

Morphology:

Phenomena

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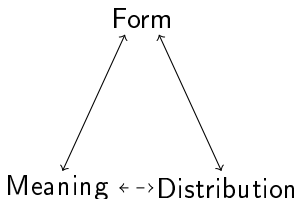
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Introduction

Question:

What is the basic objective of morphological theorizing?

- ▶ We want a theory that relates the surface form of a word with its syntactic distribution and its semantic meaning.



► This relation is in many cases relatively straightforward:

(1) [compos_v]+it_a]+ion_n] +al_a] +ity_n]

↪ Often, we can determine the syntactic distribution from the syntactic category of outermost affix.

↪ And we can determine the meaning of the whole complex from the meaning of the morphemes.

(2) a. [un+button]+able
b. un+[button+able]

↪ Also, we usually can determine the semantic meaning of an element from the meaning of its morphemes plus the derivational history.

Mismatches between Form and Distribution:

There are many cases where a simple one-to-one mapping between morphological form and syntactic distribution is not possible:

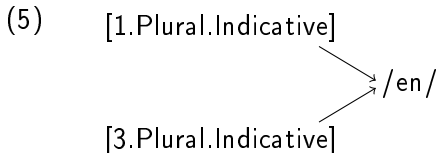
- Syncretism: Not all distinctions made by the syntax are morphologically expressed.

(3) Finnish Present Tense (4) German Present Tense

1sg	puhu-t
2sg	puhu-n
3sg	puhu- \emptyset
1pl	puhu-mme
2pl	puhu-tte
3pl	puhu-vat

1sg	sprech-e
2sg	sprich-st
3sg	sprich-t
1pl	sprech-en
2pl	sprech-t
3pl	sprech-en

- Syncretism is an (apparent) n-to-one mapping of syntactic distribution to morphological form.



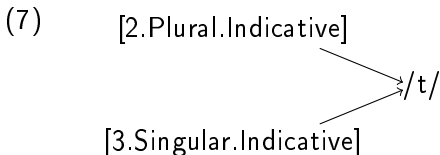
- In principle, we could assume that there are two entries in our mental lexicon, which just happen to be homophonous.

(6) [1.Plural.Indicative] → /en/

[3.Plural.Indicative] → /en/

- But this seems to miss some interesting distributional generalizations about syncretism as well as some additional syntactic effects.
- Further, a theory that stores one marker in the lexicon is preferable to one that stores two homophonous markers.

- But what about the /t/-marker that also occurs in several cells of the paradigm?



- The situation is unclear. Many people assume that, in addition to syncretism, the grammar also allows for accidental homophony.

- It is not always clear what counts as systematic syncretism and what counts as accidental homophony.
- The general strategy adopted in most frameworks is formulated in Müller (2004)'s syncretism principle:

(8) Syncretism Principle:
Identity of Form implies Identity of Function (in a domain Σ , unless there is evidence to the contrary)
Müller (2004)

➤ But what could evidence to the contrary look like?

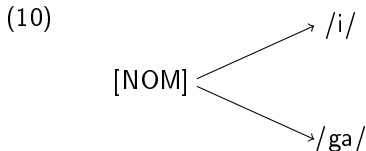
- We could let the theory decide...
 - ↳ If it can't be derived, then it is just not there...
- We could try to find syntactic evidence for the distinction between systematic syncretism and accidental homophony.

- (9) a. Sie und wir spiel-en im Finale.
 Them and us play-1/3.PL in.the final
- b. *?Sie und ihr spiel-t im Finale
 She and you.PL play-3SG/2PL in.the final

- We could try to find evidence from dialectal variation, crosslinguistic patterning or diachrony.

- We also find the opposite: A one-to-n mapping of syntactic distribution to morpheme realizations:

↪ In the paradigmatic dimension, this is referred to as *allomorphy*. With allomorphy, several exponents or markers are associated with one meaning.

