

Rutger J. Allan

1 Aspect and construal

A cognitive linguistic approach to iterativity, habituality and genericity in Greek

Abstract: This chapter analyzes the use of tense and aspect in iterative, habitual and generic expressions in terms of the cognitive linguistic notion of construal, i.e., the cognitive ability to conceive and portray a situation in alternative ways. It will be argued that tense and aspect use in iterative, habitual and generic clauses in Ancient Greek hinges on a number of specific construal operations: the capacity to construe a series of individual events as a holistic higher-order event, the capacity to construe an event as bounded or unbounded, and the capacity to view a situation from alternative vantage points.

Keywords: tense, aspect, iterativity, habituality, genericity, construal, cognitive linguistics, embodiment

1.1 Introduction

In discussing the uses of the present and imperfect tense, many of our standard Greek grammars distinguish a separate iterative, habitual or generic use. For example, Goodwin (1889) states that “[T]he present may express a *customary* or *repeated* action or a *general truth*” (9), whereas the imperfect “may denote a customary or repeated action, or a series of actions” (11). According to Stahl (1907) the present “refers to present time or the general extent of time [bezeichnet Gegenwart oder allgemeinen Zeitumfang]”¹ (87), and he mentions “the imperfect of interrupted duration or repetition [[d]as Imperfektum der unterbrochenen Dauer oder der Wiederholung]” (96). In Schwyzer & Debrunner (1950: 270–271), we read that the present indicative can be “timeless” when it is used in gnomic and proverbial expressions and it can also be “habitual [[g]ewohnheitsmäßig)”. Smyth (1956: 421, 424) discusses the “Present of Customary Action”, “Present of General Truth” and the “Imperfect of Customary Action”. Similar remarks are found in some more recent reference grammars. Duhoux (2000: 361), for example, refers to the “‘frequentative’ use of the imperfect, conveying the repetition of an action or the habit of engaging in it [[e]mploi ‘frequentative’ de

¹ The present “expresses present time or general time”. The translations from German in this paper are mine.

l'imparfait, rendant la répétition d'une action ou l'habitude de s'y livrer]”,² while Rijksbaron (2006: 10, 14; cf. also 4–5, n. 1) speaks of “the generic use of the present indicative” and points out that the imperfect “may express iterative (habitual) states of affairs”. Napoli (2006: 32) notes that, if iterativity is not expressed by means of reduplication or affixation in Homer, “the iterative reading of an event can also be included in the function of the imperfective aspect”.³

What these handbooks seem to suggest is that genericity, habituality and iterativity are distinct conventional uses or meanings of the present and imperfect indicative. Perhaps the only dissenting voice is that of Kühner & Gerth (1898: 132), who state in their treatment of the meaning of present indicative:

Doch ist zu betonen, dass das Präsens an sich weder den Begriff der Dauer, noch den der Wiederholung enthält, sondern die Handlung in ihrer Entwicklung vor Augen führt.

“However, it should be stressed that the present in itself neither contains the notion of duration nor that of repetition but that it presents the action in its development”.

And similarly, regarding the imperfect (1898: 142):

Ebenso wenig kann es an sich eine wiederholte Handlung in der Vergangenheit, ein Pflegen ausdrücken . . . Das Imperfekt erscheint in diesem Falle nur deshalb öfter als der Aorist, weil eine wiederholte Handlung gleichsam eine zusammenhängende Reihe von Handlungen darstellt, bei der der Beschauer weit öfter den Verlauf als den Abschluss ins Auge fasst.

“Nor can it in itself express a repeated action in the past, a habit . . . The imperfect occurs in this case more frequently than the aorist only because a repeated action in a sense constitutes a coherent series of actions, of which the observer envisages the progress much more often than the completion”.

Thus, Kühner & Gerth stress that the present and imperfect do not *in and of themselves* express iterativity and habituality. The tendency for iterative or habitual events to appear in these tenses has to do, rather, with the fact that iterative/habitual events constitute a coherent series which are typically viewed in their progress rather than in their completion.⁴

² The “frequentative” use of the imperfect expresses the repetition of an action or the habit of indulging in it.

³ Similar remarks can be found on pp. 49, 130, 143.

⁴ Interestingly, a similar debate about the connection between iterativity-habituality-genericity, on the one hand, and imperfective aspect (cf. the present stem in Ancient Greek), on the other, is occurring in general linguistics. For example, Comrie, 1976: 25 classifies habitual as a subdivision of imperfective. Bertinetto & Lenci, 2012 argue that habituals and generics belong to the class of “gnomic imperfectives”. Dik, 1997: 223–224, however, distinguishes imperfective aspect (a predicate operator) from habitual and iterative aspect (predication operators), although he mentions that the imperfective in some languages can get a habitual or iterative *interpretation*. Carlson, 2012 suggests that habituality should not be considered an aspect.

An indication that iterativity, habituality and genericity are not inherent meanings of the present and imperfect is the occurrence also of the aorist in such contexts, a fact recognized by the aforementioned reference grammars – although they do not seem to acknowledge that this use of the aorist is fundamentally at odds with the idea that iterativity, habituality and genericity are expressed by the present and imperfect. Examples of the aorist in such contexts are the so-called “gnomic” aorist, “empiric” aorist and “iterative” aorist:⁵

- (1) a. *pathòn dé te népios égnō*_{AOR}. (Hes. *Op.* 218)
 ‘A fool learns only when he has suffered’. (gnomic)
 b. *polloì pollákis meizónōn epithūmoúntes tà parónt’ apólesan*_{AOR}. (Dem. 23.113)
 ‘Many men often lost what they had in the desire for greater possessions’.
 (empiric)
 c. *hopóte prosblépsēi*_{AOR.OPT} *tinas tôn en taîs táxesi, tóte mèn eîpen*_{AOR} *án*. (Xen. *Cyr.* 7.1.10)
 ‘Every time he looked at some of the men in the lines, he would say . . .’. (iterative + *án*)

These examples show that the aorist is not incompatible with iterative, habitual and generic meanings. So, what sense does it make to explicitly state the existence of an iterative, habitual or generic meaning of the present and imperfect, if there also appears to be iterative, habitual and generic aorists?⁶

In this chapter, I argue that Kuhner and Gerth are right in adhering to a dissenting opinion: iterativity, habituality and genericity are *not* inherently expressed by the present indicative and imperfect. The iterative, habitual or generic interpretation of a clause is not dependent on the aspectual form of the verb, but it is always prompted either by other linguistic indications (e.g., the presence of a generic subject noun, special adverbial expressions or the particles *án* or ‘epic’ *te*) or by contextual information and general world knowledge. The flip side of this approach is that the

⁵ These aorist types are discussed by Goodwin, 1875: 54–56; Rijksbaron, 2006: 14–15, 31–33; Schwyzler & Debrunner, 1950: 278; Smyth, 1956: 408, 431, 529. The examples cited are taken from Smyth.

⁶ Other examples of the occurrence of the aorist in iterative expressions are the general (distributive-iterative) subjunctive + *án* and the iterative-distributive optative in conditional, temporal en relative subordinate clauses. In these syntactic constellations, the aorist aspect signals that the state of affairs referred to by subordinate clause is *anterior* to state of affairs of the main clause (e.g., Her. *Hist.* 1.194.4–5: *epeàn dè . . . apikōntai opisō es tous Armeniōus, álla trópōi tōi autōi poieúntai ploía* ‘When they have arrived in Armenia, they make other boats in the same way’), whereas present subjunctives and optatives signal that the state of affairs in the subordinate clause is *simultaneous* with the state of affairs of the main clause (e.g., *tóte gār pleísta kerdáinousin, hótan kakoū tinos apaggelthéntos tēi pólei tímion tôn sítōn pólōsin* ‘For they make most profit when at the announcement to the city of some disaster they sell corn at a high price’); see Rijksbaron, 2006: 70, 72–73, 82–83, 88–89.

present (i.e., imperfective aspect) and the aorist (i.e., perfective aspect) in iterative, habitual and generic expressions are not in any way “special” uses of their respective aspect forms. As I shall argue, the semantic contribution of the present and aorist aspect marking in these expressions is no different from their general meaning: the present aspect in iterative, habitual, or generic expressions is used to construe the event as unbounded within the temporal scope, while the aorist imposes a bounded construal on the event.

