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1. Universals of asymmetric coding

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Preamble

• "the cognitive status of language universals"? – I'm in a department of "linguistic and cultural evolution"
https://www.eva.mpg.de/linguistic-and-cultural-evolution/index/

• linguistics in the 18th century: practical and philosophical
19th century: historical-evolutionary
20th century: cognitive
hope for the future: all of the above
(and no community competition, cf. Haspelmath 2023)

• work on conceptual foundations –
clearing up confusions (e.g. "description vs. theory", "diachrony vs. evolution", languages as cognitive vs. social entities)

1. Grammatical unversals: a brief introduction

We can distinguish three main types of robust grammatical universals (in morphosyntax):

– universals of **ordering** (e.g. Greenberg 1963; Dryer 1992)

e.g. SVO & prepositions (English-type),
SOV & postpositions (Japanese-type)

– universals of **coding length** (e.g. Greenberg 1966; Haspelmath 2021)

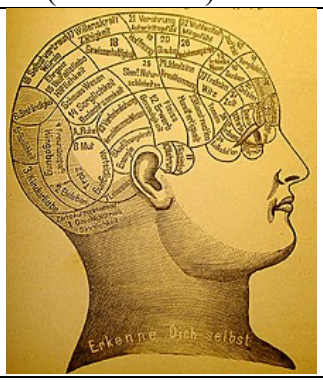
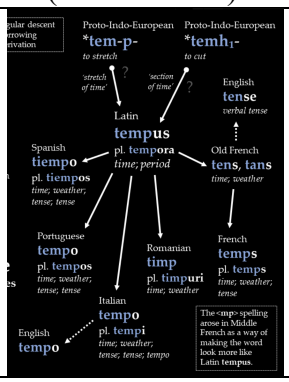
e.g. *book-Ø* vs. *book-**s**,* Spanish *cant-Ø-a vs. cant-**ar**-á*
'sings' vs. 'will sing'

– universals of **coexpression** (colexification etc.) (Kemp et al. 2018; List et al. 2018)

e.g. *sister* vs. *brother* vs. *cousin* 'male or female cousin'
(*cousin* colexifies both meanings)

2. Types of explanations for grammatical universals

We can distinguish three main types of explanations of grammatical universals:
(cf. Haspelmath 2019a)

functional-adaptive	**biocognitive**	**mutational**
convergent cultural evolution	innateness (biological evolution?)	constrained diachronic change
"Greenbergian" (Greenberg 1963)	"Bakerian" (Baker 2001)	"Blevinsian"? (Blevins 2004)
		
"functionalism"	"generativism", "nativism"	
"non-apriorism", "description-comparison approach"	"natural-kinds programme", "restrictivism"	

3. Universal coding asymmetries: introduction

The specific research programme is to explain coding asymmetries that are world-wide tendencies:

Table 1: Examples of universal grammatical coding asymmetries

singular	plural	(*book* – *book-**s***)
present	future	(*go* – ***will** go*)
3rd person	2nd person	(Spanish *canta* – *canta-**s***)
nominative	accusative	(Hungarian *ember* – *ember-**t***)
affirmative	negative	(*go* – ***don't** go*)
allative	ablative	(*to* – ***from***)
positive	comparative	(*small* – *small-**er***)

– a ***coding asymmetry*** is a pattern in which languages may show the expected asymmetric or symmetric coding, but not "counter-symmetric coding"
(= asymmetric in the opposite direction)

e.g.	*book-Ø*	*book-s*	(English)
	knig-a	*knig-i*	(Russian)
	shu-Ø	*shu-Ø*	(Mandarin)
but not :	**book-sig*	**book-Ø*	

– "world-wide tendency" means that in any representative sample, there will be evidence for the asymmetry, or at least no counterevidence

	English	Russian	Turkish	Hebrew	Swahili
SINGULAR	*book*	*knig-a*	*kitap*	*sefer*	*ki-tabu*
PLURAL	*book-s*	*knig-i*	*kitap-lar*	*sfar-im*	*vi-tabu*

The proposal is that these tendencies can be explained by **functional adaptation** – communication is facilitated for speakers and hearers if languages show a tendency to have **shorter shapes for more predictable information**. Some meanings are conveyed more frequently, and are hence more ***predictable***, so these can be conveyed with shorter coding.

4. Universal coding asymmetries: simple meaning pairs

Universal hypothesis 1:
If a language makes a coding contrast between meaning 1 (more frequent) and meaning 2 (less frequent), then meaning 1 shows a strong tendency to be coded with a shorter shape than meaning 2, and often by zero.

