Some contributions of typology to cognitive linguistics revisited

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Syntactic argumentation and the nonuniversality of syntactic categories
Syntactic categories and the distributional method

• Syntactic categories—word classes, and also classes of larger syntactic units like phrases (subject, etc.) and clauses (relative clause, etc.) are determined by the *distributional method*

• The distributional method was codified by American structuralists, and is now often referred to as *tests, criteria, arguments or evidence* for syntactic categories
What is being described?

(1) Jack kissed Janet.
(2) Janet was kissed by Jack.
(3) The old man walked with a cane.
(4) *A cane was walked (with) by the old man.

- Two tests/criteria for the Direct Object category

<table>
<thead>
<tr>
<th>Direct object: Janet</th>
<th>[Sbj Verb ___ ]</th>
<th>[ ___ be Verb-PASS… ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

| Oblique: a cane      | *               | *                      |
What is being described?

(1) Jack weighs 160 pounds.
(2) *160 pounds was weighed by Jack.

• The two tests don’t match. The usual strategy is to pick one test as the “real” test, in this case, the Passive (i.e. 160 pounds is not a direct object)

• But that doesn’t explain why 160 pounds doesn’t need a Preposition in the Active clause

• Most important: what is being described is not something about a category “Direct Object”, but something about the Passive construction
Syntactic categories and the distributional method

• The truth is, the “tests”, “criteria”, “arguments”, “evidence” for syntactic categories (and other syntactic constructs, such as constituent structure) are really *constructions*

• The distributional method is fundamentally based on the assumption of the existence and identifiability of constructions, but without using that name
Radical Construction Grammar

- Distribution patterns for words are generally mismatched; adding subclasses, exception features, etc. are just patches to avoid this fact.

- Distributional analysis presupposes the constructions used to set up the syntactic categories—but then the categories are used to define the constructions.

- To avoid this circular reasoning, we posit constructions as basic and categories as derived (from constructional roles).
The problem across languages

<table>
<thead>
<tr>
<th>Straits Salish</th>
<th>Predication</th>
<th>Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action words</strong></td>
<td>t’ilm=ɿ=sxʷ</td>
<td>cə t’iləm=ɿ</td>
</tr>
<tr>
<td>‘you sang’</td>
<td>‘the (one who) sang’</td>
<td></td>
</tr>
<tr>
<td><strong>Object words</strong></td>
<td>si’em=ɿ=sxʷ</td>
<td>cə si’em=ɿ</td>
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<tr>
<td>‘you were a chief’</td>
<td>‘the (one who) was a chief’</td>
<td></td>
</tr>
<tr>
<td><strong>Property words</strong></td>
<td>sey’si’=ɿ=sxʷ</td>
<td>cə sey’si’=ɿ</td>
</tr>
<tr>
<td>‘you were afraid’</td>
<td>‘the (one who) was afraid’</td>
<td></td>
</tr>
</tbody>
</table>

- Jelinek & Demers: no Noun/Verb distinction
- van Eijk & Hess, on Lillooet and Lushootseed: Noun/Verb distinction, because of Possessive, Aspect inflections
- Jelinek & Demers: ‘[“Nouns”] have the same syntax as any other predicate’
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- Same problem, different language
- There is another problem here: how do we know that the Salishan categories are the same as the English ones? If there is no Noun/Verb distinction, what is the remaining category? Verb? Noun? Neither?
• We must be able to compare constructions across languages

• To do so, we must determine equivalent constructions by their functions

• And categorize the form of these constructions using cross-linguistically valid morphosyntactic properties
# Parts of speech