This general characterization of the semantics of the present and aorist aspects brings us to the cognitive linguistic notion of construal. A central tenet of the cognitive linguistic approach to semantics is that meaning is not something “objective”, involving a “God’s eye view”. In cognitive linguistics, meaning cannot be abstracted away from a concrete conceptualizer who is perceiving, evaluating and physically and emotionally interacting with the world and its inhabitants surrounding him or her. Semantic content implicitly or explicitly always involves a conceptualizing consciousness, an embodied subject of conception who “construes” the content in a certain way. Construal thus refers to “the relationship between a speaker (or hearer) and a situation that he conceptualizes and portrays” (Langacker, 1987: 487–488).

Humans are able to conceive and portray a situation in alternate ways: “People have the capacity to construe a scene by means of alternative images, so that the semantic value is not simply received from the objective situation at hand but instead is in large measure imposed on it” (Langacker, 1991: 35). The conventional meaning of an expression does not only evoke a certain “objective” conceptual content, it is also associated with the particular way in which a speaker *construes* the conceptual content. In the view of semantics taken by cognitive grammar, not only lexical elements but also grammatical elements are meaningful; that is, both lexical and grammatical elements represent a particular way of construing the conceptual content. Construal is never neutral: linguistic expressions always impose a way of construing the conceptual content.

Langacker (2008: 3) illustrates the notion of construal by a visual metaphor: “In viewing a scene, what we actually see depends on how closely we examine it, what we choose to look at, which elements we pay most attention to, and where we view it from”. These various aspects involved in observing a scene correspond to four broad types of construal phenomena: specificity, focusing, prominence and perspective. In section 3, I will go into the specific construal types and their relevance to aspectual semantics in more detail.

Construal is an embodied cognitive phenomenon. As Evans & Green (2006: 45) put it: “Our construal of reality is likely to be mediated in large measure by the nature of our bodies”. An embodied understanding of mind and language holds that conceptual structure is grounded in everyday bodily experiences, such as motion, perception, emotion and social interaction:

Thought is embodied, that is, the structures used to put together our conceptual systems grow out of bodily experience and make sense in terms of it; moreover, the core of our conceptual systems are directly grounded in perception, body movement, and experience of a physical and social character. (Lakoff, 1987: xiv)

The way in which humans bodily engage the world and interact with its inhabitants fundamentally shapes their minds, their knowledge, beliefs and understandings (both personal and culture-dependent) of the reality surrounding them. A speaker's construal of reality cannot be separated from his or her embodied viewpoint and that of his or her interlocutor.

The notion of construal also features in embodied simulation approaches to language comprehension. The central idea behind the embodied simulation view is that understanding language is based on a mental simulation that is grounded in the actual bodily experience of motion and perception. One of the prominent advocates of the embodied simulation view is the cognitive psychologist Rolf Zwaan. In his model of language comprehension – which shows some similarities to Langacker's cognitive grammar – construal is defined as “the mental simulation of an experience conveyed by an attentional frame” (Zwaan & Madden, 2005: 230). According to Zwaan, linguistic constructions (words, grammatical items) in an intonation unit (which he, following Langacker, equates with an attentional frame) activate experiential resources in the mind of the language comprehender that are used to construct a mental simulation of the situation.⁷

1.2 Iterativity, habituality and genericity in cognitive linguistics

Before we return to the role of construal operations, it is important to go somewhat further into the specifics of iterativity, habituality and genericity. In section 1, I have treated the semantic domain of iterativity, habituality and genericity more or less as a unitary category. Even though these notions share features, and precise boundaries between them may at times be difficult to draw, it is helpful to identify some of their

⁷ See also Zwaan, 2004. There is a growing body of empirical evidence supporting the presence of embodiment effects in language comprehension, e.g., motor simulation: Bergen & Wheeler, 2010; Glenberg & Kaschak 2002; Taylor & Zwaan, 2008; perceptual simulation: Yao, Belin & Scheepers, 2011; Zwaan et al., 2004; emotional simulation: Havas, Glenberg & Rinck, 2007. Helpful overviews of the research on embodiment and language comprehension are given by: Barsalou, 2010; Gibbs, 2005; Kaschak et al., 2014; Sanford & Emmott, 2013: 132–160. In Allan, *forthc. a* and *forthc. b*, I use Zwaan's embodied simulation model in an analysis of the linguistic and narratological aspects of immersive narrative.

distinctive semantic properties.⁸ Typical examples of iterative, habitual and generic expressions are the following sentences (from Langacker, 2000: 251):

- (2) a. Iterative: *My cat repeatedly stalked that bird.*
 b. Habitual: *My cat stalks that bird every morning.*
 c. Generic: *Cats stalk birds. Cats have four legs.*

Iteratives refer to events that are repeated on the same occasion (within one “scene”), each occurrence of which is anchored to a specific point in time, and they refer to events that are conceived of as actually occurring (or having occurred). Iteratives are therefore located, in the terminology of cognitive grammar, on the *actual plane*. Habituals instead involve repeated events on different occasions. They do not directly refer to actual event occurrences that are anchored to a specific point in time. Habituals express that the multiple occurrences of a certain event type are characteristic of the world’s structure during some period of time. Since they do not directly provide information about actually occurring events but about the structural dimension of the world, they designate events located on the *structural plane*. The structural plane “comprises event instances with no status in actuality. These instances are conceived merely for purposes of characterizing “how the world is made”. They have no existence outside the structural plane, which can be thought of metaphorically as “blueprints’ for the world’s structure” (Langacker, 2000: 251).

Like habituals, generic expressions do not designate actual occurrences of events anchored to specific moment in time but to events located on the structural plane. The difference between habituals and generics is that the former refer to individual instances (tokens) (“my cat”, “that bird”), while generics refer to types of entities (“cats”, “birds”). Another difference is that generics do not necessarily involve repeated events but may also be states (e.g., “cats have four legs”). The distinctive semantic features of iterativity, habituality and genericity are summarized in the following table:

Table 1. Iterativity, habituality genericity: semantic features.

	REPETITION	PLANE	SUBJECT
ITERATIVE	+	actual	instance
HABITUAL	+	structural	instance
GENERIC	+/-	structural	type

⁸ My discussion of iterativity, habituality and genericity mainly draws on Langacker’s Cognitive Grammar analysis. Alternative approaches are the contributions in Bertinetto & Lenci, 2012; Carlson & Pelletier, 1995; Carlson, 2012. Typological studies are Bybee, Perkins & Pagliuca, 1994 and Dahl, 1995.

1.3 Types of construal in cognitive linguistics

As we have seen in section one, Langacker distinguishes four general types of construal operations: *specificity*, *focusing*, *prominence*, and *perspective*. For my analysis of iterativity, habituality and genericity in Greek, the three latter of these four general types will be of special importance. The use of tense and aspect in iterative, habitual and generic statements can be explained by a combination of three more specific construal operations: (1) the mental ability to focus by selecting a particular portion of conceptual content for linguistic representation; more specifically, our ability to impose a “viewing frame” on a particular situation that either includes or excludes the boundaries of an event; (2) the ability to construe some aspects of an entity or situation as more prominent than others; more specifically, the capacity to construe a number of components as collectively constituting a higher order entity. In other words, to construe the whole as cognitively more prominent than the parts; and (3) the capacity to select alternative spatio-temporal vantage points from which a given situation is viewed and described.⁹

The first construal type relates to specificity. Although this construal type is not directly relevant to my analysis, I will briefly discuss it for the sake of completeness. This construal type relates to the level of precision and granularity with which a situation is portrayed. Expressions vary with respect to their degree of specificity, as in the following example, ranging from more schematic to more specific (from Langacker, 2008: 56):

Something happened. →

A person perceived a rodent. →

A girl saw a porcupine. →

An alert little girl wearing glasses caught a brief glimpse of a ferocious porcupine with sharp quills.

The second construal type is focusing. This dimension has to do with the speaker’s selection of conceptual content for linguistic presentation (while omitting other content) and also with the speaker’s choice to present some conceptual content as foreground and other content as background. An example of focusing relevant to this argument regards verbal aspect. Grammatical categories such as tense and aspect are not used to reflect reality in an objective way but are exploited by a speaker to impose a particular construal on the described situation. By using a present (i.e., imperfective) form or an aorist (i.e., perfective) form, a speaker imposes a temporal scope, a “viewing frame”, on the conceptual content expressed by the verb stem.

