



◦ The Basics of Morphology

COSI 114 – Computational Linguistics

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Identifying meaningful elements in Words

- Isthmus Zapotec (Kroeger, pp. 10++)

| | | | | |
|-----|---------|------------------|----------|-------------------|
| (7) | kañee | 'feet' | kažigi | 'chins' |
| | ñeebe | 'his foot' | žigibe | 'his chin' |
| | kañeebe | 'his feet' | | |
| | ñeelu? | 'your foot' | žigilu? | 'your chin' |
| | kañeetu | 'your (pl) feet' | kažigitu | 'your (pl) chins' |
| | kañeedu | 'our feet' | kažigidu | 'our chins' |

Definition of “Morpheme”

- “Morphemes are the smallest individually meaningful elements in the utterances of a language” (Charles Hockett, 1958)
- Some types of morphemes:
 - Roots: carries “lexical” meaning
 - Affix: carries grammatical or other non-lexical meaning. Is always *bound*

Position Classes

- (14) **Isthmus Zapotec** (Mexico; Merrifield et al. 1987, prob. 9):

| | | | |
|----------|-------------------|--------------|---------------------|
| ñee | 'foot' | ʒigilu? | 'your chin' |
| kañee | 'feet' | kaʒigidu | 'our chins' |
| ñeebe | 'his foot' | ʒike | 'shoulder' |
| kañeebe | 'his feet' | ʒikebe | 'his shoulder' |
| ñeelu? | 'your foot' | kaʒikelu? | 'your shoulders' |
| kañeetu | 'your (pl) feet' | diaga | 'ear' |
| kañeedu | 'our feet' | kadiagatu | 'your (pl) ears' |
| ʒigi | 'chin' | kadiagadu | 'our ears' |
| kaʒigi | 'chins' | bifozedu | 'our father' |
| ʒigibe | 'his chin' | bifozenetu | 'your (pl) father' |
| kaʒigitu | 'your (pl) chins' | kabifozenetu | 'your (pl) fathers' |

Typologies

- Agglutinating (agglutinative) languages
- Analytic/Isolating
- Synthetic (fusional/inflectional) languages
- Polysynthetic languages

- (26) **Onandaga** (North America; Woodbury 1975, cited in Baker 1988:76)
Wa?-ha-yv?kw-ahni:nu-?
PAST-he/it-tobacco-buy-ASPECT
'He bought tobacco.'
- (27) **Rembarrnga** (Australia; Dixon 1980:223–224)
yarran-mæʔ?-ku?pi-popna-ni-yuwa
1pl.1O/3sg.SUBJ-might-sweat-smell-IN.F-
'It (the kangaroo) might smell our sweat along (i.e. as we try to sneak up on it).'

Multiple Exponence

- E.g. Breton diminutive plurals:
 - *bag* ‘boat’ *bagòu*
 - *bagig* ‘little boat’ *bagòuigòu*
- English:
 - *pick up*
 - *picker upper*

Stems, Roots and Compounds

- **Stem:** portion of a word which all (?) forms of a given **lexeme** have in common.
 - Bound stems cannot occur on their own without additional affixation
 - Free stems can occur as separate words
- **Compounds:** stems consisting of more than one root

Issues with Sanskrit

- Nouns have two or three stems – **strong**, **middle** and (optionally) **weakest**
- A different series of stem alternations cross-cuts this: *guna*, *vrddhi*, and zero:
 - “foot”: *pād-*, *pad-*, *pd-*
 - **strong** stems may be *guna* or *vrddhi*
 - **middle** stems may be zero, or a lexeme-specific stem
 - **weakest** stems may be zero or lexeme-specific stem

