinih gledanja na zunajjezikovna dejanja v obravnavanju glagolskega vida. *Slavistična revija: časopis za jezikoslovje in literarne vede*, 35(1/2), 85–103. [https://srl.si/ojs/srl/article/view/COBISS\\_ID-34762850](https://srl.si/ojs/srl/article/view/COBISS_ID-34762850).
- Orešnik, J. (1994). *Slovenski glagolski vid in univerzalna slovnica*. Ljubljana: Slovenska akademija znanosti in umetnosti.
- Peck, J., Lin, J., & Sun, C. (2013). Aspectual Classification of Mandarin Chinese Verbs: A Perspective of Scale Structure. *Language and Linguistics*, 14(4), 663–700. [http://www.ling.sinica.edu.tw/files/publication/j2013\\_4\\_02\\_9567.pdf](http://www.ling.sinica.edu.tw/files/publication/j2013_4_02_9567.pdf).
- Petrovčič, M. (2009). *Operator Le in Chinese*. Saarbrücken: VDM Verlag.
- Smith, C. S. (1991). *The Parameter of Aspect*. Dordrecht: Kluwer Academic Publishers.
- Smith, C. S. (1997). *The Parameter of Aspect (Second Edition)*. Dordrecht: Kluwer Academic Publishers.
- Sybesma, R. (1997). Why Chinese verb -le is a resultative predicate. *Journal of East Asian Linguistics*, 6, 215–62. <https://www.jstor.org/stable/pdf/20100721.pdf>.

- Tai, J. H.-Y. (1984). Verbs and Times in Chinese: Vendler's Four Categories. *Papers from the Parasession on Lexical Semantics*, (str. 289–296).
- Thepkanjana, K., & Uehara, S. (2009). Resultative constructions with “implied-result” and “entailed-result” verbs in Thai and English: a contrastive study. *Linguistics*, 47(3), 589–618. <http://content.ebscohost.com/ContentServer.asp?T=P&P=AN&K=39880702&S=R&D=a9h&EbscoContent=dGJyMNLe80Sep7I4yNfsOLCmr06eprBSsqe4SbW WxWXS&ContentCustomer=dGJyMPGqtE6zrrFluePfgeyx44Dt6fIA>
- Thepkanjana, K., & Uehara, S. (2010). Syntactic and Semantic Discrepancies among the Verbs for ‘kill’ in English, Chinese and Thai. *PACLIC 24 Proceedings*, (str. 291–300). <https://www.aclweb.org/anthology/Y10-1033>.
- Vendler, Z. (1967). *Linguistics in Philosophy*. Ithaca: Cornell University Press.
- Xiao, R., & McEnery, T. (2004). *Aspect in Mandarin Chinese. A Corpus-Based Study*. Amsterdam; Philadelphia: John Benjamin Publishing Company.
- Zhao, Y. (2005). Causativity in Chinese and Its Representations In English, Japanese and Korean Speakers' L2 Chinese Grammars. Doctoral dissertation. Cambridge: Faculty of Oriental Studies, University of Cambridge.
- Žele, A. (2011). Leksemski in skladijski vpliv na vidskost (na primeru slovenščine). *Opera slavica*, XXI, 4, 22–35. [https://digilib.phil.muni.cz/bitstream/handle/11222.digilib/117455/2\\_OperaSlavica\\_21-2011-4\\_4.pdf?sequence=1](https://digilib.phil.muni.cz/bitstream/handle/11222.digilib/117455/2_OperaSlavica_21-2011-4_4.pdf?sequence=1).