⁹ The following discussion of construal is based on Langacker, 2008: 55–89. Another very useful introduction to the cognitive linguistic concept of construal is given by Croft & Cruse, 2004: ch.3.

The temporal scope selects some portion of the event, which becomes the focus of attention; other portions are left out of focus. The present (imperfective) aspect imposes a limited scope on the event, a scope which excludes the initial and final boundaries of the event. The speaker “zooms in” to view the event from an internal viewpoint in its development. By contrast, the aorist (perfective) imposes a wider frame of view on the event to such an extent that it includes the boundaries of the event.¹⁰

This difference of construal can be illustrated by Figures 1.1 and 1.2:

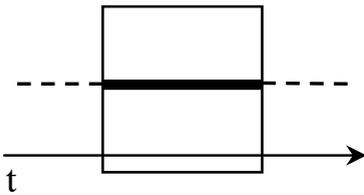


Figure 1.1: Present (imperfective) aspect: unbounded within temporal scope.

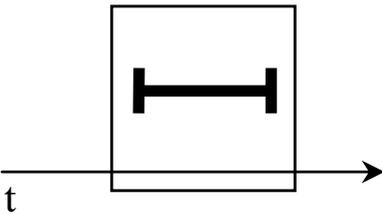


Figure 1.2: Aorist (perfective) aspect: bounded within temporal scope.

The straight horizontal lines are abstract representations of events. The boxes represent the temporal scope (“viewing frame”). The arrow labeled *t* stands for time. The portion of the total event that is located in the focus of view is indicated by a thick line. The dashes indicate that the boundaries of the situation are not specified as they are outside the scope of view. How long the event has been going on and how long the event will go on is left unspecified.¹¹

¹⁰ Note, however, that in the case of the ingressive aorist (*ebasileuse* ‘he became king’, *egélase* ‘he burst into laughter’), which only occurs with atelic verb stems (i.e., states or activities), only the *initial* boundary of the event is included in the scope of view.

¹¹ For the cognitive grammar account of verbal aspect I refer to Langacker, 1987: 258–262; 1991: 88; 2000: 222–229; 2008: 147–160. A cognitive linguistic analysis of ancient Greek aspect is given by Allan, 2017.

The third dimension of construal is prominence. This has to do with differences in cognitive salience between various elements of a conceptual content. An example of cognitive prominence that is relevant to the issue of iterativity, habituality and genericity, relates to our ability to construe a number of individual entities as constituting a collective, higher-order entity. The cognitive salience of this collective entity relative to the individual component entities may vary in degree, depending on the presence of particular linguistic elements and on pragmatic knowledge (Langacker, 1997: 199–200). This is illustrated by Figure 2 and the English examples (from Langacker, 1997: 200–201) given in (3).

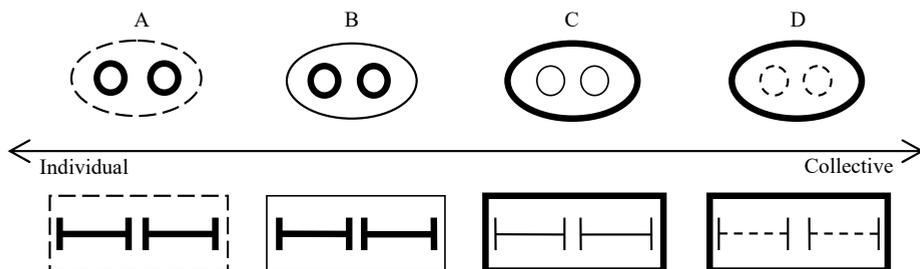


Figure 2: Construal of higher-order entities (Langacker, 1997: 200).

- (3) a. *The man and the woman are both very smart.* [column A]
 b. *That man and woman make an attractive couple.* [column B]
 c. *Peanut butter and jelly {are/ is} wonderful for sandwiches.* [column B/C]
 d. *He got three tons of {gravel/ ??pebbles} to pave his driveway.* [column C/D]

In example (3a), the presence of a word like *both*, the fact that each coordinated noun has its own article and the lexical semantics of the words *smart* evoke a construal as diagrammed in column A: the salience of the man and woman as distinct individuals is high (represented by the thick circles), while the conception of the man and woman as a collective entity is only slight (dashed oval shape). In (3b), the lack of an individual article and the lexical semantics of the word *couple* trigger a construal in which the collective entity acquires a certain degree of prominence, as represented by the continuous oval shape in column B. In (3c), the option of a singular verb form *is*, points to a construal as in column C, where the subject is construed as a single collective entity (thick oval shape) of which the individuality of the component entities (*peanut butter*, *jelly*) has become less salient. The use of the collective mass noun *gravel* in (d) is associated with column D. Here the conception of individual component pebble stones (dashed circles) is even more pushed to the background in favor of the conception of the collective entity.

A parallel scale can be observed in the construal of individual vs. higher-order events, represented in Figure 2 by the rectangular shapes in the lower row.

- (4) a. *Jack bought it and the next day Jill painted it.*
 b. *I should wash and dry the dishes.*
 c. *Sam kicked his dog several times.*
 d. *Sam kicked his dog for many years.* (From Langacker, 1997: 196, 201)

The two events in (4a) are construed as completely distinct, while the conception of them as forming a coherent entity is only tenuous. The events of washing and drying in (b) are construed as constituting a more prominent unity. Example (c) is an iterative sentence. The component events (every single time Sam kicked his dog) are construed as relatively less salient as compared to the higher-order iterative event. Example (d) describes a habitual event. Here, the component events are construed as minimally salient: in contrast to the components of an iterative event, the component entities of habitual events are not anchored to any specific point in time (Langacker, 1997: 202; 2002: 252).

The fourth and final dimension of construal concerns perspective, the overall relationship between the subject of conception (the “viewer”) and the object of conception (the situation being “viewed”). An important element of perspective is the vantage point, the actual location in space and time, from which a conceptualizer observes and describes a given situation. This construal operation is relevant to tense and aspect marking in ancient Greek. Typically, the imperfect will evoke an internal viewpoint on the state of affairs, while the aorist is used when a speaker views the state of affairs in its totality from a retrospective point of view.

We have seen that the use of tense and aspect in iterative, habitual and generic sentences crucially hinges on several construal operations: the ability to conceive of higher-order entities; the ability to impose a temporal scope on a particular event that either includes or excludes the event’s boundaries; and the capacity to view a given event from alternative vantage points. How these construal operations interact can be seen in Figures 3.1 and 3.2 (cf. Langacker, 2000: 249):

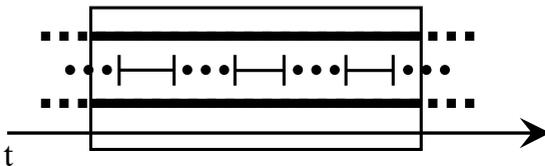


Figure 3.1: Higher-order imperfective: unbounded series of iterations.

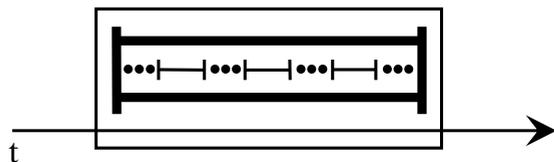


Figure 3.2: Higher-order perfective: bounded series of iterations.

Higher-order events consist of a number of component events. These component events are usually bounded, as indicated in Figures 3.1 and 3.2 by the H-like shapes (see also Figure 1.1). In this diagram, an arbitrary number of three component events are represented. However, the number of component events will often be indefinite, which is indicated by the dots between the H-shapes. The thick lines represent the construal of the component events as higher-order events. The rectangles indicate the temporal scope. The crucial distinction between (3a) and (3b) is that in the former the higher-order event (i.e., the series of iterations) is viewed from an external vantage point and construed as a bounded (perfective) entity, while in (3b) the higher-order event is viewed from an internal vantage point and construed as unbounded. In ancient Greek, tense and aspect choice in iterative, habitual and generic sentences can be shown to be directly linked to these alternative construal configurations.

1.4 Ancient Greek tense and aspect in iteratives, habituais and generics

The first case to be addressed concerns the alleged “iterative/habitual imperfect” that is so often mentioned in our handbooks. To illustrate this meaning of the imperfect, Rijksbaron (2006: 14) cites two examples (5), both of which can, in my view, straightforwardly be explained otherwise.

