

UNIT 1

Review of basic morphological concepts

- The lexeme is a sign, pairing of form with meaning (possibly with other information):

(1) Lexeme CAT:
Phonology: /kæt/
Semantics: [CAT]

- See Aronoff & Fudeman (2011: 43-46)
- The inflected forms of a lexeme are word forms.
- Inflected forms realize inflectional features or properties, such as [Number: Plural] or [Tense: Past]

LEXEMES

- The form of inflected forms is given by a set of rules and principles in the inflectional morphology component of the grammar.
- An important part of the inflectional morphology is the enumeration of inflectional features. These are language-specific, although recurrent across languages.
- Some notational conventions:
 - LEXEME → Small capitals
 - 'Meaning', [MEANING] → quotes or square brackets+cap.
 - Words* → Italics
 - ru:ts (roots) → phonetic transcription

LEXEMES

- Remember that lexemes are abstract, i.e. the lexeme for the word 'cat' is labelled as CAT, but it could as well be called 'Lexeme 100'
- The meaning is formalized using square brackets, but this is just a convention (how do we store meanings in our brains?)

What is a lexeme?

- A lexeme is a theoretical construct that corresponds roughly to one of the common senses of the term *word*. Examples include BOOK, EAT, DARK, SECRETLY.
- It is a sign or set of signs that exists independently of any particular syntactic context.
- It has a particular meaning or grammatical function (e.g., 'a set of written or printed pages fastened along one side and encased between two covers'; 'consume, as with food').
- Some linguists restrict the class of lexemes to the major lexical categories of noun, verb, adjective/adverb.
- It is generally referred to by its citation form (e.g., BOOK, EAT), but its shape may vary systematically according to the syntactic context in which it is used (e.g., one *book*, two *books*; I am *eating* right now, I *ate* a big dinner yesterday).

Aronoff & Fudeman 2011: 45

PARADIGMS

- The inflected forms of a lexeme form paradigms.

Base form	climb	swim	run	cut
Present participle	climb+ing	swimm+ing	runn+ing	cutt+ing
3rd person sg.	climb+s	swim+s	run+s	cut+s
Past	climb+ed	swam	ran	cut
Past participle	climb+ed	swum	run	cut

- The word 'climbed' is a single word form (of lexeme CLIMB), but it has two grammatical descriptions: past and participle. Thus, it represents two different grammatical words.
- Systematic homophony of this kind is called syncretism and the word form *climbed* is syncretic between the two descriptions.

PARADIGMS

- This systematic syncretism is shown in the following paradigm of regular verbs of English:

Base form	X
Present Participle	X-ing
3rd person sg.	X-s
Past	X-ed
Past Participle	X-ed

REPRESENTING LEXEMES: LEXICAL ENTRIES

- A full lexical entry for a lexeme may include syntactic and morphological information. Thus, the lexeme SWIM would include:

Phonology		/swɪm/
Morphology	past	<i>swam</i>
	past participle	<i>swum</i>
Syntax	intransitive verb	
Semantics	[SWIM]	

- Thus, a full entry contains all idiosyncratic information about a lexeme that can't be predicted from other properties (i.e. no information about regularly inflected forms).

LEXICAL ENTRIES

- Very often there is not a one-to-one correspondence between a word and one single meaning.
- Polysemy: There is similarity between meanings, so that one meaning is a metaphorical extension of another.

Mouth

1. Of a person
2. Of a cave
3. Of a river

Strike

1. hit
2. give the impression

LEXICAL ENTRIES

- In spite of meaning differences, idiosyncratic morphology remains unchanged: *struck* is the past of *strike* (regardless of the specific meaning).
- Occasionally, however, one meaning will have a regularized inflectional paradigm or there will be vacillation (*mouse* → *mice*, but what happens when we mean a computer mouse?)
- When there is no meaning connection between two superficially identical words, we use the term homonymy or homophony.

bank

1. money
2. river

- Very often homonyms are not homographs (*prey/pray*, *reign/rain*, *write/right*), i.e. they are spelt differently.

LEXICAL ENTRIES

- There are intermediate cases in which it is unclear whether we are dealing with polysemy or homonymy:

Tom ran a mile

Tom ran a factory

Tom ran huge risks

- There are also areas in the lexicon of systematic polysemy. Some verbs have related transitive/intransitive verbs.

The vase broke

Tom broke the vase

- Because there is no predictable meaning relatedness between the different meanings of words such as *run*, this information will have to be stored in the lexicon.

LEXICAL ENTRIES

- Therefore, we are dealing with a whole host of distinct signs, and hence distinct lexemes.
- However, we also have to record in our lexicon that all these different lexemes have exactly the same morphological properties. This is achieved by introducing the concept of lexeme index.
- Each lexeme (i.e. each distinct sense of a word) is provided with its own unique index, which we'll notate using an arbitrarily selected number.

