

# On what a construction is

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## Abstract

In this short think-piece, I propose a definition of the term *construction* for general linguistics and I relate it to definitions which have been proposed in the previous literature. I define constructions as at least partially schematic (having one or more open slots), and as parts of languages as historically evolved semiotic systems, not (necessarily) parts of mental knowledge systems. Although several specific mentalistic definitions have been proposed in the constructionist literature, most researchers actually tend to use the term with a general meaning corresponding to my definition. To overcome any confusion, I propose that some of the other senses are perhaps better expressed by novel terms (such as “inventorial item”). Moreover, I suggest that the primary insight about the continuity of word knowledge and constructional knowledge is best expressed by using a different term to cover all “stored pieces of structure” (e.g. the term “inventorium”), rather than the currently used term “constructicon”.

## 1 A definition of *construction*

This paper discusses the use of the term (*grammatical*) *construction* in general linguistics and makes a concrete proposal: For textbook purposes, the term *construction* can be defined as in (1). It appears that this definition captures the great bulk of the actual uses of the term very well.

(1) **construction**

A construction is a conventional schema for creating or motivating well-formed expressions in which there is at least one open slot that can be filled by one of several expressions belonging to the same form-class.

For example, the English Genitive construction can be schematized informally as in (2), where X and Y are symbols for the two open slots.

(2) the English Genitive construction

- a. the schema  
[NP [X<sub>NP</sub>] – s – (Y<sub>N</sub>)] (productive)  
'X's Y'

- b. examples  
*Kim's house, mom's hat, the boy's bike*

In this notation, Y stands for the head noun, and X stands for the Genitive nominal (NP) that is followed by the enclitic 's. The English Genitive construction has three elements: the genitive marker and the two open slots, which occur in a rigid order (symbolized by the dashes). The first slot can be filled by a nominal, and the second slot can be filled by a noun. The parentheses around Y indicate that it is optional. The construction is productive, i.e. its role is not only to motivate expressions such as those in (2b), but also to create all kinds of novel expressions.

There are also unproductive constructions which cannot be used to create novel expressions, but which are thought to motivate existing expressions. A well-known example is English deverbal nominalizations ending in *-ment*, as in (3).

- (3) English *-ment* nominalization construction
- a. the schema  
 [N XV – *ment*] (unproductive)  
 ‘the event of X-ing’
- b. examples  
*replacement, fulfillment, indictment*

This schema has an open slot for verb stems, and while it is not productive and can hardly be used to form novel expressions, it serves to motivate many established forms such as *replacement*. (See Jackendoff & Audring (2020: 28-40) on the motivating vs. generative function of constructions.)

As a third example, consider the Russian Approximative Cardinal construction exemplified in (4b), contrasting with the ordinary Precise Cardinal construction in (4a) (e.g. Yadroff & Billings (1998)). The only formal difference between the two constructions is that the order in (4b) is the opposite of the order of (4a).

- (4) a. *pjat' knig*  
 five book.GEN.PL  
 ‘five books’
- b. *knig pjat'*  
 book.GEN.PL five  
 ‘approximately five books’

This construction can be represented informally as in (5), which shows a slot for the counted noun (in the genitive plural) followed by a slot for the cardinal numeral. The ‘approximately’ meaning is not linked to either of the slots or to the grammatical marking, so that it must be associated with the entire construction.

- (5) Russian Approximative Cardinal construction: the schema  
 [NP X<sub>N[GEN.PL]</sub> – Y<sub>NUM</sub>] (productive)  
 ‘approximately Y Xs’

The present paper focuses on two ways in which definitions of the term *construction* have varied in the literature: (i) the requirement of an open slot (§3), and (ii) the nature of constructions as conventional vs. mental entities (§4). Then in §5, I will explain the terms *schema*, *open slot*, *expression*, and *form-class* (which figure in the definition but may raise some questions), and in §6 I will briefly discuss the relation between the terms *construction* and “construction grammar”. But first, I will make a few comments on 19th and early 20th usage.

## 2 A brief comment on pre-1980s usage

Linguists from constructionist schools of thought have sometimes suggested that the modern usage of the term *construction* takes up older, pre-generative (i.e. pre-1957) usage. Thus, Fillmore et al. (1988: 501) begin their paper with the claim that “the proper units of a grammar are more similar to the notion of construction in traditional and pedagogical grammars”, and Goldberg (1995: 1) makes an even stronger claim about “traditional grammarians”:

“The notion construction has a time-honored place in linguistics. Traditional grammarians have inevitably found it useful to refer to properties of particular constructions. The existence of constructions in the grammar was taken to be a self-evident fact that required little comment.”