- (5) a. *etímēse dé min megálōs· kai gàr dôrá hoi anà pân étos edídou_{IMPRF} taúta tà Pérsēisi estí tīmíōtata, kai tēn Babulóná hoi édōke_{AOR} ateléa némeshthai mékhri tēs ekeínou zōēs, kai álla pollà epédōke_{AOR}.* (Her. Hist. 3.160.2)

‘Moreover, he (sc. Darius) gave him (Zopyrus) great honors; for not only did he give him every year those things which by the Persians are accounted the most honorable, but also granted him Babylon to rule free for tribute; so long as he should live; and he added many other gifts’.

- b. *epeidè dè tò paidíon egéneto hēmîn, hē métēr autò ethélazen_{IMPRF}· hína dè mé, hopóte lousthai déoi, kinduneúēi katà tēs kímakos katabainousa, egō mèn ánō diēitómēn, hai dè gunaíkes kátō. kai houtōs édē suneithisménon ên, hōste polláki hē gunē apéiei kátō katheudēsousa hōs tò paidíon, hína tòn titthòn autôi didōi kai mē boái.* (Lys. Erat. 9–10)

‘When the child was born to us, its mother suckled it; and in order that, each time that it had to be washed, she might avoid the risk of descending by the stairs, I used to live above, and the women below. By this time, it had become such a habitual thing that my wife would often leave me and go down to sleep with the child, so as to be able to give it the breast and stop its crying’.

The presence of the cyclic adverbial *anà pân étos* in (5a) cannot be used as decisive evidence that the imperfect here has a habitual meaning. This type of argument always cuts both ways. One might equally argue the opposite case, that it is actually the presence of the adverbial that evokes the habitual interpretation of the sentence, whereas the imperfect form conveys a different semantic value. In my view, the imperfect *edídou* does not of itself express habitual meaning. Instead, it serves to construe the series of annual gifts as an unbounded higher-order event (cf. Figure 3.1). In this context, a very common discourse-pragmatic factor may have played a role: the narrator wishes to present the series of annual gifts as a temporal frame within which the following events take place. This frame-instantiating function is in fact mentioned by Rijksbaron (2006: 11) as the imperfect’s main use in narrative: “Since the *imperfect* characterizes the state of affairs as ‘not-completed’ it creates a framework within which other states of affairs may occur, while the *aorist indicative* characterizes the state of affairs as ‘completed’, as a mere event”.

From a theoretical point of view (and that of Occam’s Razor), it is more parsimonious and so more attractive to explain the imperfect *edídou* as a case of the prototypical framework-creating use of the imperfect rather than to postulate that it is used with a special “iterative” meaning. The semantic effect of the imperfect form of *edídou*, the construal of the series of iterations as an unbounded higher-order event, can be represent by Figure 4:

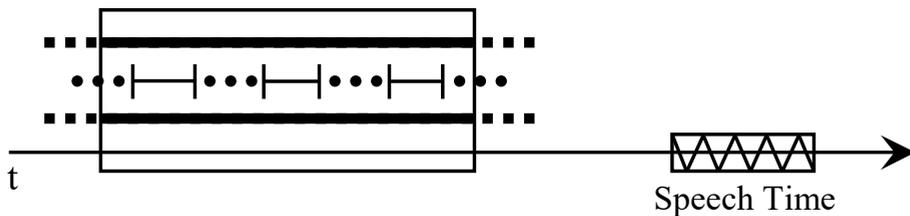


Figure 4: Imperfect: unbounded series of iterations.>

The series of iterations is unbounded within the temporal scope, represented by the rectangular box to the left. The box with squiggly lines to the right indicates the time of speaking.¹² As the imperfect is a past tense, the event is located in time prior to the time of speaking.

The imperfect *edidou* is followed by two aorists *édōke* and *epédōke*. The first aorist *édōke* is straightforward: it is a singular bounded event that does not function as a temporal frame for any subsequent events. The second aorist *epédōke* is more interesting. The direct object *álla pollá* makes it clear that we are, in fact, dealing with an iterative event. This time, however, it is not an imperfect but an aorist form: yet another indication that iterativity is not necessarily linked to the imperfect. But what does the aorist form do? The semantic effect of the aorist form of *epédōke* is that the series of repeated events is construed as a bounded, holistically viewed unity, as represented in Figure 5:

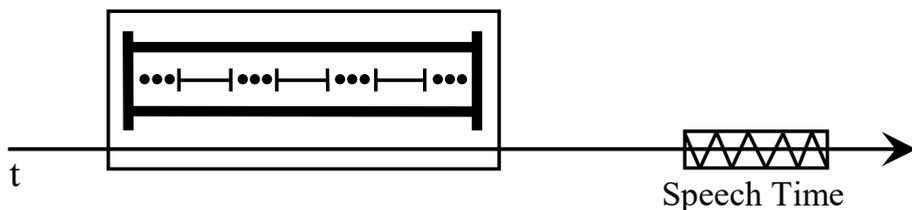


Figure 5: Aorist: bounded series of iterations.>

Again, a factor that plays a decisive role in the choice of aspect is discourse-pragmatics. Unlike *edidou* earlier, *epédōke* does not function as a framework for any following events and there is, therefore, no need to represent it from an internal viewpoint. It concludes the section about Zopyrus and the gifts he received from Darius. In the next sentence, the topic switches to Megabyzus, Zopyrus' son.

The second example of the “iterative/habitual” imperfect cited by Rijksbaron is (5b). In this case, too, it is unnecessary to ascribe the habitual reading to the imperfect *per se*. Here, knowledge of the world is enough to prompt the addressee to a habitual interpretation of *ethélazen*. Once the speaker, Euphiletus, has mentioned that he and his wife had a child, the hearer understands that the mother will not breastfeed the child only once, but will do so habitually. Instead, the imperfect serves a different,

¹² In cognitive grammar, the time of speech (acting as a reference point in tense marking) is not seen as punctual, as in many other linguistic theories, but, more realistically, seen as taking a brief time span, typically the length it takes to utter a finite clause; see Langacker, 2008: 158.

discourse-pragmatic purpose. The fact that the mother breastfeeds the child is construed by the speaker as an unbounded activity in order to present it as a temporal framework within which (and because of which) a number of subsequent actions take place: the women servants and the child move downstairs, and Euphiletus' wife often joins them to breastfeed the child.

It is worth noting that while the final boundary of *ethélazen* is left unspecified, its initial boundary is given in the syntactic context by the temporal subordinate clause (*epeidè dè tò paidíon egéneto_{AOR} hēmîn*). The aorist aspect of *egéneto* signals that the time of the subordinate clause is anterior to the time of the main clause (see Rijksbaron, 2006: 76). It appears that in such contexts, in which an activity or state is presented as starting immediately from a moment in time specified in the context, the imperfect (or, more generally, the imperfective present stem) can be used.¹³ Since the initial boundary of the event is already indicated explicitly in the syntactic context, there is no further need to express the boundedness of the event by means of an aorist form.¹⁴

Other illustrative examples showing that there is no exclusive link between iterativity and the imperfect form (and therefore no “iterative imperfect”) are the following minimal pairs from Xenophon:

- (6) a. *kai sumbalóntes tās aspídas eōthoúnto_{IMPRF}, emákhonto_{IMPRF}, apékteinon_{IMPRF}, apéthnēiskon_{IMPRF}. télos dè tōn Thēbaíōn hoi mèn diapíptousi pròs tòn Helikóna, polloì d' apokhōrountes apéthanon_{AOR}.* (Xen. HG. 4.3.19)
 ‘And setting shields against shields they shoved, fought, killed, and were killed. Finally, some of the Thebans broke through and reached Mount Helicon, but many were killed while making their way thither’.
- b. *allà takhù mèn ho Arkhídamos etétrōto tòn mērōn diampáx, takhù dè hoi makhómēnoi prò autoú apéthnēiskon_{IMPRF}, Poluainídas te kai Khílōn ho tèn adelphèn toú Arkhidámou ékhōn, kai hoi pántes dè autôn tóte apéthanon_{AOR} ouk élatton tōn triákonta.* (7.4.23)
 ‘But Archidamus speedily received a wound straight through his thigh and speedily those who fought in front of him kept falling, among them Polyaeidas and Chilon, who was married to the sister of Archidamus; and the whole number of them who fell at that time was not less than thirty’.

