

Conventionalization of grammatical anomalies through linearization



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Motivation for this talk



- ❧ Synchronically: certain constructions or features in languages do not seem to belong in the grammatical system as a whole. What to do about 'exceptions'?
- ❧ Diachronically: we might find some explanation from their historical development, with implications for synchronic analysis.
- ❧ Specifically: is there evidence in some cases of historical change conventionalizing anomalies?
- ❧ Perhaps a new perspective on reanalysis in general.

Complexity (Ross 2014)



- ❧ Assume we can measure linguistic complexity by quantifying the amount of knowledge of a speaker:
- ❧ Exceptional constructions, those not explained by more general rules in a language, add to complexity.
 - ❧ Examples of such constructions will be discussed.
- ❧ Therefore, anomalies in a language may be responsible for the bulk of its complexity.

Imagine 1,000 rules...



- Imagine we could explain most of English grammar with 1,000 rules.
 - Mostly these rules support each other and interact.
- But now imagine a 1,001st rule that must be added just because of an unusual construction.
 - The more general rules are not sufficient.
 - This more specific rule is not otherwise motivated.
 - How many are there? How do they develop?

Grammaticality



- ❧ A sentence is grammatical if it is generated by the rules of the language.
- ❧ A sentence is acceptable if it feels natural to speakers.
- ❧ Usually these two factors align.
 - ❧ But some especially complex sentences may be hard to process, for example.
 - ❧ Still, we should usually expect an acceptable sentence to be grammatical! *Almost by definition:*
 - ❧ Remember: we are describing native speaker knowledge.

Grammaticality Illusions



- Some cases of acceptable but ungrammatical sentences have been reported.
- They are called *grammaticality illusions*.

| Sentence types | Grammatical | Ungrammatical |
|----------------|--|---|
| Acceptable | <i>The dog chased the cat.</i> | *The rat the cat the dog chased hid. |
| Unacceptable | !The rat the cat the dog chased scared hid. | !*Chased dog the cat the. |

Note: “!” used to represent unacceptability.

Grammaticality Illusions



☞ Sometimes acceptability despite ungrammaticality can be robust even to an informed speaker:

More people have been to Russia than I have.

(Townsend & Bever 2001, Phillips et al. 2011, *inter alia*)

Grammaticality Illusions



- ❧ These illusions are often interesting from a processing perspective (Phillips et al. 2011, *inter alia*)
- ❧ But usually not considered important for syntactic theory, seen as just errors in performance.
 - ❧ Like the difficulty with layered center embedding being unacceptable despite it being grammatical.
 - ❧ Most illusions aren't pragmatically relevant (cf. *Russia...*).
- ❧ But could they ever conventionalize and *become* grammatical?
 - ❧ What would the resulting grammatical system be like?

Reanalysis



- ❧ Diachronic change usually involves a mismatch between the speaker and hearer.
- ❧ The hearer parses the sentences differently from the speaker's intended meaning.
 - ❧ The same form, but different structures!
- ❧ Over time, this new structure becomes conventionalized for the form.

(I have oversimplified some details, especially sociolinguistic factors, but this model is sufficient for the current discussion.)

Reanalysis



☞ *Motion* > *Future* grammaticalization

I am going to visit the prisoner.

(Danchez & Kytö 1994:65)

Compare: I'm gonna visit the prisoner.

☞ Each step of the development is consistent with the general grammatical rules of English.

☞ In fact, this change is mostly lexical.

Syntactic change



☞ Syntactic change as well often proceeds regularly.

☞ Consider word order changes in Germanic:

Old SOV order: *He the book read will.*

Modern German: *He will the book read.*

Modern English: *He will read the book.*

☞ Certainly there are some difficulties in the analysis of Germanic word order, but for the most part it is compatible with syntactic theory, and a common topic.

☞ Yet some diachronic residue can build up:

Not only have I studied German, but I have also studied Swedish.

What is normal change?



- ❧ Normally, rules change but are not added.
 - ❧ If rules are added, they usually resemble other rules.

