

How can we tell that words belong to different classes?

- Three types of criteria:
 - Distributional: Where does it occur?
 - I was happy to _____.
 - _____ became extinct in the eighteenth century.
 - He seems very _____.
 - Morphological: What forms can it have?
 - Some officials *Our officials policy
 - I escaped. *The escaped went badly.
 - Functional: What work does it perform?
 - He is always late.

Some ways to identify word classes

- Notional definitions (insufficient)
 - A noun is the name of a person, place or thing
 - A verb expresses an action, process or state
 - An adjective is a describing word which modifies a noun
- Syntactic criteria
 - Kim looked really _____ happy/*engine
 - Kim is an **electric**/***electrically engine** driver
- Morphological criteria
 - Kim drives the **engines**.

How do speakers identify word classes?

- Headlines:
 - Revived ferry sale fears dog islanders.
 - Treasury eyes wider prescription charges.
 - Revived ferry sale fears **disturb/jeopardize/irritate** islanders.
 - Treasury **considers/postpones/denies** wider prescription charges.
 - Revived ferry sale fears **dogged** the islanders.
 - Treasury **to eye** wider prescription charges.

Ling 222 - Chapter 2

3

- Word classes in headlines ('Telegraphese')
 - Nouns (N), Verbs (V)
 - Language universal
 - Open class
 - Adjectives (A)
 - Open class in English
 - Igbo just has eight adjectives
 - Prepositions (P)
 - MPs' report urges action **within** four years **on** design changes
 - Pigeon woman is cured **by** spell **of** bird.
 - Lexical class in English, though not open
 - Closed class words are often omitted:
 - Articles (*the, a*)
 - Conjunctions (*and, or*), Pronouns (*she, it, them*)

Ling 222 - Chapter 2

4

Syntax of the major word classes

- **The verb phrase**

- Intransitive verbs:

- Lee sneezed The volcano erupted
 - Ichajk'imba s-sk'in anaj Achiko. (Cakchiquel)
suddenly CMPL-scream:3sg out Francisco
'Suddenly, Francisco screamed out.'
 - **Predicate-argument structure**: one argument
 - Verbs as predicates denote situations, events, actions, processes, etc.

Ling 222 - Chapter 2

5

- Transitive verbs (two arguments)

- Carl rejected my generous assistance.
 - Kim avoided the man who'd shouted at her.
 - Bhris sí # an chathaoir. (Irish)
Break:PAST she the chair
'She broke the chair.'

- Ditransitive verbs (three arguments)

- Lee handed the letter # to Kim.
 - Lee handed Kim # the letter.
 - Jack bought some flowers # for Lee
 - Ta gei wo #zhe-ben-shu (Mandarin Chinese)
S/he give I this-CLASS-book
'S/he gave me this book.'

Ling 222 - Chapter 2

6

- **The noun phrase**

- Nouns and the closed class of determiners

- **The** paper, **a** problem, **those** feelings, **which** car, **my** fault, **both** children, **all** examples

- Determiners only occur with nouns:

- Her singing bothers me.

- Determiners have a different distribution from adjectives:

- soft furry cats

- furry soft cats

- the soft cats

- *soft the cats

- soft furry clean cats

- *which this the cat

- BUT: all my many friends

Ling 222 - Chapter 2

7

- The DP hypothesis (noun phrases are really ‘determiner phrases’)

- Some ‘pronouns’ can occur ‘transitively’

- **We linguists** aren’t stupid.

- I’ll give **you boys** three hours to finish the job.

- Some ‘determiners’ can occur ‘intransitively’

- **These/those** ___ are good.

- I’ll give **some** ___ to Lee.

- I’ll give **that/this** ___ away.

- Some ‘determiners’ can only occur ‘transitively’

- ***The/a** ___ could be problematic.

Ling 222 - Chapter 2

8

- Crosslinguistically, determiners are typically either initial or final in the noun phrase
 - Nmea nkeiewa no (Akan)
women PLURAL:small the
'the small women'
- Many languages have no DEFINITE or INDEFINITE ARTICLE (e.g. Russian), but sometimes word order can distinguish definiteness:
 - Ta mai pingguo le (Mandarin Chinese)
he buy apple ASPECT
'He bought an apple'
 - Ta pingguo mai le
he apple buy ASPECT
'He bought the apple.'

