About this presentation

These slides show the outlines, but not the full details, of this presentation.

If you have questions, please feel free to contact Hanno Beck at
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RRG's Constructional Schemas

In RRG, where do we state semantic generalizations about a construction?

- 16 presented in (as "constructional templates") Van Valin & LaPolla (1997)
- 14 presented in Van Valin (2005) -- some updated, some new
- 6 harvested from Van Valin ed. (2008)

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Semantic remarks in constructional schemas:
- sentences (9)
- VPs or predicates (7) (e.g. "contains an…" or "profiling a…")
- series of one or more NPs (9)

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Let's focus today on <u>continuum-related preferences</u>.

A Good Source of Examples: The *Tough* Construction

(1) This jar is tough to open __.

(2) Pat is easy/difficult (for Robin) to defeat __.

(3) This car is unsafe to drive __.

Many properties that were originally cast as all-or-nothing syntactic facts are actually gradient semantic or pragmatic phenomena, and therefore require relativized, supple generalizations rather than absolute syntactic decrees.

The *Tough* Construction I:

(4) These boxes would be easy for the workers to crush __.

(5) # The workers would be easy for these boxes to be crushed by __.

<div align="right">(Bresnan 1971, Lasnik & Fiengo 1974)</div>

*Brittle generalization. *NP would be easy for NP to be Ved by __.*

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Supple generalization. PSA = ~A, and the less Actorly, the better.

The *Tough* Construction II:

(6) Umbrellas are easy for vendors to sell __ when it rains.

(7) # The biking trail is easy for the river to flood __ when it rains.

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Supple generalization: embedded subject: The higher on an Animacy/Intentionality scale, the better.

The *Tough* Construction III:

(10) That man/# A man is easy to please. (I think he is standing in the driveway.)

(11) Some tornados were easy to see __ on the weather map.

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Supple generalization: The semantic/pragmatic work done by the meaning of the matrix subject must be appropriate for a Topic, and the more Topic-y the better.

The Gundel *et al.* (1993) givenness hierarchy:

in focus > activated > familiar > uniquely identifiable > referential > type-identifiable

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(12) **RAISING TO SUBJECT** That man/# Some man seems tall. (He is over there.)

(13) **TOPICALIZATION** That man/# A man, Lee dislikes. (He is very annoying.)

The *Tough* Construction IV:

(14) That store is easy to park in front of __.

(15) # That summer sale is never easy to park during __.

Semantic generalization: is it a Case Hierarchy? Or some sort of Adjunct Continuum?

…Locative >> Instrumental >> Comitative >> Others   (Blake 2001)

The *Tough* Construction V:

(16) ? This woodpecker is rare to see.   (cf. Mair 1990, Fleisher 2015)

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(17) Wow, this woodpecker is extremely rare to see at this time of year!

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(16) ? This woodpecker is rare to see.   (cf. Mair 1990, Fleisher 2015)

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Supple generalization:

Characterizing something, based in part on speaker's judgment, drawing a personal conclusion

general eval >> specific eval >> objective or reproducible conclusion

Recap: The supple generalizations

I. Matrix subject/gap – the closer to the Undergoer end of the Actor/Undergoer continuum, the better

II. Embedded subject, whether overt or covert – the higher on an Animacy continuum, the better

III. Matrix subject – the higher on a Givenness continuum, the better

IV. Matrix subject – the higher on some sort of Adjunct continuum, the better

V. Whole utterance – the more judgment-based, perspective-oriented, subjective, the better

What These Statements Have in Common

Take a continuum; select a point on it; draw an arrow from that point to one end of the continuum.

[• • • • • •]

[• • • →→→]

For a given construction A and a continuum B, there is a positive correlation between degree of X (one direction or the other) on B, and degree of acceptability of the sentences of A.

The Typological Claim

The typological claim here is that all continuum-related semantic statements in a grammar have the same structure. An arrow running from some specific starting point all the way to the right or left.

This is, like many typological claims, a statement that contiguous shapes are more natural/learnable, while discontinuous shapes are less natural/learnable. Structures with multiple arrows are not expected because they would involve discontinuities:
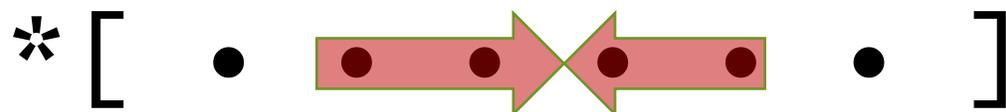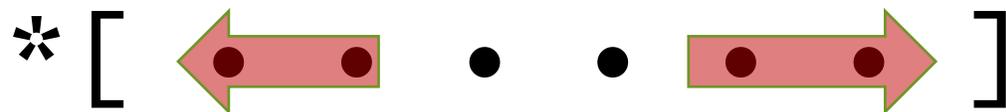
A More Formal System for Description

We could make a formal notation for these claims. Any constraints that apply to this notation system are typological claims about what semantic continuum-sensitive properties a construction in a human language can show.

Consider utterances as ordered pairs <s,c>

Define a function Acceptability(<s,c>) ε Int

"the more X, the better"

$$[<s,c>_1 \geq_X \ <s,c>_2] \longrightarrow \text{Acceptability}(<s,c>_1) \geq \text{Acceptability}(<s,c>_2)$$

The typological claim here is that this notation system only permits statements of the above form. The value of X can vary, but the overall statement syntax remains. This is like saying "at least one and at most one arrow" in the arrow notation.

"Violable Constraints"?

To capture the cumulative effect of continuum-based semantic generalizations for a construction, we could use a flavor of OT where scores are **variable** for a constraint, not just binary. With this kind of OT, constraint <u>weights</u> matter more than constraint <u>sequences</u>.

[MS: Not Actor]
[ES: Animate/Intentional]
[MS: Givenness]
[MS: Case/Adjunct]
[Subjective]

Sample Tableau

Compare Some Examples	Anim/Int	Subjectivity	Topicality
That woodpecker was extremely rare for the camera to see.	3		
A woodpecker was extremely rare for Fred to see.			1
A woodpecker was rare for the camera to see.	3	2	1
That woodpecker was rare for the camera to see.	3	2	
That woodpecker was rare for Fred to see.		2	
A woodpecker was rare for Fred to see.		2	1
That woodpecker was extremely rare for Fred to see.			
A woodpecker was extremely rare for the camera to see.	3		1

Typological Claims

The ideal outcome would be where we develop a set of violable and <u>combinable</u> constraints that describe the facts of the English tough construction, the same constraints are useful in many other constructions in English, and the same constraints are also present in other languages. The variations that we find would be expressible as different weights of those constraints.

Construction-specific constraints that are in play would be stated in the RRG constructional schema. Their precise impact for any individual utterance, would be calculated based on general OT tableau procedure.

Summary

- Many old syntax-only generalizations do not stand up well to modern research because they are brittle, not sensitive to semantic/pragmatic considerations.
- RRG is well positioned to account for semantic continuum-based preferences if we include them as semantic/pragmatic specifications in constructional schemas.
- We have seen examples where semantic continuum-based preferences correctly express the supple realities embodied in the *tough*-construction and elsewhere.
- These preferences might profitably be treated as a set of violable constraints that can interrelate and combine to yield a single overall semantic acceptability value for any particular sentence. The constraints are hypothesized to be structurally similar across constructions and across languages.
- Further research might explore a variety of languages to ascertain how similar these continuum-based preferences are crosslinguistically, and how optimally to formulate them. Also interesting would be researching how these preferences are learned.

Thank you for your attention!

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