**English**

<table>
<thead>
<tr>
<th>Object reference:</th>
<th>two hawk-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property reference:</td>
<td>its wid-th(*-s)</td>
</tr>
<tr>
<td>Action reference:</td>
<td>the destruc-tion/hunt-ing (*-s) of the lions</td>
</tr>
<tr>
<td>I learned that archery is hard.</td>
<td></td>
</tr>
<tr>
<td>Object modification:</td>
<td>Sally-’s truck/the truck in the lot</td>
</tr>
<tr>
<td>Property modification:</td>
<td>a better/bigger/more effective mousetrap</td>
</tr>
<tr>
<td>Action modification:</td>
<td>the sleep-ing girl/the girl that I met</td>
</tr>
<tr>
<td>Object predication:</td>
<td>It’s a hawk.</td>
</tr>
<tr>
<td>Property predication:</td>
<td>It’s big.</td>
</tr>
<tr>
<td>Action predication:</td>
<td>It shrink-s in hot water.</td>
</tr>
</tbody>
</table>

The propositional act constructions form the basis of a crosslinguistically valid theory of parts of speech.
Parts of speech: English

structural coding

- NUMBER
  - object reference

- NMLZR
  - property reference

- that, -ing

behavioral potential

- object modification
  - 's, PREP

- DEGREE
  - property modification

- (be) a
  - object predication

- be
  - property predication

- TENSE/AGR
  - action predication

- who, etc.
  - action modification
Parts of speech

Lango “core” properties:

Singular/Plural agreement stems: cèk/cègù ‘short’

Attributive particle in modification: gwôkk à bèr ‘the good dog’

Habitual predication—Subject agreement, no independent tone in Gerund: án àràc ‘I am bad’

Nonhabitual predication—Copula verb: án àbédò rác ‘I was bad’

Lango “peripheral” properties: same as core properties but no alternate Singular/Plural agreement stems
Parts of speech

Lango actions:

Predication—inflect in Perfective, Progressive, Habitual aspects: àgíkò/àgíkô/ágíkkò ‘I stopped/stop/am stopping something’

Predication—take Habitual tone: nénè ‘he sees it’

Modification—take Attributive + Relative, Attributive, or zero: gwókk àmé/à/Ø ṥótó ‘the dog that died’

NB: properties may take Attributive + Relative (or zero), but Attributive + Relative is preferred for action modification
Parts of speech: Lango

- core property modification
- peripheral property modification
- action modification
- ATTR
- ATTR+REL
- Non-Habitual Copula
- core property predication
- peripheral property predication
- action predication
- Subject agreement
- Perfect, Progressive; Habitual tone

SG/PL stems

Subject agreement
Summary

• Word classes are language-specific and defined by constructions. There is no small finite universal set of word classes, and hence no universals of word classes per se.

• Morphosyntactic universals are based on properties of constructions, including what categories they define. Crosslinguistic comparison of constructions must be based on function (or at least derived structure).

• One can restrict the scope of typological comparison by selecting a set of functionally related constructions which are likely to share universal constraints.
The nonuniversality of semantic categories
Not syntactic categories, but semantic categories?

• The radical constructional analysis shows that one cannot build a cross-linguistically (typologically) universal theory of syntax on formal morphosyntactic categories.

• An alternative solution is to base syntax on semantic categories instead—a conceptual, or functional, analysis, such as the one proposed in Cognitive Grammar.

• However, we have reason to believe that there are no universal semantic categories either.
Spatial adpositions

• A set of pictures of spatial situations was constructed to represent situations commonly expressed by English *on* and *in*

• The situations were described by speakers of nine diverse languages (Tiriyó, Trumai, Yukatek, Basque, Dutch, Lao, Ewe, Lavukaleve and Yélîdnye)

• Spatial adpositions only were coded

• An MDS analysis was performed on the data (refined by Croft & Poole)

(Levinson et al., *Language* vol. 79, 2003)
Sample stimuli (Bowerman-Pederson)
Two dimensional MDS model of adpositions by unfolding

The ON/OVER and ON-TOP pictures are grouped together; all manifest superadjacency.

Most of the other situation types express containment, and are grouped in IN.

Many situation types express attachment, and are grouped in ATTACHMENT.
Conceptual categories (clusters)?

