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]

• 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?)
• Roots are specific and may or may not be identical to words (see lexeme, root and semantics for ‘cat’ in Latin, feles).

<table>
<thead>
<tr>
<th>Lexeme</th>
<th>CAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonology (root)</td>
<td>/feːl/</td>
</tr>
<tr>
<td>Semantics (meaning)</td>
<td>[CAT]</td>
</tr>
</tbody>
</table>

PARADIGMS

• The inflected forms of a lexeme form paradigms.

<table>
<thead>
<tr>
<th>Base form</th>
<th>climb</th>
<th>swim</th>
<th>run</th>
<th>cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present participle</td>
<td>climb+ing</td>
<td>swim+ing</td>
<td>runn+ing</td>
<td>cutt+ing</td>
</tr>
<tr>
<td>3rd person sg.</td>
<td>climb+s</td>
<td>swim+s</td>
<td>run+s</td>
<td>cut+s</td>
</tr>
<tr>
<td>Past</td>
<td>climb+ed</td>
<td>swam</td>
<td>ran</td>
<td>cut</td>
</tr>
<tr>
<td>Past participle</td>
<td>climb+ed</td>
<td>swum</td>
<td>run</td>
<td>cut</td>
</tr>
</tbody>
</table>

• 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:

<table>
<thead>
<tr>
<th>Base form</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Participle</td>
<td>X-ing</td>
</tr>
<tr>
<td>3rd person sg.</td>
<td>X-s</td>
</tr>
<tr>
<td>Past</td>
<td>X-ed</td>
</tr>
<tr>
<td>Past Participle</td>
<td>X-ed</td>
</tr>
</tbody>
</table>

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 swam |
| 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.

<table>
<thead>
<tr>
<th>Mouth</th>
<th>1. Of a person</th>
<th>2. Of a cave</th>
<th>3. Of a river</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strike</td>
<td>1. hit</td>
<td>2. give the impression</td>
<td></td>
</tr>
</tbody>
</table>

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.
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.

EXERCISES

1. Provide lexical entries for the following words:
   
   bring
   visit
   foot
   girl
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

• 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

<table>
<thead>
<tr>
<th>Base</th>
<th>Derivate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun slave</td>
<td>Noun slavery</td>
</tr>
<tr>
<td>Verb slave</td>
<td>Verb enslave</td>
</tr>
<tr>
<td>Adjective slave</td>
<td>Verb slavish</td>
</tr>
<tr>
<td>Verb print</td>
<td>Noun printer</td>
</tr>
<tr>
<td>Verb print</td>
<td>Verb reprint</td>
</tr>
<tr>
<td>Adjective print</td>
<td>Verb printable</td>
</tr>
<tr>
<td>Adjective long</td>
<td>Noun length</td>
</tr>
<tr>
<td>Verb long</td>
<td>Verb lengthen</td>
</tr>
<tr>
<td>Adjective long</td>
<td>Noun longish</td>
</tr>
</tbody>
</table>

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  
  -z  
  /print/, [PRINT]>
  </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.

Noun, Plural (printers)

N

V

suffix

suffix

print er z

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 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. 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

• In spite of its inadequacies, the morpheme concept is often used and sometimes useful as a rough guide to morphological structure.
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)
  \(\downarrow\)  (stem for)
  /chic-a/  ‘girl’
  \(\downarrow\)  (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: swordfish
• Others are only found in a handful of compounds, e.g. Verb + Noun as in swearword.