4.1. Singular vs. plural (vs. dual) (cf. Greenberg 1966)

	Hebrew	Khanty (Uralic)
SG	*yom*	*xot*
PL	*yam-**im***	*xot-**ət***
DL	*yom-**ayim***	*xot-**ŋən***
	'day(s)'	'house(s)'

4.2. Nominative vs. accusative (Greenberg 1963)

	English	German	Quechua
NOM	*he*	*Herr Kim*	*wasi* 'house'
ACC	*hi-**m***	*Herr-**n** Kim*	*wasi-**ta***

4.3. Second person vs. third person (Seržant & Moroz 2022)

	German	Spanish	Arabic
2nd	*komm-st*	*viene-s*	*katab-ta*
3rd	*komm-t*	*viene-Ø*	*katab-a*

4.4. Male vs. female occupational terms

	Latin	German	Hungarian
MALE	*rex*	*König*	*király*
FEMALE	*reg-**ina***	*König-**in***	*király-**nő***

4.5. Cardinal numerals vs. ordinal numerals (cf. Stolz 2001: 519)

	English	Japanese	Lezgian
CARDINAL	*seven*	*nanatsu*	*irid*
ORDINAL	*seven-th*	*nanatsu-me*	*irid lahaj*

4.6. Present tense vs. future tense (cf. Greenberg 1966)

	English	Latin	Kiribati
PRS	*they praise*	*lauda-nt*	*e taetae* 'he speaks'
FUT	*they **will** praise*	*lauda-**b**-unt*	*e **na** taetae* 'he will speak'

5. Short form corresponds to high frequency

some corpus frequencies (BNC of English, 100 million words):

small	42,738	*hot*	8,633
smaller	7,101	*hotter*	179
seven	16,878	*he*	633,413
seventh	1,437	*him*	152,045

(1) **The form-frequency correspondence universal**
Languages tend to have shorter shapes for more frequent meanings.

(2) **The grammatical form-frequency correspondence hypothesis**
When two grammatical meanings that differ minimally (i.e. that form a semantic opposition) occur with significantly different frequencies, the less frequent meaning tends to be overtly coded (or coded with more segments), while the more frequent meaning tends to be zero-coded (or coded with fewer segments).

(3) causal chain:
frequency of use —> predictability —> shortness of coding

6. Differential-coding pairs

Differential coding is a situation where **a grammatical meaning is expressed in two different ways**, depending on the grammatical or lexical **context**, e.g. differential object marking, as in Spanish, where the object marking depends on the animacy (and specificity) of the object nominal.

(4) a. *Veo la casa.*
I.see the house.
'I see the house.'

b. *Veo* *a* *la* *mujer.*
I.see ACC the woman.
'I see the woman.'

Universal hypothesis 2:
If a language makes a coding contrast for a given meaning between context 1 (where it is more frequent) and context 2 (where it is less frequent), then the meaning shows a strong tendency to be coded with a shorter shape than in context 1, and often by zero.

6.1. Accusative marking on inanimate vs. animate P-arguments (Bossong 1985)

	Spanish
INANIMATE	*Ø la casa* 'house'
ANIMATE	***a*** *la mujer* 'woman'

6.2. Ergative marking on 1st/2nd person pronouns vs. full nominals

	Dyirbal	Georgian
1ST PERSON PRONOUN	*ŋadya-Ø*	*me-Ø*
FULL NOMINAL	*yarra-ŋgu* 'man'	*mama-m* 'father'

6.3. Locative marking on place names vs. inanimate nouns vs. animate nouns (Aristar 1997; Creissels & Mounole 2011; Haspelmath 2019b)

	Basque	Tswana
PLACE NAME	*Bilbo-**n*** 'in Bilbao'	*Gaborone-Ø* 'at Gaborone'
INANIMATE	*mendi-**tan*** 'at the mountain'	*toporo-**ng*** 'in town'
ANIMATE	*neska-**rengan*** 'at the girl's'	

6.4. Disjoint anaphoric vs. reflexive (Haspelmath 2008)

	English	Hebrew	M. Chinese	Japanese
DISJOINT	*her*	*oto*	*tā*	*Ø*
REFLEXIVE	*her**self***	*et ʕ**acmo***	*(tā) **zìjǐ***	***zibun***

6.5. Adpossessive marking with inalienable vs. alienable nouns (Haspelmath 2017)

	Maltese	Jeli
INALIEN	*id-Ø-i* 'my hand'	*Soma buloni* 'S.'s arms'
ALIEN	*il-ktieb **tiegħ**-i* 'my book'	*Soma **ra** monbilo* 'S.'s car'

7. Paths of change

The functional-adaptive explanation of the universal tendencies relies on the **flexibility or malleability (or plasticity) of language systems**. Our languages are not rigid unchanging systems of rules that we have to obey, but they always have some "leaks" or variable usage patterns, and they all provide ways of saying things in a novel way.

