Vocabulary: Words and Morphemes

Meaning of a word has **two** aspects:

**Internal**: A cluster of **Semantic features**

**External**: A Member of **Semantic Fields**
Example: *elephant*

- animate but non-human → Animal
- mammal → bio-classification
- herbivore → food
- large → size
- tusks → teeth
- ivory → tooth-material
- trunk → nose
- hunting → human predation
- poaching → criminal predation
- circus → entertainment
- Africa/Indian → geography
A portion of the Lexicon:

Mental lexicon: a Network

- animals
- food
- size
- tooth
- nose
- human
- plants
History of the English Lexicon:

Original: Germanic

Borrowed: Latin

eg. \textit{bona fide} ‘genuine’

French

eg. \textit{garcon} ‘waiter’
Morpheme

- **Morpheme**: The minimal unit of meaning
  - "im-possible"  "un-birthday"

- A single word may contain more than one morpheme:
  - "Antidisestablishmentarianism"
Types of Morphemes

- Free morpheme: root
  Bound morpheme: affix

- Child (monomorphemic)
  Child-ish
  Child-ish-ness
  Un-desire-able-ity
Lexical vs. Grammatical Morphemes

- **Lexical or Content Words**: tree, baby

- **Non-lexical or Function Words**: if, then

- **Grammatical morpheme**
  - **Free Morpheme**: the, and, at, I
  - **Bound morpheme**: -s, -‘s, -es, -ed, -en -ing, -er, -est
  - **Derivational morpheme**: -less, -able, -ly
One afternoon about ten days after Dad died, I decided I ought to look over the ranch.

Function words only: -s after -ed

I -ed to the

Content words: One afternoon about (‘roughly’) ten day Dad die, decide ought look ranch
## Distinctions:

<table>
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<tr>
<th>Distinctions</th>
<th>Lexical Words</th>
<th>Function words</th>
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<tbody>
<tr>
<td><strong>Morphemic status</strong></td>
<td>Free</td>
<td>Bound (affix: prefix, suffix)</td>
</tr>
<tr>
<td><strong>Word size</strong></td>
<td>large</td>
<td>Small</td>
</tr>
<tr>
<td><strong>Stress</strong></td>
<td>stressed</td>
<td>Unstressed</td>
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<tr>
<td><strong>Meaning</strong></td>
<td>Complex, specific</td>
<td>Simple, general</td>
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<td><strong>Class size</strong></td>
<td>large</td>
<td>Small</td>
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<td><strong>Membership</strong></td>
<td>open</td>
<td>Closed</td>
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<td><strong>Function</strong></td>
<td>Code shared</td>
<td>Grammar, word-derivation</td>
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<td>Knowledge/lexicon</td>
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</table>
Lexical Word Classes

1. Nouns
2. Verbs
3. Adjectives
4. Adverbs
Class Criteria:

1. Temporal stability
2. Concreteness
3. Compactness (degree of spatial scatter)
4. Complexity (number of defining features)
Eg. 1. The tree is **green**.

2. The **woman** was **angry**.

3. The **situation** becomes **chaotic**.

4. The **weather** there is **unpredictable**.

5. The **tall man** **shot** the **deer**.

6. The **girl** then **listened** to his **story**.

7. The **value** of the **house** was **depreciating**.
<table>
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<th>Prototypical</th>
<th>Non-prototypical</th>
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<td><strong>NOUNs</strong></td>
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<tr>
<td>Time-stable, complex</td>
<td>Changing, abstract</td>
</tr>
<tr>
<td>Concrete, compact</td>
<td>Eg.</td>
</tr>
<tr>
<td>Eg. Tree, woman, man, girl, house</td>
<td>Situation, weather, story, value</td>
</tr>
<tr>
<td><strong>ADJs</strong></td>
<td></td>
</tr>
<tr>
<td>Simple, inherent, time-stable</td>
<td>Temporary, abstract</td>
</tr>
<tr>
<td>qualities</td>
<td>Eg. Angry, chaotic, unpredictable</td>
</tr>
<tr>
<td>Eg. Green, tall</td>
<td></td>
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<tr>
<td><strong>VERBs</strong></td>
<td></td>
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<tr>
<td>Fast-changing, physical</td>
<td>Mental/perceptual, abstract, stative</td>
</tr>
<tr>
<td>motion/action</td>
<td>Eg. Listen, depreciate</td>
</tr>
<tr>
<td>Eg. shoot</td>
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</table>
Nouns

