3. Grammatical classes

As already discussed in Chapter 2, in Cognitive Grammar a linguistic meaning is identified with a construal, i.e. a mental representation of a thing, a person, an event, etc. denoted by the word or the expression. This is worth bearing in mind, because a number of grammatical phenomena are straightforward consequences of the way we construe things and events in our minds. In this chapter we will harness the notion of construal to solve one recalcitrant problem in virtually all grammars: the definition of grammatical classes.

3.1. Traditional grammatical classes

Undoubtedly, words in a language fall into different categories: words are similar to each other and different from other words with respect to meaning, form, and grammatical behavior. For instance, in English one can propose a category of words which denote things and living organisms. These words have singular and plural variants, the latter being formed by adding the suffix *-s*, like in *cat-cats*. The words differ in these respects from words denoting actions which may take the *-ing* suffix, like *eat-eating*. The technical term for such categories of words are **grammatical classes**, also known as parts of speech. While the details of the definitions, classifications, and even the number of classes vary across theories, a popular traditional typology includes:

Grammatical class	Examples
'nouns'	*cat*, *democracy*, *redness*
'verbs'	*to run*, *to kick*, *to know*
'adjectives'	*big*, *red*, *disgusting*
'adverbs'	*noisily*, *nearly*, *always*
'prepositions'	*in*, *towards*
'pronouns'	*I*, *her*
'conjunctions'	*and*, *but*

Table 1. Traditional grammatical classes

In most cases, intuitive judgments of speakers familiar with the definitions of basic grammatical concepts are enough to classify words into one of these categories. Nevertheless, after a closer look it turns out that most traditional classifications create surprising and unexpected problems. Firstly, some words do not fit nicely into one of above categories or appear to be on the borderline between two of them. For example, words like *three* or *the* do not appear to fall into any of the above classes. Problems of this sort are not fatal and they are usually solved by creating additional grammatical classes like 'numerals' and 'articles.' However, words like *written* or *regulated* appear to be somewhere between adjectives and verbs. While it is possible to make yet another category for these problematic words (they are traditionally classified as 'participles'), this solution looks like merely creating yet another label without explaining how these words are related to other types. Secondly, it is not always obvious

how to define the classes. Traditional semantic definitions, which attempt to point out similarities in meanings of words, are imperfect, because nouns, verbs, adjectives, and adverbs are very varied semantically. For instance, a noun can refer to a physical object (e.g. *chair*), a person (e.g. *teacher*), an abstract idea (e.g. *number*), a place (e.g. *Great Britain*), a property of an object (e.g. *redness*), nothing (e.g. *nothingness*), etc. Similarly, a verb can refer to an action (e.g. *to kick*), an event (e.g. *to rain*), a state (e.g. *to sit*), a perceptual or mental experience (e.g. *to hear*, *to seem*), etc. Moreover, it is not clear how the nouns like *regulation* differ from verbs like *to regulate*, both of which appear to refer to an action. At the end of the day, traditional definitions based on meaning and relying on some sort of enumeration of possible referents turn out to offer open-ended lists of referents without explaining the similarities between the members of one class. This, of course, undermines the whole endeavor of defining grammatical classes in terms of similarities between the members of one class.

One solution to the problem is to propose formal rather than semantic definitions of classes. In formal definitions classes are characterized not in terms of similarities in meaning between the members, but similarities in formal properties. More specifically, a word is classified as a noun when it appears within a sentence in a position that can be taken by other nouns (e.g. the grammatical subject) or when it accepts affixes taken by nouns (e.g. the plural ending -*s* in English). Formal classifications steer clear of the problems of semantic classifications (simply because the meanings of words are not taken into account), but suffer from problem of their own. For the lack of space, we are not going to go into a detailed discussion on the shortcomings of formal definitions, but let us just note that they do not explain the impression that words like *to regulate*, *regulation*, and *regulated* are closely related not only in form, but also in meaning. Unless the definitions are further qualified, the three word are judged to be entirely different members of separate grammatical classes. While this may be true if we only pay attention to the form of these words, this conclusion does not do justice to the impression that the words are closely related to each other semantically. Also, as we will see in the following section, it is sometimes the case that words that "look" like members of one grammatical class "behave" in a sentence like members of a different class> Moreover, speakers may have strong intuition that their meanings match the meaning of a different class.

3.2. Grammatical classes in Cognitive Grammar

Cognitive Grammar tackles these problems by proposing a functional rather than a formal classification. In functional classifications it is more important what a word "does" in a sentence rather than what phonological form it has. The theory assumes that the main "job" of a word in s sentence is to express a meaning in a certain way and therefore if a word is used to express a concept of a thing, the word is a noun regardless of what it looks like. Since speakers can use words in novel, creative, and unconventional ways, this type of classification must admit a fair degree of flexibility. In general, cognitive grammarians do not view grammatical classes as rigid cut-and-dry categories for pigeonholing words. Instead, the grammatical status of a word is determined primarily by means of the construal associated with it. For this reason, in the CG framework it is better to talk about "nominal construal," "verbal construal," "adjectival construal," etc. rather than "nouns," "verbs," "adjectives," etc. Construal is dynamic and flexible in nature, so the classification of a word may vary depending on

the context in which it is used. Langacker (2008, 102) illustrates this point with various senses of the word *yellow*, reproduced here in (1).[3]

(1)(a) **Yellow** *is a nice color.*
   (b) *This* **yellow** *would look good in our kitchen.*
   (c) *There's a lot of* **yellow** *in this painting.*
   (d) *The ball is* **yellow**.
   (e) *Gradually the paper* **yellowed**.
   (f) *The gold shone* **yellow**.