Sanskrit declensions

| | SG | DU | PL |
|-------|---------------------|---------------------|---------------------|
| NOM | bhágavān | bhágavant-āu | bhágavant-as |
| ACC | bhágavant-am | bhágavant-āu | bhágavat-as |
| INSTR | bhágavat-ā | bhágavad-bhyām | bhágavad-bhis |
| DAT | bhágavat-e | bhágavad-bhyām | bhágavad-bhyas |
| ABL | bhágavat-as | bhágavad-bhyām | bhágavad-bhyas |
| GEN | bhágavat-as | bhágavat-os | bhágavat-ām |
| LOC | bhágavat-i | bhágavat-os | bhágavat-su |

Table 3.2: Stem alternation in the masculine paradigm of Sanskrit *bhagavant* ‘fortunate’, with strong stem **bhágavant** and middle stem bhágavat (= Stump’s Table 6.1).

guna

zero

Sanskrit declensions

| | SG | DU | PL |
|-------|-----------------------|-----------------------|-----------------------|
| NOM | tasthiv'ān | tasthiv'āṁs-āu | tasthiv'āṁs-as |
| ACC | tasthiv'āṁs-am | tasthiv'āṁs-āu | tasthūs-as |
| INSTR | tasthūs-ā | tasthivád-bhyām | tasthivád-bhis |
| DAT | tasthūs-e | tasthivád-bhyām | tasthivád-bhyas |
| ABL | tasthūs-as | tasthivád-bhyām | tasthivád-bhyas |
| GEN | tasthūs-as | tasthūs-os | tasthūs-ām |
| LOC | tasthūs-i | tasthūs-os | tasthivát-su |

Table 3.3: Stem alternation in the masculine paradigm of Sanskrit *tasthivans* ‘having stood’, with strong stem **tasthiv'āṁs**, middle stem **tasthivát**, and weakest stem **tasthūs** (= Stump’s Table 6.3).

vrddhi

lexeme-class
particular

lexeme-class particular

Distinguishing Inflection from Derivation (Kroeger, p. 253)

| | Derivational | Inflectional |
|-----------------------------------|---------------------|--------------------------|
| category-changing | often | generally not |
| paradigmatic | no | yes |
| productivity | limited & variable | highly productive |
| type of meaning | often lexical | often purely grammatical |
| semantic regularity | often unpredictable | regular |
| restricted to specific synt. env. | no | yes |
| position | central | peripheral |
| portmanteau forms | rarely | often |
| repeatable? | sometimes | never |

Types of Derivational Processes

- Change in category, no change in meaning
 - Abstract noun formation
 - Adverbialization
- Change in meaning with no change in category
 - Diminution/Augmentation
- Change in category with change in meaning:
 - Nominalization
 - Verbalizers
 - Adjectivizers

Word Formation Rules

- Portuguese diminutive (Kroeger, pp. 262-264):
 - $[X]_{\text{NOUN}} \Leftrightarrow [X\text{-}inho]_{\text{NOUN}}$
“x” “little x”

Valence-changing Morphology: Passive

- Japanese (p. 271)

- a Sensei=ga Taroo=o sikat-ta.
teacher=NOM Taroo=ACC scold-PAST
'The teacher scolded Taroo.'
- b Taroo=ga sensei=ni² sikar-are-ta.
Taroo=NOM teacher=OBL scold-PASSIVE-PAST
'Taroo was scolded by the teacher.'

- Malayalam (p. 271)

Malayalam (Mohanan 1982:583–584)

- a kuttiye pooliissukaar ikki[iy]aakki.
child-ACC policemen-NOM tickle-PAST
'The policemen tickled the child.'
- b kutti pooliissukaañal ikki[iy]aakkappetju.
child-NOM policemen-INSTR tickle-PASS-PAST
'The child was tickled by the policemen.'