Language change can be seen as (at least partly) **driven by the speakers' preference for user-friendly utterances**, and thus ultimately user-friendly (or adaptive) structures (Keller 1994).

Phonetic reduction, e.g. *gonna* (from *going to*), *don't* (from *do not*) (e.g. Bybee 2015: §6.6):

(4) a. English *mine* (independent possessive pronoun)
my (bound possessive pronoun)

b. Polish *śpiewa-sz* [sing-2SG] 'you sing'
śpiewa-Ø [sing-3SG] 'she sings'

In both pairs, the second member is more frequent and shorter and derives from a former longer form (*my* < *mine*; *śpiewa* < *śpiewa-t*), apparently by phonetic reduction.

But: In most cases, the asymmetries are the result of **differential development** of a new construction:

(5) a. English *they will praise* (will-future)
they Ø praise (present tense)

b. Russian *vidit-sja* (passive 'is seen')
vidit-Ø (active 'sees')

There are thus **multiple ways in which asymmetric coding can come about in a language**.

In general, **multi-convergence** of pathways (Haspelmath 2019a, Michaelis 2019) shows that functional adaptation is the causal factor.

8. Asymmetric vs. symmetric coding

Of course, not all languages and all grammatical contrasts show asymmetric coding. Languages may have **symmetric coding**, where either both constructions are equally coded, or both are left uncoded. For the simple case of singular and plural, these two cases can be illustrated by (3a-b).

(6) a. Modern Greek (symmetric overt)
SG *vivlí-o* 'book'
PL *vivlí-a* 'books'

b. Mandarin Chinese (symmetric zero)
SG *shū* 'book'
PL *shū* 'books'

In languages with symmetric coding, a competing constraint takes precedence:

– Modern Greek: the general preference to express grammatical meanings **explicitly**

– Mandarin Chinese: the general preference to save coding energy and to leave inferrable meanings unexpressed.

English-type languages:	ECONOMICAL coding system at the price of asymmetric or non-uniform coding
Greek-type languages:	non-efficient but UNIFORMLY EXPLICIT coding
Mandarin-type languages:	non-efficient but UNIFORMLY PARSIMONIOUS coding

All three language systems are optimal (or **efficient**) in their own way (the form-frequency prediction is relevant only to cases where the coding is asymmetric).

The implicational universals seen earlier predict that **an asymmetric counter-economical pattern** does not exist (where the singular has an overt marker but the plural is left uncoded, as in the Pseudo-Greek pattern in (7)).

(7) (Pseudo-Greek, hypothetical, "counter-asymmetric")

SG	*vivlí-**o***	'book'
PL	*vivlí*	'books'

Now, why is the functional-adaptive explanation is proposed at the level of **language universals**, not at the level of particular languages?

For example, English has two future-tense constructions, with *will* and with *going to* (or *gonna*).

These are slightly different semantically, and they are formally asymmetric (*will* is shorter than *gonna*, 3 vs. 4 segments).

> Is it claimed that **this is because the *will*-future is more frequent than the *gonna*-future**?

NO: I make no predictions about such cases, because functional-adaptive explanations **only work at the population level** (i.e. they explain tendencies found in populations of languages).

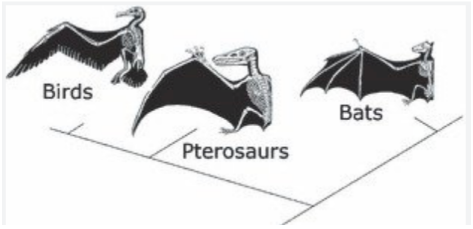
Language histories are subject to a large number of contingencies, and the adaptive forces are ***relatively weak***. The *gonna*-future could become popular very quickly for social reasons and thus more frequent than the *will*-future (this may well have happened in some varieties of English). But it would not be an exception to a general trend, because there is no general trend for languages to have two different future tenses of this sort.

But at the worldwide level, we can make a very strong claim:

All universal coding asymmetries are due to frequency asymmetries (or other predictability asymmetries), and all frequency asymmetries give rise to universal coding asymmetries.

9. Convergent cultural evolution vs. biocognitive constraints

Convergent evolution is well-known from biology:



Many language universals arise by **convergent linguistic evolution**, just as most other cultural universals arise by convergent cultural evolution (e.g. houses, tools, family organization, group governance, story-telling).

