# English Constructions

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## Abstract

**Constructions** have been defined variously in the literature, but the traditional use of the term corresponds to a conventional pairing of form with (semantic or discourse) function. This article provides examples of uncontroversial instances of constructions, clarifies some of the debates surrounding the term currently, and also briefly explores a broad based range of constructionist theories that have converged on the basic idea that traditional constructions play a central theoretical role in language.

### 1. A brief history of "constructions"

It was the Roman orator, Cicero, who in the first Century BCE, provided our first known application of the word *constructio* (from which English derives the word 'construction') to a grouping of words. Half a century later, Priscian (c. 500 CE), began using the word *constructio* as a grammatical term, and the Medieval Linguists known as the Modistae (12th Century) spent much of their time considering the nature of the construction itself. Their work centered on defining the construction as 'an ordering of words that agree and express a complete meaning.' Their basic criterion for a construction was that it consisted of at least two words in which one of the words was said to 'govern' or 'require' the other word or words. This notion of construction must be both grammatically well-formed and express a meaningful sentiment. *The crowd run*, would have been rejected on syntactic grounds (subject-verb agreement), and *Colorless green ideas sleep furiously* would have been rejected as a construction on the grounds that it is semantically vacuous. In short, the Modistae believed that constructions were not defined simply on the basis of form (i.e., syntax), but also on function (i.e., semantics).

As in the 12th Century, it is still debated what exactly counts as a construction, but in general, the term *construction* refers to *classes* of actual expressions, that is to grammatical patterns. This use of *construction* has a long tradition within descriptive grammars, being used to characterize, for example, relative clauses, passives, topicalization, and so on. On this view, a construction is any systematic phrasal pattern of form and function.

### 2. Approaches to Constructions

Linguists vary in their approaches to constructions. Nonetheless, the majority of linguists are willing to apply the term 'construction' to certain grammatical patterns that have unusual quirks in either their

formal properties or their semantic interpretation (or both) that make them ill suited for universal status. That is, these cases do not follow completely from any general principles and so their patterns can not be predicted; they must be learned piecemeal. Notice, however, that it is not the case that these are simple idioms to be learned as individual chunks. They are in fact phrasal *patterns* with identifiable and definable rules.

As an example of a clear case of an English construction, consider the time-*away* construction as in the sentence "Sam slept the whole trip away." The syntax of the construction can not be accounted for by the rules of English, nor by generative theory (Jackendoff, 1997). Furthermore, the meaning of the utterance is not obvious from just considering the meaning of the words in the sentence. What does it mean, for example, to '*sleep* a *trip*'? Indeed, the meaning only becomes clear when we compare utterances with the same construction (e.g., "They danced the night away," "John knitted the entire weekend away."). That is, the construction indicates that the specified time was vigorously spent/wasted while engaged in the action specified by the main verb.

Another example of a clear case of an English construction, is the INCREDULITY CONSTRUCTION (e.g., *Him, a trapeze artist*?!). This construction is used to express an attitude towards a proposition, one of incredulity. The speaker in the example above expresses incredulity that the person in question is a trapeze artist. The form of the construction does not obey general rules of English. For one thing, there is no verb and yet the expression stands alone as a full utterance and conveys an entire proposition. In addition, the accusative case marking is normally used for objects, and yet the initial NP would seem to act as a subject or topic argument (cf. *He's a trapeze artist*?!) (e.g., Lambrecht, 1990).

The Covariational Conditional construction (e.g., *The more the merrier*) is another example of an unusual construction.  The construction is interpreted as involving an independent variable (identified by the first phrase) and a dependent variable (identified by the second phrase). The word *the* normally occurs at the beginning of a phrase headed by a noun. But in this construction it requires a comparative phrase. The two major phrases of the construction resist classification as either noun phrases or clauses. The requirement that two phrases of this type be juxtaposed without conjunction is another non-predictable aspect of the pattern. Because the pattern is not strictly predictable, a construction is posited that specifies the particular form and semantic function involved (Fillmore, Kay, & O'Connor, 1988; Culicover & Jackendoff, 1999).