However, it appears that the notion of grammatical constructions as individual syntactic patterns (as in (2), (3) and (5)) became more common only after Bloomfield (1926: 158) and Bloomfield (1933: 184). In earlier times, *construction* was typically used in a way very similar to *syntax*, as an abstract noun referring to the regularities of word combination. The term goes back to medieval usage, where Latin *con-structio* was apparently a loan translation of Greek *syn-taxis* (cf. Kneepkens (1990)).

In recent decades, it has become very common to refer to particular syntactic patterns with specific names that include the term *construction*, e.g. “cleft construction”, “prepositional possessive construction”, “relative clause construction”. Such terms were less common before the 1970s, however. Linguists often talked about “cleft sentences”, about the expression of “genitive relations”, and about “relative clauses”, so there was less need for the term *construction*. It appears that it was in particular post-Bloomfieldian American linguists that increased the use of the term *construction* for particular patterns (e.g. Chomsky (1957: 75) on “verb + particle constructions”; Lees (1961) on the English comparative construction). However, there was apparently never a very clear definition of the term. Gleason (1961: 132) said that “a construction is any significant group of words (or morphemes)”, but this would seem to be the definition of a phrase, not of a general pattern for creating phrases.

Thus, the modern usage of the term *construction* is apparently fairly recent, and seems to have developed gradually since the 1950s, not in opposition to any general-theoretical movement, but not clearly dependent on general-theoretical considerations either. It may be worth investigating its earlier development further, but in any event, it is clear that the term itself became prominent only with the “construction grammar” movement (Fillmore et al. (1988); Fillmore & Kay (1995); Goldberg (2006); Hoffmann & Trousdale (2013); and so on).

### 3 Constructions have an open slot

In most linguists' understanding, a construction is *SCHEMATIC* in that it is not a form (or expression) that can be uttered and perceived, but has one or more open slots which must be filled to create a form (or expression). This is reflected in the definition in (1). However, in some of the literature this condition is dropped, and form-meaning pairings are treated as constructions even if there is no open slot. This allows one to define a construction very simply as a "pairing of form and function" that must be listed or stored, as in (6a-c). In effect, words and morphs are constructions, too, according to these definitions.

- (6)
- a. "Construction grammar defines constructions to be any stored pairings of form and function; according to this definition, words and morphemes are technically constructions as well." (Goldberg & Jackendoff 2004: 533)
  - b. "A linguistic construction is a systematic pairing of form and meaning, and this notion applies to the analysis of both syntactic and morphological phenomena." (Booij 2018: 3-4)
  - c. "A construction is an arbitrary pairing of (phonological/syntactic) *FORM* and *MEANING* that is stored in a speaker's mental lexicon." (Hoffmann 2022: 4)

However, words and morphs are not normally treated as constructions by linguists, and they are not included in lists of constructions ("constructicons"). Thus, it does not seem appropriate to extend the term in this way in general linguistics.

The definitions in (6a-c) which use *construction* in an extended sense follow a tradition going back to the authors of the seminal construction grammar paper (Fillmore et al. 1988). Consider the characterization of constructions in the passage below, where Fillmore et al.'s "exception (3)" is a terminological innovation.

"Constructions on our view are much like the nuclear family (mother plus daughters) subtrees admitted by phrase structure rules, EXCEPT that (1) constructions need not be limited to a mother and her daughters, but may span wider ranges of the sentential tree; (2) constructions may specify, not only syntactic, but also lexical, semantic, and pragmatic information; (3) lexical items, being mentionable in syntactic constructions, may be viewed, in many cases at least, as constructions themselves; and (4) constructions may be idiomatic in the sense that a large construction may specify a semantics (and/or pragmatics) that is distinct from what might be calculated from the associated semantics of the set of smaller constructions that could be used to build the same morphosyntactic object." (Fillmore et al. 1988: 501)

This characterization is fairly complex, especially because of the emphasis on idiomatic constructions, but the only substantive deviation from the definition in (1) is that "lexical items may be viewed as constructions themselves" ("exception (3)"). But I wonder why the meaning of the term *construction* fillmore be extended in this way. Before 1988, no linguist would have said that a lexeme or a morph is a construction.