¹³ Cf. also Rijksbaron's, 2006: 17–18, “immediative imperfect”.

¹⁴ Note that the imperfect of activities and states (i.e., atelic states of affairs) is also commonly used in contexts that form a mirror-image, i.e., contexts that provide an explicit *final* boundary, e.g., by means of a *posterior* temporal subordinate clause: *autoi dè pálin tōi mèn pezōi ekhōroun dià tōn Sikelōn hēōs aphikonto es Katánēn* ‘The troops marched back through the territory of the Sicels until they reached Catana’ (Th. 6.62.3). The imperfect *ekhōroun* expresses that the activity continues until the moment in time referred to by the subordinate temporal clause.

In these two passages, an imperfect and an aorist occur at a short distance from one another. In (6b), the two verbs actually refer to the same event. All four verb forms refer to iterative events, i.e., to a series of killings. However, two are imperfects and two aorist forms. The interpretation of the four events as iterative is, obviously, not dependent on the imperfect form since the aorist forms equally designate iterative events. Instead, the iterative interpretation of all four events should be ascribed to the punctual lexical semantics of *apothnēiskō* (i.e., Aktionsart *achievement*) in combination with the plural subject. Since it is unlikely that a considerable number of people should die at exactly the same moment (except in the drastic case of a bomb explosion or plane crash), the reader will naturally interpret the plurality of the killings as an iterative *series* of deaths distributed over a certain time span.

The contrast between the imperfects and the aorists has to do with a difference in boundedness and viewpoint. In (6a), the series of imperfects *eōthoûnto*, *emákhonto*, *apékteinon*, and *apéthnēiskon* set up, by virtue of their unboundedness, an internal viewpoint with respect to the battle events. The events are viewed in their development (cf. Figure 4) and as occurring simultaneously. With aorist *apéthanon*, the narrator invokes a retrospective viewpoint from which he views the series of deaths in a holistic way as a bounded unity (cf. Figure 5). The sentence concludes the battle description and thereby the discourse segment. In a similar way, (6b) first takes an internal viewpoint on the battle. We plunge into the battle scene when Archidamus has already been wounded (pluperfect) and the men fighting in front of him are being killed, among whom are Polyxenidas and Archidamus' brother-in-law Chilon. The aorist refers to the same series of killings, but then from a retrospective vantage point, considering it in its completeness and comprising the total number of casualties.

It should be noted that the events referred to by *eōthoûnto*, *apékteinon* and *apéthnēiskon* can be interpreted as iterative but this interpretation is, again, not due to their imperfect form but to their punctual lexical Aktionsart (achievements) combined with a plural subject. The imperfect *emákhonto*, being lexically atelic (activity), does not allow an iterative reading. An additional argument against the idea of an iterative imperfect meaning is that it is theoretically more sound to explain every one of these imperfects in the same way, i.e., as indicating an internal viewpoint, than to say that the imperfect form of *eōthoûnto*, *apékteinon* and *apéthnēiskon* designates iterativity, while only the imperfect form of *emákhonto* is used to create an internal viewpoint. This methodological principle applies to many allegedly iterative imperfects which occur in a passage next to other imperfects. To give another example, it is more attractive to analyze the whole series of imperfects in *hē dē mákhē sphēōn ên_{IMPRF} ap' híppōn, dōratá te ephóreon_{IMPRF} megála, kai autoi êsan_{IMPRF} hippeúesthai agathoí* (Her. *Hist.* 1.79.3) ('They fought on horseback, they carried long spears and they were themselves good in horsemanship.') as marking the states of affairs as unbounded and thus temporally simultaneous ("framework") to the events of the main story line than to single out *ephóreon* from the series and explain it differently by referring to an "iterative meaning of the imperfect".

In other types of iterative/habitual expressions, aspect variation seems to have a different semantic effect. Consider, for example, the following examples of the imperfect and the aorist combined with the particle *án*.

- (7) a. *en mèn tōi téōs khrónōi, hósoi me pháskoien*_{PRS.OPT.} *deinòn eínai . . . éganáktoun*_{IMPRF}
án. (Lys. 7.12)
 ‘At that time, whenever people called me shrewd . . . I would be angry’.
- b. *hopóte prosblépsēi*_{AOR.OPT.} *tinas tōn en taís táxesi, tóte mèn eípen*_{AOR} *án*. (= ex. 1c).
 ‘Every time he looked at some of the men in the lines, he would say . . .’.

In these examples, the combination of a past tense form with the particle *án* expresses a iterative/habitual meaning. In this type of iterative construction, the aspectual marking is used to provide information about the individual constituent events, rather than about the whole series of iterations. The imperfect “zooms in” on the constituents and construes them as unbounded (Figure 6.1), whereas the aorist specifies that every component event is viewed as bounded (Figure 6.2).



Figure 6.1: unbounded component events.

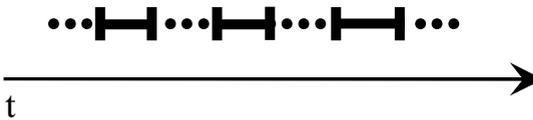


Figure 6.2: bounded component events.

The increased saliency of the constituent events is marked by the thickness of the lines. The dots indicate the indefinite iteration of the component events.

By way of digression, it is worthwhile to leave classical Greek briefly and turn to an intriguing verb formation in Homeric Greek involving an aorist stem combined with an iterative/habitual suffix *-sk-* and imperfect endings. This formation, too,

clearly shows that present aspect is not used to express iterativity or habituality. An example from Homer's description of the shield of Achilles is the following:¹⁵

- (8) *toîsi d' épeit' en khersî dépas meliédéos oînou*
dósken anèr epiôn: toî dè strépsaskon an' ógmous. (Hom. *Il.* 18.545–46)
 '[A] man would come forward and put a cup of honey-sweet wine in their hands:
 then they would turn back down the furrows'.

The complex morphological forms *dó-sk-en* and *strép-sa-sk-on* provide aspectual information on several hierarchically organized semantic levels: one semantic level has scope over the other. The hierarchical organization is iconically reflected in the order of morphemes. The aorist verb stems *do-* and *strepsa-* express that each of the individual component events (“giving a cup”, “turning back”) is in itself bounded; the suffix *-sk-* signals that each of these component events is iterated; and the imperfect endings, finally, express that the series of iterations as a whole is unbounded and thus viewed in its development. The narrator presents these iterative series of actions as unbounded for discourse-pragmatic purposes. In Homer's description of the images depicted on Achilles' shield, the imperfect is the most frequently used tense by far (Koopman, 2014: 94–95). The imperfects seem to suggest that the images depicted on Achilles' shield are “snapshots” capturing actions that have to be imagined as being in progress. In his book on the description of Achilles' shield, Becker (1995: 109) describes this effect of the imperfect in the following words: “The imperfect tense here could reflect the visual image: given its progressive aspect, the imperfect could represent the necessary incompleteness of a depicted action that is frozen in a metallic representation”. The special verbal formations *dósken* and *strépsaskon* show, once again, that the imperfect inflection does not in itself express iterativity or habituality (which is, after all, already expressed by the suffix *-sk-*) but, instead, it is used to construe, for discourse-pragmatic purposes, the series of iterated component events as unbounded.

I now turn to aspectual variation in generic expressions. Although the present is more frequently used in generic expressions, the aorist is certainly not uncommon. An example is the so-called “empiric” aorist; that is, the use of the aorist in combination with adverbs such as *aeí, édē, pollákis, oúpō, oúpote* in expressions referring to a fact of experience.¹⁶ These expressions have a generic meaning (in the case of a generic subject) or, at least, a very strong implication of generic (“gnomic”) validity, as in:

¹⁵ For more examples of this formation, see Chantraine, 1958: 323–325.

¹⁶ See Goodwin, 1875: § 156; Kühner & Gerth, 1898: 159, who do not distinguish the empiric from the gnomic aorist; Rijksbaron, 2006: 33; Smyth, 1956: 431. Most of our traditional grammars assume that the empiric aorist is the historical source of the gnomic aorist. For the gnomic aorist, see below.

- (9) a. *allà gàr athūmoûntes ándres oúpō trópaion éstēsan*_{AOR}. (Pl. Crit. 108c)
 ‘But faint-hearted men never set up a trophy yet’.
- b. *polloì pollákis meizónōn epithūmoûntes tà parónt’ apólesan*_{AOR}. (Dem. Orat. 23.113)
 ‘Many men often lost what they had in the desire for greater possessions’.

