

# On cognition-based notions in compositional aspect incompatible with traditional grammar

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*Received October 26 2025; Revised October 29, 2025; Accepted November 7, 2025*

**Abstract.** Compositional aspect is an extremely important cross-language and universal language phenomenon discovered by Henk Verkuyl, a Dutch linguist and logician, in 1971, published a year later. Compositional aspect appears to exist in all natural languages, and proof is being accumulated lately in favor of this thesis. In contrast to verbal aspect as found in the Slavic, Greek, Georgian, Chinese and other languages, where it resides in verbs as lexical entries but is grammaticalized, compositional aspect exists at the level of the sentence. The paper discusses some major notions that, on the one hand, underlie the correct understanding of compositional aspect and, on the other, constitute at least some of the reasons for the absence of the article-aspect interplay, an important phenomenon, in English grammars and in the literature on English language teaching. Publications in these two fields are practically silent about a phenomenon that has otherwise been discussed in theoretical linguistics for decades. Theoretical linguistics itself, although cognizant of the article-aspect interplay, also abounds in misconceptualizations about aspect in general, reigning in it from as early as when compositional aspect was discovered. English grammars and the overall literature on English language teaching continue to remain silent on the article-aspect interplay even lately, despite the appearance in recent years of a couple of publications – successfully addressing the issue but isolated, including two revolutionary papers dealing with articles, determiners, quantifiers and similar elements taking part in the compositional effectuation of aspect.

**Keywords:** *compositional aspect, verbal aspect, default sentence meaning, aspectual ambivalence, leaks, temporality of situation participants, NP-V-NP mapping.*

**Кабакчиев Красимир. Про несумісні з традиційною граматиною когнітивно-орієнтовані поняття в композиційному аспекті.**

**Анотація.** Композиційний аспект є надзвичайно важливим міжмовним та універсальним мовним феноменом, відкритим нідерландським лінгвістом і логіком Генком Веркуйлем у 1971 році та оприлюдненим роком пізніше. Композиційний аспект, як видається, існує в усіх природних мовах, і останнім часом дедалі більше з'являється доказів, що свідчать на користь цієї тези. На противагу дієслівному аспекту, який існує у слов'янських, грецькій, грузинській, китайській та інших мовах, де він, хоча й граматиалізований, закладений у дієсловах на рівні лексики,

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*East European Journal of Psycholinguistics*, 12(2), 156–177, <https://doi.org/10.29038/kab>

композиційний аспект існує на рівні речення. У статті автор обговорює деякі ключові поняття, які, з одного боку, лежать в основі коректного розуміння композиційного аспекту, а з іншого, – принаймні частково пояснюють причини відсутності важливого феномену взаємодії артикля та аспекту в граматиках англійської мови та літературі з її викладання. Публікації в цих двох галузях практично замовчують це явище, що обговорюється в теоретичній лінгвістиці впродовж десятиліть. Власне теоретична лінгвістика, хоча й говорить про взаємодію артикля та аспекту, рясніє хибними концептуалізаціями аспекту загалом, які панують у ній ще з часів відкриття композиційного аспекту. Англійські граматики та загальна література з викладання англійської мови продовжують замовчувати взаємодію артикля та аспекту навіть сьогодні. І це попри появу впродовж останніх років кількох публікацій, які успішно, хоча й ізольовано, аналізують це питання, включно з двома революційними статтями, що стосуються артиклів, детермінантів, квантифікаторів та подібних одиниць, які беруть участь у реалізації композиційного аспекту.

**Ключові слова:** композиційний аспект, дієслівний аспект, значення речення, аспектуальна амбівалентність, аспектуальний прорив, темпоральність учасників ситуації, мапування NP-V-NP.

## Introduction

### Compositional Aspect: A Hard Nut to Swallow

Some major notions of compositional aspect (CA) accepted by the world linguistic community after its discovery by Verkuyl (1972) remain poorly understood or misconceptualized. Today, more than half a century after the discovery, the linguistic community admits that understanding CA is not easy – and must continue. Numerous publications reveal deficient knowledge on how the mechanism of the perfective-imperfective contrast takes place compositionally (Kabakčiev, 2025, pp. 14-15). Among the mistakes is the systematic wrong interpretation of CA as something that is not necessarily found at the sentence level and can be analyzed at the VP level only (Kabakčiev, 2019, pp. 206-210).

CA is known to exist in many European languages but was recently demonstrated by Haxhillari (2024) as also characterizing Albanian. Another breakthrough in the understanding of CA came with a recent publication (Kutsarova, 2025a) which precisely described the major features of CA in Turkish, a language structurally different from the well-known European languages (Germanic, Romance, Albanian). Most importantly, the analysis of the Turkish data proved this language to be interpretable through Verkuyl's aspect schemata, the perfective and the imperfective one (about the schemata, see below).

## Methodology

### Default Aspectual Meaning of a Sentence

The concept of default aspectual meaning of sentences is central to the understanding of aspect in general, and a fundamental one for CA. The underlying notion is that CA is effectuated at the level of the sentence and not at the VP level, not at the verb level, as in verbal-aspect (VA) languages, and not at the level of some other sentence component(s). Default meaning of a sentence in CA ensures that sentences are interpretable through Verkuyl's two aspect schemata (the perfective and the imperfective one) but also through context, and sometimes through pragmatic impacts – as shown by Wu (2026).

Before the discovery of CA, aspectual meanings in English sentences were thought to exist but to occur “once in a blue moon” only, as in (1a) below. The adverbial element *up* was thought to “lend perfectivity” to “an aspectually neutral sentence”, as it were, such as (1b). At that time researchers failed to understand (some still do) that (1b) is also a perfective sentence. Most importantly, it was not understood **why** (1b) is perfective; for an explanation, see the section *NP-V-NP mapping* below. Today most researchers understand that: (1b) falls into Verkuyl's perfective schema because the value “bounded” is generated in the (referents of the) two situation-participant NPs through the definite articles, and through the telicity of the verb. Whether they understand that these circumstances are not the whole story about the perfectivity of (1b) is another matter (see again the section *NP-V-NP mapping*). As for sentences such as (1c), conversely, they are imperfective – because of the non-bounded value of the NP *milk* (for more explanation of the overall mechanism, Kabakčiev, 2019, pp. 206-210).