Applicatives

- Chichewa (pp. 273-274)

- a Ndi-na-tumiz-a chipanda cha mowa kwa mfumu.
1sg.s-PAST-send-ASP calabash of beer to chief
'I sent a calabash of beer to the chief.'
- b Ndi-na-tumiz-*ir*-a mfumu chipanda cha mowa.
1sg.s-PAST-send-APPPL-ASP chief calabash of beer
'I sent the chief a calabash of beer.'
- a Msangalatsi a-ku-yend-a ndi ndodo.
entertainer S.AGR-PRES-walk-ASP with stick
'The entertainer is walking with a stick.'
- b Msangalatsi a-ku-yend-*er*-a ndodo.
entertainer S.AGR-PRES-walk-APPPL-ASP stick
'The entertainer is walking with a stick.'

Reflexives/Reciprocals

- Kimaragang Dusun (p. 275)

| Root | | Reflexive form | |
|--------|-------------|----------------|-------------------------|
| garas | 'slaughter' | misinggaras | 'slit one's own throat' |
| patay | 'die, kill' | misingpatay | 'kill oneself' |
| timbak | 'shoot' | misingtimbak | 'shoot oneself' |
| tobok | 'stab' | misingtobok | 'stab oneself' |
| wanit | 'poison' | misingwanit | 'poison oneself' |
| lapis | 'slap' | misinglapis | 'slap oneself' |
| rayow | 'praise' | misingrayow | 'to praise oneself' |

- Chichewa (p. 276)

a Mbidzi zi-ku-menya nkhandwe.
10-zebras 10.SUBJ-PRES-hit-ASP 10-foxes
'The zebras are hitting the foxes.'

b Mbidzi zi-ku-menya-an-a.
10-zebras 10.SUBJ-PRES-hit-*RECIP*-ASP
'The zebras are hitting each other.'



Causatives

- Turkish (p. 277)
 - a Müdür mektub-u imzala-di.
director letter-ACC sign-PAST
'The director signed the letter.'
 - b Dişçi mektub-u müdür-e imzala-t-ti.
dentist letter-ACC director-DAT sign-CAUS-PAST
'The dentist got the director to sign the letter.'

Adversatives

- Malay (p. 2):
 - a Kelapa itu jatuh.
coconut that fall
'The coconut fell.'
 - b Tomo *ke-jatuh-an* kelapa.
Tomo -fall-ADVRS coconut
'Tomo was fallen on by a coconut.'
 - a Anak Tomo telah mati.
child Tomo PAST die
'Tomo's child has died.'
 - b Tomo *ke-mati-an* anak.
Tomo -die-ADVRS child
'Tomo suffered the death of a child.'

Incorporation

- Southern Tiwa (p. 280)

ben-*khwien-wia-ban*
2sg:1sg:3sg-*dog-give-PAST*
You (sg) gave me the dog.

- Chukchee (p. 280): valence decreasing

- a Morgənan mət-re-mne-ŋənet walat.
we.ERG 1pl.S-FUT-sharpen-3pl.O knives(ABS)
'We will sharpen our knives.'
- b Muri mət-ra-*wala-mna-g?a*.
we.ABS 1pl.S-FUT-*knife*-sharpen-1pl.S
'We will sharpen knives.'

Incorporation

- Mohawk (p. 281): non-valence decreasing

- a i?i khe-nuhwe?-s ne yao-wir-a?a.
1sg 1sgS:3femO-like-ASP the PRE-baby-SUFF
'I like the baby.'
- b i?i khe-*wir*-nuhwe?-s.
1sg 1sgS:3femO-*baby*-like-ASP
'I like the baby.'
- c *i?i k-*wir*-nuhwe?-s.
1sg 1sgS-*baby*-like-ASP

Allomorphy

- Korean (p. 288)

| BASE FORM | NOMINATIVE FORM | GLOSS |
|-----------|-----------------|---------------|
| cekkun | cekkun-i | ‘enemy’ |
| haksæng | haksæng-i | ‘student’ |
| salam | salam-i | ‘person’ |
| tal | tal-i | ‘moon’ |
| pap | pap-i | ‘cooked rice’ |
| ttok | ttok-i | ‘cake’ |
| oppa | oppa-ka | ‘brother’ |
| holangi | holangi-ka | ‘tiger’ |
| tongmu | tongmu-ka | ‘comrade’ |
| hæ | hæ-ka | ‘sun’ |
| kho | kho-ka | ‘nose’ |