Goldberg (1995: 4) was quite explicit about following this broadened definition of construction: "expanding the pretheoretical notion of construction somewhat, mor-

phemes are clear instances of constructions in that they are pairings of meaning and form that are not predictable from anything else”. It is true that defining a construction as an “arbitrary pairing of form and meaning/function” is a bit shorter than my definition in (1) above in that it omits reference to an open slot, but as I noted, the resulting definition is odd and not in line with actual usage. Outside of such definitions, linguists do not call words or morphs constructions, and not even construction grammarians talk like this.

The problem with the polysemy of the term *construction* has been noted by Jackendoff (2013), in a passage that deserves full quotation.

“[Some authors] use the term *construction* for all stored pieces of structure, including words, idioms, and phrase structure rules. I think this use of the term *construction* is coextensive with the term *lexical item* as used here – it is a piece of linguistic structure stored in long-term memory. For my part, I find it convenient to retain a terminological distinction between words (which they call ‘lexical constructions’), idioms, phrase structure rules, linking rules (or ‘abstract constructions’), and meaningful constructions... But there is no *theoretical* distinction among them – they are all encoded in a common format, with no sharp dividing lines.” (Jackendoff 2013: 78)

Despite the extended use of the term that was proposed by Fillmore et al. (1988) and adopted by Goldberg (1995), there is little doubt that constructions are generally understood more narrowly, as defined in (1) above. Even authors whose work is very close in spirit to construction grammar sometimes define the term more narrowly (i.e. as in this paper). The quotations in (7a-c) illustrate this.

- (7)
- a. “[M]uch of human linguistic competence is best characterized in terms of concrete linguistic expressions and constructions that are continuous with but different from the more regular and abstract constructions typically studied in more formal approaches” (Tomasello 2003: 191-192).
  - b. “The difference between lexical items and constructions is that lexical items are substantive and atomic (that is, minimal syntactic units), while constructions can be at least partially schematic and complex (consisting of more than one syntactic element)” (Croft 2007: 467)
  - c. “Constructions are meaningful templates that include slots for other linguistic expressions” (Diessel 2019: 11)

It is also interesting to consider general and typological works on grammar such as Shopen (2007), Aikhenvald (2015), and Song (2018), where the term *construction* is very widely used, for all kinds of different constructions, but the authors feel no need to define the term, and the subject indexes do not contain an entry for it. Clearly, these authors take *construction* to be a term that is generally understood, and they understand it as a schema with an open slot as in (1), and not in the extended sense introduced by Fillmore and colleagues.

Moreover, practical work on “constructionaries” (construction dictionaries, sometimes called *constructicons*) is generally restricted to schemas with an open slot, leaving words to dictionaries (and affixal morphs to morphological sections of grammars).

For example, Zhan et al. (2020: 307), who work on a constructionary for Mandarin Chinese, say that “in our view, constructions complement words and phrases rather than totally replacing them. Treating words as constructions is merely a theoretical or labelling issue.” As far as I can tell, in all of the recent work on “constructicography” (e.g. Lyngfelt et al. 2018), only constructions with an open slot are included.

This leads to the question how we should call the set of conventional form-meaning pairs that comprises both lexemes and constructions. One could call it “extended lexicon” (treating constructions as kinds of lexical items) or “extended constructicon” (treating lexical items as kinds of constructions), but it seems better to give it a new name, such as *inventorium* (Haspelmath (2024),). This enables us to treat both lexemes and constructions as *inventorial items*, and we do not need to extend the meanings of older terms in a confusing way.

#### 4 Constructions as conventional entities (vs. as mental entities)

The definition of *construction* in §1 does not make reference to knowledge (or mental storage) of languages and is thus to be understood as relating primarily to linguistic conventions. This seems to be the right choice for a textbook definition because the description of linguistic conventions is not only less controversial than mentalist descriptions, but also generally regarded as a prerequisite for studying cognitive mechanisms. For example, psycholinguists need to understand how the conventions for relative clause constructions work in a language before they can study their processing in the lab. Thus, I regard the definition of a construction as a kind of conventional schema as more basic and more neutral than the mentalist definition.

Constructions are crucial elements of language description, but different linguists have different descriptive goals: Some want to describe the social conventions that have evolved historically and that the language users adhere to, e.g. in order to facilitate language learning (as in pedagogical grammars), or to investigate worldwide linguistic diversity and its limits (as in typologically-oriented descriptive grammars). Other linguists aim to investigate the cognitive or mental mechanisms and representations that we make use of when we speak or sign. While linguists have made substantial progress on the first goal (there are hundreds of extensive descriptions of the major grammatical patterns of languages), there are less tangible results when it comes to cognitively realistic descriptions of linguistic knowledge.