- ❧ We often see changes as progressing to an endpoint.
 - ❧ Anomalies sometimes arise at what we could think of as an intermediate point in a grammaticalization path.

- ❧ In general, languages vary, but we might assume not in the *kinds* of rules they have.
 - ❧ Likewise, that should not change over time either.

Some unusual changes



- ❧ Unusual changes and constructions have received some attention from different linguists who point out that they do not conform to the more general or expected properties of the language, e.g.:
 - ❧ McCawley's (1988) discussion about 'Patches and Syntactic Mimicry'
 - ❧ Culicover's (1999) *Syntactic Nuts* (because they're hard to crack)
 - ❧ Ross (2014), regarding their contribution to the complexity of a language.

Prenominal Adjectives



- ☞ Prenominal adjectives in English can be asyndetically coordinated:

relevant, interesting research

- ☞ This is anomalous because all other coordination in English requires an overt conjunction *and*:

**mother father*

**sing dance*

**That research is relevant, interesting!*

(e.g. Quirk et al. 1985:961)

Prenominal Adjectives



❧ Is this really coordination?

❧ Consider the following ambiguity:

short young man

❧ short for his age, or both young and short

❧ A comma can also be disambiguating:

short, young man

❧ The order can also be reversed in coordination:

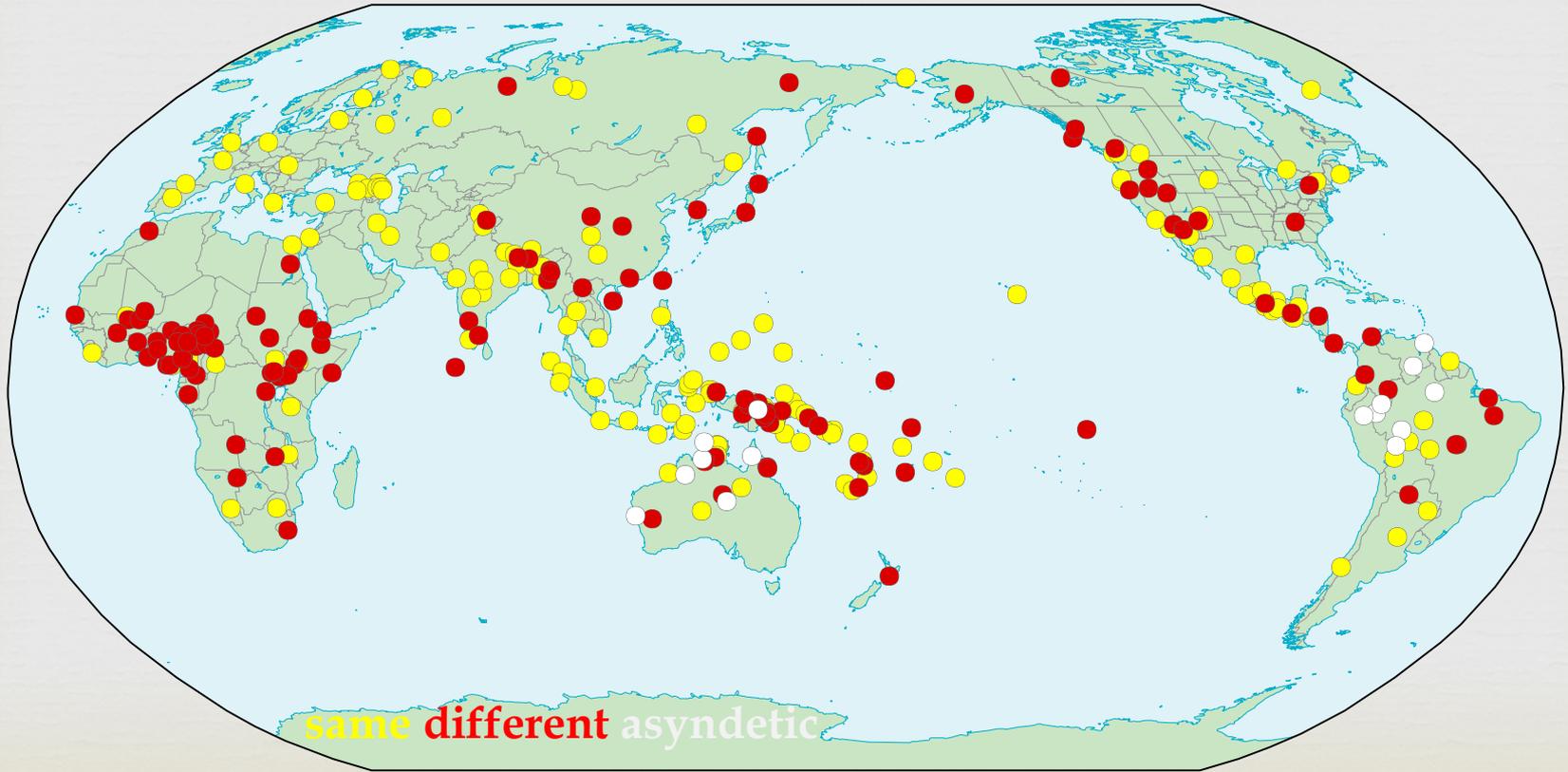
relevant, interesting research

interesting, relevant research

Prenominal Adjectives



Asyndetic coordination found cross-linguistically:
N+N/V+V 'and' is: (Haspelmath 2005)



Prenominal Adjectives



- ❧ But why this anomaly for English adjectives?
 - ❧ It isn't explained by more general rules!
- ❧ Old English permitted overtly coordinated adjective phrases or one before and another after a noun
- ❧ Middle English then developed (or used more often) hierarchical prenominal adjectives (Fisher 2004):

Adj [Adj N]

short [young man]

Prenominal Adjectives



- ✧ The modern asyndetic coordinated construction has the same linear structure as the hierarchical one:

Adj Adj N

- ✧ The hierarchical structure is ambiguous, and often the hierarchy is not semantically salient.
