Explaining language universals in diachronic perspective - 1

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The diachronic nature of typological universals

Typological universals: skewed cross-linguistic distributional patterns whereby languages recurrently display certain grammatical configurations as opposed to others. For example (Comrie 1989, Croft 2003, , among many others):

- Overt marking is usually used for both singular and plural or just plural, but not just singular.
- Ergative case marking alignment is usually used for both nouns and pronouns or just nouns, but not just pronouns.
- Preposed relative clauses (RelN) and preposed possessors (GN) are more common in OV languages than in VO languages.

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So why do we get skewed distributional patterns?

A synchronic view:

- Grammatical representation in a speaker's mind includes constraints that license particular grammatical configurations, leading individual speakers to produce those configurations, and disallow other configurations (blocking the production of those constructions).
- Other things being equal, these constraints will operate for the speakers of different languages, so that these languages will all display the same grammatical configurations.
- This is a synchronic view in that, since particular constraints are assumed to be part of a speaker's mental grammar, they will operate for all speakers on each particular usage event.
- This view is typical of formally oriented approaches to language universals, including ones that specically take into account typological universals (e.g. Kiparsky 2008, Aissen 2003).

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But this is not the view generally endorsed in the research approach that directly developed from the work of Joseph Greenberg, the **functional-typological approach**:

- In this approach, a number of selective pressures are postulated that lead speakers to adopt particular grammatical configurations as opposed to others at some point in the evolution of the language.

- The patterns captured by typological universals emerge because the same pressures operate in different languages, leading speakers to recurrently adopt the same constructions from one language to another (Comrie 1989; Bybee, Perkins and Pagliuca 1994; Givón 2001; Bybee 2006, 2009; Cristoforo 2011, among many others)

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'... languages conventionalize frequently used structures, so that use directly shapes structure. If language is used in similar ways in different cultures, similar grammars will arise.' (Bybee 2009: 18)

'[...] the mechanisms of change [...] are operative as language users produce many local and specific actions in the process of communicating. The repetition of communicative acts leads to automatization and reduction of form, habituation and generalization of meaning, as well as the conventionalization of pragmatic inference. These mechanisms create paths of change which are often universal cross-linguistically. As a by-product of these paths, synchronic states may also bear some resemblance to one another.' (Bybee 2006: 191)
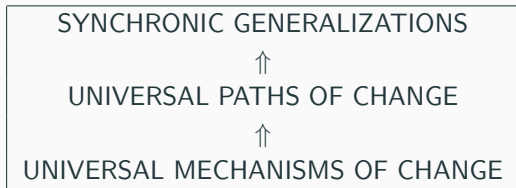
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SYNCHRONIC GENERALIZATIONS
⇑
UNIVERSAL PATHS OF CHANGE
⇑
UNIVERSAL MECHANISMS OF CHANGE

Table 1: The diachronic nature of typological universals (Bybee 2006: 191)

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This is a fundamentally **diachronic** view:

- Typological universals are a result of historical processes leading to the development, propagation and maintainance of particular grammatical configurations in different languages, but the factors underlying these processes need not play any role in a speaker's synchronic production of the relevant configurations (Newmeyer 2005; Dryer 2006; Bybee 2009; Cristofaro 2011).

- The diachronic orientation of the functional-typological approach means that, in principle, explanations for typological universals within this approach should be based on the diachronic processes that give rise to the relevant grammatical configurations cross-linguistically.

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'As traditionally understood, universals of language are cross-linguistic generalizations concerning synchronic grammars [...] It stands to reason, however, that any synchronic pattern must have a diachronic dimension, since that pattern had to come into being in some way [...] we cannot be sure of the validity of a functional explanation for a synchronic universal unless we can confirm that that functional consideration was applicable in the formation of the synchronic pattern.' (Bybee 2006: 179)

'The two central challenges that language diversity poses are, first, to show how the full range of attested language systems can evolve and diversify as sociocultural products constrained by cognitive constraints on learning, and second, to show how the child's mind can learn and the adult's mind can use, with approximately equal ease, any one of this vast range of alternative systems. The first of these challenges returns language histories to centre stage in the research program: "Why state X?" is recast as "How does state X arise?".' (Evans and Levinson 2009: 447)

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Universals in diachronic perspective: Nasal vowels (Greenberg 1978, Bybee 2006)

- All languages have oral vowels, while not all languages have nasal vowels.
- In principle, this could be explained by assuming that a speaker's mental grammar includes some rule stating that nasal vowels have a special status vis-a-vis oral vowels (**markedness**): the default situation is for vowels to be oral ('Vowels [-nasal]), so all languages will have oral vowels, and only some languages will have nasal vowels.

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- But this misses a **diachronic** relationship between oral and nasal vowels: nasal vowels originate from oral vowels in the context of a nasal consonant, which is subsequently lost (the nasal vowel may also be eventually lost):
  VN > ṼN > V (> V)

- The diachronic relationship provides an alternative explanation for the synchronic pattern: nasal vowels are less common than oral vowels because they can only develop from oral vowels in a restricted context. This means that the synchronic pattern provides no evidence for a marked status of nasal vowels in a speaker's mental representation.