- (1) a. The kid drank up the milk  
b. The kid drank the milk  
c. The kid drank milk

Another problem was that the rule about the imperfectivity of sentences such as (1c) was overgeneralized by many, even by Verkuyl himself. He insisted long ago, and still does (Verkuyl, 1993, pp. 5–6; 2022, pp. 123ff), that sentences such as (2a) with a bare object-NP cannot be perfective. This is not true. They can be perfectivized, cf. (2a) and (2b), the latter is perfectivized by the extension:

- (2) a. Judith ate sandwiches  
b. Judith ate sandwiches and is no longer hungry

Another misconception is that an English sentence like (1b) can be read as perfective simply because it is perfective compared to (1c), where the object is a bare NP. The faulty reasoning goes like this: *drank the milk* is perfective because *drank milk* is imperfective, hence (1b) is perfective and (1c) imperfective. So far so good. But the failure here is to realize the **complex reason** why (1b) is perfective. To grasp why, one must **not** compare (1b) to (1c) only; one must compare (1b) to some other sentences like, e.g., *Kids drank the milk*, which is imperfective in its default meaning because of the bare-plural subject-NP. Thus it becomes necessary to consider the so-called Verkuylian leaks, see the discussion below. Suffice it to explain here that a leak is a change in an NP in a perfective sentence from a boundedness to a non-boundedness feature, or a change from a telic verb into a non-telic one – whereby each of these two factors triggers the imperfectivization of an initial perfective sentence.

### Aspectual Ambivalence of the Verb

This is a concept mostly specialists in Romance languages have a problem with. They think that CA can be analyzed in sentences with verbs that are marked with an Aorist or an Imperfect aspectual value. It cannot. CA is operative only when the verb is aspectually ambivalent, notwithstanding what or which natural language is at issue and whether it is a CA language (Germanic and Romance languages, Albanian, Turkish) or a VA language (Slavic, Greek, Georgian, Chinese). CA languages standardly feature aspectually ambivalent verbs, forming a huge majority in the lexicon (excluding state and activity verbs). The exception is when a verb in a sentence is marked with imperfectivity, as with the English progressive – just like when a verb form in a Romance language or in Albanian is marked as an Aorist or an Imperfect. Slavic languages standardly feature aspectually ambivalent verbs, called biaspectual (Kabakčiev, 1984; 2023, pp. 49ff), which roughly represent 10% of all the verbs in the lexicon. There are biaspectual verbs in Greek too (Dimitrova & Kabakčiev, 2021, pp. 189-194) but they are obviously much less in number, for unclear reasons.

The significant misunderstanding persisting in aspectology to the very present day is that researchers think they can analyze CA in a language despite the fact that the verb is aspectually marked. As already noted, this is often the case in the Romance languages, Greek, Albanian and many other, where the verb in the sentence can have an Aorist form carrying the feature temporal boundedness, or an Imperfect form carrying the opposite feature, temporal non-boundedness. The verb must be aspectually ambivalent for the explication of aspect in compositional terms to be possible.

## Results

### What Happens When the Verb Is Aspectually Non-Ambivalent?

If the verb is aspectually non-ambivalent, it has temporal boundedness or non-boundedness marked on it which will, in turn, govern not only the aspect of the sentence but also the temporal values of the situation participants. Aspect in such cases cannot be compositional, as it will be realized – though this may be only partially – through the aspecto-temporal value of the verb (Aorist, Imperfect, Progressive), which is a grammatical one. Bulgarian (3a)-(3b)-(3c) are examples in which the verb governs the aspect of the sentence and also the temporal features of both NPs, and the phenomenon represents V-NP mapping:

- (3) a. Messi ritna<sub>PFVAor</sub> topkata  
 ‘Messi kicked the ball [once]’  
 b. Messi rita<sub>IMPFVAor</sub> topkata  
 ‘Messi kicked the ball [for some time]’  
 c. Messi ritashe<sub>IMPFVIMP</sub> topkata  
 ‘Messi was kicking/kicked the ball repeatedly’

Note again that *topkata* ‘the ball’ in (3a) and *topkata* ‘the ball’ in (3b) are situation participants in two sentences with two different forms of the verb – with different temporal constitutions, and the same is valid for the subject NP. As for sentence (3c), it is different from (3b) in that the situation in (3c) is again iterative as in (3b), but while in (3b) there is bounded iterativity, in (3c) the iterativity is non-bounded.

For traditional grammar, these very serious differences present no problem at all. It will interpret *topkata* ‘the ball’ in (3a), (3b) and (3c) in precisely the same way, as the same object – physical and spatial, and will do the same as regards the subject. This is a ***gigantic fallacy***. For the observer-speaker and the hearer, in (3a) *topkata* ‘the ball’ is a kinetic object with a one-off appearance in their vision, originating from the perfective Aorist form of the verb – an accomplishment in Vendlerian terms (Vendler, 1957).<sup>1</sup> In (3b) *topkata* ‘the ball’, although it is exactly the same NP with the same formal (morphological) characteristics, for the observer-speaker and for the hearer it is a rather different kinetic object: with repeated appearances in their vision

<sup>1</sup> It is the other way round from the point of view of the observer-speaker: a perfective Aorist form of the verb is a result of his/her perception, in which a situation is identified as a one-off act, hence a perfective Aorist form of the verb must be used. For the hearer the opposite is valid: s/he will interpret the temporal values of the situation participants on the basis of the grammatical form of the verb.

but on a bounded section of the time axis – hence an imperfective Aorist form of the verb. In (3c) again there is a different kinetic entity, a syntactic object, with repeated appearances (iterativity) but this time on a non-bounded section of the time axis. The same is valid for the subject. In Vendlerian terms, (3b) realizes an episode situation (Kabakčiev, 2000, pp. 286-307). Messi in (3a) is a one-off kinetic object; in (3b) Messi is an iterative, re-occurring kinetic object but on a bounded stretch of the time axis, with a known beginning and a known end; in (3c) Messi is again an iterative, re-occurring kinetic object, but this time on a non-bounded stretch of the time axis, with no known beginning and no known end.

In (3a) the aspecto-temporal form of the verb *ritna* ‘kicked [once]’ is perfective Aorist, which generates: (i) a single kinetic image of *topkata* ‘the ball’; (ii) a single kinetic image of *Messi*, the subject NP referent – as shown below in Fig. 4. In (3b) the aspecto-temporal form of the verb *rita* ‘kicked [for some time]’ is imperfective Aorist, which generates: (i) a pluralized (with a known beginning and a known end) kinetic image of *topkata* ‘the ball’ and a pluralized in the same way kinetic image of *Messi*, the subject NP referent. In (3c) the imperfective Imperfect generates non-bounded iterativity of the situation, and of the object NP and the subject NP, as shown in Picture 5 below. The issue is discussed again in the sections bearing the names of the two phenomena: *Temporality of situation participants*; *NP-V-NP mapping*.