Ling 222 - Chapter 2

9

- Determiners often AGREE with various properties of the noun they co-occur with:
 - French
 - Le livre, le garçon, le chat, le lit
'the book', 'the boy', 'the cat', 'the bed'
 - La table, la fille, la fleur, la langue
'the table', 'the girl', 'the flower', 'the language'
 - Les livres, les garçons, les tables, les filles
'the books', 'the boys', 'the tables', 'the girls'
 - German
 - der Mann, die Frau, das Mädchen
'the man', 'the woman', 'the girl'

Ling 222 - Chapter 2

10

– NPs most typically function as arguments of predicates

- Semantic functions (thematic roles)

- Lee handed the letter to Kim
AGENT THEME GOAL
- Kim loves sprouts.
EXPERIENCER THEME
- The letter came from Lee.
THEME SOURCE
- This new saw cuts well.
INSTRUMENT
- The meat cuts well.
THEME
- Jim cuts well.
AGENT

- Syntactic functions (grammatical relations)

- Kim kissed Lee.
SUBJECT DIRECT OBJECT
- Lee was kissed by Kim.
SUBJECT OBJECT OF PREPOSITION
- Pears, she doesn't like
DIRECT OBJECT SUBJECT
- Kim handed the letter to Lee
SUBJECT DIRECT OBJECT INDIRECT OBJECT
- Kim handed Lee the letter.
SUBJECT INDIRECT OBJECT DIRECT OBJECT
SUBJECT DIRECT OBJECT OBJECT2
- Lee was handed the letter by Kim.

- Subjects control subject/verb agreement in English
 - The woman is happy;
 - *The woman are happy.
 - The women are happy.
 - *The women is happy
- Subject pronouns occur in nominative case in English; whereas objects occur in accusative case:
 - She gave her a letter.
 - *Her gave she a letter.
- Nominative pronouns: *I, you, he, she, it, we, they*
- Accusative pronouns: *me, you, him, her, it, us, them*
- Genitive determiners: *my, your, his, her, its, our, their*
- Genitive pronouns: *mine, yours, his, hers, its, ours, theirs*

- Distributional test:
 - Typically only NPs can be subjects or objects:
 - ___ became extinct in the eighteenth century.
 - I like _____.
 - However, some verbs allow clausal subjects or objects:
 - That Kim was late surprised me.
 - I saw that Kim was late.
- Noun phrases can be predicates instead of arguments:

<ul style="list-style-type: none"> ▪ <u>Malay</u> Zainal guru saya Zainal teacher my ‘Zainal is my teacher.’ 	<ul style="list-style-type: none"> ▪ <u>Russian</u> Marija rebëk Mary child ‘Mary is a child.’
--	--

 - English has linking verb ‘to be’ (‘copula’) connecting subject with predicate NP.

- **The adjective phrase**

- Adjectives and the closed class of degree modifiers

- French

- tres belle trop lourd presque gentil
very beautiful too heavy almost nice

- Breton

- klañv kaer
sick very 'very sick'

- Positions and functions of APs

- Attributive AP's modify a noun:

- Hungarian Greek Breton
A piros autó i omorfi jineka an ti kozh tre
the red car the beautiful woman the house old very

- Predicative adjectives function as predicates:

- He felt _____. She is/seemed _____.
I find it _____ to think she's forty.

- Some languages don't have copula:

- » Ali marah (Malay)
Ali angry
'Ali is angry'

- The man was awake/*the awake man
*the failure seems utter/an utter failure

– Are adjectives essential?

- **Iak**-imiki kuti a (Kwamera)
1SG-dislike dog this
'I don't like this dog.'
- Lau **r-am**-agkiari ihi
Iau 3SG-PROGRESSIVE-talk still
'Iau is still talking.'
- Pukah u **r**-asori
pig this 3SG-big
'This pig is big.'
- Ianpin **iak-am**-óuihi ihi ...
when 1SG-PROGRESSIVE-small still
'When I was still small...'

– Other languages use nouns:

- 'Kim has kindness.'

Ling 222 - Chapter 2

17

• The prepositional phrase

– Prepositions can occur transitively:

- under the table, beside the road, for Judy

– They can also occur intransitively:

- The student was here before.
- Put your clothes underneath.