Allomorphy

- Huichol (p. 289)

| | | | |
|-------|-------------|----------|-----------------|
| qaicʌ | 'fish hook' | qaicʌ-ya | 'his fish hook' |
| kuka | 'bead' | kuka-ya | 'his bead' |
| kʌye | 'tree' | kʌye-ya | 'his tree' |
| haca | 'axe' | haca-ya | 'his axe' |
| maku | 'pumpkin' | maku-ya | 'his pumpkin' |
| muza | 'sheep' | muza-ya | 'his sheep' |
| hauri | 'candle' | yu-hauri | 'his candle' |
| huye | 'road' | yu-huye | 'his road' |
| micu | 'cat' | yu-micu | 'his cat' |
| zʌnai | 'nit' | yu-zʌnai | 'his nit' |



Allomorphic change

- Phonologically conditioned (e.g. Korean example)
- Lexically conditioned (e.g. Huichol)
- Morphophonemic (e.g. Finnish vowel harmony)

Allomorphy

| Base form | Past participle |
|------------------|------------------------|
| give | given |
| take | taken |
| hide | hidden |
| bite | bitten |
| know | known |
| live | lived |
| bake | baked |
| guide | guided |
| sight | sighted |
| owe | owed |

Suppletion

- English, p. 290

| POSITIVE | COMPARATIVE | SUPERLATIVE |
|-----------------|--------------------|--------------------|
| big | bigger | biggest |
| fast | faster | fastest |
| funny | funnier | funniest |
| great | greater | greatest |
| good | better (*gooder) | best (*goodest) |
| bad | worse (*badder) | worst (*baddest) |



Total suppletion

- E.g. *go/went*
- Total suppletion rarely (if ever) occurs in derivational processes?
 - Provenance adjectives in English

Affixal Suppletion

- Lexically conditioned (e.g. Huichol)
- Phonologically conditioned (e.g. Korean)
- Morphologically conditioned – dependency on other specific morphological material in word. E.g. Welsh
(- ۲۰۲۱)

| BASE | | NOMINALIZATION | | PLURAL |
|---------|--------------|----------------|----------------|---------------------------|
| swydd | 'job' | swyddog | 'official' | swyddog-ion 'officials' |
| march | 'horse' | marchog | 'horseman' | marchog-ion 'horsemen' |
| pechu | 'sin' | pechadur | 'sinner' | pechadur-iaid 'sinners' |
| cachu | 'feces' | cachadur | 'coward' | cachadur-iaid 'cowards' |
| tywysog | 'prince' | tywysoges | 'princess' | tywysoges-au 'princesses' |
| Sais | 'Englishman' | Saesnes | 'Englishwoman' | Saesnes-au 'Englishwomen' |

Inflectional Classes

- Latin (pp. 298-299)

Latin 1st declension nouns (singular only)

| | <i>woman</i> | <i>star</i> | <i>sailor</i> |
|------------|--------------|-------------|---------------|
| NOM | femin-a | stell-a | naut-a |
| GEN | femin-ae | stell-ae | naut-ae |
| DAT | femin-ae | stell-ae | naut-ae |
| ACC | femin-am | stell-am | naut-am |
| ABL | femin-ā | stell-ā | naut-ā |

Cf. syncretism...