But there are also **biococognitive constraints** on knowledge, experience and behaviour, as is well-known from the areas of taste and emotion.

the five innate tastes the five innate emotions

– The most popular approach is the **natural-kinds paradigm,** based on the idea of a rich set of biocognitive constraints ("**rich universal grammar**"): Linguists hypothesize that there are dozens or hundreds of innate grammatical elements, and that different grammatical systems are composed of these elements in different ways

– There is plenty of evidence that humans have **domain-specific biological adaptations** for language (i.e. that we didn't simply invent speaking the way we invented bicycle-riding; Pinker & Jackendoff 2005) – but there is almost no evidence for biologically specified **grammatical elements**.

– Linguistic patterns often seem to be similar across the world's languages for the same reasons that houses and spoons are similar, not for the same reasons that emotions and tastes are similar.

General principle:

Appeal to **convergent cultural evolution** before appealing to **biologically specified elements** of grammar – because cultural evolution is inherently more likely than biological specification

(how would dozens of biogrammatical elements have evolved over a few hundred thousand years?)

Cost scale of explanatory factors (Haspelmath 2019a: 16):

(3) less costly ⟵⟶ more costly

mutational > functional-adaptive > representational constraints

10. Biocognitive explanations of coding length universals?

– simple meaning pairs: possibly "markedness" (Kiparsky & Tonhauser 2012)

– differential coding pairs, e.g.:
- dependent case theory (Baker 2015; Baker & Bobaljik 2017; Baker 2024)
- meaning-form correspondence (e.g. Ortmann 2018; Matushansky 2019)

However, most papers that "adopt" a Chomskyan/generative framework are not really concerned with explaining general trends.

2. Types of explanations for universals

1. Explanations in p-linguistics and in g-linguistics

particular linguistics: the study of a particular language

general linguistics: the study of Human Language in general (see Haspelmath 2021)

Is p-linguistics merely descriptive, while g-linguistics is explanatory?

cf. Anderson (2016: 12):

> structure of the texts under consideration. Calling the linguistics of the period "descriptive" should be taken quite literally: The aim of the field was to develop complete and accurate descriptions of the observable facts of the world's languages rather than explanations of those facts.

But one could say that by describing a language, one **explains** why speakers talk the way they do:

Chomsky, in *Syntactic Structures* (1957: 15):

> of grammatical utterances. In this respect, a grammar mirrors the behavior of the speaker who, on the basis of a finite and accidental experience with language, can produce or understand an indefinite number of new sentences. Indeed, any explication of the notion "grammatical in L" (i.e., any characterization of "grammatical in L" in terms of "observed utterance of L") can be thought of as offering an explanation for this fundamental aspect of linguistic behavior.

What happens when we do not distinguish properly between p-linguistics and g-linguistics:

Borsley (2017: 84)

> Minimalism has also been said to offer explanations (unlike other frameworks). Thus, Chomsky (2000) remarks that Minimalism 'encourages us to distinguish genuine explanations from "engineering solutions" – a term I do not mean in any disparaging sense'. An 'engineering solution' is presumably something that works. It is not a bad thing to produce something that works. It is certainly better than producing something that doesn't work. It is no doubt good to provide explanations as well. But there seems to be no basis for the idea that Minimalism is more explanatory than other frameworks. Consider a peculiarity of English non-finite relative clauses, the

p-linguistic explanations = structural explanations
(= synchronic descriptions)

my favourite p-linguistic explanation: the FIELD MODEL of German word order
(Haspelmath 2010; 2023)

(1)	*Katja*	***singt***	*ein*	*Lied.*			
	Katja	sings	a	song			
(2)	*Katja*	***hat***	*ein*	*Lied*	***gesungen***.		
	Katja	has	a	song	sung		
(3)		***Wenn***	*Katja*	*ein*	*Lied*		***singt***, ...
		when	Katja	a	song		sings
(4)		***Wenn***	*Katja*	*ein*	*Lied*	***gesungen***	***hat***, ...
		when	Katja	a	song	sung	has
(5)	*Heute*	***singt***	*Katja*	*ein*	*Lied.*		
	today	sings	Katja	a	song		

abstract template (with five slots):

prefield – **P1** – middle field – *nonfinite verb* – **P2**

Figure 2: The German word order template

The rules:

(i) arguments (like *Katja*) or adverbials (like *heute*) can occur in the prefield or in the middle field;
(ii) subordinators (like *wenn*) occur in P1 and preclude a prefield;
(iii) the finite verb (*singt, hat*) occurs in P1 unless this field is filled by a subordinator (as in (3)-(4)).
(iv) otherwise the finite verb occurs in P2, as in (1)

Such "unifying" descriptions/explanations are valued by all linguists, so in this sense, **"we are all structuralists"** (blogpost 2020: https://dlc.hypotheses.org/2356).
In addition to p-explanations and g-explanations, we can talk about **p-theories** and **g-theories**.