## Leaks

The concept of a leak (or leaks) may at first sight appear to be a banal observation. No, it is not. It is **not** a peripheral or negligible phenomenon, it is central to the understanding of CA. It consists in the relegation of a sentence from Verkuyl’s perfective schema into the imperfective one due to the introduction into the relevant perfective sentence of a certain element: either a non-bounded NP or a non-telic verb. Consider the following sentences, they all are Verkuyl’s, from his three major publications (Verkuyl, 1972; 1993; 2022):

- (4) a. The bomb exploded [perfective]
- b. Greetje walked from the Mint to the Dam [perfective]<sup>2</sup>
- c. Den Uyl gave the Labor badge to a congress-goer [perfective]
- (5) a. Bombs<sub>LEAK</sub> exploded everywhere in town [imperfective]
- b. Greetje spoke<sub>LEAK</sub> from the Mint to the Dam [imperfective]
- c. Policemen<sub>LEAK</sub> walked from the Mint to the Dam [imperfective]
- d. Den Uyl gave the Labor badge to congress-goers<sub>LEAK</sub> [imperfective]
- e. Den Uyl gave Labor badges<sub>LEAK</sub> to congress-goers<sub>LEAK</sub> [imperfective]

The sentences in (4) are perfective. They are perfective because they contain: (i) an NP or NPs whose referent(s) explicate(s) the notion “boundedness” –

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<sup>2</sup> In the sense of ‘Greetje covered the distance from the Mint to the Dam’

which Verkuyl initially labelled “specified quantity of X”;<sup>3</sup> (ii) a verb which, apart from being aspectually ambivalent, carries the semantic value “telic”,<sup>4</sup> which in Verkuyl’s theory is labelled +ADD TO in verbs. +SQA is “specified quantity of A”, and +ADD TO is loosely defined as movement to bring about some change (Verkuyl 1993, pp. 17–18) or an expression of dynamic progress of some sort (Verkuyl 2022, p. 123).

### Temporality of Situation Participants

The temporality of situation participants was discussed above on sentences (3), but perhaps an easier way to understand the temporality of situation participants is to perceive them in a video – simultaneously. Picture *Messi* kicking a ball once, see (6a) below, with the situation recorded in a video. A misconceptualization here will consist in abstracting away *Messi* and *the ball* from the sentence and analyzing these agents as entities outside the situation. This is a faulty reasoning that leads to the wrong apprehension of *Messi* and *the ball* not as entities participating in a single act but to the focusing of features characterizing the two entities as physical ones. Note that in similar sentences, for example (6c), following the simplistic view in grammars about NP referents as either “physical”, hence “spatial” or “abstract”, *Messi* will have to be regarded a physical entity while *penalty* cannot be viewed in this way. Note, furthermore, that *ball* is not necessarily always a physical entity, as manifested in sentences such as (6b).

- (6) a. Messi kicked the ball  
b. Messi passed a ball to Iniesta  
c. Messi scored a penalty

This is a conflict between notions of traditional grammar and notions of CA – that otherwise grammar books ought to be obliged to explain and resolve. But they fail to do it. Instead, they try to make their readers believe that language describes “physical entities” (*woman*, *skater*) or “abstract entities” (*axel*), as in (7):

- (7) a. The skater performed an axel  
b. The skater performed axels

This is a naïve and inadequate explanation of what language does, and it can lead to wrong interpretations of sentences. For example, a sentence such as (7b) must not be read as equivalent to (8a) but as equivalent to (8b):

- (8) a. The skater performed a few axels  
b. The skater performed axel after axel

Cf. Bulgarian, where the English perfective sentence (8a) is equal to the perfective Bulgarian sentence (9a). But the imperfective (7b) is equal to the

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<sup>3</sup> Also called “quantified”, sometimes “quantized”.

<sup>4</sup> Called so here and in other publications by Kabakčiev, 2019; 2023; 2025.

imperfective Bulgarian (9b) or, even more precisely, to (9c), containing the phrase *aksel sled aksel* ‘axel after axel’. Compare along these lines the non-grammaticality of Bulgarian (9d) with a perfective Aorist form combined with a NP denoting non-boundedness – with no known beginning and no known end, standing for an indefinitely iterative situation:

- (9) a. Kankyorkata izpalni<sub>PFVAOR</sub> nyakolko aksela  
‘The skater performed a few axels’  
b. Kankyorkata izpalnyavashe<sub>IMFVIMP</sub> akseli  
‘The skater performed axels’  
c. Kankyorkata izpalnyavashe<sub>IMFVIMP</sub> aksel sled aksel  
‘The skater performed axel after axel’  
d. \*Kankyorkata izpalni<sub>PFVAOR</sub> aksel sled aksel  
‘The skater performed [once] axel after axel’

It is worth asking why Bulgarian (9d) is non-grammatical. The explanation is that a perfective Aorist verb form denoting a bounded singular Vendlerian situation, with a known beginning and a known end, and a reached telos – *izpalni* ‘performed [once]’, cannot match and be equal to a phrase such as *aksel sled aksel* ‘axel after axel’, i.e., a phrase denoting a non-bounded (with no known beginning and no known end) situation, indefinitely iterative.

Traditional grammar – of all languages, not only English, is overflowing with assertions that nouns (nominals/NPs) are language elements that refer, roughly, to two major kinds of entities: (i) material (physical), hence spatial; (ii) non-material (non-physical), hence non-spatial. Entities of type (i) are called concrete, entities of type (ii) abstract. But this is a simplistic assertion: false, harmful for linguistics. First, material (physical) and hence spatial entities are **only and solely** those that reside in the objective, material world. Entities that do not reside in the objective world cannot be regarded as and labelled “material”, “physical” and “spatial”. Consider a woman looking at herself in the mirror, Figure 1 (Courtesy of Velislava Kirilova, actress).:

Figure 1

*Mirror As Language. The Woman in the Mirror is an Image of a Woman, Not a Physical Entity*

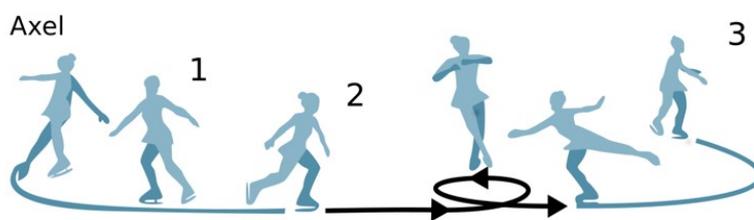


There are two women in this picture: one in front of the mirror, with her face not visible, another in the mirror itself, her face visible. The woman in front of the mirror is a real-world woman, a physical and spatial entity. The woman in the mirror is a woman encoded through language – because the mirror here is taken to symbolize language. The question is: is the image of a woman encoded through language “a material and spatial entity”? Of course not. It is a *kinetic image* of another entity – material and spatial and existing in the objective world. The woman in the mirror may be moving in space or be static. But when referred to through language, it always moves in time. The problem is that traditional grammar misleads its readers into having them believe that a woman encoded in language is *not* a kinetic image of a material and spatial entity but is *itself* a material and spatial entity. It is not.