Formally, these expressions refer to past events. According to Rijksbaron (2006: 33), the empiric aorist is a type of constative aorist; that is, an aorist occurring in direct speech, which “usually indicates that the state of affairs is completed relative to the *moment of utterance* . . . the completion of the state of affairs is merely ascertained” (Rijksbaron, 2006: 28–29). From a retrospective viewpoint, the speaker oversees the past in its totality (i.e., the past as a whole is located within his or her viewing frame) and observes that some events have (or have never) occurred. Taken literally, the expressions only provide information about the past. The special effect of using an aorist past indicative – instead of, for example, a present tense – is to highlight that our knowledge of the general structure of the world is based on past experience. These constructions strongly imply that our past experience can be used as reliable evidence for the existence of the more structural characteristics of our world.

Tense and aspect variation in generic expressions can be insightfully analyzed by reference to the cognitive model already briefly discussed above, that is, the structured world model, which relates to the idea that the world has a stable structure or “blueprint” that specifies how the world is made. Our knowledge of the world’s structural dimension consists of generalizations based on the observation of actually occurring instances of a particular event type. Generic sentences do not refer to actual, incidental events (the *actual plane*) but to structural generalizations about the world’s essential nature (the *structural plane*). The generalizations may be like laws of nature or physical regularities (*Cats have four legs, Cats stalk birds*) or they may be established in social practice (*In the UK, cars drive on the left side of the road, A man proposes to a woman*). Since generalizations do not refer to actual events, they are virtual entities: they represent what is common to a number of actual events (Langacker, 2009: 197–198). The cognitive model structuring the conceptual content relevant to generic expressions is represented in Figure 7.

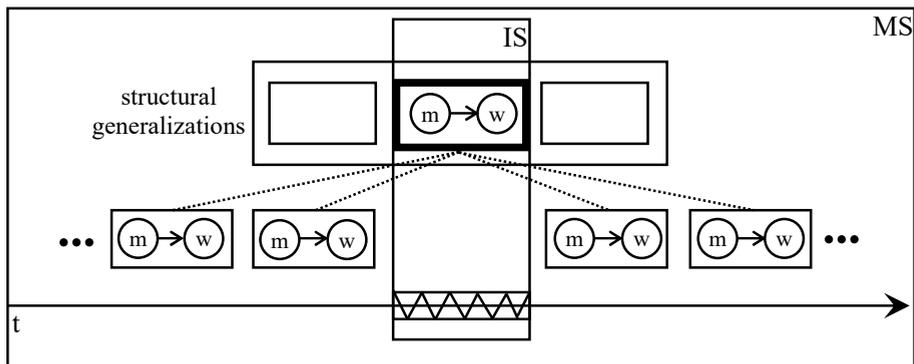


Figure 7: 'A man proposes to a woman' (Langacker, 2009: 198).

The conceptual content involved in generic expressions includes a number of elements. The abbreviation MS stands for “maximal scope”, which relates to the full extent of a conceptual structure evoked by a linguistic expression. IS stands for “immediate scope”: this is the portion within the totality of the conceptual structure that is focused on by a linguistic expression. Metaphorically speaking, it is the “onstage region” to which viewing attention is directed.¹⁷ Since we are dealing with matters of tense and aspect, the immediate scope can in this case be identified with the temporal scope. The rectangular shapes in the lower row, containing circles connected by an arrow represent actual events in which a man (m) proposes to a woman (w). These events can be located at particular moments in the past (depicted to the left of the speech event, the box with the squiggly lines in the middle of the time line *t*), but they can also be projected into the future (to the right of the speech event). The larger rectangle in the upper half of the diagram represents the structural plane, which contains structural generalizations on the basis of actual occurrences in the past (indicated by the two dotted lines connecting them to the actual past occurrences). Structural generalizations can, in turn, be used as a basis to predict the occurrence of actual events in the future (indicated by the two dotted lines towards the actual future events). Since the events on the structural plane are abstractions from actual events, they are not anchored to a specific temporal location.

The elements mentioned above are the standard components of the complete conceptual content evoked by a generic expression. However, these components are not always equally prominent in all generic expressions. In the end, it is the speaker who has the choice of construing one element as being more salient than another, or to view

¹⁷ For example, the word *elbow*, even though it only designates a particular part of the body, it also evokes the conception of the whole human body. In other words, the word *elbow* has the designated body part in its immediate scope, while it has the conception of the human body in its maximal scope.

the conceptual content form a particular perspective. Figure 7 is in fact a representation of the specific generic sentence *A man proposes to a woman*. This sentence features a present tense. In the diagram, this is indicated by the fact that the designated generic event (thick-lined rectangle) is located above (i.e., simultaneous with) the speech event. In a cognitive semantic approach to genericity as advocated here, this should not be analyzed as the “generic” or “timeless” meaning of the present tense. Instead, the reason why the speaker uses a present tense is a matter of construal: the speaker wishes to highlight the present validity of the generalization at issue and thus to stress its present relevance to his or her current communicative aims.

To return to the empiric aorist: In terms of construal, the use of the empiric aorist can now be analyzed as a way to focus on the past events, while the general validity that may be inferred from the occurrence of these past events is left implicit.

Another aorist occurring in generic sentences is the “gnomic” or “generic” aorist. Perhaps the most puzzling property of the gnomic aorist is that it is, despite its apparently past form (augment and secondary endings), in fact (equivalent to) a present tense. This is not only shown by its alternation with the present tense in one and the same passage (especially similes) but also by the fact that subordinate clauses depending on it feature a subjunctive (instead of an optative). Kühner & Gerth (1898: 160) explain this present by stating that “its main emphasis (lies) on its practical use for the present or the future [das Hauptgewicht [liegt] auf der Nutzenanwendung für die Gegenwart oder Zukunft]”. In other words, generic events are construed by the speaker as somehow presently relevant. The clash between the morphologically past tense form and its present-oriented meaning was possibly not felt as very strong, since gnomic aorists do not refer to events that are actually occurring simultaneously to speech time, but to virtual events which by definition are not anchored to a particular moment in time but merely construed by the speaker as being presently relevant.

One of the ways in which the past tense form can be explained historically is by assuming that the gnomic aorist has evolved from the empiric aorist (for this explanation, see Goodwin, 1889: § 156; Rijksbaron, 2006: 33; Smyth, 1956: 431). With the empiric aorist, the present validity of the generalization is still only an implicature, while in the gnomic aorist the present validity has conventionalized and become part of the inherent semantics. In other words, the historical development from empirical to gnomic aorist can be analyzed as an instance of the very common diachronic process of the semanticization of erstwhile pragmatic implicatures.

This is not the place to review the considerable body of scholarly literature on the intriguing phenomenon of the gnomic aorist. Instead, we can focus on one particular issue relating to the gnomic aorist: the semantic effect of the aorist marking. Cross-linguistically, it is rare to find perfective aspect forms in generic expressions. In a typological study of generics, however, Östen Dahl (1995: 420) has found a number of Slavic languages in which perfectives appear in generic sentences. In these languages, perfective forms are used in opposition to imperfective forms and, according to Dahl, the opposition perfective vs. imperfective in generics expresses the

same aspectual distinction as in the rest of the aspectual system. The same situation seems to apply to the variation of present and (gnomic) aorist forms in ancient Greek generic expressions. The alternation between present indicative and gnomic aorist in generic expressions, once again, shows that it makes no sense to distinguish a separate “generic present” and a “generic aorist”. Neither the present nor the aorist form expresses genericity; rather, they show their general semantic value, that is, they construe the event as unbounded or bounded, respectively. This can be neatly observed in Homeric similes; for example,

- (10) *hōs d' hót' apò skopiês eíden_{AOR} néphos aipólos anēr*
erkhómenon katà pónton hupò Zephúroio iōês·
tôi dé t' áneuthen eónti melántonon eúte píssa
pháinet'_{PRS} iòn katà pónton, ágei_{PRS} dé te laílapa pollén·
rhígēsén_{AOR} te idón, hupó te spéos élase_{AOR} mēla·
toíai . . . (Hom. Il. 4.275–80)

‘As from some high point a goat-herd sees a cloud coming over the sea at the west wind’s blast: to his eyes in the distance it shows black as pitch as it crosses the sea, and it brings a great storm with it: and he shivers at the sight and drives his flock into a cave’s shelter – so . . .’.