- ✧ By assigning coordinating semantics to the structure, reanalysis of the syntactic structure took place.
- ✧ Now the conjunction *and* is optional in English, but only between prenominal adjectives! **A special rule!**

Icelandic Past Infinitives



- ❧ Old Icelandic 3PL.PRES verbs were coincidentally homophonous with infinitives.
- ❧ By analogy (in a certain construction), *preterite infinitives* developed, homophonous to 3PL.PAST.
- ❧ The result is semantically vacuous tense-agreement.

(cf. Heusler 1921, Sigurðsson 2010, Ross forthcoming)

Zwicky's GoToGo



- ❧ English has an unusual 'go and' construction:
I'm going to school and study. / I'm going home and sleep.
 - ❧ This usage is rare but found in natural usage by native speakers of American English (Staum 2004).
 - ❧ It appears to be a blend of two different sentences:
I'm going to school. I'm going to go and sleep.
 - ❧ Or maybe a reanalysis of:
I'm going to school and going to sleep.
- (Zwicky 2002, Staum 2004)

try and [verb]



☞ Pseudocoordination with *try and* is semantically equivalent to *try to* (**What did you both try and also do?* is ungrammatical for the relevant reading!)

☞ Example:

I will try and win the race.

(But even if I try, I might not win!)

(Ross 2013, 2014, 2015, forthcoming)

A quick survey...



| | |
|-------------------------|--------------------------------|
| ?Try and win! | (It's ok if you don't though.) |
| ?I will try and win. | (But I might not win.) |
| ?We always try and win. | (But we don't always win.) |
| ?He tries and win. | (But he doesn't always.) |
| ?He tries and wins. | (But he doesn't always.) |
| ?We tried and win. | (But we didn't win.) |
| ?We tried and won. | (But we didn't win.) |

Grammaticality



| | |
|------------------------|--------------------------------|
| Try and win! | (It's ok if you don't though.) |
| I will try and win. | (But I might not win.) |
| We always try and win. | (But we don't always win.) |
| *He tries and win. | (But he doesn't always.) |
| *He tries and wins. | (But he doesn't always.) |
| *We tried and win. | (But we didn't win.) |
| *We tried and won. | (But we didn't win.) |