Consider now Figure 2, representing what an axel is. It contains several skaters – but they do not represent a plural entity. They represent one skater taking part in, i.e., performing, an axel, one axel. A question arises. The word *axel* may appear to the speakers of a language – of any language, including English, as if there is a thing out there in the world called “axel” – in the same sense as there are things out there in the world called “elephants” or “women”, or “houses”. No. There is nothing out there in the world called *axel*. What there is is a skater who takes part in an axel, and the skater performing an axel can be broken down into elements corresponding to the stages of the axel – which have precise time-space coordinates:

Figure 2

*Axel* (Courtesy of <https://de.wikipedia.org/wiki/Benutzer:Nellinka>)<sup>5</sup>



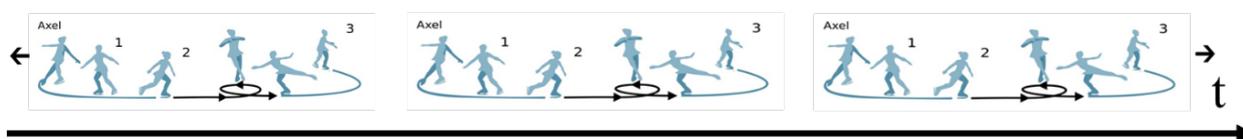
However, language is an extremely powerful tool and it can take a temporal instantiation of an axel, as in Fig. 2, and then multiply it on the time axis, whereby the multiplication may be bounded, as in a sentence such as *The skater performed three axels*, where the observer-speaker perceives exactly three axels, and the resulting sentence is perfective – temporally bounded, encoding a global action consisting of three separate sub-actions with the

<sup>5</sup> [https://commons.wikimedia.org/wiki/File:Axel\\_Paulsen\\_jump\\_without\\_text.svg](https://commons.wikimedia.org/wiki/File:Axel_Paulsen_jump_without_text.svg)

global action having a telos achieved.<sup>6</sup> But axels can also be non-bounded, as in a sentence such as *The skater performed axels* where the observer-speaker does not know where the axels begin and where they end, and this is symbolized by the arrows at the two ends of the diagram pointing at different directions. A sentence such as *The skater performed axels* in its imperfectivity reading can be interpreted as synonymous with the sentence *The skater performed axel after axel*, diagrammatically portrayed in Fig. 3:

Figure 3

*Diagrammatic Representation of The Skater Performed Axels or The Skater Performed Axel After Axel*



The two arrows pointing at the two opposite directions of the time axis in Picture 3 indicate that the axels in the diagram are not three but represent an indefinite, unknown, non-bounded number of axels. As already noted, the sentence *The skater performed axels* (a non-bounded number of axels) can be represented through natural language also through the sentence *The skater performed axel after axel* – where the phrase *axel after axel* is equivalent to *axels* in the non-bounded interpretation of *axels*. The difference is important because *axels* in a sentence such as *The skater performed axels* **may** mean *The skater performed some axels*, despite the fact that the quantifier *some* is omitted here. In such cases, it is called “a silent *some*”. When a sentence such as *The skater performed axels* means ‘The skater performed some axels’, it is perfective because *some axels* represents a bounded number of axels. This bounded number of axels is then mapped from the NP *some axels* onto the referent of the verb *performed* and the verb acquires perfectivity: an accomplishment with a telos achieved – and this is a case of NP-V mapping.

The idea in grammatical writings that many nominals in English denote “physical, hence spatial entities” (*apple, cat, car, street, house*) is simplistic and misleading. The problem is that grammatical writings seem unaware of the fact that entities such as *apple, cat, car, street, house* etc. are physical and hence spatial only in the objective, material world. When used in language, these entities are not physical and spatial but are products of the human brain, with features that have nothing to do with the physical features of objective-world entities.

<sup>6</sup> The telos is the successful completion of one axel – or of three axels, etc.

Let us, for the purposes of the discussion of the temporality of situation participants, return to the sentences (3):

- (3) a. Messi ritna<sub>PFVAor</sub> topkata  
 ‘Messi kicked the ball [once]’  
 b. Messi rita<sub>IMPFVAor</sub> topkata  
 ‘Messi kicked the ball [for some time]’  
 c. Messi ritashe<sub>IMPFVIMP</sub> topkata  
 ‘Messi was kicking/kicked the ball repeatedly’

The Bulgarian sentence (3a), meaning “Messi kicked the ball once” can be represented as in Figure 4 – a single kick of a ball by a football player (let’s call him Messi):

Figure 4

*A Single Kick, a Single Ball, a Single Football Player (Messi)*



But sentence (3b), meaning “Messi kicked the ball for some time” and encoding an episode Vendlerian situation (see above), **cannot** be represented in the same way. It must be represented so as to cover the kicking of the ball **repeatedly**, but on a bounded stretch of the time axis. The ball and Messi here are kinetic images with characteristics on the time axis that equal the characteristics of the episode Vendlerian situation: kicking the ball repeatedly on a bounded stretch of the time axis. (No diagrammatic representation is given here for (3b) because it would have to be more complex.) This stands to reason because the observer-speaker producing sentence (3b) does not perceive repeated ball-kicking **only** – but sees a sequence of a ball and a football player, appearing consecutively before his/her eyes. As for sentence (3c), it encodes an activity Vendlerian situation consisting in repeated ball-kicking by Messi on a non-bounded stretch of the time axis, see Fig. 5:

Figure 5

*An Indefinitely Pluralized Kick, an Indefinitely Pluralized Ball, an Indefinitely Pluralized Football Player, Exemplifying Sentence (3c).*



As in Fig. 3 above, the two arrows pointing at two opposite directions of the time axis indicate that the kicks were not a particular number (here five) but an indefinite, unknown, non-bounded number of kicks, corresponding to the non-bounded iterativity of ball-kicking by Messi. This means that Messi is a kinetic object re-occurring an unknown number of times and the ball is also a kinetic object re-occurring an unknown number of times. All this is reflected in Fig. 5.

