

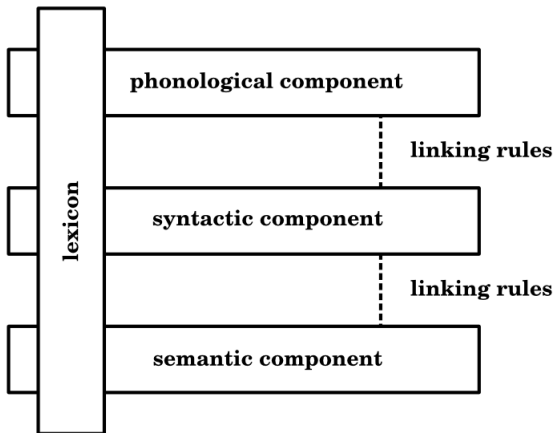
Radical Construction Grammar

Will Roberts
wroberts@coli.uni-sb.de

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Componential Models of Grammar



But: Idioms

Idioms: Linguistic expressions which are idiosyncratic in some way.

- Lexical
 - kith and kin
- Syntactic or extragrammatical
 - all of a sudden
 - by and large
 - wine and dine
- Semantic
 - tickle the ivories
 - kick the bucket
 - spill the beans

Since these expressions are larger than single words, there are difficulties storing this information in the lexicon.

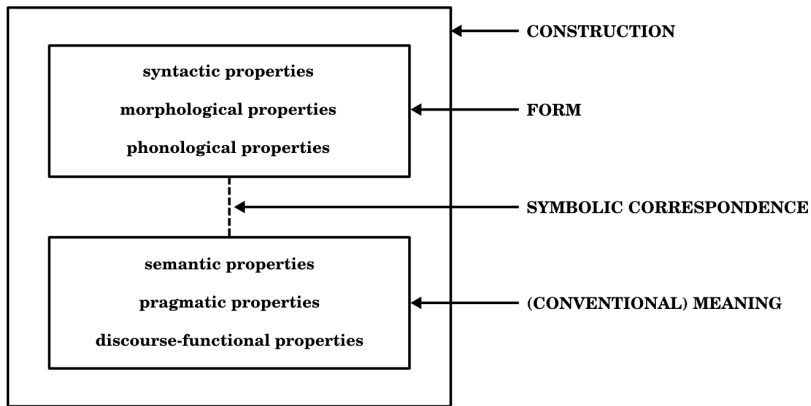
Schematic Idioms

Some idioms are not completely lexically specific (*substantive*).

- The *X*-er, the *Y*-er. (*The higher you fly, the farther you fall.*)
- Pull *NP*'s leg. (*Come on, don't pull my leg.*)

These follow normal syntactic rules, or have their own regularities, but they are semantically idiosyncratic.

Constructions



Constructions

Regular syntactic rules can also be represented as constructions; this leads to a continuum from atomic and specific to complex and schematic constructions.

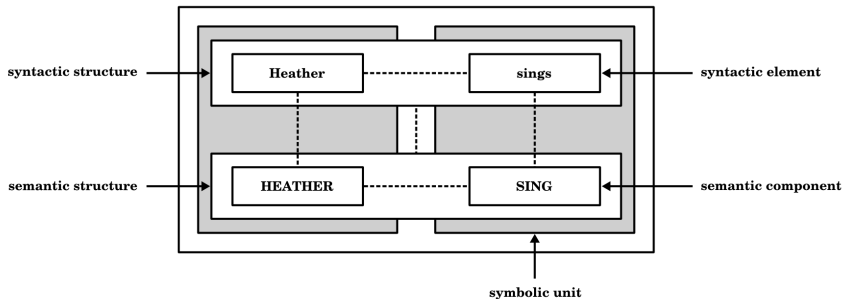
CONSTRUCTION TYPE	TRADITIONAL NAME	EXAMPLE
Complex and (mostly) schematic	syntax	SUBJ <i>be</i> VERB- <i>en</i> by OBJ
Complex and (mostly) specific	idiom	<i>pull</i> NP- 's <i>leg</i>
Complex but bound	morphology	NOUN- <i>s</i>
Atomic and schematic	syntactic category	ADJ
Atomic and specific	word	<i>green</i>

Thus, construction grammars can provide a uniform representation of all types of grammatical structures.

