1. **What is a word: is it meaning-based?**

Semantic vs Syntactic words:

<table>
<thead>
<tr>
<th>word</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>the</td>
<td>yes</td>
</tr>
<tr>
<td>er</td>
<td>no</td>
</tr>
</tbody>
</table>

2. **Lexical vs Functional Words: ‘fascinating vs celebrating’ types:**

E.g., the ‘How do you do’ deletion/substitution experiment.

How_ you do? ok. vs How do you__ not ok.

Which ‘do’ /du/ can potentially delete (child language, ESL)? Why?

Recall that phonology can’t be an account given both /du/s are alike.

Recall that speaks and fix both have same phonological /s/ at the end of the word but are treated differently. Why? (lexically vs functional, stem vs affix)”

/spiks/ [[speak]s] vs /fiks/ [fix]

3. **What is a morpheme? Smallest unit of meaning: But what does meaning mean? Two types of morphemes: lexical/substantive vs. functional/abstract.**

   a) **Lexical morphology** aligns with **Derivational morphology:**
   
   Word changing derivations (on a semantic level): e.g.,
   
   [teach] + {er} = person who teaches ⇒ [teacher]

   [V] + {er} = person who performs act of the verb

   This is a semantic/word changing shift, hence derivational.

   b) **Functional morphology** aligns with **Inflectional morphology:**
   
   Non-wording changing inflections (on a syntactic level): e.g.,

   [[visit] s], [[visit] ing], [[visit] ed]
4. Morphology: A Dual Mechanism Model (Ch. 3)
‘Two approaches to morphological rules’

Syntactic objects at the edge trend towards functionalization. At the Middle where stems, compounding of stems or derivations take place trend towards lexicalization.

What is the processing?
   a) [[Teach]er] or
   b) [Teacher]

[teacher] processes via derivational morphology like a stem. (UCLA Experiment).

i. Stems (N, V, Adj) process as chunks:
   ii. [Brother] = chunk
   iii. [Teacher] = chunk
   iv. [[Teacher]s] = chunk + decomposed item {s}(w. brain signature distinctions).

Derivational affixes: e.g.,
{er}, {ish}, {ly}, {hood}
{ing}

INFL affixes: e.g.,
plural {s}, verbal {s}, possessive {'s}
past {ed}, participle {en/ed}, {ing}

Morphological rules may come via INFLectional rules, or via Lexicalization:
For example consider Reduplication of lexical stem as substitute for functionalization:

Lexicalization via stem: Functionalization via affix

i. Ponapean language: duhp (drive) English: I drive
du-duhp (be driving) I [am] [[driv] ing]
i. French en train de conduire (be driving) Spanish: yo [estoy] [[manih]ando]
5. **INFL affixes may have allomorphs via assimilation:**

<table>
<thead>
<tr>
<th>/t/ (cooked)</th>
<th>/d/ (played)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense: {ed}</td>
<td>{ed} /id/</td>
</tr>
<tr>
<td></td>
<td>over-regularized {ed} /id/</td>
</tr>
<tr>
<td>Plural</td>
<td>/z/ (cars)</td>
</tr>
</tbody>
</table>

6. **Bare stems: Tense/Agreement**

Italian: [gatti] (= cat, {i} plural)  *[[Gatt] Ø] (not grammatical)

Hence, *[gatt] is not bare stem, unlike English [cat].

+-Bare stem languages:

Spanish/Italian as [- Bare verb stem] vs. English as [+Bare verb stem]

<table>
<thead>
<tr>
<th>Spanish:</th>
<th>Italian:</th>
<th>English:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Yo) habl-o</td>
<td>(Io) parl-o</td>
<td>I speak-Ø</td>
</tr>
<tr>
<td>(Tu) habl-as</td>
<td>(Tu) parl-I</td>
<td>You speak-Ø</td>
</tr>
<tr>
<td>(Ella) habl-a</td>
<td>(Lei) parl-a</td>
<td>She speak-s (= INFLection)</td>
</tr>
<tr>
<td>(Nosotros) habl-amos</td>
<td>(Noi) parl-iamo</td>
<td>We speak-Ø</td>
</tr>
<tr>
<td>(Vosotros) habl-ais/an</td>
<td>(Voi) parl-ate</td>
<td>You speak-Ø</td>
</tr>
<tr>
<td>(Ellas) habl-an</td>
<td>(Loro) parl-ano</td>
<td>They speak-Ø</td>
</tr>
</tbody>
</table>

Spanish/Italian stems require clitic-like affixes and cannot go bare (unlike English). There is a syntactic notion here to strength: weak/free (English) vs. Strong/bound (Spanish).

French: le-s petite-s garcon-s  +INFL
Spanish: mi-s carro-s rojo-s
English  the  little boy-s  -INFL

7. **INFLectional markers across languages: (pp 22-23)**

<table>
<thead>
<tr>
<th>a. Number:</th>
<th>Singular:</th>
<th>Plural:</th>
</tr>
</thead>
<tbody>
<tr>
<td>German:</td>
<td>[tag]</td>
<td>[[tag] e] (day)</td>
</tr>
<tr>
<td>Russian:</td>
<td>[zamok]</td>
<td>[[zamk] i] (castle)</td>
</tr>
<tr>
<td></td>
<td>[kamen]</td>
<td>[[kamn] i] (stone)</td>
</tr>
</tbody>
</table>
b. Accusative case

<table>
<thead>
<tr>
<th>[+Nom/subject]</th>
<th>[Accusative/object]</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: [who]</td>
<td>[who] m</td>
</tr>
<tr>
<td>Korean: [ton]</td>
<td>[ton] ul (money)</td>
</tr>
<tr>
<td></td>
<td>{ul} / C_ (allomorph)</td>
</tr>
<tr>
<td>[tali]</td>
<td>[tali] lul (leg)</td>
</tr>
<tr>
<td></td>
<td>{lul} / V_ (allomorph)</td>
</tr>
</tbody>
</table>