What is the important conclusion to make? It is that in a sentence such as English *Messi kicked the ball* – and in any language with the same meaning of the relevant sentence, *Messi* and *the ball* are not “physical entities” – as traditional grammar insists, but are kinetic images in the minds of speaker and hearer. Furthermore, depending on the grammatical characteristics of the sentences in the language under investigation, a particular kinetic image may be represented in the same way in the sentence – as here, where *Messi* and *the ball* are singular entities, but actually these seemingly singular entities may stand for plural ones. Thus in the Bulgarian sentence (3c) *Messi* and *the ball* are singular entities: formally, morphologically. But in sentence (3c) the referents of *Messi* and *the ball* are actually plural entities – and the plurality is temporally non-bounded, yet it is covert for the ordinary speaker of the language who is misled by the traditional grammar writings insisting that *Messi* and *ball* are material beings.

### NP-V-NP mapping of temporal values

A serious misalignment is observed above between the formal, grammatical singularity of the two entities *Messi* and *the ball* and the cognitive processes taking place in the minds of speaker and hearer. How are these processes realized? They are realized through the **mechanism of mapping** temporal values from (the referents of) the NPs onto (the referent of) the verb – this is NP-V mapping, and from (the referent of) the verb onto (the referents of) the NPs – this is V-NP mapping. NP-V mapping is characteristic of, but not restricted to, CA languages. V-NP mapping is characteristic of, but not restricted to, VA languages. Mapping thus can take place in both directions: from NPs to verbs (but not only), as generally happens in English; from verbs

to NPs, as generally happens in VA languages (Slavic, Greek) – but not only. The NP-V-NP mapping of temporal values was reported for the first time a whopping four decades ago (Kabakčiev, 1984, pp. 661ff) but, despite its importance for theoretical linguistics, it was systematically ignored by the aspectological community, with minor exceptions.

The first confirmation of the idea, launched in Kabakčiev (Ibid.) of situation participants as carrying temporal values generated by the grammatical features of the verb in a sentence was made by Vounchev (2007) – on Greek and Bulgarian data.<sup>7</sup> Vounchev's terminology is different from the one used here but his explanations of the phenomena are generally identical. Vounchev asserts that in sentences such as *He rarely wrote me a letter* (Greek *Spánia mou égrafe grámma*, Bulgarian *Ryadko mi pisheshe pismo*) the NP standing for *letter* does not have a singular meaning but a plural one, dispersive and referring to different letters (Vounchev, 2007, pp. 86–87).

## Discussion

### The Article-Aspect Interplay: A *Sad terra incognita* in Grammars and Pedagogical Writings

The review of the major notions for the correct understanding of CA made above will now be used to describe a huge omission in practically all English grammars, traditional grammatical writings and the literature on English language teaching: the ***absence of a description of the article-aspect interplay***, a major structural phenomenon of Modern English. Due to the overall nature of the article-aspect interplay and the theory of CA in general – both phenomena being difficult to understand, the omission mostly concerns tertiary education and the preconditions for university attendees at all levels, including postgraduate and Ph.D., for acquiring adequate high-class knowledge of English grammar and the overall structure of the English language. But the omission also has a detrimental impact on the English-speaking society (as a whole) interested in English grammar, and even on the pre-university levels of English language teaching, where there are many talented students capable of acquiring grammatical material such as CA – difficult and important at the same time.

Of course, the analysis of the omission is not meant to hurt the feelings of grammarians and other authors of traditional pedagogical writings. It is aimed at improving the grammatical description of English and eliminating the innumerable misconceptions in it residing in several linguistic areas: first and

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<sup>7</sup> The idea was later sophisticated in Kabakčiev, 2000; 2019; 2023.

foremost in the lack of knowledge and understanding of the interplay between aspect and articles. We, specialists in English grammar living and working around the globe today, are grateful to the authors of traditional English grammars. We used them in the course of many decades and learned a lot from them. But this circumstance does not oblige us today to turn a blind eye to the serious mistakes and omissions observed in English grammars: practically in all of them, as well as in other similar linguistic writings and in the literature on English language teaching. The article-aspect interplay, as covered in the theoretical literature in various ways – usually inconsistent and even incompatible – involves other grammatical and structural entities apart from articles: determiners, quantifiers, demonstratives, personal pronouns, possessive pronouns, proper names. Last but not least, the article-aspect interplay is inseparable from the understanding of the notion of zero article (also known as “bare NP”), possessing an extremely important aspectological function not only in English and similar languages but, of course, also in cross-language terms. Unfortunately, apart from being totally absent in English grammars, it is misunderstood and/or misconceptualized also in most of the theoretical literature.

The article-aspect interplay is a phenomenon of Modern English that is unquestionably fundamental and this makes the answer to the question why it is **completely absent** in all major English grammars and traditional linguistic writings difficult to answer. As noted by Bulatović (2020, pp. 404-405), there are only two English grammars today, called specialized by the author, that demonstrate to some extent the interplay between aspect and articles. The first one (Declerck, 2006) is focused on specific domains of language structure, the second is aimed at speakers of another language. But these are exceptions, negligible, unknown to the general readership. Furthermore, the article-aspect interplay has remained a *terra incognita* in English grammars for several decades already, more than half a century, despite the fact that it has been known in aspectology thanks mainly to the works of Vendler (1957) and Verkuyl (1972; 1993; 2022).

One of the first vestiges of discontent with English grammars concerning the way they treat aspect in general and CA in particular (in languages like English) was reported in Schüller (2005), who identified, though not in a detailed manner, what she called “the problem of the potential neutrality of the simple form”, which can “merely be evaluated as a marker for a neutral perspective”. The author obviously intuited that the “neutral perspective” is a major aspectual property of the preterit and of similar aspectually unmarked verb forms in a CA language but did not manage to offer an adequate explanation of the phenomenon. This aspectual property can very easily be recognized in sentences like (10) below containing semantico-syntactic

patterns that are similar or identical. Actually, these sentences were specially constructed: with very simple subject and object NPs and a verb, and containing aspectually ambivalent verb forms – neutral between the values of perfectivity and imperfectivity (Kabakčiev, 2025, pp. 11-12). They demonstrate that aspect in CA languages is not at all effectuated through the verb in a sentence but mainly through the temporal features of the situation participants in them existing under the guise of non-bare or bare NPs: bounded and non-bounded respectively (*ibid.*):

- (10) a. The kid fed the cat [perfective meaning]  
b. The kid fed cats<sub>SLEAK</sub> [imperfective meaning]  
c. Kids<sub>SLEAK</sub> fed the cat [imperfective meaning]  
d. Kids<sub>SLEAK</sub> fed cats<sub>SLEAK</sub> [imperfective meaning]

A perfective sentence, belonging to Verkuyl's perfective schema – see further below about Verkuyl's schemata and the global mechanism of perfectivization, can be imperfectivized, i.e., relegated to the imperfective schema, by the so-called leak (Verkuyl's, 1993 term). A leak in the case of (10b), (10c), (10d) is the loss of an article – or of more than one article, as in (10d), which causes the referent of the relevant NP to become unbounded (non-bounded).<sup>1</sup> Generally on leaks, see Verkuyl (1993; 2022).