(A theory is a structured set of explanatory statements of some generality. The terms *explanatory* and *theoretical* are largely synonymous.)

A generative **grammar of a p-language** is a **p-theory**, as has been clear since Chomsky (1957):

> Syntactic investigation of a given language has as its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language under analysis. (1957: 11)
>
> A grammar of the language L is essentially a theory of L. (1957: 49)

Jumping immediately from p-theories to g-theories is not justified on this conception. **General linguistics** must make reference (explicitly or implicitly) to **universal claims** (Haspelmath 2021).

In any event, descriptions are theories, and descriptive linguists are theoretical linguists (unless they have exclusively applied goals; Haspelmath 2021). **There is no "description vs. theory" contrast.**

(And there is no "typology vs. theory" contrast either – all typology is theoretical; see 2019 blogpost: https://dlc.hypotheses.org/1915)

2. P-descriptions of mental grammars (= I-languages) vs. social grammars

How can we test the correctness of unifying p-descriptions?

> – If they are intended as descriptions of **mental grammars**, then maybe psycholinguistic experimentation can distinguish between competing hypotheses.
>
> – If they are intended as descriptions of **social grammars** (Saussurean *langues*), then it does not matter which description one chooses – it is a largely esthetic choice.

Many post-1957 linguists have assumed (often without argument) that we want to describe mental grammars, and the hope was that by learning more and more about innate structures, we can narrow down the options.

For example, if functional heads such as I (or T) and C are innate, then a "movement analysis" of German word order seems plausible:

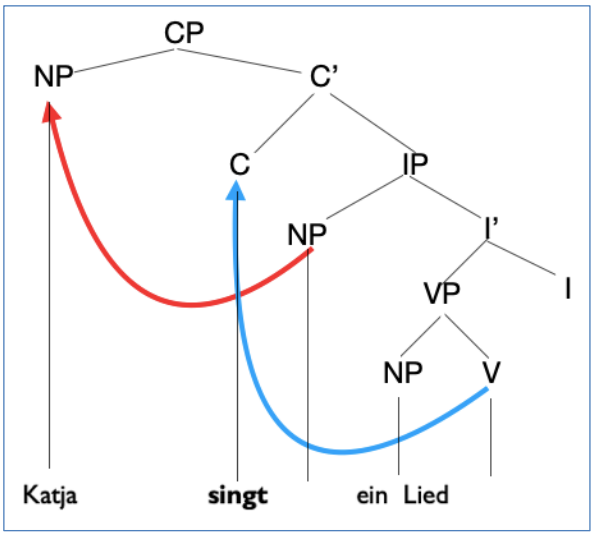


Figure 4: A movement analysis of German word order

But if our goal is to describe the social grammars (= what people must know to use the language), then such analyses in terms of pre-established categories (cf. Haspelmath 2007) are not motivated.

3. Does the nature of diachronic change explain synchronic systems?

There is now general agreement that **language change** must play an important role in bringing about efficiently designed systems, as in biological evolution (e.g. Croft 2000; Haspelmath 1999; 2008; Lupyan & Dale 2016).

But can the efficient language structure be explained on the basis of **the nature of the diachronic processes and pathways of change**?

This has been argued in recent years (e.g. Bybee 2006; Blevins 2006; Anderson 2016; Cristofaro 2019):

Bybee (2006): the true universals are diachronic universals, i.e. universal mechanisms of change

Cristofaro (2019): explanations should be **source-oriented**, not **result-oriented** – diachronic change has no "goal"

Anderson (2016: 28):

> In many cases, in morphology and syntax as well as in phonology, it is reasonable to suggest that things are as we find them in substantial part because that is the outcome of the shaping effects of history, not because the nature of the Language Faculty requires it. In phonology in particular, there are few if any well-established substantive universals governing the class of possible relations, whether these are described by rules or by constraints.

For example, the tendency for **final devoicing** of obstruents seems to be explainable with reference to common phonetically motivated changes (see also Blevins 2006; Kiparsky 2008).