LEXICAL ENTRIES

RUN		
Phonology		/rʌn/
Morphology	past	<i>ran</i>
	past participle	<i>run</i>
Syntax	Intransitive verb	
Semantics	[LOCOMOTE IN CHARACTERISTIC RUNNING MANNER]	
Index	1	

LEXICAL ENTRIES

RUN		
Phonology		/rʌn/
Morphology	past	<i>ran</i>
	past participle	<i>run</i>
Syntax	transitive verb	
Semantics	[GOVERN ORGANIZATION OR INSTITUTION]	
Index	2	

LEXICON

- The lexicon is a listing of all the lexical entries of the language.
- Some theories assume that it includes organizing principles (e.g. what kind of lexemes are systematically related to each other).
- Other theories just refer to 'lexicon' as an unstructured list of idiosyncractic facts about words.
- We shall call the organizing principles 'the lexical component' and keep the term 'lexicon' for the word register.
- See Aronoff & Fudeman (2011: 54-57) for further details.

EXERCISES

1. Provide lexical entries for the following words:

bring

visit

foot

girl

2. Provide lexical entries, including a lexeme index, for the following words:

head

master

DERIVATIONAL MORPHOLOGY

- English has a variety of morphological operations which permit us to derive a new lexeme from an old one (a base lexeme).
- We call these operations derivational morphology.
- The new lexeme is called derived lexeme.
- In the canonical cases of derivational morphology, the meaning of the new lexeme is related in a simple, regular fashion to the meaning of the derivational affix.

PRINT + suffix -er (person or thing that...)



PRINTER

DERIVATIONAL MORPHOLOGY

- The new lexeme (PRINTER) has its own root, derived by systematically modifying the root of the base lexeme.
- The PRINT → PRINTER type of derivation is called **semantically compositional** because we can obtain the meaning of the derived lexeme by simply knowing the meaning of the parts.
- This is not true of all derivations: e.g. WAIT+ER or SITT+ER are not 'someone who waits' or 'someone who sits'.
- In these cases we say that the derived forms are **semantically non-compositional**.
- Words resulting from derivation may belong to a different word class from the base: PRINT (verb) + able → PRINTABLE (adj).
- This crucially differs from inflection. Inflected forms are forms of a single lexeme, and a lexeme is supposed to belong to only one lexical category.

DERIVATIONAL MORPHOLOGY

Base	Derivate			
Noun	Noun	slave	slavery	-ery
	Verb	slave	enslave	en-
	Adjective	slave	slavish	-ish
Verb	Noun	print	printer	-er
	Verb	print	reprint	re-
	Adjective	print	printable	-able
Adjective	Noun	long	length	-th
	Verb	long	lengthen	-en
	Adjective	long	longish	-ish

THREE TYPES OF DERIVATION IN ENGLISH

- **Meaning-changing derivation:** An affix which is systematically associated with a certain meaning change is concatenated with a root, which contributes its meaning to the whole in a compositional fashion.

sing (verb) → singer (noun) 'person who sings'
 read (verb) → readable (adjective) 'that can be read'

Transpositions are cases in which category-changing morphology does not alter the lexical meaning.

walk (verb) → walking (adjective) ,e.g. *walking boots*

THREE TYPES OF DERIVATION IN ENGLISH

- Conversions are cases in which new lexemes may be derived without any morphology being involved.

skin (noun) → to skin (verb) 'remove skin from')

mix (verb) → mix (noun)

DISCUSSING THE MORPHEME CONCEPT

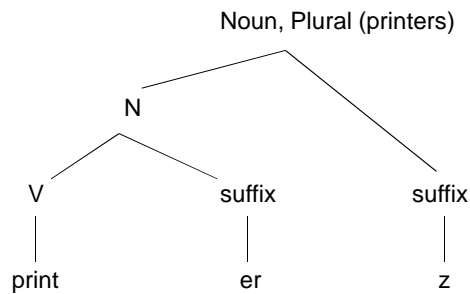
- A morpheme is defined as the smallest indivisible meaningful unit of a word.
- This concept was put forward by American Structuralist linguistics of the 1920s onwards.
- According to this view, each morphologically complex word is made up out of simple atomic building blocks, each of which contributes a meaning of its own to the whole word.
- Each morpheme is a kind of lexical sign (i.e. just like a lexeme in its own right)

print </print/, [PRINT]>

-z </z/, [PLURAL]>

DISCUSSING THE MORPHEME CONCEPT

- It has been suggested that morphemes combine with each other to form hierarchical structures, much like the syntactic structures – hence the term word syntax.



DISCUSSING THE MORPHEME CONCEPT

- Morphemes sometimes assume different phonological shapes depending on their phonological, morphological or lexical environment. This is called allomorphy.