Latin 2nd declension nouns (singular only)

| | <i>god</i> | <i>slave</i> | <i>man</i> |
|------------|------------|--------------|------------|
| NOM | de-us | serv-us | vir |
| GEN | de-i | serv-i | vir-i |
| DAT | de-ō | serv-ō | vir-ō |
| ACC | de-um | serv-um | vir-um |
| ABL | de-ō | serv-ō | vir-ō |

Latin 3rd declension nouns (singular only)

| | <i>city</i> | <i>lion</i> | <i>father</i> | <i>body</i> |
|------------|-------------------|-------------|---------------|---------------------|
| NOM | urbs ⁷ | leō | pater | corpus |
| GEN | urb-is | leōn-is | patr-is | corpor-is |
| DAT | urb-ī | leōn-ī | patr-ī | corpor-ī |
| ACC | urb-em | leōn-em | patr-em | corpus ⁸ |
| ABL | urb-e | leōn-e | patr-e | corpor-e |

Non-linear morphology: Infixation

- Kimaragang Dusung (pp. 305-306)

| ROOT | PAST (PASSIVE) | GLOSS |
|-------------|-----------------------|-------------------------|
| patay | p-in-atay | 'was killed' |
| takaw | t-in-akaw | 'was stolen' |
| babo' | b-in-abo' | 'was carried (on back)' |
| garas | g-in-aras | 'was butchered' |

| ROOT | NON-PAST | PAST | GLOSS |
|-------------|-----------------|--------------|------------------|
| talib | t-um-alib | t-in-um-alib | 'to pass by' |
| rikot | r-um-ikot | r-in-um-ikot | 'to arrive' |
| laguy | l-um-aguy | l-in-um-aguy | 'to leap' |
| silaw | s-um-ilaw | s-in-um-ilaw | 'to turn yellow' |

Two Types of Infixation

- Extrametrical infixation, Bontoc:

| | | | |
|-----------------|--------|-------------------|-----------------------|
| <i>antj'ōak</i> | 'tall' | <i>umantj'ōak</i> | 'I am getting taller' |
| <i>k'āwīsat</i> | 'good' | <i>kum'āwīsat</i> | 'I am getting better' |
| <i>p'ūsiak</i> | 'poor' | <i>pum'ūsiak</i> | 'I am getting poorer' |

- Positively circumscribed infixation, Ulwa:

| | | | |
|-----------------|-------------|-----------------------------|------------------------|
| <i>bilam</i> | 'fish' | <i>bilam<u>ki</u></i> | 'my fish' |
| <i>dii muih</i> | 'snake' | <i>diim<u>amuih</u></i> | 'your (sg.) snake' |
| <i>liima</i> | 'lemon' | <i>liik<u>ama</u></i> | 'his lemon' |
| <i>sikbilh</i> | 'horsefly' | <i>sik<u>nibilh</u></i> | 'our (incl.) horsefly' |
| <i>onyan</i> | 'onion' | <i>on<u>kinayan</u></i> | 'our (excl.) onion' |
| <i>baa</i> | 'excrement' | <i>baa<u>mana</u></i> | 'your (pl.) excrement' |
| <i>mistu</i> | 'cat' | <i>misk<u>anatu</u></i> | 'their cat' |
| <i>anaalaka</i> | 'chin' | <i>anaaku<u>analaka</u></i> | 'their chin' |

Templatic Affixes in Yowlumne

| | Neutral Affixes | | Template Affixes | |
|----------------|----------------------------|-------------------------------|--|--|
| Root | <i>-al</i> ‘dubitative’ | <i>-t</i> ‘passive aorist’ | <i>-inay</i> ‘gerundial’ CVC(C) | <i>-ʃaa</i> ‘durative’ CVCVV(C) |
| caw ‘shout’ | caw-al | caw-t | caw-inay | cawaa-ʃaa-n |
| cuum ‘destroy’ | cuum-al | cuum-t | cum-inay | cumuu-ʃaa-n |
| hoyoo ‘name’ | hoyoo-al | hoyoo-t | hoy-inay | hoyoo-ʃaa-n |
| diiyl ‘guard’ | diiyl-al | diiyl-t | diyl-inay | diyiil-ʃaa-n |
| ʃilk ‘sing’ | ʃilk-al | ʃilk-t | ʃilk-inay | ʃiliik-ʃaa-n |
| hiwiit ‘walk’ | hiwiit-al | hiwiit-t | hiwt-inay | hiwiit-ʃaa-n |