☞ The 'bare form condition' applies (Carden & Pesetsky 1977)

try and [verb]



- ❧ Neither verb can be inflected. Paradigmatic gaps:
*He tries and win(s).
- ❧ Descriptively, we can restrict inflection. However:
- ❧ In Faroese, a comparable construction exists with overt inflection (Ross 2015, Heycock & Petersen 2012):
Tey royna og lesa bókina.
(lit.) They try and read the.book
- ❧ Faroese PRES.PL inflection (but not SG, PAST, etc.) is identical to the infinitive: *looks-like-infinitive rule!*

Historical Development



- œ 1500s: literal coordination reanalyzed as ‘attempt to’:
You maie (said I) trie and bring him in...
But only in infinitive and imperatives!
- œ 1800s: syntactic shift allows bare present tense usage:
*We always try and eat well. (*He always tries...)*
- œ 1900s: *be* permitted in present tense contexts:
I always try and be polite.

(Ross 2013)

Grammaticality Conditions



- (A) The second verb is a bare infinitive, selected by *and*
- (B) Inflectional parallelism, 1st shares inflection w/ 2nd
- (C) Standard subject-verb agreement (1st verb only)

| Potential <i>try and</i> sentences | A | B | C |
|------------------------------------|---|---|---|
| I try and win. | ✓ | ✓ | ✓ |
| *He tries and wins. | * | ✓ | ✓ |
| *He tries and win. | ✓ | * | ✓ |
| *He try and win. | ✓ | ✓ | * |

Blending & Amalgams



- ❧ Townsend & Bever (2001:184) propose that some grammaticality illusions may blend two similar (but grammatical) sentences, often with related meanings:
 - **That's the first time anyone sang to me like that before.*
 - (a) *That's the first time anyone sang to me like that.*
 - (b) *No one sang to me like that before.*
- ❧ Diachronically this may come from the tendency to try to parse messy input (see Frazier & Clifton 2015).
 - ❧ More generally may be a type of 'good enough' processing.

Linear Grammaticality



- ❧ Reanalysis can occur when a linear sequence of words is grammatical under *any* reading.
- ❧ Note that grammaticality is determined for pairs of form and meaning, not just that a sentence has at least one grammatical parse.
- ❧ If the hearer reinterprets the meaning of the utterance (in context), then a new parse may develop, and if conventionalized then syntactic change has occurred.

Reinterpretations



- ☞ Speakers seem to try to do their best to find a meaningful interpretation in an utterance.
- ☞ Even grammaticality illusions might be interpreted:

No head injury is too trivial to be ignored.

Compare: No missile is too small to be banned.

(Wason & Reich 1979)

Partial grammaticality



- Local linear sequences within a sentence tend to be grammatical, and they might be parsed locally.
- We could consider unusual constructions like *try and to be* like grammaticality illusions, blending two different grammatical segments/sentences.

If I try and be valedictorian, I might not succeed.

Segment 1: *I try...* (subject verb agreement)

Segment 2: *...try and be valedictorian.* (parallelism)

Context: becoming valedictorian is hard; I might fail.

Reanalysis revisited



- ❧ In fact, it isn't inconsistent with the idea of reanalysis to consider *all instances* of syntactic change to be the conventionalization of grammaticality illusions.
- ❧ Most of the time this more complicated explanation does not seem necessary.
- ❧ What it does explain are the more anomalous cases, which appear synchronically to still almost be grammaticality illusions despite being conventional.
- ❧ *But do these constructions actually remain illusions?*

Surface constructions



- ❧ Assuming we don't want to think of grammaticality illusions or structure-blending as a synchronic grammatical process, what alternatives are there?
- ❧ We must find some way to patch the grammar.
- ❧ One option is a specific grammatical rule, but this complicates the grammar overall.
- ❧ Another option is to use the approach of Construction Grammar: add a (lexically stored) surface-level construction with distinctive properties.