-able: /abl – abil/ *read ~ readable ~ readability*
-ic: /ik – is/ *period ~ periodic ~ periodicity*

PROBLEMS FOR THE MORPHEME CONCEPT

- The morpheme concept assumes a one-to-one relationship between form and meaning.
- Problem 1: cumulation. One form simultaneously realizes more than one meaning, e.g. *walk-s*, 's' signals both 3rd person singular and present tense.
- Problem 2: extended or multiple exponence. One meaning is extended over more than one form, e.g. *driven*, where both the root /*driv-*/ and the suffix /-*en*/ are exclusive of the past participle form.
- Problem 3: null morphemes (zero morphs). These are morphemes with meaning, but no form. That is the case of the expression of the singular form of nouns, e.g. if *cat-s* is *cat+plural*, *cat* is *cat+singular* (null singular morpheme).

PROBLEMS FOR THE MORPHEME CONCEPT

- Problem 4: meaningless morphemes. These are often called cranberry morphs, cranberry morphemes or just cranberries, after the following:

*blueberry, blackberry, cloudberry, gooseberry, strawberry,
loganberry, raspberry, bilberry, cranberry*

- See Spencer (2004: 77-83) for a thorough discussion.
- In spite of its inadequacies, the morpheme concept is often used and sometimes useful as a rough guide to morphological structure.

MORPHOLOGICAL PROCESSES AND MORPHOLOGICAL OPERATIONS

- Examples of morphological processes are pluralization (i.e. the process whereby singular *cat* becomes plural *cats*) or past formation (*walk* becomes *walked*).
- Morphological operations are the procedures to implement morphological processes (e.g. prefixation/suffixation). In this sense, morphological operations are the exponent of a morphological process.

Morphological process:	pluralization
Morphological operation:	-z suffixation
Exponent of plurality	-z
Result	<i>kat</i> → <i>katz</i>

SOME TERMINOLOGY

- The basic phonological form of a lexeme from which other forms are built is called root.

/si:l/	‘seal’	root
/si:ld/	‘sealed’	inflected form

- The form which is the input to some morphological operation to realize some inflectional property is called stem. In English, roots and stems coincide, but not in other languages such as Spanish:

/chic-/	‘boy’	(root)
↓ (stem for)		
/chic-a/	‘girl’	
↓ (stem for)		
/chic-a-s/	‘girls’	

SOME TERMINOLOGY

- **Base:** Form which is the input to compounding or derivational morphology, or an inflectional operation (e.g. *print* is the base of the derived verb *reprint*).
- **Affix:** morphophonological element added to the right (suffix) or left (prefix) of a base.
- **Bound vs Free Elements:** Bound elements cannot occur independently (morpheme *-z*, *-ed*, root /*chic-*/ in Spanish CHICO). Free elements can occur in isolation (root /*kat*/ is also word 'cat').

MORPHOLOGICAL OPERATIONS IN ENGLISH

- **Affixation:** Addition of affix to base form (already illustrated).
- **Ablaut:** Change in the vowel of a root or stem. This is found with a few irregular plurals, past tenses and occasionally accompanies certain types of affixation

man ~ men goose ~ geese

sing ~ sang ~ sung

- **Consonant mutation:** A handful of verbs are formed by voicing the final consonant of a noun:

house /*haus*/ ~ to house /*hauz*/

MORPHOLOGICAL OPERATIONS IN ENGLISH

- Consonant mutation + ablaut: Both processes are combined in cases like the following:

life ~ live breath ~ breathe
bath ~ bathe

- Conversion: Formation of a new lexeme without morphological operations:

a sail ~ to sail to walk ~ a walk
an e-mail ~ to e-mail

- Compounding: Formed by concatenating the base form of a lexeme (usually its root) with the base form of another lexeme. It can be one word, two words or be hyphenated:

blackbird, greenhouse, coffee table, morphology lecture

OTHER WAYS OF CREATING NEW WORDS

- Acronyms: NATO, NINJA (= no income, no job).
- Truncation (clipping): Often used for forming diminutives of proper names:

Leonard ~ Len Amanda ~ Mandy
telephone ~ phone influenza ~ flu

PRODUCTIVITY

- Some morphological processes are very regular and more or less any lexeme of the right sort will undergo it, e.g. nearly all transitive verbs have an –able/-ible form. These are called productive processes.
- Others only apply to a small number of lexemes and cannot be applied to new words, e.g. –ery in *bakery* (**drinkery*). These are called non-productive processes.
- Certain types of compounding in English are productive, e.g. the Noun + Noun Compounding: *sword fish*
- Others are only found in a handful of compounds, e.g. Verb + Noun as in *swearword*.

CLITICS

- These are phonologically dependent elements that have to ‘lean on’ a phonological host to the right – proclitic, or to the left – enclitic.
- Some well-known cases of enclitics include *it’s*, *could’ve*, *she’ll*, *wasn’t*.
- The Saxon genitive is also a clitic, attaching to the right edge of the NP containing the possessor: [The girl]’s name.
- Many function words are normally unstressed and could be seen as clitics: *the book*, *an orange*.