Similes do not describe structural patterns in a direct way by explicitly referring to multiple occurrences. Instead, they depict one single scene (often with a singular protagonist: ‘a lion’, ‘a man’) that is used as an arbitrary instance to stand for a plurality of occurrences, a general pattern. The generic validity of the events is clear from the presence of a generic subject *aipólos anēr* (‘a goatherd’) and “epic” *te*. This means that aspect morphology is “free” to be used for other purposes. More specifically, present and aorist forms – through their difference vis-à-vis boundedness – are used to view the events either from an internal viewpoint as they are evolving, or as completed. The first aorist *eíden* is ingressive (it designates the initial boundary of the state of seeing): the goatherd discerns a cloud coming over the sea. He notices that the cloud looks (*pháinet'*) black as pitch and that it brings (*ágei*) a storm with it. These two presents construe the two events from an internal viewpoint: they are occurring while the goatherd is viewing them. The two following aorists, *rhígēsén* (‘starts to shiver’ or ‘shivers (once)’) and *élase* (‘drives’), designate completed, sequential events.¹⁸ In a similar way, in proverbial expressions (*gnômai*) such as *pathôn dé te nēpios égnō_{AOR}*, the aorist is used to mark the boundedness of the event: the fool’s mental change

¹⁸ A very similar analysis of aspectual variation in similes can be found in Mackay, 1988.

subsequent to his suffering involves a transition from a state of ignorance to one of knowledge.¹⁹

Apart from present and aorist indicatives, we also find other tenses in generic expressions. For example, the imperfect can be used in generic expressions to discard the speaker's present vantage point and thus to disregard the present relevance of the generic sentence. In such cases, the imperfect serves to present the generic state of affairs from a viewpoint in the past when the generic state of affairs was relevant to a particular character. In narratological terms, we are dealing with character focalization.²⁰

- (11) a. *éntha diatméxas tàs mèn Krétēi epélassen, hēkhi Kúdōnes énaion_{IMPRF} Iardánou amphì rhéethra.* (Hom. *Od.* 3.292)
 'He (sc. Zeus) split their ships in two: some of them he drove to Crete, to where the Cydonians were living around the streams of the Iardanos'.
 b. *all' én_{IMPRF} ekeinē g', éphē, antístrophos tēs gumnastikēs, ei mémnēsai.* (Pl. *Rep.* 522a)
 "No", he said, "it (sc. music) was the counterpart of gymnastics, if you remember".

In (11a), the permanent state of affairs that the Cydonians live in a certain place on Crete is viewed from the particular moment in time at which Zeus sends some of Menelaus's ships to Cydonia. In (11b), Socrates disregards the fact that music is *always* a counterpart of gymnastic in order to transfer his interlocutor mentally to the earlier moment of their discussion when this point was at issue.²¹

Generic expressions, finally, may also feature a future tense. For example,

- (12) a. *óρθrou dè genoménou loúntai kai amphóteroi: ággeos gàr oudenòs hápsontai_{FUT} prìn àn loúsōntai.* (Her. *Hist.* 1.198)
 'And when it is morning they wash themselves, both of them, for they will touch no vessel until they have washed themselves'.
 b. *phamèn dè dē hótī ho epieikēs anēr tōi epieikeī, hoûper kai hetaîrós estin, tò tethnánai ou deinòn hēgēsetai_{FUT}.* (Pl. *Rep.* 387d)

¹⁹ In Allan, 2016 I discuss in more detail the issues regarding tense, aspect and the augment of the gnomic aorist.

²⁰ Cf. Kühner & Gerth (1898: 145): "The speaker disregards the continuation of the action into the present, and transfers himself to the moment in the past in which he perceived the action or in which the action was discussed [der Redende nimmt alsdann keine Rücksicht auf das Fortbestehen der Handlung in der Gegenwart, sondern versetzt sich in den Zeitpunkt der Vergangenheit zurück, in welchem er dieselbe erkannt oder von ihr die Rede war]". More examples of this use of the imperfect are given by Kühner & Gerth, 1898: 145–146. For an analysis of this imperfect in terms of character focalization, see Rijksbaron, 2012.

²¹ I.e., 410a–412a. See also Duhoux, 2000: 364.

‘We say that a decent man will not think that death is a terrible thing for another decent man whose friend he is’.²²

The future tense serves to emphasize the predictive aspect of generics: our knowledge of the structural dimension of the world allows us to predict the occurrence of certain events in the future.²³

1.5 Conclusion: Construal and embodiment

Labels such as “iterative/habitual imperfect”, “iterative aorist”, “generic present”, “generic/gnomic aorist”, “gnomic perfect” and “gnomic future”, so often found in our reference grammars, are misleading as they suggest that these are inherent meanings of the tense and aspect forms. As I have argued, the iterative, habitual or generic interpretation of a particular expression should not be ascribed to the primary indicative form (as a marker of the present tense) nor to the present stem as a whole (as a marker of imperfective aspect), but to other factors: either to explicit linguistic elements in the syntagmatic context (such as adverbs, generic subject or object, “epic *te*”, or the iterative suffix *-sk-*) or to pragmatic knowledge of the world. This means that upon closer inspection the semantic effect of tense and aspect in iterative, habitual and generic expressions is in accordance with the general meaning of the Greek tenses and aspects.

A central notion in cognitive linguistic theory is the construal, which pertains to the idea that a speaker is able to conceptualize a given situation in alternative ways by means of alternative linguistic expressions. In the case of the semantic domain of iterativity, habituality and genericity, a number of construal operations are relevant: the capacity to construe a plurality of individual events as a collective higher-order event, the capacity to construe a state of affairs as bounded or unbounded, and the capacity to view and describe a given state of affairs from alternative vantage points. In ancient Greek, tense (primary vs. secondary indicative) and aspect (present vs. aorist stem) morphology is not used to express iterativity, habituality or genericity, as is often assumed, but to construe a state of affairs in alternate ways.

Embodiment is of key importance to such topics as conceptual metaphor, prototype and polysemy, image schemas, deixis, perspective, cognitive scripts, usage-based approaches to language, and mental simulation in language understanding.

²² More examples can be found in Goodwin, 1875: 19; Kühner & Gerth, 1898: 171–172; Smyth, 1956: 428; Stahl, 1907: 141.

²³ Often, an implicit condition is present that enables the occurrence of the event at issue. For example, in (b), the subject *ho epieikês anêr* is equal to a condition ‘if a man is decent’. Thus, the use of the future in generic sentences can be compared to the future in apodoseis.

Considerable linguistic work has already been done on ancient Greek from an embodied perspective (although not always explicitly using the term “embodiment”). To name only a few examples: Allan (2003) (usage-based approach, prototype, polysemy and the middle voice), Bakker (1997; 2005) (tense-aspect, deixis, discourse structure, visualization and memory), Bonifazi (2012) (deixis, discourse markers and their role in visualization and memory), Luraghi (2003) (usage-based approach, metaphor in case and prepositional semantics), Martínez Vázquez & Jiménez Delgado (2008) (metaphor in the verbal lexicon). To this wide variety of linguistic topics that are in one way or another connected to embodiment we may add the notion of construal. Construal is an important element of a cognitive approach to semantics. It revolves around the important observation that linguistic meaning always incorporates the embodied viewpoint of a conceptualizing (speaking or hearing) subject. Construal is of pervasive importance to lexical semantics (e.g., subjective-evaluative vocabulary, modals), grammar (e.g., tense, aspect, mood, and voice), and discourse-pragmatic meaning (e.g., topic and focus assignment, discourse structure). Recognizing the significant role of construal operations in semantics and pragmatics may help us to insightfully explain many still elusive aspects of the ancient Greek lexicon and grammar.