- One might assume that the crosslinguistic MDS analysis reveals universal conceptual categories that are linguistically relevant.
- But the conceptual clusters simply illustrate the coherence of the conceptual space.
- They are **NOT** linguistically relevant per se.
- Instead, what is universal are the individual situation types (holistically conceived) and their conceptual relations to each other.
All adposition categories
Language universals and language-specific

Universal: each situation type (picture), holistically conceived

Language-specific: an adposition category (cutting line)

Language categories cut through conceptual “categories” (clusters)
The importance of relations between situation types

These pictures are almost all of surface attachment—between ON and ATTACHMENT.

These pictures are almost all of semi-contained attachment—between ATTACHMENT and IN.
Somewhat closer to **IN**, the figure is partly contained in the ground, which has an opening, not a hole.

Closer to **ATTACHMENT**, the figure is or creates a hole in the ground, but can extend beyond the ground.
The IN “cluster”:
A closer look

There is a gradient of increasing envelopment of the figure by the ground, NOT a set of discrete conceptual categories
Parts of speech

• Rogers (2016) examined the morphosyntactic expression of 49 semantically diverse concepts in 11 languages, using the coding and behavioral constructions defining parts of speech according to Croft (1991, 2001)

• Object (“nominal”) and action (“verbal”) concepts were more uniform in morphosyntactic expression than property (“adjectival”) concepts

• But these semantic categories nevertheless exhibited internal conceptual structure
MDS analysis: prototypes?

Exhibit more dissimilarity among them than is found in the other prototypes, they maintain some amount of cohesion as well. These clusters are illustrated in Figure 6.

In the next sections, I turn to a discussion of the internal structure of each prototype. The arrangement of points in the spatial model will be evaluated to determine whether they substantiate my predictions regarding the relevant semantic characteristics for prototypicality.
MDS analysis: noun prototype

This suggests that unbounded objects are most distant from the noun prototype among object concepts.

Figure 7. Noun prototype

Between these two concepts on the lower end and the animates on the upper end, a significant number of concepts landed in the same spot in the spatial model. This group includes TREE, SEED, HAT, BED, ARM, FACE, RIVER, and HOUSE. No markedness distinctions were found to disambiguate these terms in my analysis. The explanation may be found in the semantic features that were used to subclassify animacy hierarchy.
MDS analysis: adjective prototype

The eight property concepts that are in the middle of the continuum—neither very object-like or action-like—are not arranged so neatly in the spatial model. Some of these concepts are clustered very close to each other, and there does not seem to be an obvious structure from "nouny" to "verby" within them. This may be a human propensity for physical properties over value, age, form, color, and gender.
Within this subgroup of stative concepts, however, the distinction between two-participant states and inactive actions is not clear in the spatial model. Inactive actions SIT and WEAR are found together in the lowest position in the verb cluster, but SEE/Look at—an inactive action—is bundled up with the two-participant states.

The separation of SIT and WEAR from the other stative concepts may reflect the unintentional inclusion of more active meanings in some of the lexemes chosen.

**Stative, more or less dynamic, more or less punctual (?)**
Summary

• Grammatical categories are constrained by the structure of conceptual space

• The structure of conceptual space is universal, but it does NOT consist of universal conceptual categories

• Instead, it consists of particular, holistic situation types and their relations to each other

• But linguistic function is not just semantic content

• Linguistic function involves the construal of semantic content
Physical tools and conceptual tools

- A physical tool is an object that we use to carry out some purpose, e.g. a knife is for cutting things
Tools and function

• But tools and function don’t always match

• Three general principles follow from this

  ✴ Physical objects are used in whatever way to achieve *a person’s goals* in their actions

  ✴ The *nature of reality* favors some functions for tools over others

  ✴ *Cultural conventions* also favors/limits certain shapes and styles of tools
Linguistic meanings as conceptual tools

- We use words and grammatical categories/constructions as *tools* to express meanings or concepts to our interlocutors.
- And they can be used in different ways just as tools are.
- This is what cognitive linguists call *conceptualization* or *construal*.
Examples of construal

The leaves are pretty.

The foliage is pretty.