Conclusions



- ❧ Grammatical anomalies require special rules.
- ❧ Grammatical linearized sequences of words can be reanalyzed with new (possibly unusual) structures.
- ❧ Such exceptional usage can conventionalize.
- ❧ In general, I think it is important to consider both core structural components of language and also allow for surface-level *constructions* to explain form.
 - ❧ Rather than one theory being 'right', it may be a matter of which is right for which questions.

References



- Carden, Guy & David Pesetsky. 1977. Double-Verb Constructions, Markedness, and a Fake Co-ordination. *Chicago Linguistics Society* 13. 82–92.
- Culicover, Peter W. 1999. *Syntactic nuts: hard cases, syntactic theory, and language acquisition*. Oxford: Oxford University Press.
- Danchev, Andrei & Merja Kytö. 1994. The construction *be going to + infinitive* in Early Modern English. In Dieter Kastovsky (ed.), *Studies in Early Modern English*, 59–77. Berlin: Walter de Gruyter.
- Fischer, Olga. 2004. Developments in the category adjective from Old to Middle English. *Studies in English Medieval Language and Literature* 19. 1–36.
- Frazier, Lyn & Charles Clifton Jr. 2015. Without his shirt off he saved the child from almost drowning: interpreting an uncertain input. *Cognition and Neuroscience* 30(6). 635–647.
- Haspelmath, Martin. 2005. Nominal and Verbal Conjunction. In Martin Haspelmath, Matthew S. Dryer, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 262–265. Oxford: Oxford University Press.
- Heusler, Andreas. 1921. *Altisländisches Elementarbuch*. Heidelberg: C. Winter.
- Heycock, Caroline & Hjalmar P. Petersen. 2012. Pseudo-coordination in Faroese. In K. Braunmueller & C. Gabriel (eds.), *Multilingual Individuals and Multilingual Societies*, 259–280. Hamburg: John Benjamins.
- McCawley, James D. 1988. *The syntactic phenomena of English*. Chicago: University of Chicago Press.
- Phillips, Colin, Matthew W. Wagers & Ellen F. Lau. 2011. Grammaticality illusions and selective fallibility in real-time language comprehension. In Jeffrey Thomas Runner (ed.), *Experiments at the interfaces*, 147–180. (Syntax and Semantics 37). Bingley: Emerald.

References



- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A Comprehensive grammar of the English language*. London: Longman.
- Ross, Daniel. 2013. Dialectal variation and diachronic development of *try*-complementation. *Studies in the Linguistic Sciences: Illinois Working papers* 38. 108–147.
- Ross, Daniel. 2014. The importance of exhaustive description in measuring linguistic complexity: The case of English *try* and pseudocoordination. In Frederick J. Newmeyer & Laurel B. Preston (eds.), *Measuring Grammatical Complexity*, 202–216. Oxford: Oxford University Press.
- Ross, Daniel. 2015. What can Faroese pseudocoordination tell us about English inflection? *LSO Working Papers in Linguistics* (University of Wisconsin-Madison) 10. 74–91.
- Ross, Daniel. Forthcoming. Pseudocoordination, serial verb constructions and multi-verb predicates: The relationship between form and structure. University of Illinois at Urbana-Champaign Ph.D dissertation.
- Sigurðsson, Halldór Ármann. 2010. Mood in Icelandic. In Björn Rothstein & Rolf Thieroff (eds.), *Mood in the languages of Europe*, 33–55. Amsterdam; Philadelphia: John Benjamins.
- Staum, L. 2004. The GoToGo Construction: A descriptive Study. Stanford Qualifying Paper. <http://staum.casanto.com/documents/StaumQP1.pdf>.
- Townsend, David J. & Thomas G. Bever. 2001. *Sentence comprehension: the integration of rules and habits*. Cambridge: MIT Press.
- Wason, Peter C. & Shuli S. Reich. 1979. A verbal illusion. *Quarterly Journal of Experimental Psychology* 31. 591–597.
- Zwicky, Arnold M. 2002. Seeds of variation and change. Presented at NWA 31, Stanford. <http://www.stanford.edu/~zwicky/seedhnd.pdf>.

Questions?



☞ Thank you for listening
to my developing new
perspective on this as
I reanalyze the data!