Even though *yellow* is most readily thought of as an adjective, (1d) is the only sentence in which the word can be reasonably classified in this way. In (1a)-(1c) *yellow* functions as a noun. This would have to be admitted even by the proponents of formal classification, since in the sentences the word occupies the "slot" reserved for nouns: it is a grammatical subject in (1a) and (1b), it is modified by *this* in (1b) and appears after *of* in the *a lot of* construction. In (1e) *yellow* functions as a verb (it takes the verbal past tense suffix *-ed*) and in (1f) as an adverbs modifying the verb *to shine*. This variety of senses may be problematic for grammarians who would like to view grammatical classes to be rigid and mutually exclusive categories. A cognitive grammarian, however, may simply argue that in each of the sentences in (1) the construals behind *yellow* are slightly different, which results in slightly different grammatical functions and, consequently, different classifications. Let us take a closer look at the details.

3.2.1. Nominal profiles

Whenever we want to characterize a construal, it is necessary to specify what is the profile and what is the base against which the profile "stands out." In the case of things, the crucial cognitive capacity that gives rise to the nominal profile is the so-called **mental grouping**. Thanks to this ability we are able to perceive structures and patterns in a mass of complex data. The most straightforward illustration is mental grouping in visual input. Take a look at Figure 3.1. The chessboard in the top left corner of the diagram represents "raw" unprocessed visual data with no mental grouping. The viewer may wish to "highlight" particular portions of the chessboard in various ways. For instance, one can focus on the fields along the one of the diagonals and to perceive them together as one sequence (the top middle chessboard). Alternatively, one may focus on fields in a column or a row (top right and bottom left chessboards). It is also possible to focus attention on one particular field (bottom middle) or the L-shaped pattern similar to the movement of the knight in chess (bottom right). These five arrangements are the results of five different ways of mental grouping, i.e. the process of imposing patterns on the original visual data. It is possible to "switch" between the groupings instantaneously – you can probably quickly shift you attention from a column to a row. Yet typically when we focus on one pattern, we tend to lose sight on another – it is impossible to focus on a column and a row at the same time. If we wished to describe Figure 3.1 in CG terms, we could say that the chessboards correspond to different construal arising from imposing different profiles (the thick red frames) on the same base (the chessboard). Obviously, in Cognitive Grammar not all construals are visual in nature,

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[3]   (1f) does not appear in Langacker's discussion.

but mental grouping may also operate on more abstract concepts. For instance, the already mentioned word *democracy* denoted a mental grouping of abstract ideas rather than visible objects. Yet in an important sense, the ideas known as democracy form a mental grouping of a particular sort somewhat like the patterns of fields in Figure 3.1.
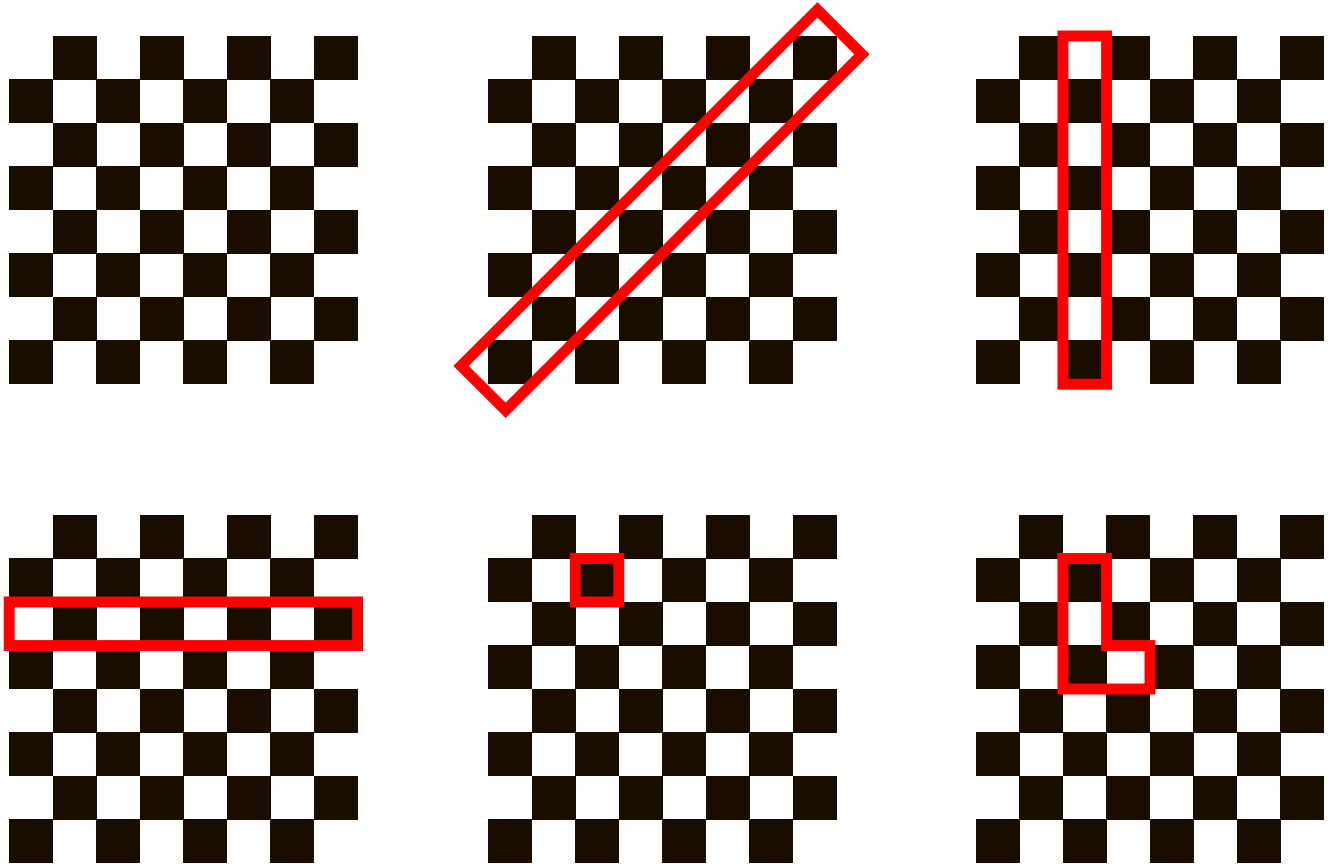