• Two different construals (individuated vs. aggregate)
• Cannot be simultaneously construed both ways
• Neither construal is “better” than the other, out of context
The properties of construal

- **Construal**: the process of conceptualizing an experience
  - there are multiple alternative construals available
  - you have to choose one or another; they are mutually exclusive
  - no construal is the “best” or “right” one, out of context
Examples of construal

Highest landfill use in Europe?

Actually, the UK is on course. It’s just that it’s a long road.

- Two different construals (different spatial metaphors)
- Cannot be simultaneously construed both ways
- Neither construal is “better” than the other, out of context
Another type of “construal”

But reading to a dog isn’t so scary.

“When you’re six or seven years old, that’s quite a lot of dog bearing down on you.”

• This looks similar to the previous examples of construals of experience, but in fact it is “construal” of a word, namely dog

• There are significant differences between the two processes
Another type of “construal”

But reading to a dog isn’t so scary.

“When you’re six or seven years old, that’s quite a lot of dog bearing down on you.”

- First, the “construal” is not of the same experience: the meanings are different (the animal vs. weight of the animal), even if related
- So it looks more like a type of semantic shift
Another type of “construal”

But reading to a dog isn’t so scary.

“When you’re six or seven years old, that’s quite a lot of dog bearing down on you.”

- Second, it only involves construal in an indirect fashion (simplifying somewhat here):
  - the construction allows the employment of an image schema that forms part of the construal of the experience
  - while the word contributes its potential, or purport
The variety of constructions

• Construal and its competing motivations lead to the variety of constructions found across and within languages:

  ✴ The interlocutors’ goals in discourse allow for the high flexibility of constructional construals

  ✴ The nature of reality favors some construals (prototypes) over others, which can be reflected in differences in constructional properties

  ✴ Cultural conventions limit constructional construals within languages and preserve crosslinguistic variation in constructional properties
Verbalization and construal

Wallace Chafe, 1927-2019
The verbalization of experience

- The structure of experience and the structure of language are completely different
  - Experience is a *unique whole*
  - An utterance consists of *reusable parts*

- How does one get from one to the other?

Let’s get a pizza.
Chafe’s model of verbalization

- A speaker takes the whole experience and breaks it into smaller chunks of the same holistic type - subchunking
Chafe’s model of verbalization

- Chafe later (1994) describes this process in terms of **consciousness**: a focusing of consciousness that moves around a semiactive periphery of consciousness.
Chafe’s model of verbalization

• A speaker then analyzes the chunk into parts of different type: individuals that recur across chunks, and the remainder, which is the event in the chunk - *propositionalizing*
Chafe’s model of verbalization, cont.

• Finally, a speaker identifies those parts (entities) in terms of previously verbalized, similar parts of prior experiences - **categorizing**

• Chafe’s later work retains this function
Chafe’s model of verbalization, cont.

• At this point, the speaker can verbalize the originally unique, whole experience as reusable parts, namely the content words (nouns, verbs, adjectives) that are used in the utterance

• Chafe’s 1977 model accounts for the universal organization of utterances into clauses, or at least intonation units, and phrases to some extent
Chafe’s model of verbalization, *cont.*

- But the 1977 model does not account for the function words and grammatical categories and constructions that are so widespread in human languages (Chafe later partially remedies this)
Elaborating Chafe’s model of verbalization

• Chafe’s 1977 model describes how the unique whole of experience is broken down and the parts are identified by categories

• But language also allows the speaker to particularize the general categories to the unique parts in the experience, and to reconstitute the experiential whole

• Thus, the unique whole can be communicated
## Elaborating Chafe’s model of verbalization

<table>
<thead>
<tr>
<th>Taking it apart…</th>
<th>…and putting it back together again</th>
</tr>
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<tbody>
<tr>
<td>Subchunking/Focusing of consciousness</td>
<td>Cohering (Flow of consciousness)</td>
</tr>
<tr>
<td>Propositionalizing</td>
<td>Structuring</td>
</tr>
<tr>
<td>Relating it to prior experience…</td>
<td>…and re-establishing its unique specificity</td>
</tr>
<tr>
<td>Categorizing</td>
<td>Particularizing:</td>
</tr>
<tr>
<td></td>
<td>Selecting (Instance)</td>
</tr>
<tr>
<td></td>
<td>Situating (Grounding, Orientation)</td>
</tr>
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</table>
Particularizing