– Prepositions pair up with their own modifiers

- She put the book right on the table.
- The weight is well inside the limit.
- Put your clothes right underneath.

Ling 222 - Chapter 2

18

- Some traditional ‘adverbs’ occur with ‘right’ and are thus prepositions:
 - She lives right upstairs/downstairs
 - The plane flew right overhead.
- Traditional verbal ‘particles’ are also prepositions:
 - She called me right up.
 - Put those chocolates right back.
- Malay has prepositional modifier *terus* ‘right’:
 - Dia berarii terus ke ayahaya
he ran right to father:his
‘He ran right to his father.’
 - Tolong masuk terus ke dalam
please come right to in
‘Please come right in.’

- Some languages have ‘postpositions’
 - Tookyoo kara sono hito to (Japanese)
Tokyo from that person with
‘from Tokyo’ ‘with that person’
 - Cover term is ‘adposition’
- Adpositions function to mark grammatical relations:
 - I gave the book to John (to = indirect object)
- PPs function as locatives (time or space)
 - I walked to the sea
 - I arrived after four o’clock
 - Kwamera only has two locative prepositions, Igbo and Yoruba only have one.
- PPs can function as manner adverbials:
 - He walked with a limp.
 - He talked in a loud voice.

- **Adverbs**

- Form

- Adjective + *ly* ending: slowly, suddenly
French ‘-ment’ (*sagement* ‘wisely’)
 - She works fast(*-ly)/hard(*ly).
 - An ungodly hour/*He speaks ungodly.

- Adjectives and adverbs are in **complementary distribution**:

- An unusual [_N song].
An unusually [_A happy] song
She speaks unusually [_{Adv} quickly]
She [_V spoke] unusually.

- Linguists thus consider adverbs and adjectives as subclasses of the same word class: ‘adjectives’ (since these are more basic in form)

- Evidence:

- Share modifiers:

- He is very happy He worked very happily

- Can occur in the *as*____*as* comparative construction:

- He is miserable as Kim.
He draws as miserably as Kim.

- Comparative suffix (-*er*) and superlative suffix (-*est*) can occur on both:

- Nice, nicer, nicest Soon, sooner, soonest

- There are some differences:

- He seems uncertain whether she left or not.
 - *He spoke uncertainly whether she left or not.

- In many languages there is no formal distinction
 - Er ist schön (German)
he is nice
'He is nice'.
 - Er singt schön
he sings nice
'He sings nicely'
- 'today', 'tomorrow', 'yesterday' and 'tonight' can function adverbially but are nouns since they have the distribution of NPs:
 - Tonight/tomorrow/today seems fine.
 - I planned tomorrow/tonight very carefully
 - I'll finish it by tonight.
- Words like 'still', 'already', 'sometimes' don't take degree modifiers, but do modify verbs and adjectives, so linguists count them as adverbs.

Grammatical Categories

- Form:
 - Inflection
 - Affix indicates grammatical category
 - Closed class words
- Types
 - Inherent categories
 - Properties a word has or doesn't have
 - Agreement categories
 - Show syntactic links between words
 - Relational categories
 - Mark the relationship a word or phrase has to the whole sentence

- Nouns
 - Inherent: number, gender or noun class, definiteness
 - Relational : case
- Verbs
 - Inherent: tense, aspect, mood, transitivity
 - Relational: voice
 - Agreement: agreement with arguments
- Adjectives
 - Inherent: degree of comparison (equative, comparative, superlative)
 - Agreement: agreement of attributive adjectives with head noun; agreement of predicative adjectives with subject.

• Grammatical categories for nouns

– Number

- natu-gu natu-gu-wao (Saliba)
 child-my child-my-PLURAL
 ‘my child’ ‘my children’
- ci cwn pedwar ci (Welsh)
 ‘dog’ ‘dogs’ ‘four dogs’
- Some languages use dual or trial
 - dyulef ‘the hands’ (Cornish)
 - dornow ‘hands of more than one person’
 - dewlagas ‘the eyes’
 - lagsow ‘eyes of more than one person’

– Gender or noun class

- Spanish: two genders: masculine & feminine

<ul style="list-style-type: none"> – el libro ‘the book’ el chico ‘the boy’ el vestido ‘the dress’ el jardín ‘the garden’ 	<ul style="list-style-type: none"> la revista ‘the magazine’ la chica ‘the girl’ la corbata ‘the necktie’ la libertad ‘the liberty’
---	---

- Swahili: 15 noun classes.