Figure 3.1: Various mental groupings of chessboard fields

Returning to our examples, in (1a) the base for the construal in the color space, which can be thought of as a mental representation of all colors recognized by the conceptualizer. In Figure 3.2, the color space is presented in a simplified form as a color spectrum.
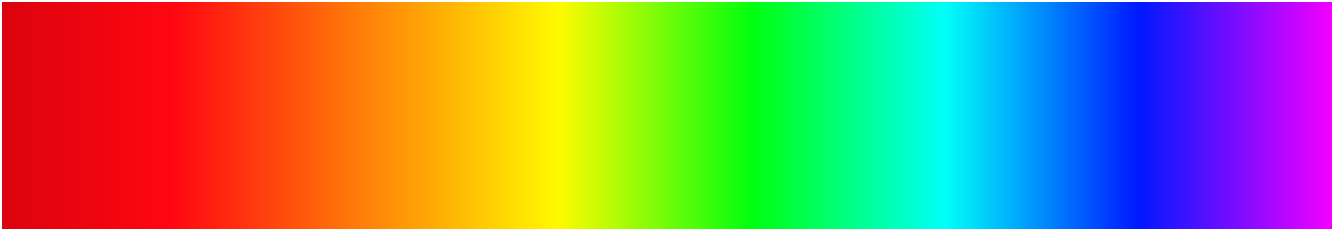
Figure 3.2: The color space – a mental representation of colors

Just like in the case of names of days of the week from Chapter 2, the base remains the same for all construals in (1). This accounts for the fact that all instances of *yellow* have some sort of connection to one of the colors in the spectrum. The differences in meanings are mostly a matter of the specifics of the profile. Thus, in (1a) the word profiles a region in the color space embracing all colors that qualify as yellow. This profile is sketched in Figure 3.3.
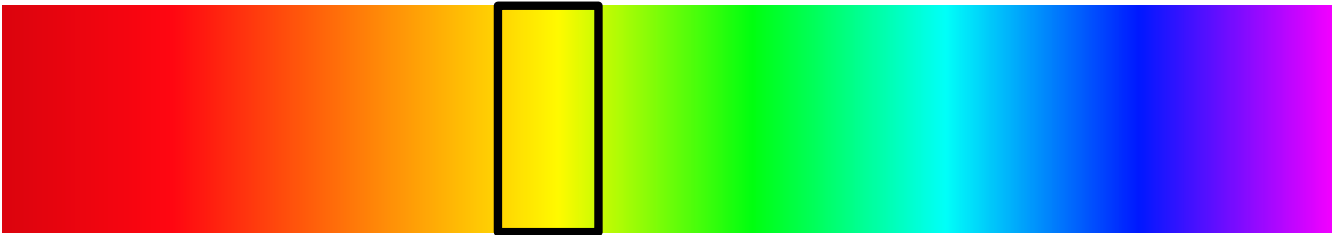