- Discourse Function
- Semantic Characteristics
- Syntactic behavior
- Morphological Characteristic

**Discourse Function:**

to refer to entities in discourse.
<table>
<thead>
<tr>
<th>Semantic Characteristics</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Concreteness</strong></td>
<td><strong>Concrete:</strong> rock, house, horse, flower</td>
</tr>
<tr>
<td></td>
<td><strong>Temporal:</strong> day, week, month, year</td>
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<tr>
<td></td>
<td><strong>Abstract:</strong> freedom, love, thoughtfulness</td>
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<tr>
<td><strong>Animacy</strong></td>
<td><strong>Animate:</strong> elephant, boy, pigeon, snake</td>
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<tr>
<td></td>
<td><strong>Inanimate:</strong> paper, pen, computer, river</td>
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<tr>
<td><strong>Artifactness</strong></td>
<td><strong>Natural:</strong> woman, man, lion, air, sun, grass</td>
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<tr>
<td></td>
<td><strong>Artifact:</strong> machine, TV, skyscraper</td>
</tr>
<tr>
<td><strong>Humanness</strong></td>
<td><strong>Human:</strong> teacher, student, mother, father</td>
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<tr>
<td></td>
<td><strong>Non-human:</strong> dinosaur, cow, tree, house</td>
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<tr>
<td><strong>Countability</strong></td>
<td><strong>Count (individuated):</strong> desk, trees, babies</td>
</tr>
<tr>
<td></td>
<td><strong>Mass (unindividuated):</strong> sand, air, water</td>
</tr>
<tr>
<td></td>
<td><strong>Either:</strong> right, love, appearance, control</td>
</tr>
<tr>
<td><strong>Reference</strong></td>
<td><strong>Type:</strong> man, state, university, panda</td>
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<tr>
<td></td>
<td><strong>Token:</strong> John, Colorado, NCTU, Lili</td>
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</tbody>
</table>
Morphological Features

- **Inflectional Morphology** Plural marker
  -s \( \text{girl: girls} \)
  Irregular \( \text{foot: feet} \)
  Zero \( \text{deer:deer} \)

- **Grammatical Morphology**
  - Preposition
  - Possessor Pronoun
  - Articles

- **Derivational Morphology**
  - V \( \rightarrow \) N
  - Adj \( \rightarrow \) N
  - N \( \rightarrow \) N
Syntactic Features

- **Position/Role in Clause**
  - Subject, Direct Object, Indirect Object
    - When Henry met Sally
    - He gave Sally a hug.
  - Nominal Predicate
    - Referring: This is my desk.
    - Non-referring: This is a desk.(not a chair)
Syntactic Features

- Position/Role in NP
  - Modified by an ADJ
    » the smart boy
  - by a REL-clause
    » the girl I dated yesterday
  - by a Numeral
    » twenty flowers
  - by a possessor
    » Mary’s eyes
  - Modifier Noun
    » the delivery truck / a computer idiot
Question

What about Chinese Nouns? What are the unique morphological, semantic, and syntactic characters of Chinese nouns?

– Does Chinese have free morphemes and bound morphemes? If so, what are they?
– What are the semantic distinctions?
– What are the syntactic properties?
Bound Morpheme in Chinese

- 我 + 們
  - 孩子們/先生們/小姐們
- N + Plural morpheme
- ＊桌椅們
- N: animate
Nominalization in Chinese

- 我會 聯絡他
  -> 我會作一個聯絡
  -> 我會做一個聯絡的動作
- 我會 改進
  -> 我會做一個改進
- 我會 接觸/交涉/協調
  -> 作一個聯絡/交涉/協調
  -> 作一個聯絡/交涉/協調的動作