• Categorizing relates an entity in the experience to prior entities by subsuming them under a general category/type, e.g. *hummingbird*

• But the speaker is verbalizing an experience with a particular instantiation of the category

• The speaker does so by *selecting* the instantiation, and *situating* it in physical and mental space
## Particularizing

<table>
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<tr>
<th>Selecting</th>
<th>Individuals</th>
<th>Events</th>
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<tbody>
<tr>
<td></td>
<td><em>a hummingbird, two hummingbirds, a pair of hummingbirds</em></td>
<td><em>flew, was flying, is about to fly</em></td>
</tr>
<tr>
<td></td>
<td><em>the hummingbird in the nest, a/the hummingbird, Joey’s hummingbird</em></td>
<td><em>will fly, might fly, flew yesterday, flew on Tuesday, Joey thinks it flew</em></td>
</tr>
</tbody>
</table>
Structuring

- **Structuring** takes the particularized entities in a subchunk of the verbalized experience (roughly: the event, participants, and their properties that have been verbalized), and reassembles them into the whole subchunk.

- Grammatically, structuring represents clause structure, including argument structure and modification within phrases, and the division into parts of speech (propositional action constructions).
8.24 [.9] And he puts it on his [.35] bicycle rack in front,

Parts of speech (propositional act constructions)
Cohering

• **Clause linkage**: coordination, subordination
   
   ✦ **Coordination**: *So they’re walking along, and they brush off their pears, and they start eating it.*

   ✦ **Subordination (balanced)**: *And because he’s watching her, when he turns around his hat comes off.*

   ✦ **Subordination (deranked)**: *Without saying anything, they help him put the pears back in the basket.*
Cohering

• **Reference tracking**: anaphora, ellipsis (null instantiation), switch-reference

  ✦ Sbj=Sbj: *Sally ate the banana and ___ tossed the peel* (VP Coordination, Conjunction Reduction)

  ✦ Obj=Obj: *Sally peeled ___ and Gary ate the banana* (Right Node Raising)

  ✦ Sbj=Sbj and Obj=Obj: *Sally peeled ___ and ___ ate the banana* (Verb Coordination, Conjunction Reduction)

  ✦ Sbj≠Sbj and Obj≠Obj: *Sally ate the banana and Gary ___ the watermelon* (Gapping)
He picked up some hay and lifted it over the corral fence and into the corral. All of the animals went after and began eating the hay.
The inventory of constructions

- The verbalization process motivates the types of constructions found across languages:
  - **Particularizing**: various adnominal and adverbial (including “satellite”) constructions
  - **Structuring**: clausal (predicate-argument) and phrasal (attributive) constructions, including argument structure and information structure constructions
  - **Cohering**: many complex sentence constructions; reference tracking, including anaphora, null instantiation, switch-reference
The grammaticalization of constructions

- All of the processes of verbalization can be expressed lexically ("periphrastically")
- But the "reconstituting" processes (particularizing, structuring, cohering) are highly likely to be grammaticalized
- This is partly because there are many fewer options for reconstituting an experience that has already been broken down and has had its parts categorized
- Usage patterns (e.g. frequency) lead to particular combinations of multiple verbalization processes to be grammaticalized into single complex constructions
Comparative concepts and the structure of morphosyntax
Constructions and strategies

• The issue: the grammatical concepts used in linguistic description are language-specific, because they are defined by language-specific properties (Croft 2001; Haspelmath 2010)

• Croft (2014, 2016) defines two types of *comparative concepts* (Haspelmath 2010):
  - *constructions*: whatever structure is used to express a function
  - *strategies*: a specific, cross-linguistically definable structure used to express a function
**Constructions vs. strategies**