Corresponding to these two goals, there are two different definitions of *construction* in the literature (see Schmid 2020: 27), as in (8a) and (8b).

- (8) a. construction = “conventionalized form-meaning pairing” (e.g. Croft (2001: 19))  
 b. construction = “stored form-meaning pairing” (e.g. Goldberg (2003: 219))

The definition in (1) is primarily about conventions, and a non-mentalist definition was also given initially by Goldberg (1995: 4), with no reference to mental storage:

“Phrasal patterns are considered constructions if something about their form or meaning is not strictly predictable from the properties of their component parts or from other constructions”.

But a few years later, Goldberg switched to a mentalist definition in terms of stored patterns:

“Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.” (Goldberg 2006: 5)

Goldberg’s (2019) definition is again different, as discussed by Ungerer & Hartmann (2023: §2.2). Thus, there is no stable definition of *construction* in the construction grammar literature, which may be another reason to adopt the neutral definition proposed here. One might conclude from the mismatches between “convention-based constructions” and “storage-based constructions” that the term is potentially confusing, as noted by Schmid (2020):

“Societies do not store constructions in networks of more or less abstract schemas, and the minds and brains of different speakers do not really conform in their behaviour in such a way that this could create a convention. Nevertheless, the notion of construction runs the risk of conflating the social and mental aspects of constructions.” (Schmid 2020: 27)

Schmid thus chooses to avoid the term in his 2020 book, but this is not an option for grammarians in general, because the term *construction* is so extremely widespread. From this perspective, it is better to define the term in a way that maximally conforms to existing usage, i.e. as a conventional schema. So when I say that a construction creates well-formed expressions, this is meant in an abstract way (somewhat like the mathematical term *generate*), not as a description of what language users do when they talk or sign.

Finally, a good reason for choosing a non-mentalist definition is that people’s knowledge of linguistic patterns is highly variable and continuous and must ultimately be captured by quantitative psychological measures. If everything that is stored in memory is a construction, and if exemplar storage is assumed, then every instance of language use would end up as a construction (cf. Ungerer (2023: §3.4)). By contrast, if the term *construction* is a term for grammatical conventions, it is not problematic that it is categorical rather than gradient.

## **5 Comments on the terms *schema*, *open slot*, *expression* and *form-class***

The two key features of the definition of *construction* proposed here (repeated in (9) below for convenience) are that constructions must be at least partially schematic (have one or more open slots, §3 and that they are parts of languages as historically evolved semiotic systems (§4), not (necessarily) parts of mental knowledge systems.

**(9) construction**

A construction is a conventional *schema* for creating or motivating well-formed *expressions* in which there is at least one *open slot* that can be filled by one of several expressions that belong to the same *form-class*.

Now there are four terms in this this definition (italicized in the above formulation) which deserve some further discussion: schema (§5.1), open slot (§5.2), expression (§5.3), and form-class (§5.4).

**5.1 Schema**

In the definition that I propose here, a construction is said to be a kind of SCHEMA (alternatively, I could have said *template*, as in Diessel’s formulation in (7c), or *abstract pattern*). I will not define the term schema here but assume that it is understood. In addition to constructions (schemas with open slots for creating or motivating expressions), languages also have phonological schemas that only concern shapes, e.g. syllable templates such as (C)CV(C). Perhaps there are also purely semantic schemas, but I will not pursue this question here. Outside of language, there are of course many types of social conventions that involve schemas (schemas for meals with open slots for types of dishes, schemas for poems with open slots for kinds of verses, schemas for rituals with open slots for types of activities, and so on).

**5.2 Open slot**

The open position of a construction that can be filled by an expression is now typically called (OPEN) SLOT, in a tradition going back at least to the 1980s (e.g. Hudson (1980: 86); Allerton (1982); Lehmann (1985: 71)). Linguists also often say state that constructions are (partially) SCHEMATIC (as opposed to substantive expressions, Croft & Cruse (2004: 255)), by which they mostly mean that they have an open slot. Diessel (2019: 113-195) extensively discusses what he calls *filler-slot relations*. In discussions of verbal valency, slots have often been called (*unsaturated*) *places*, and we often talk about “two-place predicates”, “three-place predicates” etc. This parlance seems to originate in logic, but argument positions in valency schemas are of course just one kind of constructional slot. Two other equivalent terms for open slots are Croft’s *syntactic role* (e.g. Croft (2024a)), and Jackendoff & Audring’s (2020) *variable* (deriving from mathematics).