“Suprafixes”

- Terena (p. 308)

Terena (Brazil; Bendor-Samuel 1960)

| | | | |
|-------|---------------|-------|--------------|
| emo?u | ‘his word’ | ẽmõ?ũ | ‘my word’ |
| ayo | ‘his brother’ | ãyõ | ‘my brother’ |
| owoku | ‘his house’ | õwõkũ | ‘my house’ |

- Birom (p. 309)

| | VERB | NOMINALIZATION |
|-----------|-------|----------------|
| ‘surpass’ | dàl | dál |
| ‘break’ | mòpòs | mópós |
| ‘follow’ | ra: | rá: |
| ‘roast’ | haláŋ | háláŋ |
| ‘see’ | dí | dí |
| ‘run’ | télé | télé |

Reduplication

- Malay (p. 309)

| BASE FORM | REDUPLICATED | |
|-----------|--------------|-------------------|
| kanak | ‘child’ | kanak-kanak |
| negara | ‘country’ | negara-negara |
| pemimpin | ‘leader’ | pemimpin-pemimpin |
| pelajar | ‘student’ | pelajar-pelajar |

- Tagalog (p. 310)

| ROOT | ACTIVE PRESENT | |
|---------|----------------|----------------|
| bigay | ‘give’ | nag-bi-bigay |
| ?usap | ‘converse’ | nag-?u-?usap |
| trabaho | ‘work’ | nag-ta-trabaho |

Reduplication

- Malay (p. 310)

ROOT

| | |
|---------|--------------------|
| sayur | ‘vegetable’ |
| kuih | ‘cake’ |
| lauk | ‘gravy, viand’ |
| saudara | ‘cousin, relation’ |
| gunung | ‘mountain’ |
| rumput | ‘grass’ |
| kayu | ‘wood’ |
| batu | ‘stone’ |
| asal | ‘origin’ |

COLLECTIVE

| |
|---------------|
| sayur-mayur |
| kuih-muih |
| lauk-pauk |
| saudara-mara |
| gunung-ganang |
| rumput-rampai |
| kayu-kayan |
| batu-batan |
| asal-usul |

Subtractive morphology

- Papago (p. 310)

| | BASE | PERFECTIVE |
|--------------|-------------|-------------------|
| ‘haul’ | huhag | huha |
| ‘laugh’ | huhum | huhw |
| ‘cook’ | hidod̪ | hido |
| ‘swing’ | wid̪ut | wid̪u |
| ‘shoot’ | gatwid | gatwi |
| ‘wake’ | wuhan | wuha |
| ‘give’ | maak | maa |
| ‘split’ | taapan | taap |
| ‘descend’ | hud̪uj | hud̪ |
| ‘shell corn’ | kwiliw | kul |



Clitics

- Elements that are “syntactically free” but “phonologically bound”



Clitics

- Amele (pp. 316-317)

- a Mel aid uqa ahul eu himéc gel-*ad-éi-a*.¹
boy female 3sg coconut that only scrape-3pl.OBJ-3sg.SUBJ-REC.PAST
'The girl scraped only those coconuts.'
- b Mel aid uqa ahul eu gél himéc *ad-éi-a*.
boy female 3sg coconut that scrape only 3pl.OBJ-3sg.SUBJ-REC.PAST
'The girl only scraped those coconuts.'
- a Uqa ho-*na*.
3sg come-3sg.SUBJ-PRES
'He is coming.'
- b Uqa l-i l-i h-u h-u ena.
3sg go-PRED go-PRED come-PRED come-PRED 3sg.SUBJ-PRES
'He comes and goes.'

What is a word?