| time *away* construction | *Sleeping the days away* |
|---|---|
| Incredulity construction | *Him, a trapeze artist?!* |

| | |
|---|---|
| Covariational Conditional construction | *The more chips you eat, the more you want.* |
| purely benefactive ditransitive with non-reflexive pronoun (informal; regional variation) | *I think I'm gonna make me a sandwich.* |
| What's X doing Y? | *What are your shoes doing on the table?* |
| Stranded preposition construction | *What did you put it on?* |
| NPN construction | *Day after day* |
| To N construction | *To school; to camp; to hospital (British English)* |

**Table 1: Productive or semi-productive constructions that are unusual cross-linguistically.**

In any given language, there are a very large number of such constructions. Table 1 provides a few additional examples. Some theorists have argued that such constructions are epiphenomenal, apparent only because of an interacting set of universal, fixed principles with parameters selected on a language-particular basis (Chomsky, 2000). In the Principles and Parameters framework, grammatical constructions are "taxonomic artifacts, useful for informal description perhaps but with no theoretical standing" (Chomsky, 2000). This idea is motivated by the view that "the [apparent] diversity and complexity [of languages] can be no more than superficial appearance" (Chomsky, 2000) because this is thought to be the only way language could be learnable, given the impoverished input children are exposed to. Most generative grammarians thus conclude, with Chomsky, that "the search for explanatory adequacy requires that language structure must be invariant, except at the margins" (Chomsky, 2000).

These researchers accordingly attempt to predict the properties of patterns such as are found in Table 1 on the basis of general, universal principles. If such attempts are unsuccessful in this endeavor, the pattern is relegated to the "periphery" or "residue" of language. As such, it is determined to be an uninteresting bit of a language that is not subject to the same cognitive principles at work in the 'core' grammar of a language.

## 3. Constructionist Approaches to Syntax

Over the past two decades, a new theoretical approach to language has emerged that treats constructions as central. Many linguists with varying backgrounds have converged on several key insights

that have given rise to a family of *constructionist* approaches (Lakoff, 1987; Langacker, 1987; Fillmore et al., 1988; Langacker, 1991; Gleitman, 1994; Goldberg, 1995; Michaelis & Lambrecht, 1996; Culicover, 1999; Kay & Fillmore, 1999; Croft, 2001; Diessel, 2001; Jackendoff, 2002; Tomasello, 2003; Fillmore, Kay, Michaelis, & Sag, in progress; Culicover & Jackendoff, to appear; Goldberg, to appear-b). Constructionist approaches embrace the traditional view that patterns such as passive, topicalization and relative clauses are conventional pairings of form and (semantic or discourse) function—*constructions*.

Generative linguists point to such patterns (the passive, the relative clause, or the interrogative) and reason that they involve formal universals in need of an explanation. The constructionist approach, on the other hand,  takes a somewhat different view of what is universal. We acknowledge that the associated functions are (near) universal, but attribute their ubiquity to their functions: it is quite useful to be able to deemphasize the normally most prominent argument (passive); modify nominal referents with propositions (relative clauses) and ask questions (interrogatives). Other types of cross linguistic generalizations are sought by appealing not to language universals, but to general cognitive, pragmatic and processing factors (e.g., Croft 2003; Goldberg, 2004, to appear-b).

At the same time, constructionists generally emphasize that except in cases of shared diachronic history or language contact, constructions in different languages often differ in subtle aspects of their forms and/or functions (e.g., see Dixon, 1984; Lambrecht, 1994; Dryer, 1997; Zhang, 1998; Kim & Maling, 1999). As Tomasello (2003) notes, what is truly remarkable is the degree to which human languages differ from one another, given that all languages need to express roughly the same types of messages. Constructional approaches anticipate such wide variability across languages (Van Valin & LaPolla, 1997; Croft, 2001; Garry & Rubino, 2001).

