

Li8: Morphology/Michaelmas 2017

Contrasts and atomistic functions

Jim Blevins (jpb39)
M11-12 / LB9 / 23-10

From alternations to systems

- ❖ To a first approximation, morphology is the study of form variation, involving observable contrasts at the level of shape, arrangement and distribution.
- ❖ However, contrasts do not exist in isolation, but operate in the context of a morphological system.
 - ❖ What is the function of individual contrasts?
 - ❖ How do they combine to form larger arrangements?

The function/meaning of morphological contrasts

- ❖ There are three basic conceptions of the function of contrasts:
 - ❖ Atomistic: contrasts (or variants) are individually meaningful; a morphological system is fully determined by an inventory of contrastive variants.
 - ❖ Discriminative: contrasts serve principally to distinguish larger units, whose function is defined by systems of oppositions within a language.
 - ❖ Autonomous: contrasts are often functionless residues, which arise due to historical changes and are preserved by inertia.

Atomistic interpretations of segmental contrasts

- ❖ Segmental alternations appear to invite an atomistic interpretation:
 - ❖ The marker *-s* is suffixed to *book*, and the meaning of *books* is the sum of the lexical meaning of *book* and the plurality of *-s*.
 - ❖ The medial vowel alternation between *mice* and *mouse* can also be treated as carrying the plural meaning corresponding to *-s*.
 - ❖ The Tagalog infix *um* can be treated as an infinitive marker when it is a prefix in *umalís* ‘to leave’ and an infix in *bumása* ‘to read’
 - ❖ The parts of the Chuckchee circumfix *e ... ka* can also be treated as jointly expressing privative case in *e-titi-ke* ‘needlessness’.

Suprasegmental marking of lexical/morphological contrasts

- ❖ Suprasegmental contrasts also suggest an atomistic interpretation.
- ❖ In English, stress may correlates with differences in word class:
 - ❖ *prógress*, N ‘development’ vs *progréss* V ‘to advance’; *récord* N, ‘stored information / milestone’ vs *recórd* V ‘to make a recording’.
- ❖ In tone languages, forms may differ solely in tone. Chiquihuitlan Mazatec (Jamieson 1977) exhibits a contrast between 4 level tones:
 - ❖ $\check{c}ha^4$ ‘I talk’ ~ $\check{c}ha^3$ ‘difficult’ ~ $\check{c}ha^2$ ‘his hand’ ~ $\check{c}ha^1$ ‘he talks’.

Suprasegmental marking of purely morphological contrasts

- ❖ Although absolutive arguments are not marked morphologically, there is suprasegmental absolutive case marking. This is coded by a stress shift from the penultimate to the ultimate syllable of the preverbal noun phrase (*kukaísâ* → *kukaisấ*, transitive object ... *karáiha* → *karaihá*, intransitive subject ...), combined with a general rising intonation. These suprasegmental features code the link between absolutive nominals and the verb. (Franchetto 1990: 409)
- ❖ There is also tonal marking of nominative, genitive and locative in Teso-Turkana (Dimmendaal & Breedveld 1986: 28), nominative and accusative in Maasai (Plank 1995a: 60), etc.

Atomistic constancy, morphotactic variation

- ❖ Medial alternations, infixation and circumfixation, and even some suprasegmental patterns, present morphotactic challenges to models based on segmental concatenation.
- ❖ But these alternations are all fully compatible with an atomistic perspective, on which individual form variants are associated with discrete meanings or functions and the meaning and form of the whole is the sum of the meanings and forms of the parts.
- ❖ What patterns would challenge an atomistic perspective?

Multiple marking in German plurals

- ❖ Plurals in German can be marked by suffixes or ablaut.
- ❖ But some plurals are marked by **both** strategies.

Nom Sing	Nom Plu	Marker	
Tag	Tage	-e	'day'
Garten	Gärten	a ~ ä	'garden'
Maus	Mäuse	a ~ ä + -e	'mouse'

Multiple marking in French futures (and conditionals)

- ❖ The synthetic future in French is marked by an ending that corresponds to the present indicative form of *avoir* 'to have'.
- ❖ But 3rd conjugation verbs often combine a suppletive future-conditional stem with the future (or conditional) ending:

Infinitive	1sg Fut	Marker	
chanter	chanterai	-ai	'sing'
dormir	dormirai	-ai	'sleep'
aller	irai	ir + -ai	'go'
voir	verrai	verr + -ai	'see'

'Primary' and 'secondary' marking?

- ❖ Given the simple structure of modern European languages, one could identify one of the contrasts as a 'primary' marker, and the other as a 'secondary' marker.
- ❖ In the German and French patterns, contrasts could be marked by a 'primary' affix and a 'secondary' stem alternation.
 - ❖ In French, the future suffix is more regular than the stem alternation (even though it is losing out to the periphrastic future).
 - ❖ In German, endings that cooccur with umlauted stems are neither regular nor productive but umlauted stems are even more restricted.
- ❖ However, even if one can impose this kind of analysis on German and French, there are other 'symmetrical' cases in which the markers have equivalent status.

Empty inflectional markers? Theme vowels in Spanish

- ❖ In some cases exponents are treated as 'empty' or 'functionless'.
- ❖ Romance theme vowels are frequently-cited examples of this kind.