Comparison

Generative Grammar: [[Heather]_{NP} [sings]_{VP}]_S

Construction Grammar:



Similarities

- Both the generative grammar and construction grammar versions share a part-whole or *meronomic* structure of syntactic units:
 - The sentence is made up of two parts: *Heather* and *sings*

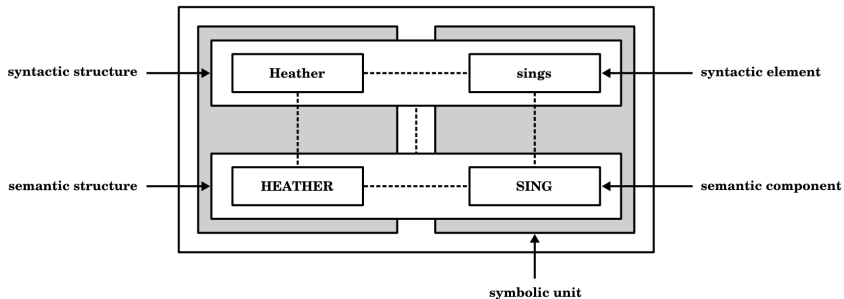
Differences

- However, the generative grammar analysis is built up from syntactic atoms—words belonging to syntactic categories; the meaning of the sentence is derived using linking rules to translate the syntactic structure to the semantic representation.
- The construction grammar treats the component units as fundamentally symbolic, that is, there are *symbolic relations* between the form and the meaning of the construction.
- “Heather sings” is an *instance* of an Intransitive construction.

Comparison

Generative Grammar: [[Heather]_{NP} [sings]_{VP}]_S

Construction Grammar:



Why “Radical”?

- Radical Construction Grammar approaches syntactic theory from a typological perspective.
- Radical Construction Grammar is *non-reductionist*.
- Almost all aspects of grammatical structure are language-particular.
- Syntactic relations between elements (i.e., words, constituents) do not exist.

Typology

- Language is *diverse*. Variation is normal in language. There is both cross-linguistic variation and language-internal variation.
- Language is *arbitrary*. Not everything in language can be explained in terms of formal principles or generalizations.
- Language is *dynamic*. Because language is arbitrary, it can change over time, and it does.

The Radical Construction Grammar approach

- Grammatical categories are discovered using the *distributional method*.
- Constructions are the basic units of syntactic representation, and syntactic categories are derived from the constructions in which they appear.
- Constructions have properties which identify them; finding the constructions in a language is a categorization problem, similar to the problem of trying to identify part of speech categories.
- Constructions are organized in a *structured inventory*, representing a speaker's linguistic knowledge. So *kick the bucket*, SUBJ *kick* OBJ, and the general Transitive Construction are separate constructions, but they are chained together in a hierarchy.

Non-reductionism

- Reductionist theories have fundamental theoretical primitive constructs that are atomic—they cannot be broken down into smaller parts in the theory.
- The primitive construct of Radical Construction Grammar is the construction, which is complex.
- Constructions contain categories and relations, but these are defined by the constructions they appear in, and are not theoretical primitives.
- Gestalt paradigm: the whole is greater than the sum of its parts
- That is, the parts of a construction (syntactic categories and relations) do not have an independent existence outside of the whole construction.

No Universal Grammar

Syntactic categories, and the properties that identify them, are defined by the constructions in which they appear. While there are similarities between constructions in the same language, and even between constructions in different languages, it is misleading to conclude that the syntactic categories are identical between languages.

Any set of syntactic properties only isolates a subset of constructions in the world's languages, so constructions are language-specific. Since Radical Construction Grammar posits that constructions are the basic unit of syntax, this means that syntax is also language-specific.

Primitive syntactic categories such as noun, verb, adjective do not exist in a universal sense.

Evidence for syntactic relations

Falls into two categories:

- Coded Dependencies
 - **Sheila** sells seashells.
 - Manifested by some aspect of the grammatical structure of the utterance (e.g., Subject-Verb Agreement, Subject in preverbal position, etc.).
- Collocational Dependencies
 - The cherry trees **burst into bloom**.
 - A constraint on the choice of words: cannot say ... *burst into bicycles*.

Coded Dependencies

- Linear order does not always predict categorization (e.g., English *there* constructions).
- Languages with discontinuous constituents: “Constituency is not an abstract global structure for the syntax of constructions.”
- Overtly coded dependencies (e.g., case agreement, head-marking, etc.). Mismatches between different overtly coded dependencies in a single language. “Each type of structure that defines a coded dependency defines its own set of coded dependencies”.

Coded dependencies are formal properties of construction types, and are not manifestations of abstract syntactic relations. These dependencies are due to *symbolic* relations.

Collocational Dependencies

- Tom **pulled strings** to get the job.
- *Tom pulled ropes to get the job.

Strings refers metaphorically to personal connections when used with *pull*, and *pull* refers to exploiting when used with *strings*.

These meanings are attached to the words in question, but only when these two words occur together. Actually, the meaning of the idiom is due to the *semantic* relation between strings and pulling.

Conclusion

- Grammatical structure are language-particular.
- Radical Construction Grammar is non-reductionist.
- Primitive syntactic categories such as noun, verb, adjective do not exist.
- Syntactic relations between elements (words, constituents) do not exist.

Literature



Croft, W. (2001).

*Radical Construction Grammar: Syntactic Theory in
Typological Perspective*

Oxford: Oxford University Press.