Bibliography

- Allan, R. J. (2003). *The Middle Voice in Ancient Greek: A Study in Polysemy*. Amsterdam: Gieben.
- Allan, R. J. (2016). Tense and Aspect in Classical Greek: Two Historical Developments. Augment and Perfect. In S. Runge & C. J. Fresch (Eds), *The Greek Verb Revisited. A Fresh Approach for Biblical Exegesis* (pp. 81–121). Bellingham: Lexham Press.
- Allan, R. J. (2017). The Imperfect Unbound: A Cognitive Linguistic Approach to Greek Aspect. In K. Bentein, M. Janse & J. Soltic (Eds), *Language Variation and Change: Tense, Aspect and Modality in Ancient Greek* (pp. 100–130). Leiden: Brill.
- Allan, R. J. (forthc. a). Narrative Immersion: Some linguistic and narratological aspects. In J. Grethlein & L. Huitink (Eds), *Narrative and Experience*. Berlin: Mouton de Gruyter.
- Allan, R. J. (forthc. b). Construal and Immersion: A cognitive Linguistic Approach to Homeric Immersivity. In P. Meineck (Ed), *The Routledge Handbook of Classics and Cognitive Theory*. London: Routledge.
- Bakker, E. J. (1997). *Poetry in Speech: Orality and Homeric Discourse*. Ithaca: Cornell University Press.
- Bakker, E. J. (2005). *Pointing at the Past: From Formula to Performance in Homeric Poetics*. Washington, DC/Cambridge, MA: Center for Hellenic Studies.
- Barsalou, L. W. (2010). Grounded cognition: Past, present, and future. *Topics in Cognitive Science*, 2, 716–27.
- Becker, A. S. (1995). *The Shield of Achilles and the Poetics of Ekphrasis*. Lanham: Rowman & Littlefield Publishers.
- Bergen, B. & Wheeler, K. (2010). Grammatical aspect and mental simulation. *Brain & Language*, 112, 150–158.
- Bertinetto, P. M. & Lenci, A. (2012). Habituality, Pluractionality, and Imperfectivity. In R. I. Binnick (Ed), *The Oxford Handbook of Tense and Aspect* (pp. 954–880). Oxford: Oxford University Press.

- Bonifazi, A. (2012). *Homer's Versicolored Fabric: The Evocative Power of Ancient Greek Epic Wordmaking*. Washington, DC/Cambridge, MA: Center for Hellenic Studies.
- Bybee, J., Perkins, R. & Pagliuca, W. (1994). *The Evolution of Grammar*. Chicago: The University of Chicago Press.
- Carlson, G. (2012). Habitual and Generic Aspect. In R. I. Binnick (Ed), *The Oxford Handbook of Tense and Aspect* (pp. 828–851). Oxford: Oxford University Press.
- Carlson, G. N. & Pelletier, F. J. (Eds). (1995). *The Generic Book*. Chicago: The University of Chicago Press.
- Chantraine, P. (1958). *Grammaire Homérique, I: Phonétique et morphologie*. Paris: Éditions Klincksieck.
- Comrie, B. (1976). *Aspect*. Cambridge: Cambridge University Press.
- Croft, W. & Cruse, A. D. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Dahl, Ö. (1995). The Marking of the Episodic/Generic Distinction in Tense-Aspect Systems. In G. N. Carlson & F. J. Pelletier (Eds), *The Generic Book* (pp. 412–425). Chicago: The University of Chicago Press.
- Dik, S. C. (1997). *The Theory of Functional Grammar. Part 1: The Structure of the Clause*. Second, revised edition. Berlin: Mouton de Gruyter.
- Duhoux, Y. (2000). *Le verbe grec ancien: Éléments de morphologie et de syntaxe historiques*. Louvain-la-Neuve: Peeters.
- Gibbs, Jr., R. W. (2005). *Embodiment and Cognitive Science*. Cambridge: Cambridge University Press.
- Glenberg, A. M. & Kaschak, M. P. (2002). Grounding language in action. *Psychonomic Bulletin & Review*, 9, 558–565.
- Goodwin, W. W. (1889). *Syntax of the Moods & Tenses of the Greek Verb*. London: Macmillan.
- Evans, V. & Green, M. (2006). *Cognitive Linguistics: An Introduction*. Edinburgh: Edinburgh University Press.
- Havas, D. A., Glenberg, A. M. & Rinck, M. (2007). Emotion simulation during language comprehension. *Psychonomic Bulletin & Review*, 14, 436–41.
- Kaschak, M. P., Jones, J. L., Carranza, J. & Fox, M. R. (2014). Embodiment and Language Comprehension. In L. Shapiro (Ed), *The Routledge Handbook of Embodied Cognition* (pp. 118–126). London: Routledge.
- Koopman, N. (2014) *Ancient Greek Ekphrasis: Between Description and Narration*. Unpubl. diss. University of Amsterdam.
- Kühner, R. & Gerth, B. (1898). *Ausführliche Grammatik der griechischen Sprache. 2. Teil: Satzlehre. 1. Band*. Hanover: Hahnsche Buchhandlung.
- Lakoff, G. (1987) *Women, Fire, and Dangerous Things. What Categories Reveal about the Mind*. Chicago: The University of Chicago Press.
- Langacker, R. W. (1987). *Foundations of Cognitive Grammar, Vol. I: Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, R. W. (1991). *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.
- Langacker, R.W. (1997). Generics and Habituals. In A. Athanasiadou & R. Dirven (Eds), *On Conditionals Again* (pp. 191–222). Amsterdam: John Benjamins.
- Langacker, R. W. (2000). *Grammar and Conceptualization*. Berlin: Mouton de Gruyter.
- Langacker, R. W. (2008). *Cognitive Grammar: A Basic Introduction*. Oxford: Oxford University Press.
- Langacker, R. W. (2009). *Investigations in Cognitive Grammar*. Berlin: Mouton de Gruyter.
- Luraghi, S. (2003). *On the Meaning of Prepositions and Cases: The Expression of Semantic Roles in Ancient Greek*. Amsterdam: John Benjamins.
- Martínez Vázquez, R. & Jiménez Delgado, J. M. (2008). *Metáfora conceptual y verbo griego antiguo*. Zaragoza: Libros Pórtico.

- McKay, K. L. (1988). Aspectual Usage in Timeless Contexts in Ancient Greek. In A. Rijksbaron, H. A. Mulder & G. Wakker (Eds), *In the Footsteps of Raphael Kühner: Proceedings of the International Colloquium in Commemoration of the 150th Anniversary of the Publication of Raphael Kühner's Ausführliche Grammatik der griechischen Sprache, II. Theil: Syntaxe* (pp. 193–208). Amsterdam: Gieben.
- Napoli, M. (2006). *Aspect and Actionality in Homeric Greek: A Contrastive Analysis*. Milan: FrancoAngeli.
- Rijksbaron, A. (2006). *The Syntax and Semantics of the Verb in Classical Greek. An Introduction. Third Edition*. Chicago: The University of Chicago Press.
- Rijksbaron, A., (2012). The imperfect as the tense of Substitutionary Perception. In P. da Cunha Corrêa et al. (Eds), *Hyperboreans. Essays in Greek and Latin Poetry, Philosophy, Rhetoric and Linguistics*. São Paulo, 331-377.
- Sanford, A. J. & Emmott, C. (2013). *Mind, Brain and Narrative*. Cambridge: Cambridge University Press.
- Schwyzler, E. & Debrunner, A. (1950). *Griechische Grammatik, 2. Band*. Munich: C. H. Beck.
- Smyth, H. W. (1956). *Greek Grammar, revised by Gordon M. Messing*. Harvard: Harvard University Press.
- Stahl, J. M. (1907). *Kritisch-historische Syntax des griechischen Verbums der klassischen Zeit*. Heidelberg: Carl Winter.
- Taylor, L. J. & R. A. Zwaan (2008). Motor Resonance and Linguistic Focus. *Quarterly Journal of Experimental Psychology*, 61, 896–904.
- Yao, B., Belin, P. & Scheepers, C. (2011). Silent reading of direct versus indirect speech activates voice-selective areas in the auditory cortex. *Journal of Cognitive Neuroscience*, 23, 3146–3152.
- Zwaan, R. A. (2004). The Immersed Experiencer: Toward an Embodied Theory of Language Comprehension. In B. H. Ross (Ed), *The Psychology of Learning and Motivation* 44 (pp. 35–62). New York: Academic Press.
- Zwaan, R. A., Madden, C. J., Yaxley, R. H. & Aveyard, M. E. (2004). Language comprehenders mentally represent the shape of objects. *Psychological Science* 13, 168–171.
- Zwaan, R. A. & Madden, C. J. (2005). Embodied Sentence Comprehension. In D. Pecher & R. A. Zwaan (Eds), *Grounding Cognition: The Role of Perception and action in memory, language, and Thinking* (pp. 224–245). Cambridge: Cambridge University Press.