One issue that arises is the question of explanatory adequacy. Language researchers are generally in agreement that a theory is only explanatorily adequate if we can ultimately account for how languages can be learned from the initial state on the basis of the input. The approaches differ, however, both in what each theory believes it is necessary to account for, and in each theory's view of the richness of the initial state. As mentioned, generative linguists often relegate constructions such as the incredulity construction to the periphery of the theory. As such, they have no reason to account for they way in which they are learned. Moreover, more prolific constructions such as the passive are considered to exist in many languages and as such may be universal and part of the genetic language component. Constructionists hold neither of these views and therefore believe that a theory of language learning must necessarily account for how all constructions are learned. Typically, constructionist theories of learning claim that language input is in fact rather rich, not impoverished, and that language learners bring to the task a host of pragmatic and cognitive abilities which they employ to great effect in the task of language learning (these include the ability to make statistical generalizations, and the ability to use semantics and pragmatics to help guide interpretation and generalization) (see, e.g., Tomasello 1999; 2003).

In spite of these important differences, constructionist approaches share certain foundational ideas with the mainstream generative approach that has held sway for the past several decades. Both general approaches agree that it is essential to consider language as a cognitive (mental) system; both approaches acknowledge that there must be a way to combine structures to create novel utterances, and both approaches recognize that a non-trivial theory of language learning is needed.

**4. Why constructions?**

Constructionists generally apply the term 'construction' to patterns that systematically combine any morphological or phrasal elements, allowing for compositional phrasal constructions. On this view, even basic sentence patterns of a language, such as transitive, intransitive and ditransitive – not just usual patterns such as those presented in Table 1 – can be understood to involve constructions (Goldberg, 1995; Jackendoff 1997). The alternative is to assume that the form and general interpretation of basic sentence patterns of a language are determined by semantic and/or syntactic information specified by the main verb. The sentence patterns given in (1) and (2) indeed appear to be determined by the specifications of *give* and *put* respectively:

1. Mike gave her a pencil.
2. Laura put her book on the shelf.

*Give* is a three argument verb. An act of giving requires three participants: a giver (or 'agent'), a recipient, and something given (or 'theme'). It is therefore expected to appear with three phrases corresponding to these three roles. In (1), for instances, *Mike* is agent, *she* is recipient, and *a pencil* is theme. *Put*, another three argument verb, requires an agent, a theme (object that undergoes the change of location) and a repository of the theme's motion. It appears with the corresponding three arguments in (2).

Although the main verb may appear to determine the form of the constructions in (1) and (2), the form of the sentence patterns of a language are generally not determined by independent specifications of the main verb. For example, it is implausible to claim that *sneeze* has a three argument sense, and yet it can appear in (3). The patterns in (4)-(6) are likewise not naturally determined by the main verbs:

3. "He sneezed his tooth right across town." (*Andrew's Loose Tooth*, Robert Munsch)
4. "She smiled herself an upgrade." (A. Douglas, *Hitchhiker's guide to the Galaxy* Harmony Books)
5. 'We laughed our conversation to an end.' (J. Hart. 1992, *Sin* NY: Ivy Books)
6. "They could easily co-pay a family to death." (NYT, 1/14/02)

If, however, basic sentence patterns can involve constructions (as constructionists believe), then verbs can be understood to combine with argument structure constructions to account for such data. Consider the verb *slice* and the various constructions in which it can appear (labeled in parentheses):

7a. He sliced the bread.                        (transitive)

b. Pat sliced the carrots into the salad.         (caused motion)

c. Pat sliced Chris a piece of pie.              (ditransitive)

d. Emeril sliced and diced his way to stardom.   (*way* construction)

e. Pat sliced the box open.                   (resultative)

In all of these expressions *slice* means to cut with a sharp instrument. The specific interpretation of the word, however changes depending on the argument structure with which the verb is used. (7a) suggests something acting on something else, (7b) suggests something causing something else to move, (7c) shows someone intending to cause someone to receive something, (7d) someone moving somewhere, and (7e) someone causing something to change state (Goldberg, 1995, to appear-b). Constructionists suggest that it is the argument structure construction that provides the direct link between surface form and general aspects of the interpretation. Accordingly, while most linguists agree that constructions are required for unusual patterns, constructionists invoke constructions for the basic, regular patterns of language as well.

In order to capture differences in meaning or discourse properties between surface forms, constructionist theories do not derive one construction from another, as is typically done in mainstream generative theory. An actual expression typically involves the combination of a dozen different constructions beginning with the individual words themselves. For example, the construct in (8) involves the list of constructions given in (9a-f):

(8)  What did Chris buy her mother?