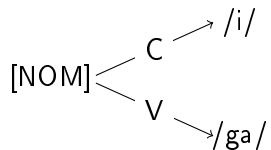


↪ Allomorphy can either be phonologically or morphosyntactically conditioned:

- (11) Phonologically conditioned allomorphy in Korean:
- pada ('sea') → pada-ga ('sea', nominative)
 - mur ('water') → mur-i ('water', nominative)

- The choice of affix is conditioned by the phonological features of the adjacent segment:

(12)



- ▶ We also find cases where morphological features condition the choice of allomorph:

(13) a. lazi-ness b. eat-ing
 adj-NLMZ verb-NLMZ

- ▶ Category-changing derivational affixes such as nominalizers typically alternate depending on which category they attach to.

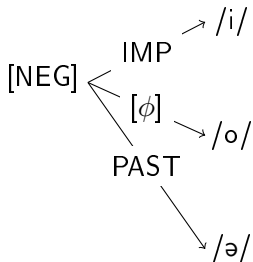
- The negation in the Finno-Ugric language Mari is /i/ in the imperative, /o/ if it is realized next to a morpheme encoding ϕ -features and /ə/ when next to a past marker, a desiderative marker and in some other configurations:

- (14) a. Me o-na tol
1PL NEG-1PL come.CNG
'We don't come'
- b. Me ə-š-na tol
1PL NEG-PAST-1PL come.CNG
'You didn't come'
- c. Me ə-ne-na tol
1PL NEG-DESID-1PL come.CNG
'(I wish) we don't come'
- d. i-da tol
NEG-2PL come.CNG
'Don't you.(pl) come!'

Saarinen (2015)

- ▶ The decision matrix thus becomes more complicated; especially since, in cases of imperatives, the conditions for the first and the second arrow are both fulfilled.
 - ↪ Nonetheless, we find that the first arrow takes precedence.

(15)



Some Research Questions:

- Is it always adjacent morphemes which trigger a given allomorph?
- Are there certain directions in which this conditioning happens?
 - Left-to-Right
 - Inside-Out
 - Or depending on the kind of allomorphy
- Is it always material inside the same word which conditions a given allomorph?

- A one-to-n mapping in the syntagmatic dimension is referred to as *Multiple Exponence*.
- In a case of Multiple Exponence, one feature is expressed by multiple morphemes inside a word:

- (16)
- a. Kind-er-n
child-PL-DAT.PL
 - b. Kind- \emptyset
child-DAT
 - c. *Kind-n
child-DAT.PL

- Here, it seems that plural is expressed twice on the noun. There is a designated plural affix but in addition there is an affix encoding dative plural.

- We can observe that most (if not all) cases of multiple exponence are such that one of the morphemes in question additionally encodes something else (above dative).
 - ↪ Does this tell us something about general relations between morphemes and their semantic meaning?
 - ↪ Can cases like the one above be recast as morphosyntactically conditioned allomorphy in the sense that the second affix above is merely a dative affix which is sensitive to plurality?

Other phenomena which seem to violate a one-to-one mapping between form and distribution of words/morphemes:

- Polarity
- Non-concatenative Morphology
 - Infixation
 - Ablaut
 - Subtractive Morphology
 - Templatic Morphology
 - Haplology (Phonological and Morphological)

Mismatches between Form and Meaning:

- Sometimes complex words have non-compositional meanings:

(17) emerge \rightarrow emergent \nrightarrow emergency

- Non-compositional meaning per se is not a problem since we will have to store it in the lexicon one way or another but it seems that there are certain generalizations about which affixes can generate a non-compositional meaning:

(18) a. grave \nrightarrow gravity
 b. monstrous \nrightarrow monstrosity
 c. callous \nrightarrow callosity

(19) a. grave \rightarrow graveness
 b. monstrous \rightarrow monstrousness
 c. callous \rightarrow callousness

- There can be mismatches between the order of affixes (encoding the derivation) and the actual meaning.