**5.3 Expression (or form)**

Constructions are schemas for EXPRESSIONS, but are not expressions themselves (as discussed in §3). Note that no distinction is made between the terms *an expression* and *a form* here: An expression or a form is a pairing of a shape and a meaning that does not contain an open slot and that can be uttered.

Expressions are meaningful entities such as morphs, words, phrases, clauses and sentences, which can be uttered and thus become (parts of) utterances. Utterances

can be observed and serve as the primary data for linguistics, but most of the time linguists talk about the properties of expressions of various kinds. There are thus three different levels that must be kept apart: (i) the utterance level (observable and recorded in corpora), (ii) the expression level (recorded in dictionaries, paradigms, and example sentences), and (iii) the level of constructions with open slots (recorded in grammatical descriptions).

The definition in (1) does not explicitly state that a construction is a form-meaning pairing, but something like this is implicit because a construction is schematic for an expression, and an expression is meaningful by definition.

#### 5.4 Form-class

The class of expressions or forms that can fill a slot in a construction belong to a class that is called *FORM-CLASS* here, using a term introduced by Bloomfield (1933: 146). A better-known term for form-classes is “syntactic category”. In the English Genitive construction [<sub>NP</sub> [<sub>X<sub>NP</sub></sub>] – *s* – (Y<sub>N</sub>)] ‘X’s Y’ (see §1 above), the slot X is filled by a nominal (indicated by the subscript NP), and the slot Y is filled by a noun (indicated by the subscript N). In the *-ment* nominalization construction [<sub>N</sub> X<sub>V</sub> – *ment*], the slot X can be filled by a subclass of verbs (hence the subscript V), but only by a very restricted subclass. While virtually all English Nouns can occur in the Y slot of the Genitive construction, so that the relevant form-class is basically identical to the class called “Nouns” in English grammar, the form-class of English Verbs that can occur in *-ment* nominalizations (*advancement*, *replacement*, etc.) is highly construction-specific.

In fact, William Croft has argued in a number of publications that syntactic categories or classes, i.e. Bloomfieldian form-classes, are defined by the constructions whose slots (or roles) they fill:

“Categories are defined by constructions, that is, the elements that can fill the roles defined by the components of a construction. In other words, syntactic categories exist, but only derivatively, since they are defined by the construction(s) that they occur in.” (Croft (2005: 283); see also Croft (2001); Croft (2024a))

The term form-class is preferred to “syntactic category” (or “word class”) because constructional slots are not always of word (or root) size. Form-classes may be classes of phrases (“phrasal categories”), classes of clauses, or classes of morphs. Different kinds of expressions or forms are grouped together by their possible occurrence in constructional slots, and these are appropriately called form-classes (“expression-classes” would work as well, but Bloomfield (1933) and Hockett (1958) used the former).

## 6 Constructions and construction grammar approaches

As is well-known, the term *construction* has gained enormous additional prestige and practical relevance with the emergence of “construction grammar” approaches (e.g. Fillmore et al. (1988); Goldberg (1995); Hoffmann & Trousdale (2013); Ungerer & Hartmann (2023)). In this new tradition, the term *construction* has been given a much bigger significance, as a way of describing a representational architecture that

differs drastically from the “componential model” (Croft & Cruse 2004: 225-229) or the “syntacticocentric architecture” (Culicover & Jackendoff 2005: 17) of classical mainstream generative grammar (i.e. Chomsky (1965) and subsequent work). In constructionist approaches, “constructions are the primitives of linguistic knowledge” (van Trijp 2024: §7), and Fried & Östman (2004: 12) put it as follows: “Unlike many other theories, ... Construction Grammar sees function and form as inseparable from each other and thus does not develop independent modules or ‘components’ that must be ‘fitted in’ with each other as needed.” It takes a “multidimensional network approach in which all aspects of a person’s linguistic knowledge are analyzed in terms of associations” (Diessel 2023: 76).

This “non-componentialist” view is typically linked to the term construction, and construction grammar advocates often say things like (10a-c).