**Construction**

- predication of object concept

**Strategies**

- inflected copula
- zero copula/zero inflection

**English:**
Ivan is the best dancer.

**Russian:**
Ivan lučšij tancor
Types of strategies

**Encoding strategies:** forms/structures that encode the constructional function

*Ivan is the best dancer.*

**Coexpression strategies:** expressing different functions in different constructions with the same form

*Sally sat with Harry./Sally ate it with chopsticks.*

**Recruitment strategies:** recruit an entire construction for another function

*Eva has an iPhone./Eva has a cold.*
Semantics and information packaging

• POS—noun, verb, adjective—have posed extremely vexing problems for crosslinguistic analysis

✦ Definitions of POS are language-specific (morphological inflections, syntactic constructions)

✦ Claims that “This language has no Adjectives”, etc. are due to definitions based on European POS strategies

• Solution: POS represent a combination of semantic content and information packaging (Croft 1991, 2001, in prep.)
The functional-typological analysis of POS

<table>
<thead>
<tr>
<th></th>
<th>reference</th>
<th>modification</th>
<th>predication</th>
</tr>
</thead>
<tbody>
<tr>
<td>object</td>
<td><em>the sharp thorns</em></td>
<td><em>the bush’s thorns</em></td>
<td><em>It’s a thorn.</em></td>
</tr>
<tr>
<td>property</td>
<td><em>sharpness</em></td>
<td><em>the sharp thorns</em></td>
<td><em>Those thorns are sharp.</em></td>
</tr>
<tr>
<td>action</td>
<td><em>(I said) that the thorns scratched me</em></td>
<td><em>(the thorns that scratched me)</em></td>
<td><em>(The sharp thorns scratched me).</em></td>
</tr>
</tbody>
</table>
Semantic content and information packaging

- This “two-dimensional” analysis of function accounts for typological variation in form, and allows us to distinguish POS constructions from POS strategies.

- In fact, all linguistic meaning, that is, meanings of grammatical constructions, can be described as the information packaging (Clark’s [1996] ‘formulation’) of semantic content.
## Predicate-argument structure

<table>
<thead>
<tr>
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<th>core</th>
<th>oblique</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>subject</strong></td>
<td><strong>object</strong></td>
<td></td>
</tr>
<tr>
<td><strong>agent</strong></td>
<td>The director presented the watch to Bill.</td>
<td>(not found in English, but compare Algonkian inverse, Austronesian voice)</td>
</tr>
<tr>
<td><strong>theme</strong></td>
<td>The watch was presented to Bill.</td>
<td>The director presented the watch to Bill.</td>
</tr>
<tr>
<td><strong>recipient</strong></td>
<td>Bill was presented with the watch.</td>
<td>The directed presented Bill with the watch.</td>
</tr>
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# Complex sentences