Figure 3.3: The construal behind *Yellow is a nice color.*

In (1b) the word refers to a particular shade of yellow rather than all shades that count as yellow. Arguably, the word is a countable noun; it is not inconceivable in a similar context for someone to say something like *These **yellows** look good in our kitchen*, meaning several distinct shades. Therefore, Figure 3.4 depicts the profile as a smaller slice of the color spectrum corresponding to one shade only.
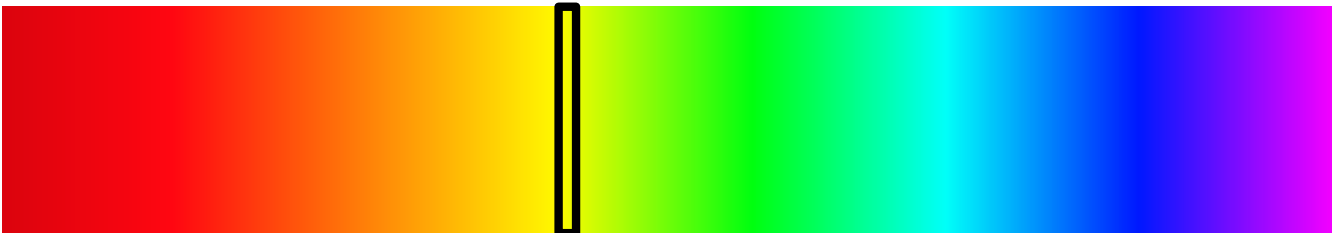

Figure 3.4: The construal behind *This yellow would look good in our kitchen.*

Yellow in (1c) is somewhat different in that, strictly speaking, it does not refer to a particular color, but all yellow regions in a particular painting. Of course, to fully understand (1c) we still need some sort of reference to the color space, but this time it is a portion of the painting, rather than a portion of the color space itself, that is at stake. More technically, the profile corresponds to the blotches of a

color in the painting (as indicated by the heavy-line ellipsis) and the color is related to a region in the color space, as diagrammed in Figure 3.5.
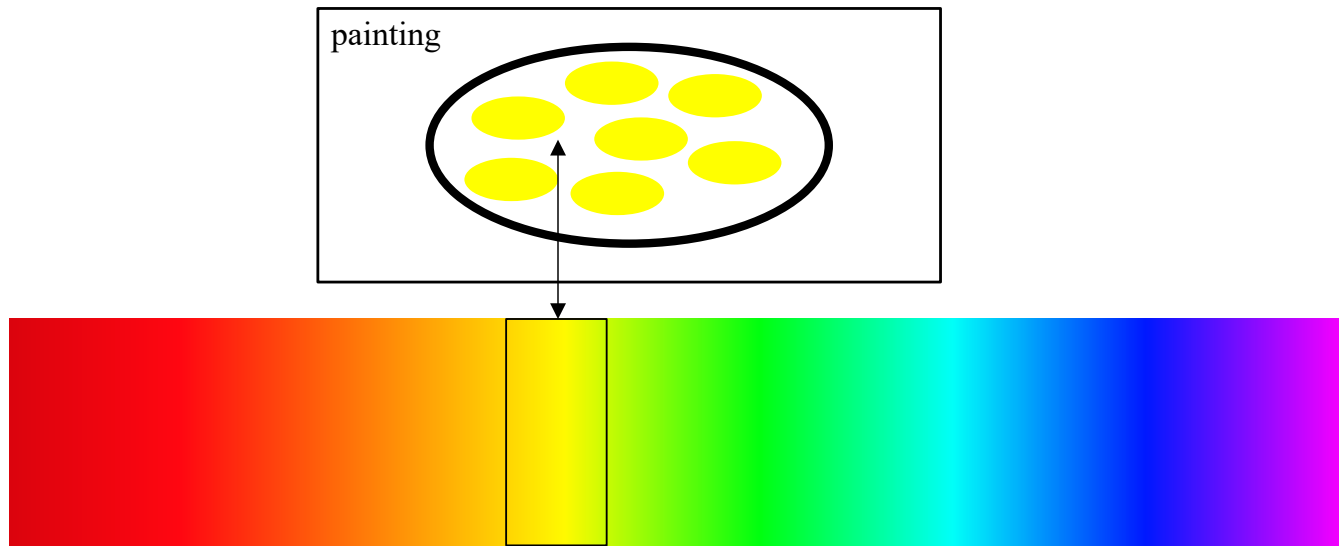

Figure 3.5: The construal behind *There's a lot of yellow in this painting.*

Notice that in our analyses so far the nominal construals behind *yellow* involve abstract regions of some sort: in (1a) and (1b) the regions are portions of the color space, while in (1c) it is a yellow portion of the painting. This hints at a more general point: in Cognitive Grammar nouns are words with nominal profiles involving some sort of regions, usually formed through the process of mental grouping. These regions and other groupings are conceptualized as abstract things. In a nutshell, we may say that **nouns profile things**, although it should be remembered that here the term *thing* has a special technical meaning and does not refer to inanimate physical objects alone. In the technical sense, a mental representation of a person is also a thing, because it involves a mental grouping of a sort: people exist in space, and therefore occupy certain three-dimensional regions, and consist of various parts that work together as a whole. Similarly, the abstract concept DEMOCRACY is a thing, because it involves a "grouping" of ideas about the political system of a state that form a coherent whole. The definition of the thing, and consequently of the noun, is admittedly abstract and general, but it main strength is that it allows for coherent characterization of different noun types discussed briefly in Section 3.1. Given the sufficient degree of abstract thinking, all physical objects, people, places, colors, properties, etc. expressed by nouns can be analyzed as products of mental grouping occupying some sort of physical or abstract region.