- (10) a. “One of the central ideas in construction grammar is the conception of a language... as a structured inventory of constructions: a constructicon.” (Lyngfelt 2018: 1)
- b. “[Constructionist approaches] see constructions, i.e. form-meaning pairs at various levels of abstraction and complexity, as the main units of linguistic knowledge.” (Ungerer & Hartmann 2023: §1)
- c. “[T]here are an awful lot of stored constructions, of varying degrees of schematicity, that are assumed to be represented in the human mind.” (Croft 2024b: §2.1)

Clearly, it is an important question whether a description of the linguistic conventions of a language (or its mental representation in a speaker) should take the form of separate components such as phonology, morphology, syntax and semantics plus the lexicon (as a component that hosts cross-cutting information about words), or whether a language is better described by conventional form-meaning pairings of different kinds. It could be the case that the first (traditional and classical generative) conception unwittingly reproduces the traditional outputs of linguists, grammar books and dictionaries, while the second conception is better motivated, although it does not correspond to well-known kinds of products of linguists, with its non-componentialist view being innovative. But is this newer view described accurately by the term *construction(ist)*?

Another very important contribution of construction grammar thinking is the idea that syntactic schemas can be directly associated with meanings, so that not only morphs and words as well as phrases and sentences, but also constructions with open slots are “conventional pairings of form and meaning”, i.e. Saussurean signs. We saw a clear example of a constructional meaning in the Russian Approximative Cardinal construction in (5) above. This idea is reflected in statements such as those in (11a-c).

- (11) a. “[Constructions are much like phrase structure trees except that they] may specify, not only syntactic, but also lexical, semantic, and pragmatic information” (Fillmore et al. (1988: 501); also cited in §3)
- b. “What distinguishes constructional approaches is the ability to represent linguistic structures ... in which the meaning of a phrase cannot be attributed solely to the meanings of its daughters.” (Michaelis 2017: §II)
- c. “there are aspects of interpretation that cannot be localized in the mean-

ings of the individual words but must be associated with the structure in which they appear” (Culicover 2021: §2.1)

We can summarize these two conceptual contributions of construction grammar approaches as in (12). They are clearly closely related.

- (12) a. **Representational uniformity** (= non-componentialism) (e.g. 10a-c)  
Linguistic conventions are generally stated as form-meaning pairings (or triples of phonological, syntactic, and semantic properties), not through a lexical repository plus separate rule components.
- b. **Meaningful syntax** (e.g. 11a-c)  
Syntactic schemas (i.e. schemas with open slots for words or phrases) can be conventionally meaningful, so that the meanings of complex expressions that are not part of the inventorium can be richer than the meanings of their parts.

It appears that constructionists since Fillmore et al. (1988) have used the term *construction* as a convenient shorthand to highlight these two key ideas, but of course the two ideas do not follow from any of the definitions, and definitions of *construction* are not needed to state them. On the contrary, it seems clear that the key constructionist ideas are better stated if they are not bound up with the definition of the term *construction*, because this term is both (i) deeply entrenched in the uses of linguists regardless of their approach; and (ii) used quite variably even within constructionist approaches (Ungerer & Hartmann 2023: §2.2).

Thus, even though I am very sympathetic to many of the constructionist ideas, in this paper I advocate the separation of the definition of *construction* from particular methodological orientations or theoretical assumptions. This has led me to discuss constructionist approaches only in this last section of this paper.

## 7 Concluding remarks

This paper does not make an empirical contribution or a theoretical claim, but focuses on conceptual issues and makes the methodological contribution of proposing the definition in (1) above (repeated here again).

- (13) **construction**  
A construction is a conventional schema for creating or motivating well-formed expressions in which there is at least one open slot that can be filled by one of several expressions that belong to the same form-class.

To recapitulate, some of the key features of this definition are the following:

- it relies on more basic concepts that are widely understood and largely uncontroversial
- it excludes lexical items and morphs and is restricted to schemas with an open slot (§3)
- it defines a construction as a linguistic convention, not as a piece of linguistic knowledge (§4)

- it does not rely on specific constructionist approaches or views (§6)
- it is a definition with clear boundaries and no gradience, not a definition of a prototype or canon

I make this proposal for a definition explicit in this paper because I observed that linguists often treat technical terms such as *construction* as if they represented a reality that is independent of the linguists' definitions, so that it may appear to be our task to find out what the term really means. But this would be so only if the phenomena denoted by the terms are hypothesized to exist independently of the terms, as natural kinds (see Haspelmath (2018) for some discussion). Thus, our textbooks should simply state what a construction is and not present it as something whose precise limits are the object of research.

We know that knowledge of language structure exists as a cognitive phenomenon at the level of the individual ("competence"), but probably even those who use the term construction in a cognitive sense would not want to say that it embodies a claim that could be readily tested and potentially refuted by further evidence. Rather, we use the term to organize our understanding of language structures, and thus it is better if we treat it as a comparative concept rather than as a natural kind. It is in this spirit that I have proposed the definition, as potentially usable by anyone in linguistics, regardless of their methodological leanings or theoretical hunches.