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In spite of the fundamentally diachronic orientation of the functional-typological approach, explanations of typological universals are mainly based on the synchronic properties of the relevant patterns, not how these patterns actually originate cross-linguistically:

- In particular, individual patterns are generally assumed to arise because they comply with principles of **optimization of grammatical structure/ efficiency**.

- For example, the distribution of overt marking for particular meanings is assumed to reflect a tendency to only use overt marking when it is really necessary (economy/typological markedness: Greenberg 1966, Comrie 1989, Croft 2003, Haspelmath 2008, among others).

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- Overt marking will be restricted to plural as opposed to singular because plural is less frequent and therefore more in need of disambiguation;

- Ergative case marking alignment usually involves overt case marking for A arguments and zero case marking for P and S arguments. This alignment types is sometimes restricted to nouns as opposed to pronouns because nouns are less likely to occur as A arguments, hence, when they do, the A role is more in need to be disambiguated through overt case marking.

- This is based on what meanings are encoded by zero vs. overt marking synchronically, not how the relevant patterns actually originate in individual languages.

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- A number of word order correlations are explained by assuming that they lead to syntactic configurations that are easier to process (Dryer 1992, Hawkins 1994, Hawkins 2004)
- This is based on the synchronic syntactic configurations produced by particular word orders, not how these word orders originated in individual languages.

- This is a **result-(goal-)oriented** view, in that it assumes that the development of particular patterns is related to whether these patterns comply with particular principles (e.g. economy or processing ease).

- But, if the patterns described by typological universals originate from specific diachronic processes, then explanations for individual patterns should refer to these processes, not just the synchronic properties of the pattern.

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Evidence about the development of grammatical constructions (including those involved in typological universals) mainly comes from grammaticalization studies and historical linguistics in general.

- In these research traditions, grammatical constructions are assumed to evolve from pre-existing ones through processes triggered by particular properties of the source constructions and the contexts in which they are used (Bybee, Perkins and Pagliuca 1994; Traugott and Dasher 2005, among many others)

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For example:

- Motion verb constructions become associated with the notion of future as the motion meaning is bleached in contexts where a future event that represents the goal of the motion is particularly relevant as opposed to motion in itself ('X is going to do Y' > 'X will do Y').

- Locative expressions become associated with the notion of progressive action in contexts where an entity is at a location where they are involved in an ongoing activity, and the activity is more relevant than the location in itself ('X is at doing Y' > 'X is doing Y').

- Conjunctions expressing simultaneity between events ('while') develop concessive meanings in contexts where two simultaneous events are in contrast.

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- This is a **source-oriented** view of the development of grammatical constructions: this development is related to **local properties of particular source constructions and contexts** (for example, particular source constructions being prone to particular types of context-induced reinterpretation), rather than general properties of the resulting constructions, as assumed in the result-oriented view.

'...our view of grammaticization is much more mechanistic than functional ... grammaticization is not goal-directed ... The push for grammaticization comes from below ... in the tendency to infer as much as possible from the input, and in the necessity of interpreting items in context.' (Bybee, Perkins and Pagliuca 1994: 298-300)

'Lexical items begin on the path towards grammatical elements in the process of conversational inferences carried out by mature speakers.' (Slobin 2002: 381)

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The correlation between the order of adposition and noun and that of possessor and possessed item (Bybee 1988, Aristar 1991)

- If a language has prepositions, it has preposed possessors, and vice versa (Prep ≡ NPoss, or PossN ≡ Postp).
- In the typological literature, this universal has been accounted for in terms of various principles related to processing ease:
    - Cross-Categorial Harmony (Hawkins 1983 and subsequent work): languages will tend to consistently place dependent elements (nouns in combinations of adpositions and nouns, possessors in possessive constructions) on the same side of the head.
    - The Branching Direction Theory (Dryer 1992, 2006): languages will tend to consistently order phrasal (branching) categories (e.g. nouns in adpositional constructions, genitives in possessive constructions) on the same side of non-phrasal (non-branching, lexical) categories (e.g. adpositions in adpositional constructions, nouns in possessive constructions).

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(1) Neo-Aramaic (Semitic)

qaama di *beetha* > **qaamid** *beetha*
front   GEN house   in.front.of house
'in front of the house' (Aristar 1991: 6)

(2) Finnish (Uralic)

poja-n **kansa-ssa** > *poja-n* **kanssa**
boy-GEN company-IN   boy-GEN with
'with the boy' (Aristar 1991: 6)

In such cases, the correlation between the order of adposition and noun and that of possessor and possessed item is motivated by the fact that the two contructions were originally one and the same, rather than any more general processing preference.

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The result-oriented view and the source oriented view are not usually
contrasted, and we don't have systematic evidence about the actual
diachronic development of the cross-linguistic patterns described by
typological universals. However,

- Progress in grammaticalization studies and historical linguistics in
  general means we now have relatively detailed evidence about at
  least *some* of the possible origins of these patterns.
- Does this evidence support classical explanations for individual
  patterns?
- What does this evidence tell us about the nature of typological
  universals in general?

Abbreviations

GEN   genitive
IN   inessive

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