It would be an empty effort to start checking whether English grammars – comprehensive and academic in general, demonstrate an understanding of what aspect is as an important cross-language and universal phenomenon. They do not. And, of course, this checking has already been done – by Bulatović (2020), whose conclusion is unforgiving: “the majority of modern English grammars [...] need to abandon their traditional approach to aspect as a tense/aspect category and devote more space to the individual components that contribute to sentence-level aspectual interpretation”.

Indeed, there are two grammars of English, relatively recently published, Huddleston and Pullum's (2002) and Fenn's (2010), whose authors frankly admit that an aspectual contrast between perfectivity and imperfectivity in English exists (Huddleston and Pullum 2002, pp. 124–125; Fenn 2010, pp. 312–315). The first grammar commendably employs Vendler's (1957) well-known classification of time schemata (states, activities, accomplishments and achievements) and even offers some adequate comparisons with VA as manifested in the Slavic languages. Unfortunately, both grammars offer no explanation whatsoever about the way this contrast is effectuated in a non-VA language and where exactly it sprang from to appear all of a sudden in an English grammar. Apart from that, Fenn (2010, pp. 312–314) makes a crucial

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<sup>8</sup> Also sometimes called non-quantized.

mistake with the assertion that “the simple form is perfective, i.e., refers to an action as a whole”, while, as already pointed out above, the simple form is merely “a marker for a neutral perspective” (in Schüller’s, 2005 phraseology). Compare again the sentences in (10) above, each having exactly the same verb – in the so-called simple form – but while sentence (10a) is perfective, the other three sentences are imperfective, (10b), (10c), (10d). The discrepancy is due **not** to some difference in the form of the verb – the verb is exactly the same, but to the different impact on the meaning of the relevant sentence effectuated by the referents of the situation participants with their grammatical, semantic and/or pragmatic features. See the analysis of the sentences further below.

The first truly effective criticism of the inadequate treatment of aspect in English grammars and in the literature on English language teaching – harsh but straight to the point and justified – was raised in several publications by Bulatović (2013; 2020; 2022) whose latter two papers focused specifically on the interplay between aspect and articles – and some other relevant grammatical entities such as determiners, quantifiers, pronouns, proper names, etc. Bulatović’s reasoning is highly revealing of the defects of English grammars and the literature on English language teaching, hence worth a precise quotation:

the articles *a* and *the* have a key role in the signaling of [+boundedness], [...] the zero article has a key role in the signaling of [-boundedness]; [CA regularities] have not made their way into research on article use by ESL learners; [CA] is not described in grammars of English, not mentioned in English coursebooks, and not taught in schools and colleges (Bulatović 2022, pp. 500–501).

Bulatović’s revelation of the profound defects of English grammars and the literature on English language teaching consisting in the sidestepping of the article-aspect interplay and of CA in general, remained, unfortunately, largely unheeded by the world aspectological community, with certain exceptions, among which two recent ones.

It was first Dimitrova (2021, pp. 48, 52) who focused on Bulatović’s explanation of CA through the values of NP referents, and added to Bulatović’s understanding her own (Dimitrova’s) interpretation of the values of NP referents related to aspect. Dimitrova does not view situation participants as material and spatial objects as does Verkuyl (1993; 2022) – and also Bulatović after him, but as temporal entities following Kabakciev (1984; 2000; 2019). In two other publications, brand-new, dealing with two Balkansprachbund languages, first Haxhillari (2024, p. 328) focused on Bulatović’s treatment of determiners, hence also articles, about the way determiners are related to the effectuation of CA in Albanian. Before the appearance of Haxhillari’s (2024)

paper which, for the first time in linguistics, recognizes Albanian as a CA language, this language was *never* regarded as representative of CA.

In recent publications on another language in the Balkansprachbund, Kutsarova (2025a; 2025b) outlined some major features of CA in Turkish, a non-Indo-European language structurally very different from the well-known European languages. Kutsarova (2025a, pp. 50–64) offers a detailed review of Bulatović's treatment of the English article-aspect interplay and applies the regularities observed by Bulatović to Turkish, to find that Turkish fully conforms to Verkuyl's aspect schemata and the overall mechanism of CA, but in ways that are surprising. Turkish aspect is crucially related to phenomena such as word order, use of cases, use of transnumerals (Kutsarova, 2025b), functional sentence perspective. Sidestepping definiteness-indefiniteness in the Turkish direct object, English CA has nothing to do with word order, functional sentence perspective, cases, transnumerals – it is not influenced by such structural entities.

This deviation from English grammar into the grammar of a non-Indo-European language indicates that the defects and omissions observed in English grammars with the absence of a description of the article-aspect interplay and of CA in general do not affect English grammar only. The defects and omissions generate – potentially and even practically – a negative effect on the understanding of aspect, including CA, in other languages. Kutsarova's (2025a) paper with its enormous bibliography in Turkish, Russian and English, shows that the study of non-Indo-European languages is heavily dependent on, and is permanently and crucially influenced by, that kind of grammar conceptualized for Indo-European languages, including English. This means that mistakes and omissions in English grammar trigger mistakes and omissions in other grammars, of other languages around the world.

### **On Sentences with Similar or Identical Patterns Used to Explain CA**

The article-aspect interplay in Modern English was demonstrated in (10) above through simple sentences with identical or similar patterns containing short words so that the attention of the reader should not be distracted from the regularities. But it had previously also been shown on sentences not with two but with three situation participants, such as (11a), a Middle English sentence from *Cursor Mundi* (1300 A.D.), translated into Modern English (11b):

- (11) a. She dud þe childe drynke of þe welle  
b. She made the child drink from the well

A slight change is made of the Modern English translation of the original sentence (11a): substitution of the subject *she* with *the woman*, whereby a sentence with a subject NP containing an article (12a) obtains – decisive for the ultimate explanation of the perfectivity of sentences such as (12a) and the imperfectivity of sentences such as (12b), (12c) and (12d) – based on precisely the article-aspect interplay, a major and extremely significant phenomenon of Modern English:

- (12) a. The woman made the child drink from the well [perfective]  
b. Women<sub>LEAK</sub> made the child drink from the well [imperfective]  
c. The woman made children<sub>LEAK</sub> drink from the well [imperfective]  
d. The woman made the child drink from wells<sub>LEAK</sub> [imperfective]

See below how the sentences in (12) must be properly analyzed to obtain the correct interpretation of aspect compositionally – on the basis of their grammatical characteristics and the temporal and other values of situation participants.