Goldberg (1995: 4) described other uses of the term construction as "pretheoretical", but did this mean more than "pre-Fillmorean"? If it is not possible to describe or understand languages without theoretical considerations (as Dryer (2006) reminds us), then these earlier authors had different theoretical ideas rather than no theory. But it is also true that one can discuss methodological choices independently of theoretical claims, and terminological choices are part of our methodology. In this sense, therefore, the definition proposed here can be regarded as a contribution to the ("pretheoretical") methodology of linguistics, and it does not affect theoretical claims about (the mental reality of) constructions that one might want to make.

## References

- Aikhenvald, Alexandra Y. 2015. *The art of grammar: A practical guide*. Oxford: Oxford University Press.
- Allerton, D. J. 1982. *Valency and the English verb*. London: Academic Press.
- Bloomfield, Leonard. 1926. A set of postulates for the science of language. *Language* 2(3). 153–164. doi:10.2307/408741.
- Bloomfield, Leonard. 1933. *Language*. New York: H. Holt and Company.
- Booij, Geert E. 2018. The construction of words: Introduction and overview. In Geert E. Booij (ed.), *The construction of words*, 3–16. Cham ZG: Springer.
- Chomsky, Noam A. 1957. *Syntactic structures*. 's-Gravenhage: Mouton.
- Chomsky, Noam A. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
- Croft, William. 2001. *Radical construction grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Croft, William. 2005. Logical and typological arguments for radical construction grammar. In Jan-Ola Östman & Mirjam Fried (eds.), *Construction grammars: Cognitive grounding and theoretical extensions*, 273–314. Amsterdam: Benjamins.

- Croft, William. 2007. Construction grammar. In Dirk Geeraerts & Hubert Cuyckens (eds.), *The Oxford handbook of Cognitive Linguistics*, 463–508. Oxford: Oxford University Press.
- Croft, William. 2024a. Constructions in typological and cross-linguistic context. In *Cambridge handbook of construction grammar*, Cambridge: Cambridge University Press (to appear).
- Croft, William. 2024b. Philosophical reflections on the future of construction grammar (or, Confessions of a radical construction grammarian). *Constructions and Frames (to appear)*.
- Croft, William & D. A. Cruse. 2004. *Cognitive linguistics*. Cambridge: Cambridge University Press.
- Culicover, Peter W. 2021. *Language change, variation, and universals: A constructional approach*. Oxford: Oxford University Press.
- Culicover, Peter W. & Ray S. Jackendoff. 2005. *Simpler Syntax*. Oxford: Oxford University Press.
- Diessel, Holger. 2019. *The grammar network*. Cambridge: Cambridge University Press.
- Diessel, Holger. 2023. *The constructicon: Taxonomies and networks*. Cambridge: Cambridge University Press. doi:10.1017/9781009327848.
- Dryer, Matthew S. 2006. Descriptive theories, explanatory theories, and basic linguistic theory. In Felix K. Ameka, Alan Dench & Nicholas Evans (eds.), *Catching language: The standing challenge of grammar writing*, 207–234. Berlin: Mouton de Gruyter. <http://www.acsu.buffalo.edu/~dryer/desc.expl.theories.pdf>.
- Fillmore, Charles & Paul Kay. 1995. *Construction grammar (lecture notes)*. Stanford. doi:10.5281/zenodo.4737707.
- Fillmore, Charles J., Paul Kay & Mary Catherine O'Connor. 1988. Regularity and idiomaticity in grammatical constructions: The case of let alone. *Language* 64(3). 501–538.
- Fried, Mirjam & Jan-Ola Östman. 2004. Construction grammar: A thumbnail sketch. In Mirjam Fried & Jan-Ola Östman (eds.), *Construction grammar in a cross-language perspective* Constructional approaches to language, 11–86. Amsterdam: Benjamins.
- Gleason, Henry Allan. 1961. *An introduction to descriptive linguistics*. New York: Holt, Rinehart and Winston.
- Goldberg, Adele E. 1995. *Constructions: A construction grammar approach to argument structure*. Chicago: The University of Chicago Press.
- Goldberg, Adele E. 2003. Constructions: A new theoretical approach to language. *Trends in Cognitive Sciences* 7(5). 219–224.
- Goldberg, Adele E. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.
- Goldberg, Adele E. 2019. *Explain me this: Creativity, competition, and the partial productivity of constructions*. Princeton, NJ: Princeton University Press.
- Goldberg, Adele E. & Ray S. Jackendoff. 2004. The English resultative as a family of constructions. *Language* 80(3). 532–568.
- Haspelmath, Martin. 2018. How comparative concepts and descriptive linguistic categories are different. In Daniël Van Olmen, Tanja Mortelmans & Frank Brisard (eds.), *Aspects of linguistic variation: Studies in honor of Johan van der Auwera*, 83–113.