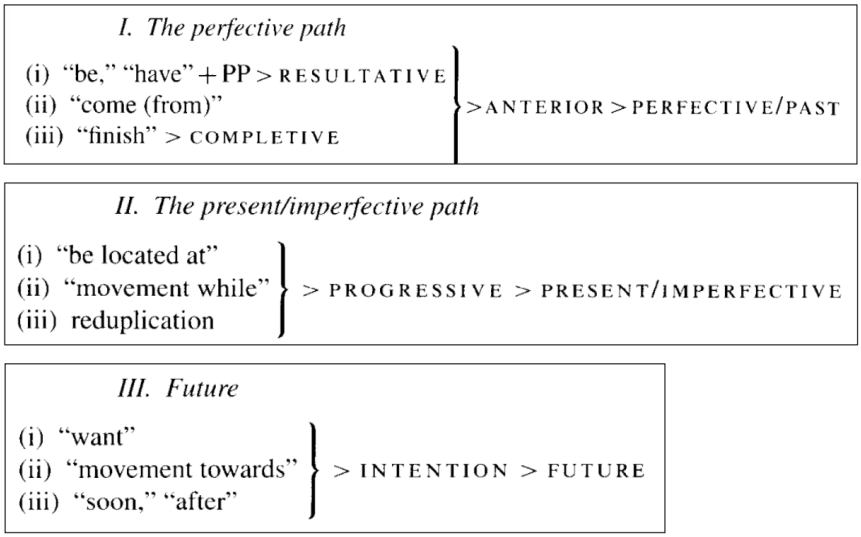
Bybee (2006): Greenberg's universal that no language has more nasal vowel qualities than oral vowel qualities can be explained by a constraint on change: nasal vowels only ever derive from VN sequences:

(11) **VN** (I) > **ṼN** (II) > **Ṽ** (III) > **V** (IV)

But not all "common pathways of change" lead to synchronic universals, e.g. Greenberg's (1978) proposal:

(12) DEMONSTRATIVE > DEFINITE ARTICLE > NON-GENERIC ARTICLE > NOUN MARKER

And while Bybee has discovered interesting regularities in the sources of various aspectual and temporal verb forms (Bybee et al. 1994), again these common pathways do not seem to result in synchronically observable universals:



According to Anderson (2016), the seeming tendency for aspectual ergativity splits to show **ergative patterns in perfective/perfect aspects** seems to be "the result of the accidental convergence of a number of logically independent paths of historical development "(Anderson 2016: 22).

See the very transparent description by Coon (2013):

(13) HINDI

a. [$_{A}$ Lataa-ji-**ne**] [$_{P}$ kai gaane]$_i$ gaa-ye$_i$
Latta.FEM-HON-ERG many song.MASC(ABS) sing-PRFV.MASC.PL
'Lataa-ji sang several songs.'

b. [$_{A}$ Lataa-ji]$_i$ [$_{P}$ gaane] gaa-tii hẼ / thĩ$_i$
Latta.FEM-HON song.MASC(ABS) sing-HAB.FEM be.PRES.PL be.PST.FEM.PL
'Latta-ji sings/used to sing songs.' (Bhatt 2007, 3)

(28) GEORGIAN AORIST

a. [$_{A}$Sudenṭ-**ma**] [$_{P}$ çeril-**i**] daçera.
student-ERG letter-ABS wrote
'The student wrote the letter.'

b. [$_{S}$Sṭudenṭ-**i**] mivida.
student-ABS went
'The student went.'

(29) GEORGIAN NON-AORIST

a. [$_{A}$Sṭudenṭ-**i**] [$_{P}$ çeril-**s**] çers.
student-ABS letter-DAT writes
'The student writes the letter.'

b. [$_{S}$ Sṭudenṭ-**i**] midis.
student-ABS goes
'The student goes.'

Hindi-Urdu (and other Indo-Iranic languages):
– the ergative pattern developed only in a perfective-like aspect

Georgian:
– the non-ergative (accusative) pattern developed only in an imperfective-like aspect

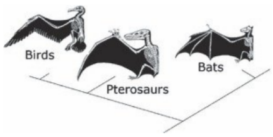
5. Reasons to be skeptical of mutational explanations: multi-convergence

But I suspect that in most cases, **the causal relationship is the reverse**:

– linguistic innovations are largely random (like biological mutations)
– propagation in language change is driven both by social factors (Croft 2000) and by functional factors (Haspelmath 1999):

Language users unconsciously **prefer efficient variants in language use**, which results in overall efficient systems – so *pace* Cristofaro, change is often **result-oriented.**

The changes that lead to the resulting systems have very similar results, but **their starting points and trajectories can be very diverse**. This is similar to biological evolution, where we often see convergent evolution, e.g. wings in different taxa:



Examples of multi-convergence

Vowels in Indo-European languages (from (some kind of) Proto-Indo-European):

[i]	< i	English *fish*	(*pisk-)
	< e	English *is*	(*est)
	< ei	OHG *stigan*	(*steig^{h}-)
	< ū	Polish *syn*	(*sūnu-)
[u]	< u	OHG *ubir*	(*uper-)
	< w	Latin *lupus*	(*wlk^{w}os)
	< ā	German *Mutter*	(*māter)
	< ō	German *Flut*	(*plōd^{h}-)

Differential accusative markers:

Latin *ad* ‘to’	>	Spanish *a*
Latin *per* ‘though’	>	Romanian *pe*
Russian *-a* (genitive)	>	*-a* (accusative)
German *-en* (stem marker)	>	*-en* (accusative), e.g. *den Linguist-en*
Chinese *bǎ* 把 ‘take‘	>	*bǎ* (accusative preposition)

Independent vs. dependent possessive person forms (Michaelis 2019):

Language	**Strategy**	**Dependent form**	**Independent form**
German	affixal lengthening	*mein* [1SG.POSS]	*der mein-ige* [DEF 1SG.POSS-INDEP]
Arabic	dummy noun**:** 'property'	*-ii* [1SG.POSS]	*milk-ii* [property-1SG.POSS]
Greek	intensified person form 'own'	*mu* [1SG.POSS]	*dhikó mu* [INTENS 1SG.POSS]
Diu Indo-Portuguese	use of adposition 'of, for'	*mi* [1SG.POSS]	*də mi* [of 1SG.POSS]
Albanian	use of definite article	*im* [1SG.POSS]	*im-i* [1SG.POSS-DEF]
Berbice Dutch	general nominalizer	*ɛkɛ* [1SG.POSS], [1SG]	*ɛkɛ-jɛ* [1SG.POSS-NMLZ]
English (dialectal)	exaptation	*her* [3SG.F.POSS]	*her-n* [3SG.POSS-INDEP]
Mandarin Chinese	identical	*wo de shu* I GEN book 'my book'	*wo de* I GEN 'mine'
Lezgian	additional marker	*zi ktab* I.gen book 'my book'	*zi-di* I.gen-subst 'mine'
Kanuri	additional stem	*fewá-ndé* cow-1PL.POSS 'our cows'	*kaá-nde* INDEP-1PL 'ours'
Italian	additional article	*mia sorella* 'my sister'	*la mia* 'mine'
Coptic	longer form	*p-ek-ran* art-2sg-name 'your name'	*p-ô-k* art-indep-2sg 'yours'
Bislama (APiCS, Meyerhoff 2013)	identical	*blong yu* [POSS 2SG] 'your'	*blong yu* [POSS 2SG] 'yours'
Kinubi (Luffin 2013)	identical	*tá-i* [POSS-1SG] 'my'	*tá-i* [POSS-1SG] 'mine'
Batavia Creole (Maurer 2013)	added possessive form	*minya* [1SG.POSS] 'my'	*minya sua* [1SG.POSS POSS] 'mine'

Moreover, the tendencies of aspectual ergativity splits may actually be due to some kind of "pull force":

Tsunoda's "effectiveness condition" may generally favour **ergative/passive and perfective** patterns, while "non-effectiveness" may favour **non-ergative and imperfective patterns**.

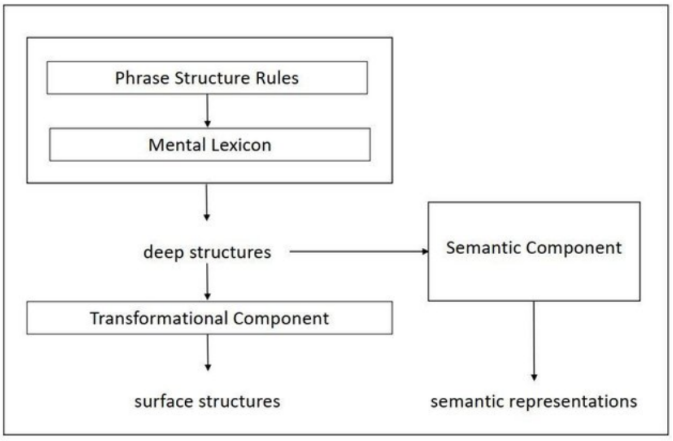
(35) EFFECTIVENESS CONDITION(TSUNODA 1981, 393)

	IS MET:	IS NOT MET:
	…ergative	**…non-ergative/split**
a.	action	state
b.	impingement on **P**	non-impingement on **P**
c.	**P** attained	**P** not attained
d.	**P** totally affected	**P** partially affected
e.	completed	uncompleted, or in progress
f.	punctual	durative
g.	telic	atelic
h.	resultative	non-resultative
i.	specific or single activity/situation	customary/general/habitual activity/situation
j.	**P** definite/specific/referential	**P** indefinite/non-specific/non-referential

And even Bybee's tendencies of change in tense-aspect categories can be seen as some kind of multi-convergence.