3.2.2. Relational profiles

Let is now move on to the more "standard" meaning of *yellow* in (1d). In Cognitive Grammar, adjectives refer to the so-called **atemporal relations**. As the name suggests, one defining property of an atemporal relation is that they can be exhaustively characterized without any reference to the flow of time. At first blush, it may seem counterintuitive to think about the meaning of *yellow* in (1d) in terms

of a relation. After all, a color is a visual sensation and not a relation between two things. Note, however, that whenever an adjective is used in a sentence, it specifies a property of a thing (as defined in the previous paragraph). Thus, one could argue that adjectives relate things to properties specified within some sort of quality space, i.e. an abstract collections of properties that a thing may possess. In the case of color terms, the quality space is the already discusses color space. Hence, the sentence *The ball is yellow* relates the referent of the word *ball* to the portion of the color space corresponding to *yellow*. The construal is sketched in Figure 3.6, where "B" stands for the ball.
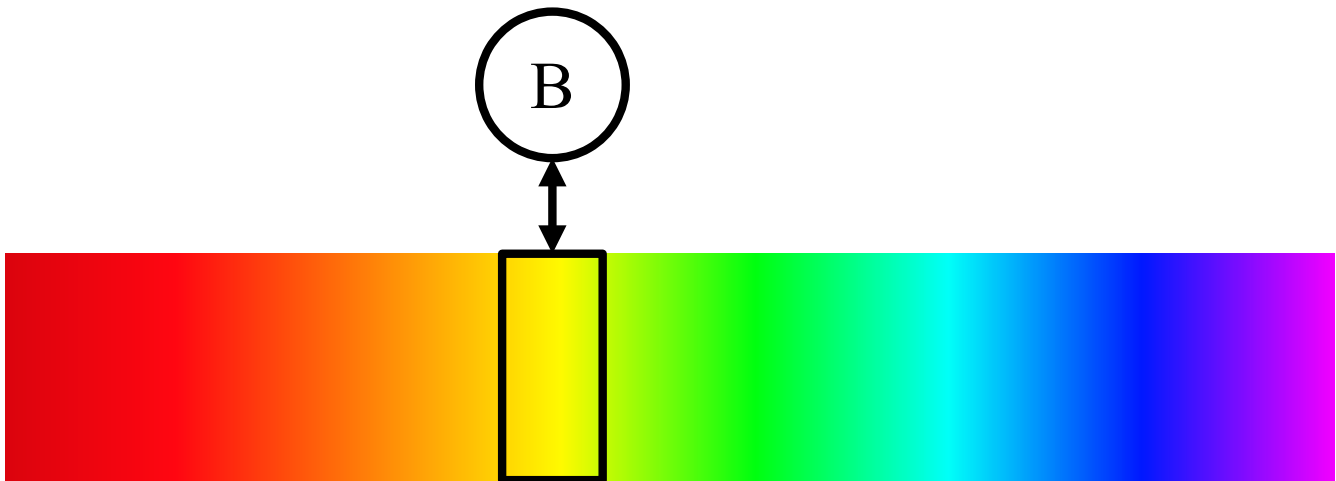

Figure 3.6: The construal behind *The ball is yellow.*

At this juncture, it is useful to introduce two important theoretical terms pertaining to relations. Relationships always hold between participants, oftentimes two or more, but (as we will see) some admit only one participant. Usually, the participants do not enjoy equal status – one of them is more prominent for one reason or another. This prominence should be understood as the subjective importance for the speaker or the amount of attention given to the entity within a construal and does not have to correspond to any objective properties of the entity. For instance, the sentences in (2) depict the same relation between dogs and foxes, but the construals behind the two sentences is somewhat different. In (2a) dogs are compared to foxes, so dogs are in the primary focus of attention; in (2b) it is the other way around – foxes are compared to dogs and they enjoy greater focus of attention. Grammatically, the greater prominence of one of the entities is often signaled by the fact that the entity is the subject of the sentence. In the CG formalism, the participant enjoying greater prominence in a relation is called **the trajector** and the one enjoying less prominence is called **the landmark**. Thus, in (2a) the concept DOGS is the trajector and the concept FOXES is the landmark, while in (2b) it is the other way around. With these two new terms at our disposal, we are now in a position to return to (1d) and characterize the construal in more technical terms. Thus, in *The ball is yellow*, the concept BALL is the trajector and the respective region in the color space is the landmark. More generally, *yellow* with its adjectival meaning profiles a relation, because it expresses a relation between a thing and the yellow region in a color space.