### **The CA Mechanism in Verkuyl’s Theoretical Framework and in Some Recent Developments on Different Languages**

Sentences of type (12a) above belong to Verkuyl’s perfective schema; his term for “perfective” is “non-durative”. Conversely, sentences of type (12b), (12c) and (12d) fall into Verkuyl’s imperfective schema; his term for “imperfective” is “durative”. Verkuyl’s discovery of the two aspect schemata are an epochal achievement in linguistics, recognized soon after the appearance of his first book, reporting the finding of CA (Verkuyl, 1972). Unfortunately, the discovery of CA and the theoretical framework around it, despite being well-known by the world linguistic community and generally well-recognized, have nonetheless remained grossly misconceptualized in some significant details – since then and to the very present day (Kabakčiev, 2000; 2025).

Consider the following. In Verkuyl’s (1972; 1993; 2022) theoretical framework, situation participants (Verkuyl’s term is “verb arguments”) such as *the woman*, *women*, *the child*, *children* and *the well*, *wells* in (12) above are physical entities, hence spatial; see Verkuyl (1993) and the wording “interaction between temporal and atemporal structure” in the title itself. According to Kabakčiev’s (2025) version of the theory of CA (the latter as architected by Verkuyl and his followers between the 1970s and the 1990s), sentences such as those in (12) indeed demonstrate in an excellent way what Verkuyl (1993, p. 73) calls “feature algebra”. According to it, the two major aspectological notions – perfectivity and imperfectivity, are effectuated in terms of Verkuyl’s two aspectual schemata. Perfectivity – first schema, arises as an interplay between features of situation participants (verb arguments) that are non-temporal. Conversely, imperfectivity – second schema, arises as a leak or leaks occurring

in a real or hypothetical initial perfective sentence belonging to the first schema, the perfective (non-durative) one.

### **On CA As a Cognitive Mechanism, Much More Complex Than the Traditional Deciphering of Sentence Meanings**

But the description above is not the whole story behind the compositional explication of aspect in English or similar languages. In Kabakčiev's (2025) extension of the initial understanding of CA – associated mainly with Verkuyl's theoretical framework, situation participants **are not** what traditional grammars and Verkuyl (1993) himself insist on: physical beings. Entities such as *woman*, *child*, *well* are interpreted by Verkuyl and his followers as physical, material objects, hence spatial. Conversely, in Kabakčiev's (2000; 2025) theoretical framework, physical, spatial entities belong to the objective, material world **only and solely**. Therefore, they have little or even nothing to do with situation participants in the minds of speaker and hearer – producing and interpreting natural language. Entities such as *woman*, *child*, *well* in natural language are *not* physical and spatial, they are temporal, featuring two major values: boundedness and non-boundedness on the time axis, with some additional sub-features such as iterativity and non-iterativity, etc.

Kabakčiev's (2000, Chapters 5-6) conceptualization of situation participants as entities with temporal values in the minds of speaker and hearer, irrespective of what or which natural language is under study, was first corroborated, as already noted, by Vounchev (2007, pp. 86–87) on Greek and Bulgarian data. Some years later, the understanding of situation participants as entities with temporal values was also confirmed by Dimitrova (2021): in a slightly different manner and once again on Greek data. Several other authors followed suit, some of them on material from other languages, including genealogically unrelated: Shabashvili on Georgian (in Shabashvili & Kabakčiev, 2021), Bakardzhieva-Morikang on Ukrainian (in Bakardzhieva-Morikang & Kabakčiev, 2024), Haxhillari (2024) on Albanian, Kutsarova (2025a) on Turkish – the latter two already discussed.

Thus, following the conceptualization by several authors already of the temporality of situation participants, in the imperfective interpretation (non-bounded iterativity) of sentence (12b) above, the subject-NP *women* does *not at all* refer to a group of women standing in the same place and collectively forcing a child to drink from a well. What the NP *women* here refers to is a sequence of *one woman* extensively recurring in time, and every time occurring as a separate single woman, but seemingly under the guise of a static plural entity, *women*. Furthermore, it is certainly not at all the same physical individual every time. Every time it is a different physical individual, yet falsely appearing as if it is a case of a static group of women. Therefore, the precise

meaning of sentence (12b) is: ‘Woman after woman after woman made the child drink from the well’, and not the otherwise theoretically possible ‘(Some) women in the same place made the child drink from the well’.<sup>9</sup>

Analogously, in the imperfective interpretation (non-bounded iterativity) of sentence (12c) the object-NP *children* does not refer to a static group of children standing in the same place and being forced by a woman to drink but to a sequence of actually one child extensively recurring in time, and every time occurring as a separate single individual (normally it is a different child every time, or at least some of the times), yet falsely appearing as if this is a case of a static group of children. Therefore, the precise meaning of (12c) is actually: ‘The woman made child after child after child drink from the well’, and not the otherwise theoretically possible ‘The woman made a group of children standing at the same place drink from the well’.

Finally, in the imperfective interpretation – of non-bounded iterativity, of sentence (12d), the adverbial (or indirect object-NP) *wells* does not refer to a group of wells located at roughly the same physical place but to a sequence of a singular “moving well” – moving in time, recurring before the eyes of the observer and speaker, and every time occurring as a separate single well, yet falsely appearing as if this could be a case of a stationary group of wells. For this reason, the precise meaning in this sentence is actually: ‘The woman made the child drink from a well after well after well’ – the wells rising before the woman’s eyes as she moves forward in space and time, and not the otherwise theoretically possible ‘The woman made the child drink from a group of wells located at the same place’.

Here a semantic clash occurs – which is, as a rule, covert, i.e., hidden for both linguist and native speaker – between the aspectual reading of each of these sentences and the outward grammatical and semantic features of the relevant NPs, to which, as convincingly argued by Wu (2026), significant pragmatic ingredients may have to be added for obtaining the final true meaning of sentences. This semantic clash is only one of the numerous reasons for the decades-long misconceptualization of aspect in English and in similar CA languages – the Germanic and the Romance languages, Albanian.