(9)

    a.  *Chris, buy, her, mother, what, did* constructions (i.e. words)

    b. Ditransitive construction (instantiated by the combination of *what* and *Chris buy her mother)*

    c. interrogative construction  (formed by combining initial *wh- word* with the Subject-Auxiliary construction and clause with a "missing" argument)

    d. Subject-Auxiliary inversion construction (instantiated by *did Chris*)

    e. VP construction (instantiated by [*buy her mother]*)

    f. NP construction (instantiated by *What*, *Chris*, and *her mother*)

Note that "surface form" need not specify a particular word order, nor even particular grammatical categories, although there are constructions that do specify these features. For example, the ditransitive construction in (9) and discussed above is characterized in terms of a set of argument types. The overt order of arguments in (9) is determined by a combination of a verb phrase construction with the INTERROGATIVE construction, the latter of which allows for the "theme" argument (represented by *What*) to appear sentence initially.

**5. What counts as a construction?**

The majority of constructionists argue that not only are phrasal grammatical patterns constructions, but grammatical patterns that combine two or more morphemes lexically are also constructions. Still other theorists emphasize the parallels between morphemes, words, idioms and larger phrasal patterns by apply the term "construction" to any conventional pairing of form and function, including *individual* morphemes and root words along with idioms, partially lexically filled and fully general linguistic patterns. Examples of each of these types are given in Table 2 from lexical to phrasal.

| | | |
|---|---|---|
| root words | e.g., *book, dog, or* | |
| Combination of morphemes | e.g., *un*-V | |
| Idiom (filled) | e.g., *Going great guns* | |
| Idiom (partially filled) | e.g., *jog* <someone's> *memory* | |
| Ditransitive (double object) construction | Form: Subj [V Obj1 Obj2] (e.g., *Mike gave her a book; He baked her a carrot cake.*) | Meaning: transfer (intended or actual); see text. |
| Passive | Form: Subj aux VPpp (PP$_{by}$) (e.g., *The house was hit by lightening*) | Discourse function: to make undergoer topical and/or actor non-topical |

**Table 2: Examples of constructions, varying in size and complexity; form and function are specified if not readily transparent.**

According to the more inclusive use of the term construction, 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, many researchers observe