- Berlin: De Gruyter Mouton. doi:10.1515/9783110607963-004.
- Haspelmath, Martin. 2024. Four kinds of lexical entities. (*in preparation*).
- Hockett, Charles F. 1958. *A course in modern linguistics*. New York: MacMillan.
- Hoffmann, Thomas. 2022. *Construction grammar: The structure of English*. Cambridge: Cambridge University Press.
- Hoffmann, Thomas & Graeme Trousdale (eds.). 2013. *The Oxford handbook of Construction Grammar*. Oxford: Oxford University Press.
- Hudson, Richard A. 1980. Constituency and dependency. *Linguistics* 18(3). 179–198. doi:10.1515/ling.1980.18.3-4.179.
- Jackendoff, Ray. 2013. Constructions in the Parallel Architecture. In Thomas Hoffmann & Graeme Trousdale (eds.), *The Oxford handbook of Construction Grammar*, 70–92. Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780195396683.013.0005.
- Jackendoff, Ray & Jenny Audring. 2020. *The texture of the lexicon: Relational morphology and the parallel architecture*. Oxford: Oxford University Press.
- Kneepkens, C. H. 1990. On mediaeval syntactic thought with special reference to the notion of construction. *Histoire Épistémologie Langage* 12(2). 139–176. doi:10.3406/hel.1990.2321.
- Lees, Robert B. 1961. Grammatical analysis of the English comparative construction. *WORD* 17(2). 171–185.
- Lehmann, Christian. 1985. On grammatical relationality. *Folia Linguistica* 19(1). 67–110. doi:10.1515/flin.1985.19.1-2.67.
- Lyngfelt, Benjamin. 2018. Introduction: Constructicons and constructicography. In Benjamin Lyngfelt, Lars Borin, Kyoko Ohara & Tiago Timponi Torrent (eds.), *Constructicography: Constructicon development across languages* Constructional approaches to language, 1–18. Amsterdam: Benjamins.
- Lyngfelt, Benjamin, Lars Borin, Kyoko Ohara & Tiago Timponi Torrent (eds.). 2018. *Constructicography: Constructicon development across languages*. Amsterdam: Benjamins.
- Michaelis, Laura A. 2017. Meanings of constructions. *Oxford Research Encyclopedia of Linguistics* 2017. doi:10.1093/acrefore/9780199384655.013.309.
- Schmid, Hans-Jörg. 2020. *The dynamics of the linguistic system: Usage, conventionalization, and entrenchment*. Oxford: Oxford University Press.
- Shopen, Timothy (ed.). 2007. *Language typology and syntactic description (3 volumes)*. Cambridge: Cambridge University Press.
- Song, Jae Jung. 2018. *Linguistic typology*. Oxford: Oxford University Press.
- Tomasello, Michael. 2003. *Constructing a language: A usage-based theory of language acquisition*. Cambridge, MA: Harvard University Press.
- van Trijp, Remi. 2024. Different constructional approaches in practice: A comparative study. In *Cambridge handbook of Construction Grammar*, Cambridge: Cambridge University Press (to appear).
- Ungerer, Tobias. 2023. A gradient notion of constructionhood. *Constructions* 15. 1–20. doi:10.24338/cons-543.
- Ungerer, Tobias & Stefan Hartmann. 2023. *Constructionist approaches: Past, present, future*. Cambridge: Cambridge University Press.
- Yadoff, Michael & Loren Billings. 1998. The syntax of Approximative Inversion in

- Russian (and the general architecture of nominal expressions). In Željko Bošković, Steven Franks & William Snyder (eds.), *Formal approaches to Slavic linguistics: The Connecticut Meeting 1997*, 319–338. Ann Arbor: Michigan Slavic Publications.
- Zhan, Weidong, Jiajun Wang, Long Chen & Haibin Huang. 2020. Form and meaning representation of Chinese constructions: Fundamental issues on constructicography. In Bianca Basciano, Franco Gatti & Anna Morbiato (eds.), *Corpus-based research on Chinese language and linguistics*, 305–338. Venice: Edizioni Ca' Foscari.