(From Packard, 2000, *The Morphology of Chinese: A Linguistics and Cognitive Approach*, Cambridge University Press).

- **Orthographic word:** Words as defined by delimiters in written text. This appears to have no relevance in Chinese since there are no such written delimiters (apart from punctuation marks, which mark ends of phrases, not words).
- **Sociological word:** Following (Y.R. Chao 1968), these are 'that type of unit, intermediate in size between a phoneme and a sentence, which the general, non-linguistic public is conscious of, talks about, has an everyday term for, and is practically concerned with in various ways.' In English this is the lay notion of 'word', whereas in Chinese this is the character.
- **Lexical word:** This corresponds to Di Sciullo and Williams' (1987) *listeme*.

What is a word?

- **Semantic word:** Roughly speaking, this corresponds to a ‘unitary concept’.
- **Phonological word:** A word-sized entity that is defined using phonological criteria. (Yes, that’s circular.) Packard goes on to note that Y.R. Chao considers prosodic issues, such as when one can pause in a sentence, to provide useful tests for phonological wordhood. In many languages, phonological words are the domain of particular phonological processes: in Finnish, for example, vowel harmony is restricted to phonological words. In dialects of Mandarin that have (stress) reduction, such phenomena are generally restricted to words, as is consonant lenition.

What is a word?

- **Morphological word:** following Di Sciullo and Williams' notion, a morphological word is anything that is the output of a word-formation rule.
- **Syntactic word:** These are all and only those constructions that can occupy X^0 slots in the syntax. (The syntactic word is the definition of word that Packard uses as the basis for the bulk of his discussion.)
- **Psycholinguistic word:** This is the “‘word’ level of linguistic analysis that is . . . salient and highly relevant to the operation of the language processor” (Packard, 2000, page 13).

Simple clitics

- Bound words in Indonesian (p. 321)

- a Siapa náma orang itu?
who name person that
'What is that person's name?'
- b Siapa náma dia?
who name 3sg
'What is his name?'
- c Siapa namá=nya?
who name=3sg
'What is his name?'
- d Dia me-namá-kan anak=nya Elvis.
3sg ACT-name-APP LIC child=3sg Elvis
'He named his child Elvis.'

“Promiscuous” attachment

- Indonesian (p. 321):

- a Narti menúnggu dia/Pak Sastro.
Narti wait.for him/Mr. Sastro
'Narti is waiting for him/Mr. Sastro.'
- b Narti menunggú=nya.
Narti wait.for=3sg
'Narti is waiting for him.'
- a Tolong berikan buku ini kepada dia.
please give book this to 3sg
'Please give this book to him.'
- b Tolong berikan buku ini kepadá=nya.
please give book this to=3sg
'Please give this book to him.'



Simple Clitics

- Phrasal affixes in English
 - John's mother
 - The CEO of Microsoft's flabby body
 - The woman I saw yesterday in the park next to the *Pleurotus ostreatus*-infested oak tree's new hat

Special Clitics

- Second position clitics. Tagalog (p. 323):

- (11) Ibinigay *ko* *na* ang=pera kay=Charlie.
IV-PFV-give 1sg.GEN already NOM=money DAT=Charlie
'I already gave the money to Charlie.'
- (12) Hindi *mo* *pa* *ako* mahagkan sa=noo,
not 2sg.GEN IMPERF 1sg.NOM ABIL.FUT-kiss-DV DAT=forehead
[sariwa *pa* ang=sugat].
fresh IMPERF NOM=wound
'You cannot kiss me on the forehead yet, the wound is still fresh.'
(Wolfenden 1967, DL-118)
- (13) Sinabihan *ako* ni=Luz na
PFV-say-DV 1sg.NOM GEN=Luz COMP
[ibinigay *mo* *na* ang=pera kay=Charlie].
IV-PFV-give 2sg.GEN already NOM=money DAT=Charlie
'I was told by Luz that you already gave the money to Charlie.'