<ul style="list-style-type: none"> – m-toto ‘child’ PERSON-child ki-kapu ‘basket’ SMALL.THING-basket ku-soma ‘reading’ ACTIVITY-reading 	<ul style="list-style-type: none"> wa-toto ‘children’ PEOPLE-child vi-ti ‘stools’ SMALL.THINGS-stool
---	--

- Mandarin Chinese: many measure words

<ul style="list-style-type: none"> – yi tiao lu one CLASS road – yi zhang youpiao one CLASS stamp 	<ul style="list-style-type: none"> yi tiao qunzi one CLASS skirt yi zhang piao one CLASS ticket 	<ul style="list-style-type: none"> yi tiao dianxian one CLASS wire yi zhang zhuoze one CLASS table
---	---	--

– Definiteness

- Swedish marks definiteness morphologically:
 - mus-**en**
mouse-DEF
‘the mouse’
 - den (hungry) mus-**en**
the hungry mouse-DEF
‘the (hungry) mouse’

- Cakchiquel has definite article but word for ‘one’ is only a numeral and not an indefinite article:
 - ntos **ri-jun**-ræchbil ri-ya-ros stsijon ruk’In ri-doktor
then DEF-one-her:friend DEF-FEM-Rosa talked with DEF-doctor
‘Then the one friend of Rosa’s talked to the doctor.’

– Case

- English shows case only on pronouns
- Some languages show no case at all
 - Saya benci dia Dia benci saya (Malay)
I hate he/she He/she hate I
'I hate him/her' 'She/he hates me'
- Some languages have rich case systems:
 - German has four cases: Nominative, Accusative, Dative, Genitive:
Der Mann kaufte dem Vater des Jungen den Computer.
DEF:NOM man bought DEF:DAT father DEF:GEN boy DEF:ACC computer
'The man bought the boy's father the computer.'
- Rich case systems can allow freer word order:
 - Nauta puellam amat (Latin)
sailor:NOM girl:ACC loves
'the sailor loves the girl.'
 - Puellam nauta amat
girl:ACC sailor:NOM loves
'the sailor loves the girl'

- Finnish has 14 cases:
 - Nominative talo 'house'
 - Genitive talon 'of (a) house'
 - Essive talona 'as a house'
 - Partitive taloa 'house (as an object)'
 - Translative taloksi 'to a house'
 - Inessive talossa 'in (a) house'
 - Elicative talosta 'from (a) house'
 - Illative taloon 'into (a) house'
 - Adessive talolla 'at (a) house'
 - Ablative talolta 'from (a) house'
 - Allative talolle 'to (a) house'
 - Abessive talotta 'without (a) house'
 - Comitative talomeni 'with my house(s)'
 - Instructive talon 'with (a) house'

<http://www.cs.tut.fi/~jkorpela/finnish-cases.html>

- Grammatical categories for verbs

- **Tense**

- Grammaticalized expression of location in time (Comrie)

- English

- John studied yesterday past tense
- John studies every day present (non-past) tense
- John will study tomorrow future auxiliary verb

- ChiBemba

- ba-**a~li**/-bomba-**ele** remote past (before yesterday)
- ba-**a~li**/-bomba removed past (yesterday)
- ba-**a~ci**/-bomba near past (earlier today)
- ba-**a**/-bomba immediate past (just happened)
- ‘they worked’
- ba-**ka**/-bomba remote future (after tomorrow)
- ba-**ka**~-bomba removed future (tomorrow)
- ba-**lee**/-bomba near future (later today)
- ba-**a/la/a**/-bomba immediate future (very soon)
- ‘they’ll work’

- **Aspect:**

- Different ways of viewing the internal temporal constituency of a situation (Comrie)

- English:

- She is/was studying Progressive
- She has/had studied. Perfect

- The perfective aspect highlights or signals one or more boundaries of a verb. (Sabine Erika Stoll)

- Russian

- Ona **procitala**’ knigu Perfective
- ‘She read a/the book’
- Ona **citata**’ knigu Imperfective
- ‘She read the/a book/she was reading a/the book’
- Ona **citata**’ knigu i prodolzhaet ee citat’ i ceicas
- she read:IMPV book and continues it to.read and now
- ‘She read the book and continues to read it now.’
- *Ona **procitala**’ knigu i prodolzhaet ee citat’ i ceicas
- read:PFV

- French

- Jean *étudiait* quand Pierre *est entré*
studied:IMPV when is entered
'Jean was studying when Pierre entered.'
- Imparfait Imperfective
- Passé Composé: Perfective

- Welsh

- Mae Steffan **yn** sgwennu llyfr
is PROGRESSIVE write book
'Steffan is writing a book.'
- Mae Steffan **wedi** sgwennu llyfr
is PERFECT write book
'Steffan has written a book.'