that there exists linguistic and psycholinguistic evidence that patterns are stored even if they are fully predictable as long as they occur with sufficient frequency (Bybee, 1995; Barlow & Kemmer, 2000; Tomasello, 2003). Thus these highly frequent expressions, even if fully compositional, are sometimes labeled "constructions" as well. As a result of such varying theoretical views, researchers have different ideas about what kinds of utterances count as constructions (Figure 1).
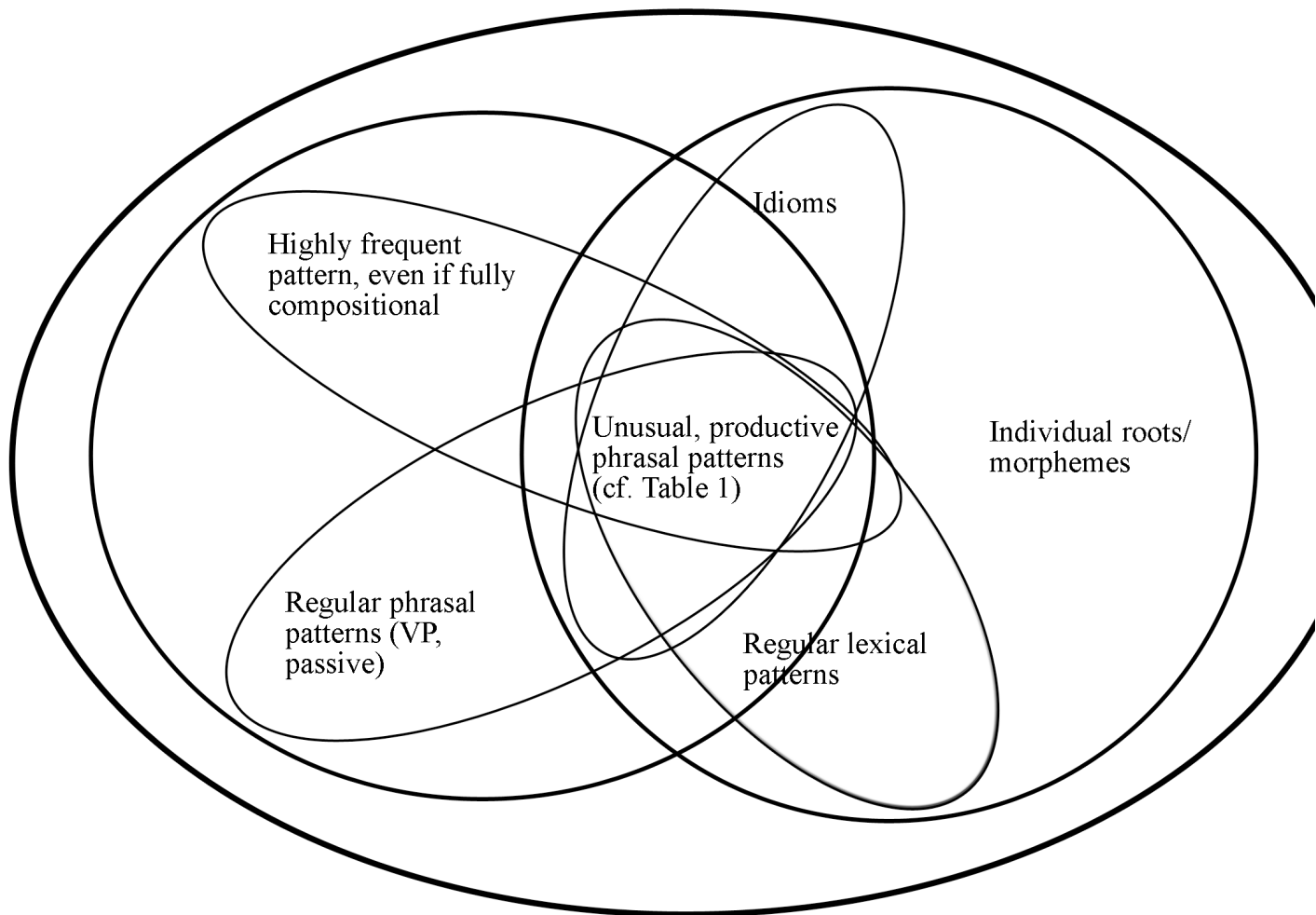


**Figure 1: Possible conceptions of what should count as a construction.**

Different surface forms are typically associated with slightly different semantic or discourse functions. Take for example, the *ditransitive* construction, which involves the form, Subj V Obj1 Obj2 (e.g., (1), (10b), (11b)). The ditransitive form evokes the notion of transfer or "giving." This is in contrast to possible paraphrases. For example, while (10a) can be used to mean that Liza bought a book for a third party because Zach was too busy to buy it himself, (8b) can only mean that Liza intended to give Zach the book. Similarly while (11a) can be used to entail caused motion to a location (the book is caused to go to

storage), the ditransitive pattern requires that the goal argument be an animate being, capable of receiving the transferred item (cf.11b, 11c). As is clear from considering the paraphrases, the implication of transfer is not an independent fact about the words involved. Rather the implication of transfer comes from the ditransitive construction itself.

(10)

     a. Liza bought a book for Zach.

     b. Liza bought Zach a book.

(11)

     a. Liza sent a book to storage.

     b. Liza sent Stan a book.

     c. ??Liza sent storage a book.

Constructions are combined freely to form actual expressions as long as they are not in conflict. For example, the specification of the ditransitive construction that requires an animate recipient argument conflicts with the meaning of *storage* in (11c) resulting in unacceptability. The observation that language has an infinitely creative potential is accounted for, then, by the free combination of constructions.

Oftentimes, the difference between two seemingly synonymous constructions is due not to semantic generalization, but to generalizations about *information structure* properties of the construction. Information structure has to do with the way in which a speaker's assumptions about the hearer's state of knowledge and consciousness at the time of speaking is reflected in surface form (see Birner and Ward, this volume). In particular, there is a reliable statistical tendency for the recipient argument in ditransitives to have already been mentioned in the discourse (often encoded by a pronoun) as compared to prepositional paraphrases (Erteschik-Shir, 1979; Thompson, 1990; Arnold, Wasow, Losongco, & Ginstrom, 2000).