## Conclusion

English grammars and similar traditional writings have been pestered for decades by a simplistic explanation, whether outspoken or shrouded in

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<sup>9</sup> Sentence (12b) could also be read as a perfective one, meaning ‘Some women made the child drink from the well on a particular occasion’ – but it requires some mental strain for the sentence to be perceived in this way, with *women* referring not to a woman recurring in time but to a small group of women standing in the same place. The same is also valid for the relevant NPs in (12c) and (12d).

complex and ultimately meaningless jargon, according to which there is, simply, no such thing as aspect in English in the sense found in languages such as the Slavic ones, Greek, Georgian or Chinese – that is, VA. There is, indeed, no perfective VA in the modern Germanic and Romance languages – or in Albanian for that matter – structurally very similar to the Romance languages in CA terms! But all these languages, including English, do have imperfective VA forms – different in the different languages, whether called progressive, habitual or imperfect (other terms are used too, as per the relevant grammatical tradition). Hence, languages in both synchronic and diachronic terms differ *not* according to whether they have VA in general. They differ according to whether they *have or do not have perfective VA*.

English grammars, the publications on English language teaching and even some of the theoretical literature have a long way to go to finally get rid of the misconceptualizations of aspect, maintained in the course of more than half a century: from 1971, when CA was discovered by Verkuyl, to the very present day. Aspect in its instantiation of perfectivity versus imperfectivity is not an exotic phenomenon found only and solely in languages like the Slavic ones, Greek, Georgian or Chinese! Aspect is *a universal phenomenon found in all natural languages* in two major disguises: VA – where aspect is directly effectuated by the verb in the sentence; CA – where aspect is effectuated at the level of the sentence by an extremely complex interplay of, mainly, features of referents of situation participants.

## Disclosure Statement

The author reported no potential conflicts of interest.

## References

- Bakardzhieva-Morikang, S., & Kabakčiev, K. (2024). Ukrainian biaspectuality: An instantiation of compositional aspect in a verbal-aspect language. *East European Journal of Psycholinguistics*, 11(1), 28–46. <https://doi.org/10.29038/eejpl.2024.11.1.bak>
- Bulatović, V. (2013). Modern theories of aspect and Serbian EL2 learners. *Belgrade English Language and Literature Studies*, 5, 65–79. <https://doi.org/10.18485/bells.2013.5.3>
- Bulatović, V. (2020). Thinking for speaking in the right aspect – on whether modern English grammars can do more. *Revista Española de Lingüística Aplicada*, 33(2), 384–415.
- Bulatović, V. (2022). Aspect semantics and ESL article use. *International Review of Applied Linguistics in Language Teaching*, 60(2), 491–521.
- Declerck, R. (2006). The grammar of the English verb phrase: Volume 1: The grammar of the English tense system. Mouton de Gruyter.
- Dimitrova, D. (2021). Aspect coercion in Greek aorist and perfect verb forms. *Studies in Greek Linguistics*, 41, 45–53.

- Dimitrova, D., & Kabakčiev, K. (2021). Compositional and verbal aspect in Greek: The aorist/imperfect distinction and the article-aspect interplay. *Athens Journal of Philology*, 8(3), 181–206. <https://doi.org/10.30958/ajp.8-3-2>
- Fenn, P. (2010). A student's advanced grammar of English. Narr Francke.
- Haxhillari, H. (2024). The category of determiner in Albanian. *Athens Journal of Philology*, 11(4), 327–338. <https://doi.org/10.30958/ajp.11-4-4>
- Huddleston, R., & Pullum, G. K. (2002). The Cambridge grammar of the English language. Cambridge University Press. <https://doi.org/10.1017/9781316423530>
- Kabakčiev, K. (1984). The article and the aorist/imperfect distinction in Bulgarian: An analysis based on cross-language 'aspect' parallelisms. *Linguistics*, 22, 643–672.
- Kabakčiev, K. (2000). Aspect in English: A “common-sense” view of the interplay between verbal and nominal referents. Kluwer. <https://doi.org/10.1353/lan.2003.0080>
- Kabakčiev, K. (2019). On the history of compositional aspect: Vicissitudes, issues, prospects. *Athens Journal of Philology*, 6(3), 201–224. <https://doi.org/10.30958/ajp.6-3-4>
- Kabakčiev, K. (2023). On the temporal values of situation-participant NP referents mapped from Bulgarian perfects with aorist and imperfect participles. *East European Journal of Psycholinguistics*, 10(1), 48–60. <https://doi.org/10.29038/eejpl.2023.10.1.kab>
- Kabakčiev, K. (2025). On the systematic misconceptualization of aspect East and West leading aspectology astray. *Linguistic Studies*, 49, 7–26. <https://doi.org/10.31558/1815-3070.2025.49>
- Kutsarova, S. (2025a). An attempt at outlining the major features of compositional aspect in Modern Turkish. *Athens Journal of Philology*, 12(1), 49–74. <https://doi.org/10.30958/ajp.12-1-3>
- Kutsarova, S. (2025b). On the Turkish transnumeral as an aspect effectuation device. *East European Journal of Psycholinguistics*, 12(1), 76–112. <https://doi.org/10.29038/eejpl.2025.12.1.kut>
- Schüller, S. (2005). Problematik der Darstellung von Aspektunterschieden in englischen Referenzgrammatiken. In H. Thomas (Ed.), *Linguistische Dimensionen des Fremdsprachenunterrichts* (pp. 29–42). Königshausen & Neumann.
- Shabashvili, G., & Kabakčiev, K. (2021). Verbal aspect vis-à-vis compositional: A typological case study of Georgian, against Russian and English data. *Studies in Greek Linguistics*, 42, 375–384. <https://doi.org/10.13140/RG.2.2.23601.25449>
- Vendler, Z. (1957). Verbs and times. *The Philosophical Review*, 66, 143–160.
- Verkuyl, H. (1972). On the compositional nature of the aspects. Reidel. <https://doi.org/10.1007/978-94-017-2478-4>
- Verkuyl, H. (1993). A theory of aspectuality: The interaction between temporal and atemporal structure. Cambridge University Press. <https://doi.org/10.1017/CBO9780511597848>
- Verkuyl, H. (2022). The compositional nature of tense, mood and aspect. Cambridge University Press. <https://doi.org/10.1017/9781108989732>
- Vounchev, B. (2007). *Aspektialnite harakteristiki v novogratskiya ezik – sredstva za izrazyavane i semantika* [Aspectual characteristics of Modern Greek – expression devices and their semantics]. Sofia University Press.
- Wu, S. (2026). Pragmatic dimensions of aspects in English: Theory and practice. *Athens Journal of Philology* (forthcoming).