- **Mood**

- A grammatical category which marks properties such as possibility, probability, and certainty.
 - Indicative mood (for actual events)
 - » Kim goes to Greece tomorrow.
 - » Kim went to Greece yesterday
 - Hypothetical event expressed by modal auxiliary
 - » Kim **would** go to Greece tomorrow...
(*would, could, can, may, might, should...*)
 - Subjunctive mood (verbal morphology for hypothetical events)
 - » ...if she **were** wealthy enough.
 - » I demand that this man **leave/be removed** at once!
- French:
 - Je veux que tu le **fasses**
I want that you:SG it do:STV:2SG
'I want you to do it.'
 - Je crois que tu le **feras**
I believe that you:SG it do:FUT:INDIC:2SG
'I believe that you will do it.'

– Voice

- Relational category because it is associated with the position of the NP arguments of the verb.
- Active vs. Passive voice
 - Japanese (from David Oshima)
 - » Pat-ga Max-o nagut-ta
Pat-NOM Max-ACC hit-PAST
'Pat hit Max.'
 - » Max-ga Pat-ni nagu-rare-ta
Max-NOM Pat-DAT hit-PASSIVE-PAST
'Max was hit by Pat.'
 - Direct object of active verb is promoted, subject of active verb is demoted, and the form of the verb changes.
 - English: auxiliary *be* or *get* plus past participle.

– Agreement

- Inherent features of the noun phrase arguments are marked (cross-referenced) on the verb.
 - English: person and number of subject (very little)
 - » I play He play-s (3SG in Present tense)
 - Cakchiquel: person and number of subject and object
 - » rioj y-**e-qa**-tsu? rie?
we ASPECT-OBJ-SUBJ-see they
'We see them.'
 - » rie? y-**oj-ki**-tsu? rioj
they ASPECT-OBJ-SUBJ-see we
'They see us.'
 - Swahili: noun class of subject and object:
 - » Wa-toto **wa-li-i**-imba ny-imbo
NC2-child NC2-PAST-NC9-sing NC9-song
'The children sang songs.'
 - » Mw-alimu **a-me-wa**-amsha wa-toto
NC1-teacher NC1-PERF-NC2-wake.up NC2-child
'The teacher has woken the children up'
(<http://www~personal.umich.edu/~dbeck/lin211/Swahili.html>)

- **Grammatical categories for adjectives**

- **Comparison**

- English

- Big, bigger, biggest

- Welsh

- Mae-'r cwpan cyn llawn-**ed** a-'r botel.
is-the cup as full-EQUATIVE with-the bottle
'The cup is as full as the bottle.'

- **Agreement**

- Swahili

- ma-pande **ma**-kubwa
NC6-block NC6-big
'big blocks'

- German

- Ein klein-**es** Kind sah einen reich-**en** Mann.
A small-NOM:SG:NEUTER child saw a rich-ACC:SG:MASC man
'A small child saw a rich man.'

Ling 222 - Chapter 2

37

- **Grammatical categories for prepositions**

- **Agreement**

- Irish

le Séamas	'with Séamas'
leis	'with him'
léithí	'with her'

- Cakchiquel

- **ru**-ma ri-ixoq
3SG-by the-woman
'by the woman'
- **ki**-ma ri-ixoq-e
3PL-by-the-woman-PLURAL
'by the women'

Ling 222 - Chapter 2

38

Summary

- Languages with a lot of morphology represent grammatical information without needing a lot of closed class words
 - Bantu languages, native American languages, Greek, Slavic, Finnish, Turkish
- Languages without a lot of morphology rely on closed class words.
 - Chinese, Vietnamese, Cambodian, Malay/Indonesian