Consider the Left-dislocation and topicalization constructions in English. At first (12) and (13) seem to be synonymous:

(12) Jazz, she loves it.                          Left-dislocation

(13) Jazz, she loves.                            Topicalization

However, using the parsed version of the Switchboard Corpus, Gregory and Michaelis (forthcoming) document subtle distinctions between them. The majority of the referents of the fronted NP in Topicalizations are previously mentioned and yet do not persist as topics. The opposite holds for Left

Dislocations. Thus, the left-dislocation construction is TOPIC ESTABLISHING, whereas the topicalization construction tends to be used for MORIBUND TOPICS.

Along these same lines, it has been claimed that languages typically have special constructions that allow for noncanonical packaging of information. To take another example, Lambrecht (1994) defines SENTENCE FOCUS (SF) CONSTRUCTIONS as constructions that are formally marked as expressing a pragmatically structured proposition in which both the subject and the predicate are in focus. He goes on to describe several properties of SF constructions. The function of SF constructions is presentational — namely, to present an entity or an event into the discourse (cf. also Sasse's (1987) entity-central vs. event-central thetic sentences). An English SF construction that introduces an event into the discourse is characterized by having pitch accent only on the logical subject, and not on the predicate phrase, as in (14).

(14) Context: What happened?
　　a. Her BROTHER is sick.
　　b. Her HONDA broke down.
　　c. PETER called you.

The subject in this construction is not topical and cannot be pronominal. For example, (15) can only be interpreted with a narrow focus on the subject argument (an ARGUMENT FOCUS reading) and does not permit a sentence focus interpretation:

(15) HE is sick. (possible context: A: Is she sick?  B: No, HE is sick)

The predicate in the SF construction typically has semantics that are compatible with presentation, with SF constructions crosslinguistically favoring certain unaccusative verbs such as *arrive*, *come*, *die*, and *disappear*. The same function, indicated in English by sentence accent, is marked by different formal means in other languages. The need for a full range of expressive power motivates the existence of marked construction types such as the SF construction.

Facts about the use of entire constructions, including register (e.g. formal or informal), dialect variation, etc. may be stated as part of the construction as well. Constructionist approaches provide a direct way of accounting for these facts, since constructions specify a surface form and a corresponding function.

**6. Constructions in Generative Grammar**

Certain current generative frameworks share the basic idea that some type of meaning is directly associated with some type of form, independently of particular lexical items (e.g., Borer, 1994; Marantz, 1997; Hale & Keyser, 1998; Borer, 2001). To the extent that syntax plays a role in contentful meaning, these other approaches are "constructional," and they are occasionally referred to that way in the literature.

However, the approaches are fundamentally different from the type of constructional approaches outlined above. In particular, these generative accounts do not adopt a non-derivational (monostratal) approach to syntax, as other constructionist approaches do. They also do not emphasize speaker construals of situations; the emphasis is rather on rough paraphrases. "Constructions" are assumed to be pairings of underlying form and coarse meaning instead of surface form and detailed function. Only certain syntactic patterns are viewed as instances of constructions; words or morphemes are assumed to be stored in a separate component, and most syntactic generalizations are assumed to make no reference to semantics or function. Another critical difference is that constructions are assumed to be universal and part of Universal Grammar. Finally, constructions are assumed to be compatible with Minimalist architecture and assumptions instead of providing an alternative way to view our knowledge of grammar. See Goldberg (to appear-b chapter 3) for a review of these approaches and comparison with the type of constructionist approaches outlined in earlier sections.

**7. Conclusion**

As with the medieval Modistae, linguists today have varying notions about what types of utterances count as constructions. It is safe to say, however, that in essence a construction is a pattern in the formal properties of a language (i.e., in its form) that is associated with a particular function. While various theories may choose to interpret this definition broadly or more narrowly, the basic notion of a construction as a pattern of form and function remains the same.

**Short bios**

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