6. Componential universals?

Many linguists think that the grammatical systems of Human Language can be best understood by identifying their componential structure, e.g.



transformational grammar (1969s-style, Harris 1993)

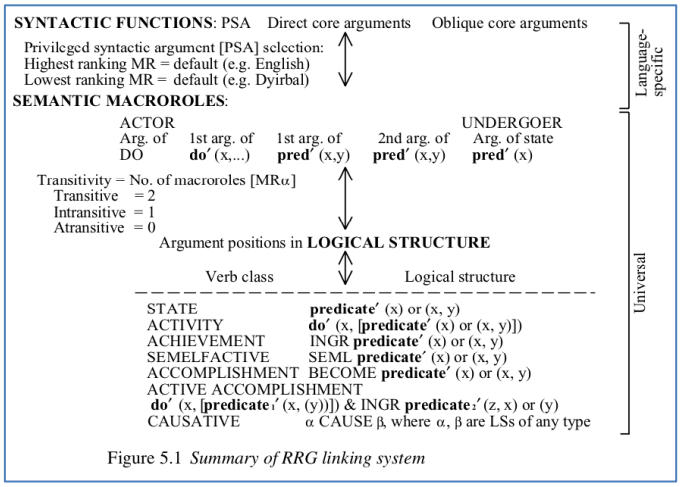
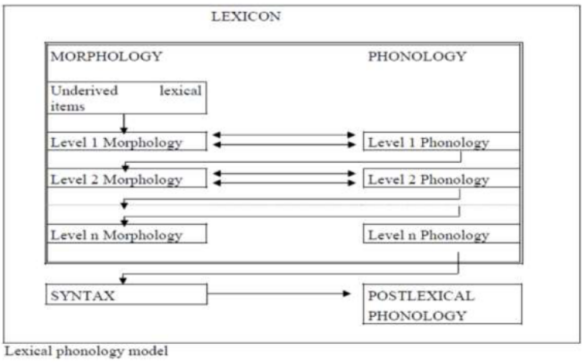


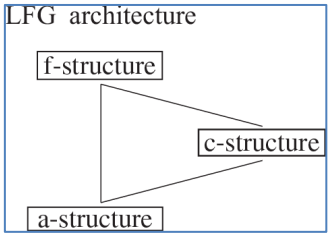
Figure 5.1 *Summary of RRG linking system*

Role and Reference Grammar (Van Valin 2005: 129)



Lexical phonology model

Lexical Morphology and Phonology (Kiparsky 1982: 132)



Lexical-Functional Grammar

Such universals would have to be explained as innately given (a biocognitive explanation), although this is not often made clear.

Componentially-based ideological divisions?

Nordlinger & Sadler (2019):

> "Lexical-Functional Grammar (LFG) and Head-Driven Phrase Structure Grammar (HPSG) are both **lexicalist**, non-transformational, constraint-based grammatical frameworks. While they differ in many respects, they share a number of fundamental principles relevant to morphological theory and analysis, which guide the overall architecture of the grammar."

What does "lexicalism" entail? It is often said that **"lexical integrity"** entails that the internal structure of words plays no role in syntax, e.g.

Anderson (1992: 84):

> "The syntax neither manipulates nor has access to the internal structure of words."

Bresnan & Mchombo (1995: 181):

> How can we tell whether a sequence of morphemes is a word? A fundamental generalization that morphologists have traditionally maintained is the *lexical integrity principle*, which states that words are built out of different structural elements and by different principles of composition than syntactic phrases. Specifically, the morphological constituents of words are lexical and sublexical categories – stems and affixes – while the syntactic constituents of phrases have words as the minimal, unanalyzable units; and syntactic ordering principles do not apply to morphemic struc-

But what kind of statement is this?

– an ideological position (a "commitment", a "tenet")?
– an unquestioned methodological choice?
– a testable universal claim?

It seems that many authors simply presuppose that a distinction between syntax and morphology can be made (on the basis of a distinction between words, affixes and phrases), but this is not at all clear (Haspelmath 2011).

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