English: [who] m
Korean: [ton] ul (money)

b. Accusative case

<table>
<thead>
<tr>
<th>[+Nom/subject]</th>
<th>[Accusative/object]</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: [who]</td>
<td>[who] m</td>
</tr>
<tr>
<td>Korean: [ton]</td>
<td>[ton] ul (money)</td>
</tr>
<tr>
<td></td>
<td>{ul} / C_ (allomorph)</td>
</tr>
<tr>
<td>[tali]</td>
<td>[tali] lul (leg)</td>
</tr>
<tr>
<td></td>
<td>{lul} / V_ (allomorph)</td>
</tr>
</tbody>
</table>

c. Possessive/[GEN]itive Case:

*English [house] [my [house]] = Determiner, pre-position

Turkish: [ev] [[ev] im] (my house) = INFL, post-position

*English has lost case for nouns: Old English had Case:
[stan] (stone) vs [[stan]es] (my stone). This morpheme turned into {*s}. But this is all that is left regarding the noun class:

d. Old English: ‘stone’

[stan] [Nom] (The stone is heavy)
[[stan] as] [plural] (The stones are heavy)
[stan] [Acc] (I threw the stone)
[[stan] es] [Gen] (my stone)
[[stan] e] [Dative] (to give a stone)

e. Infinitive ‘to’

English: [to [come-out]] ‘to’ pre-position

Turkish: [[çik] mak] [[Comeout] to] ‘to’ post-position

8. Two approaches to morphology:

a. Morpheme-based model:

Like syntax (p. 41):
Phrase structure Rules: Det → N, DP
Aux → V, AuxP
Adj → N, AdjP

Hence:
Noun + {s} = Plural
Verb + {ed} = past tense, etc.

Under a morpheme based model: there is only one stem w. concatenation:
Not two different stems [book] and [books]
(which would be a single mechanism model)
Concatenation becomes property of lexical class via selection: \([N + \{s\}]\) allowing for productivity. Morphological structure becomes a string of morphemes.

Note however that derivational morphology may in fact process as two different stems: e.g, \([\text{teach}] \rightarrow [\text{teacher}]\) and not \([\text{[teach]}er]\) (see UCLA experiment).

In this way,

Inflectional morphology captures a Dual Mechanism Model,
Derivational morphology captures a Single Mechanism Model.

b. Word-based Model

\[[\text{book}] \ N/\text{sg}\]
\[[\text{Books}] \ N/pl\] = both as lexical items and stored as such in the lexicon.

9. (Gordon) The ‘Rat-eater’ experiment (on lexical compounding and the Dual Mechanism Model):

Q. What do you call a person who eats \([\text{[rat]} s]\)?
R. \([\text{Rat}-][\text{eater}]\)
@ \([\text{[Rat]}s][\text{eater}]\) deletion of plural

But \([\text{mice}] [\text{eater}]\) is fine. The Preservation of plural in compounding is kept. Why?

10. Overview;

Lexical words/derivational/single mechanism model
i. N, Adj,
ii. V, Adv,
iii. Prep
iv. Derivational morphology
   \{er\}, \{ly\} \{ish\}, \{ing\} gerund

Functional words/inflectional/dual mechanism model
i. Determiners: A, the, this, that, these, those, each, all, every
ii. Auxiliary: Do, Be, Have
iii. Modals: can, could, shall, should, etc.
iv. Inflections:
   \{s\} (verbal, nominal) \{‘s\} possessive, \{ed\} tense, \{ing\} progressive
Productivity Clines: ‘two approaches’ = clines

Inflection/Agr(eement) Affix Continuum (Synchronic)

-Ø-Agr- [-Agr]  [+Agr]
  Non-Productive  Semi-productive  Productive

Lexical/ Word-based  Functional/ Rule-based

[Fascinating]-type  [[Celebrat]ing]-type

i. Idioms: ‘kick-the-bucket’  ‘notwithstanding’
Compounds: [break-fast] [to-morrow][wind-ow]

ii. Tense: {ed}  {ed}/ld/ over-regularized {ed}/ld/
Irreg.: slept  (wanted)  e.g., putted, hurted...
feet (Note on assimilation: /futi/)

\[\text{go} > \text{went} \text{ (suppletion)} = [-\text{productive}] \]  ‘goed’, ‘wented’
(attested in child language, [+productive])

Functional items show as clitics/affixes,
Not lexical items: contrast infinitive ‘to’
with prep ‘to’.
Future Tense: ‘going-to’ (gonna)

a. I’m going to go to the store.
b. I’m gonna go to the store.
c. I’m going to the store.
d.*I’m gonna to go to the store.
e.*I’m gonna to the store (=* I’m going)
a. (‘going to’ > contracted to ‘gonna’)

iii.  3rd per/sing/Agr: {s}

iv.  Stem-change Plural {s}  Plural/Agr {s}
\[\text{wife} > \text{wives} \]  \[\text{boys, girls} \]
v.  

   Derivational {ing}  
   [Fascinating]  
   Derivational/Gerund  
   {en}, {ing}  
   [broken](Adj)  
   The {dancing} (N)  

   Inflectional {ing}  
   [[Celebrating]]  
   Inflectional/Participles  
   {ed}, {en}  
   have [[visit]ed], [[writt]en]  

vi.  

   Case: Possessive { ’s }  
   [of]  

   [+/-Nom]: I/me, he/him,  
   who/[[who]m]  

   *hi-m / the-m / m-e / who-m