	I	II	III
Infinitive	amar	vender	partir
1sg Future	amaré	venderé	partiré
	'love'	'sell'	'leave'

'Intramorphological meaning' of theme vowels in Spanish?

- ❖ Although these elements do not carry any clear 'denotative' meaning, they nevertheless serve as markers of 'conjugation class' and thereby convey morphological information about the inflectional patterns followed by other forms of an item.

	Sg	Plu	Sg	Plu	Sg	Plu
1st	amo	amamos	vendo	vendemos	parto	partimos
2nd	amas	amáis	vendes	vendéis	partes	partimos
3rd	ama	aman	vende	venden	parte	parten

Empty derivational markers: Linking elements in West Germanic

- ❖ The *Fugenelemente* 'linking elements' that occur in West Germanic compounds are also commonly treated as empty formatives:

		-n-		-s-			
Nom Sing	Spinne		Rakete		Arbeit		Liebe
Nom Plu	Spinnen		Rakaten		---		---
Compound	Spinnennetz		Rakatenstufe		Arbeitsamt		Liebesbrief
	'spider (web)'		'rocket (stage)'		'job (center)'		'love (letter)'

Negative marking in English?

- ❖ A property can also be signaled by the **absence** of a marker.
- ❖ If one member of a contrasting pair is consistently marked in some way, then the other member of the pair can be unambiguously indicated by a lack of marking.
- ❖ In English, this strategy is exploited in the encoding of number.
- ❖ Given that plurals are consistently marked, the opposition with *books* allows *book* to be interpreted as singular, not in spite of the lack of a marker but precisely because there is no marker.

Plural *-t* in Georgian

Future indicative paradigm of K'VLA 'kill' (Tschenkeli 1958: §31)

	1Sg	1Plu	2Sg	2Plu	3
1Sg	—	—	mogk'lav	mogk'lavt	movk'lav
1Plu	—	—	mogk'lavt	mogk'lavt	movk'lavt
2Sg	momk'lav	mogvk'lav	—	—	mok'lav
2Plu	momk'lavt	mogvk'lavt	—	—	mok'lavt
3Sg	momk'lavs	mogvk'lavs	mogk'lavs	mogk'lavt	mok'lavs
3Plu	momk'laven	mogvk'laven	mogk'laven	mogk'laven	mok'laven

Negative marking in Georgian

- ❖ The same pattern recurs in more complex morphological systems:

Consider the Georgian Verb form mogk'lav ... This form represents agreement with a first-person singular Subject and a second-person singular Direct Object ... But while an overt affix (/g/) is present to signal agreement with the second-person Object, no affix marks the fact that the Subject of this Verb is (and must necessarily be) first-person singular. This agreement can be inferred from the following information ...

Negative marking in Georgian

The Subject cannot be second person, because if it were, the sentence would be reflexive — but reflexive forms in Georgian are grammatically third person, and this Verb has a second-person Object. Similarly, the Subject cannot be third person, since, if it were, there would be a suffix (/s/) at the end of the Verb. Thus ... the Subject must be first person. But it must be singular, rather than plural, since a first-person plural Subject would trigger the introduction of a suffix (/t/) at the end of the Verb. We know therefore that the Subject of this Verb must be first-person singular, but this fact is not signaled by the presence of any overt affix in the word. (Anderson 1992: 87)

Contrastive 'exchange' patterns

Exchange patterns in Spanish (Matthews 1991: 199) and Estonian (Erelt et al. 1995):

Form	Ending	Meaning	Form	Meaning	Ending	
compra	-a	3sg.Ind	compre	3sg.Subj	-e	'to buy'
come	-e	3sg.Ind	coma	3sg.Subj	-a	'to come'
hekki	-i	Part.Sg	hekke	Part.Pl	-e	'hedge'
lille	-e	Part.Sg	lilli	Part.Pl	-i	'flower'

- ❖ What is the 'meaning' of *-a* and *-e* in Spanish and *-i* and *-e* in Estonian?

Contrastive tonal melodies in Dinka (Andersen 2002: 9)

The oblique is distinguished from the absolutive in virtually all monosyllabic nouns that have a short vowel ... and in most disyllabic nouns with the prefix à- and a short root vowel ...

The rule for such nouns is that if the absolutive has a low root tone [ù] ... then the oblique gets a falling root tone [û], and if the absolutive has a high or falling root tone [ú or û] ... then the oblique gets a low root tone [ù].

- ❖ What 'meaning' can be associated with tonal contours in Dinka?

Contrastive tonal melodies in Dinka

Alternation	Absolute	Oblique	
ù ~ û	tòŋ	tôŋ	'spear'
	pìŋ	pîŋ	'land'
ú ~ ù	dít	dît	'bird'
	léc	lèc	'stick'
û ~ ù	àŋâw	àŋàw	'cat'
	àrêw	àrèw	'tortoise'

Discrimination or autonomy?

- ❖ If individual contrasts cannot always be assigned discrete meanings and the interpretation of larger forms cannot be defined as the sum of the meanings of their parts, what is the logic that allows individual contrasts and alternations to combine to form cohesive systems?