- (20)
- a. Al|enje a-na-mény-án-its-á mbûzi
 2.hunters 2SG-PAST-HIT-RECIP-CAUS-FV 10.goats
 'The hunters made the goats hit each other'
- b. Al|enje a-na-mény-éts-an-á mbûzi
 2.hunters 2SG-PAST-HIT-CAUS-RECIP-FV 10.goats
 'The hunters made each other hit the goats.'

Chichewa: Alsina 1999

- In (20), the semantic scope of the causative and the reciprocal affixes is correctly displayed in the order of the affixes.

- Consider now the following example from Chimwiini, another Bantu language.

- (21) a. luti, Ji mw-andik-is-iriz-e mwa:na xati
 stick Ji 3SG-write-CAUS-APP-FV child letter
 'Ji used a stick to make the child write a letter.'
- b. skuñi, Ari m-pik-ish-iriz-e muke nama
 firewood Ali 3SG-cook-CAUS-APP-FV woman meat
 'Ali made the woman cook meat with the firewood.'

Chimwiini: Hyman 2002

- Here, the order is fixed and associated with various semantic meanings.
- ➡ We want a theory that allows for exceptions but is still accounts the data which are compositional.

- When the order of affixes correctly displays their semantic scope, this is usually referred to as scopal (or scope-transparent) order.
- When it does not, this is often referred to as *anti-scopal* order.
 - Sometimes, a distinction is made between *antiscopal* order and *ascopal* order. Then, *ascopal* refers to situations where the order of affixes is fixed despite variable semantics.
 - *Anti-scopal* orders refers to a situation where the order of affixes is variable but always displays the “wrong” scope. This is claimed to be unattested.

- *Conversion* is a word formation process which changes the syntactic category of an element (a noun or an adjective) and the associated semantics without change in form.



- (22)
- a. He chaired this session.
 - b. I gifted him a brand new desk
 - c. She hit the ball right onto the green.

- With conversion, it is not per se clear where the mismatch lies exactly:
- Are these things actual semantic meanings associated with the lexical entry? Or is this just a special kind of *coercion*?
 - Or is it possible that languages like English, where conversion is very widespread, roots are not necessarily associated with a syntactic category in the lexicon?

Another phenomenon where distribution and meaning seem to pattern together but both mismatch with the morphological form is *deponency*.

- Deponency is characterized by the fact that sometimes, seemingly wrong word forms are used in a given semantic and syntactic context.

↪ Consider the two Latin verbs *amo* (love) and *sequor* (follow):

	Active	Passive	Active	Passive
1.SG	am-o	am-or	sequ-or	-
2.SG	ama-s	amā-ris	seque-ris	-
3.SG	ama-t	amā-tur	seque-tur	-
1.PL	ama-mus	amā-mur	seque-mur	-
2.PL	ama-tis	amā-mini	seque-mini	-
3.PL	ama-nt	amā-ntur	seque-ntur	-

- A small portion of verbs in Latin take the endings that are usually used for passive contexts. These verbs can, however, not be passivized.
 - ↪ In the passive, they systematically exhibit *paradigmatic gaps*.
- Otherwise deponent verbs behave syntactically like active verbs, i.e. the assign accusative case, etc.
 - ↪ We can conclude from that that syntactically and semantically, these verbs are active but, for some reason their form indicates passive.

- Deponency originally only referred to the phenomenon of voice mismatching verbs in Latin, Sanskrit and Greek.
- But recently the term was used in a broader sense for cases where a lexically specified set of roots or stems seem to violate the systematic categorizing found elsewhere in the grammar.
 - ↪ But despite the broadened use of the term 'deponency', it is doubtful that a unified explanation for these cases can be found.
- Other forms of deponency are listed in the Surrey Deponency Database (<http://www.smg.surrey.ac.uk/deponency/>)