(2)(a) *Dogs resemble foxes.*
  (b) *Foxes resemble dogs.*

  Turning to (1e), in Cognitive Grammar verbs profile **processes**, which are in turn described as **temporal relations**. In analogy to atemporal relations discussed in the context of adjectives, temporal relations can be exhaustively characterized only when the flow of time in taken into consideration. Just like atemporal relation, processes involve as least one participants. In (1e) we have, in fact, two. The trajector of the process, i.e. the more prominent participant functioning here as the grammatical subject, is the concept PAPER. The other (and perhaps less obvious) participant is the region of the color space corresponding to yellow. The relation can be characterized in the following way: over time the paper changes in such a way that its color gradually becomes more yellow. Figure 3.7 may be slightly misleading: the multiple circles marked with "P" stand for a single referent during several stages of the process (and not to several different participants existing in the same moment). The flow of time necessary for understanding the process is signaled with the horizontal arrow with "T."
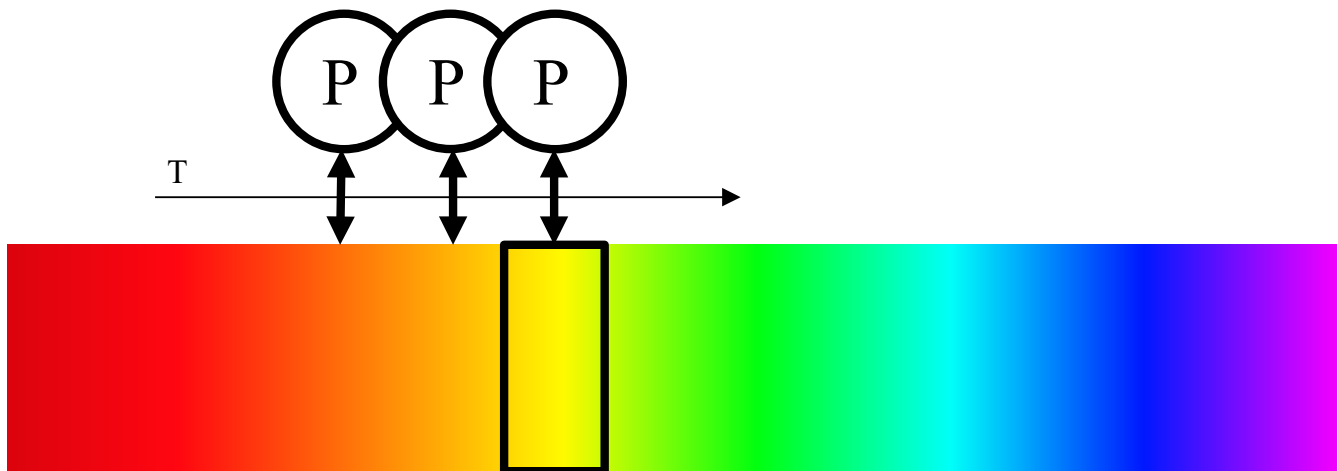

Figure 3.7: The construal behind *Gradually the paper yellowed.*

  In many respects the adverbial construal behind *yellow* in (1f) is similar to the adjectival construal in (1d), since in Cognitive Grammar adverbs profile atemporal relation, too. The key difference between an adjective and an adverb is that the trajector of the former is a thing and the trajector of the latter is another relation. This explains why adverbs can modify words belonging to seemingly different grammatical classes: verbs (e.g. *to shine **brightly***), adjectives (e.g. ***extremely** small*), and other adverbs (e.g. *to shine **extremely** brightly*). In the CG framework, all of these classes profile relations, either temporal (verbs), or atemporal (adjectives and adverbs), so they are compatible with the adverbs which require a relation as their trajectors. In the case of (1f), *yellow* profiles a relation between the process of shining and the color yellow. More technically, the trajector of the relation is the process TO SHINE and the other participant is the yellow region of the color spectrum. The fact that in Figure 3.8 the stages of

the process are not marked with bold line is meant to indicate that this time *yellow* does *not* profile a temporal relation. The flow of time inherent in a temporal relation can be found in the meaning of *to shine*, i.e. it is "built into" the trajector of the relation denoted by *yellow* rather than in the relation itself. After all, it is possible to understand the basic meaning of *yellow*, even when it is used as an adverb, without considering the flow of time.
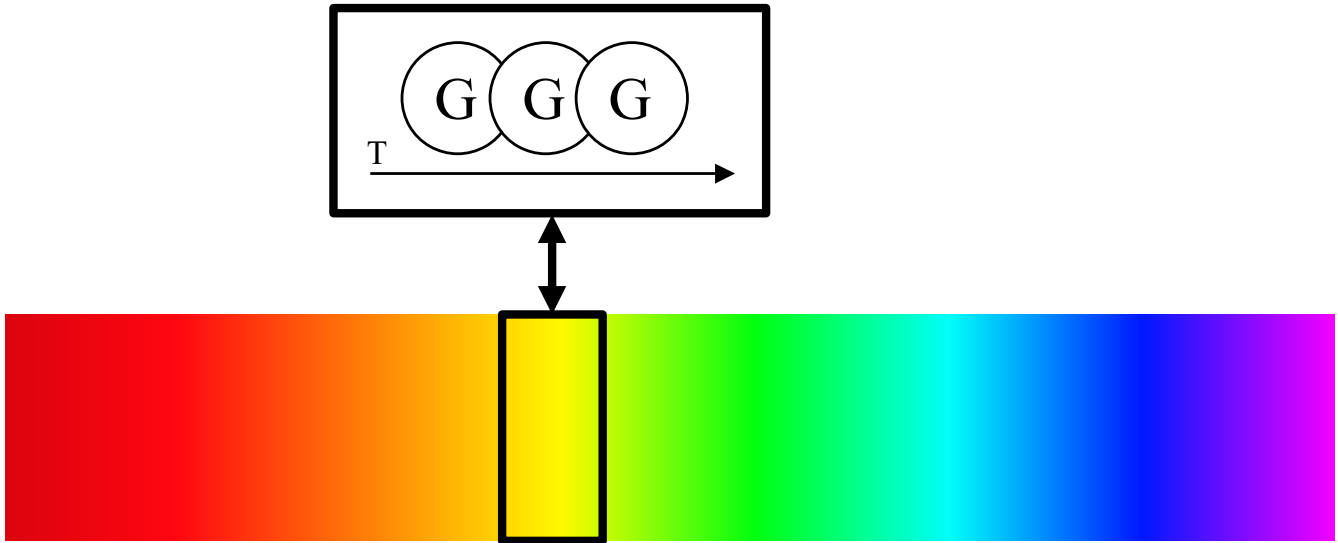