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<tbody>
<tr>
<td><strong>Anterior</strong></td>
<td></td>
</tr>
<tr>
<td><em>He washed the car before driving to the party.</em></td>
<td><em>He washed the car and drove to the party.</em></td>
</tr>
<tr>
<td><strong>Posterior</strong></td>
<td></td>
</tr>
<tr>
<td><em>He drove to the party after washing the car.</em></td>
<td><em>He washed the car and drove to the party.</em></td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td></td>
</tr>
<tr>
<td><em>He washed the car while the sun was still shining.</em></td>
<td><em>The sun was shining and he was washing the car.</em></td>
</tr>
<tr>
<td><strong>Cause</strong></td>
<td></td>
</tr>
<tr>
<td><em>She went to bed because she was exhausted.</em></td>
<td><em>She was exhausted and (so) went to bed.</em></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td></td>
</tr>
<tr>
<td><em>I will grab a stick (in order) to defend myself.</em></td>
<td><em>I will grab a stick and defend myself.</em></td>
</tr>
<tr>
<td><strong>Apprehensional</strong></td>
<td></td>
</tr>
<tr>
<td><em>I grabbed a stick lest he attack me.</em></td>
<td><em>Grab a stick or he will attack you.</em></td>
</tr>
</tbody>
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<tbody>
<tr>
<td><strong>Means/Positive</strong></td>
<td>He got into the army <em>by</em> lying about his age.</td>
<td>He lied about his age <em>and</em> got into the army.</td>
</tr>
<tr>
<td><strong>Circumstantial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Negative</strong></td>
<td>She carried the punch into the living room <em>without</em> spilling a drop.</td>
<td>She carried the punch into the living room, <em>but/and</em> she didn’t spill a drop!</td>
</tr>
<tr>
<td><strong>Circumstantial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Additive</strong></td>
<td><em>In addition to</em> having your hand stamped, you must show your ticket stub.</td>
<td>You have to have your hand stamped <em>and</em> show your ticket stub.</td>
</tr>
<tr>
<td><strong>Substitutive</strong></td>
<td>We barbecued chicken at home <em>instead of</em> going out to eat.</td>
<td>We didn’t go out to eat, <em>and</em> barbecued chicken at home.</td>
</tr>
<tr>
<td><strong>Subtractive</strong></td>
<td>He did all the problems correctly <em>except</em> he missed the proof on the last one.</td>
<td>He did all the problems correctly <em>but</em> he missed the proof on the last one.</td>
</tr>
<tr>
<td><strong>Conditional</strong></td>
<td><em>If</em> you do that, <em>(then)</em> the terrorists have won.</td>
<td>Murphy, you do that <em>and</em> the terrorists have won, ...</td>
</tr>
</tbody>
</table>
## Clause-level information status

<table>
<thead>
<tr>
<th>topic-comment (categorical)</th>
<th>thetic</th>
<th>identificational</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The Mac is mine.</em></td>
<td><em>I have a MAC.</em></td>
<td><em>It’s the MAC that is mine (not the PC).</em></td>
</tr>
<tr>
<td><em>The soup tureen is sitting on the table.</em></td>
<td><em>On the table sat a SOUP TUREEN.</em></td>
<td><em>The soup tureen is on the TABLE (not in the kitchen).</em></td>
</tr>
</tbody>
</table>
The structure of Morphosyntax

Part One—Introduction

1. Grammatical Categories, Semantic Classes and Information Packaging
2. Propositional Act Constructions: The Skeleton of a Sentence

Part Two—Argument Phrase Structure: Reference and Modification

3. Reference and Referent Expressions
4. Modification: Semantic Types and Morphosyntactic Strategies
5. The Structure and Origin of Modification Constructions

Part Three—Clause Structure: Predication and Arguments

6. Event Structure and Argument Coding: Semantics, Transitivity and Alignment
7. Event Structure and Nonprototypical Argument Coding
8. Argument Coding and Voice: Discourse Factors
9. Argument Coding and Voice: Salience of Peripheral Participants
10. Nonprototypical Predication and Nonpredicational Clauses
11. Information Packaging in Clauses
12. Speech Acts, Modality and Information Packaging
13. Eventive Complex Predicates and Related Types
14. Stative Complex Predicates, including Manner

Part Four—Complex Sentences

15. Temporal and Causal Relations Between Events: Coordination and (Adverbial) Subordination
16. Other Semantic Relations Between Events: Comparative, Conditional, and Concessive
17. Events as Arguments: Complement Clause Constructions
18. Events as Modifiers: Relative Clause Constructions
Typology and cognitive linguistics, revisited

• Typology leads to a Radical Construction Grammar approach to syntax: no universal syntactic categories

• The same typological approach (semantic maps/MDS) leads to no universal semantic categories either

• The cognitive linguistic concept of construal provides another view of semantics
Typology and cognitive linguistics, revisited

- Chafe’s model of verbalization provides a functional basis for (morpho)syntax
- Verbalization is construal
- Constructional meaning always involves information packaging
- Information packaging is verbalization is construal
- Syntax = origin and evolution of constructional strategies across languages