Figure 3.8: The construal behind *The gold shone yellow.*

The last grammatical class to be discussed in this chapter is prepositions. In their basic meanings, these words profile spatial relations to things. Thus, one characteristic property of prepositions is that their landmarks (lm) are things and their trajectors (tr) can be either things (e.g. *a cat*$_{tr}$ *in a box*$_{lm}$), or relations (e.g. the temporal relation TO SLEEP in *to sleep*$_{tr}$ *in a box*$_{lm}$). In this respect, prepositions are to some extent similar to adjectives, when the trajector of the preposition is a thing, and to adverbs when the trajector is a relation. This semantic similarity is nicely illustrated by the dubious status of the word *near*, which may function as a preposition when referring to a spatial relation (e.g. *a cat **near** the box*), an adjective when modifying a noun (e.g. *a **near** relative*), or an adverb when modifying a word with relational meaning (e.g. *We are **near** related*). The main difference between typical adjectives/adverbs and typical prepositions is that the landmarks of the former are not expressed explicitly in the phrases and the landmarks of the latter are. For example, the complete characterization of the adjective *yellow* involves both the landmark (the yellow region of the color spectrum) and the relation to the landmark. One could say that in typical adjectives and adverbs the landmark is (as if) "built into" the meaning of the adjective. In the preposition like *on* the landmark is not "built into" the meaning, so it has to specified explicitly in the phrase, e.g. *the cat **on** the box*$_{lm}$. Sometimes it is perfectly natural to omit the landmark of the preposition, e.g. *the cat is around*, but in such cases the landmark is typically obvious from the context (*the cat is around (here)*), so it is still not "built into" the preposition, but comes from a widely understood context in which the expression is produced.

The differences between the construals in the grammatical classes involving atemporal relations are summarized in Figure 3.9. The cross-hatched circles indicate that the participant of the relation is not specified in the semantics of the word and it has to signaled explicitly in the expression or can be inferred from the context, like in the already mentioned *the cat is around*. The boxes enclosing the relations in adverbs and adverb-like prepositions indicate that the trajector is the entire relation in the inside the box.

adjective   adverb

adjective-like   adverb-like
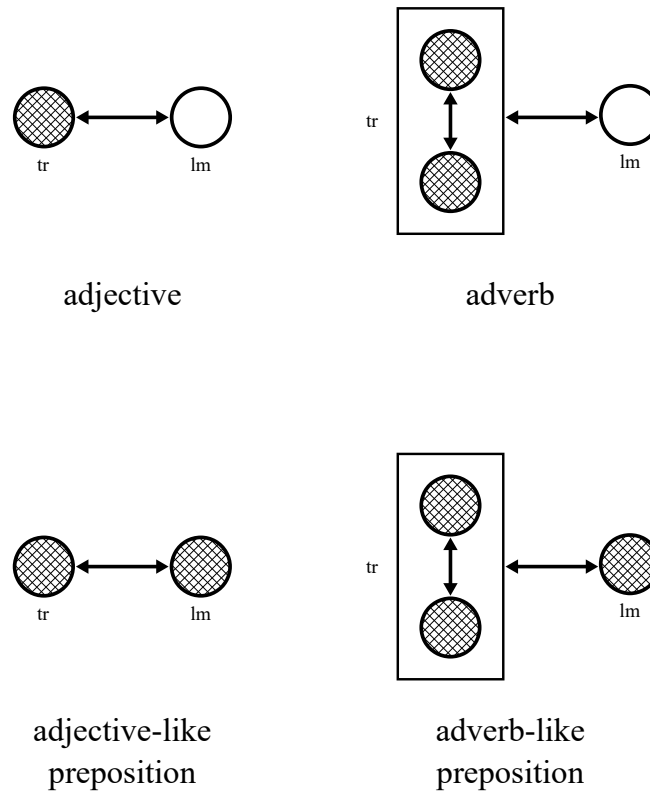preposition   preposition

Figure 3.9: Differences in the construals of
atemporal relations

The differences between grammatical the grammatical classes discussed in this chapter are summarized in the flowchart in Figure 3.10. Some other grammatical classes will be discussed in more detail in the following chapters.
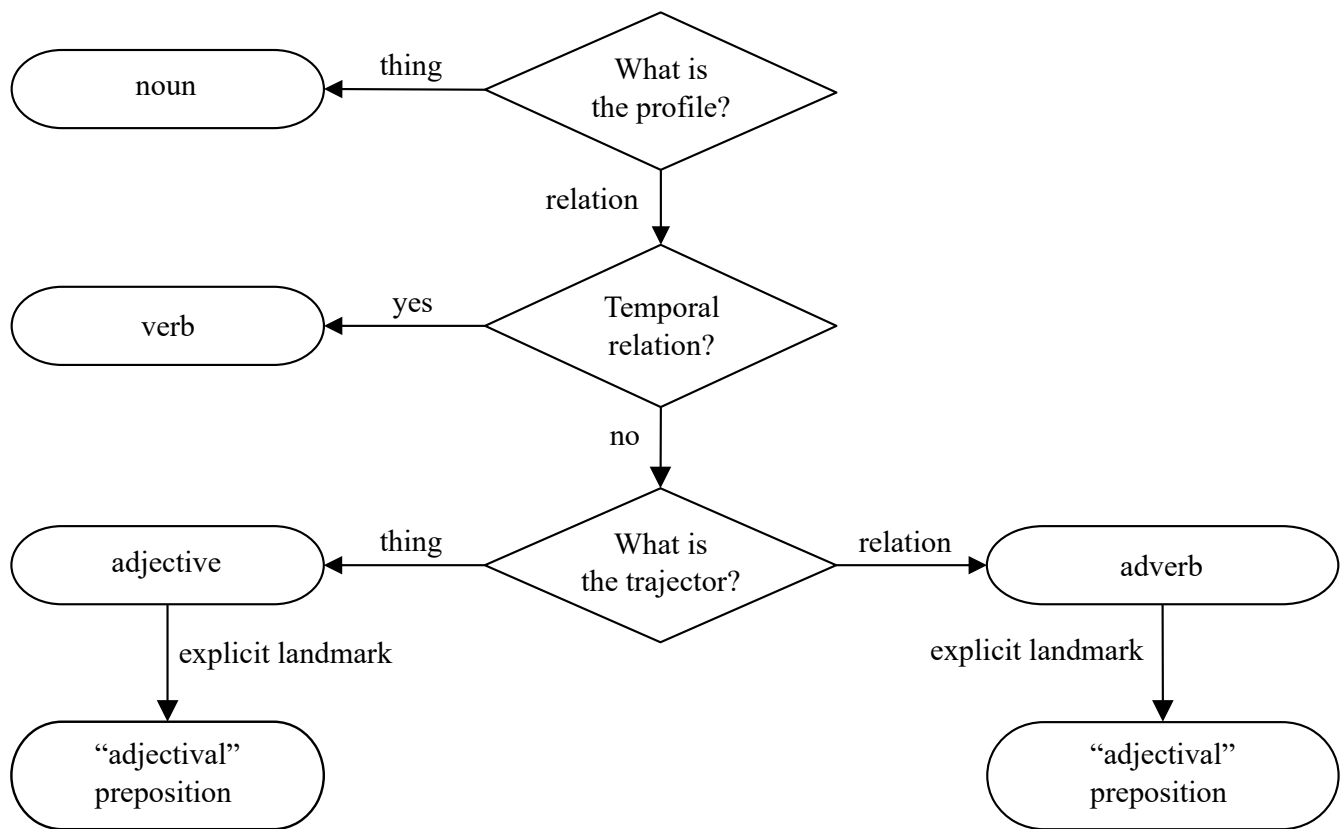
Figure 3.10: Differences in the construals behind main grammatical classes

Study questions

1. The words *wolf* in the sentences a)-c) below belong to different grammatical classes. Assuming that the three construals behind the word are profiled against the same base, what is the difference between the construals?

   a) *I saw a **wolf** near my house yesterday.*
   b) *He always **wolfs** down supper after a long day at work.*
   c) *If you encounter a **wolf** pup in a forest, don't take it with you!*

2. Can you think of other words with the same phonological form that can be construed as belonging to different grammatical classes?
3. Can you think of several alternate ways to mentally group the geometric shapes in the diagram below?
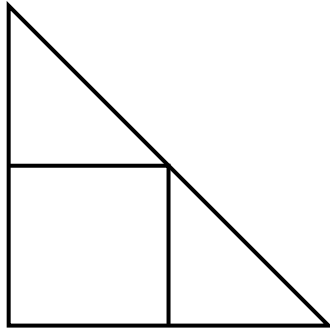
References

- Langacker, Ronald W. 2008. *Cognitive Grammar. A Basic Introduction.* New York: Oxford University Press.
  - Sections 4.2-4.3
- Langacker, Ronald W. 2013. *Essentials of Cognitive Grammar.* Oxford-New York: Oxford University Press.
  - Sections 4.2-4.3
- Taylor, John R. 2002. *Cognitive Grammar*. Oxford: Oxford University Press.
  - Chapters 11, 18