Special Clitics

- Tagalog (pp. 323-324)

- (14) a Hindi sinisisi ni=Charlie *si=Linda.*
not OV-PRES-blame GEN=Charlie NOM=Linda
‘Linda is not blamed by Charlie.’
- b Hindi *siya* sinisisi ni=Charlie.
not 3sg.NOM OV-PRES-blame GEN=Charlie.
‘She is not blamed by Charlie.’

Tagalog (Schachter and Otanes 1972:496–498, 512)

- a [Para=kay Pedro] *ko* binili ang laruan.
for=DAT Pedro 1sg.GEN PFV-buy-OV NOM toy
‘For Pedro I bought the toy.’
- b [Bukas ng gabi nang alas.otso] *siya* aalis.
tomorrow GEN night ADV eight.o'clock 3.SG.NOM FUT.AV-leave
‘It’s tomorrow night at eight that he’s leaving.’

Special clitics

- Russian (p.324)

a Pročitala=li Anna knigu?
read=QUES Anna book
'Did Anna read a book?'

b Knigu=li Anna pročitala?
book=QUES Anna read
'Was it a book that Anna read?'

a [Interesnuju=li knigu Ivana] on čitaet?
interesting-ACC=QUES book Ivan-GEN he reads
'Is it an interesting book of Ivan's that he is reading?'

b [Na ètom=li zavode] on rabotaet?
at this=QUES factory he works
'Is it at this factory that he works?'

c *[Na ètom zavode]=li on rabotaet?
at this factory =QUES he works

Verbal clitics

- Spanish (p. 325)

- (18) Spanish (Aissen and Perlmutter 1983:362)

a Eduardo *la*=vio.

Eduardo 3sg.FEM=saw

‘Eduardo saw her.’

b Quiere *ver*=*la*.

wants see.INF=3sg.FEM

‘He wants to see her.’

- (19) a Luis quiere comer las manzanas amarillas.

Luis wants eat.INF the(FEM.PL) apples yellow

‘Luis wants to eat the yellow apples.’

b Luis quiere comer=*las*.

Luis wants eat.INF=3pl.FEM

‘Luis wants to eat them.’

c Luis *las*=quiere comer.

Luis 3pl.FEM=wants eat.INF

‘Luis wants to eat them.’

Clitics vs. Agreement

- Muna (p. 327)

- a inodi *a-leni* ‘I am swimming.’
I 1sg-swim
- b ihintu *o-leni* ‘You are swimming.’
you 2sg-swim
- c ama-ku *no-leni* ‘My father is swimming.’
father-my 3sg-swim
- d *a-leni* ‘I am swimming.’
1sg-swim
- e *o-leni* ‘You are swimming.’
2sg-swim
- f *no-leni* ‘He is swimming.’
3sg-swim

Clitics vs. Agreement

- Muna (p. 327)

- (23) a a-ghondohi-*ko* ‘I am looking for you.’
1sg-look.for-2sg

- b a-ghondohi ihintu ‘I am looking for you.’
1sg-look.for you

- c *a-ghondohi-*ko* ihintu
1sg-look.for-2sg you

- (24) a madaho fumaa-*kanau* ‘In a while you can eat me.’
later (IMP-)eat-1sg

- b madaho fumaa inodi ‘In a while you can eat me.’
later (IMP-)eat me

- c *madaho fumaa-*kanau* inodi
later (IMP-)eat-1sg me

Clitic Doubling

- Spanish (p. 328)

a Eduardo (*lo=)vio

el

edificio nuevo.

Eduardo 3sg.MASC=see-3sg-PAST the(MASC.SG) building new(MASC.SG)
‘Eduardo saw the new building.’

b Eduardo (la=)vio

a Maria.

Eduardo 3sg.FEM=see-3sg-PAST DAT Maria

‘Eduardo saw Maria.’

c Eduardo *(la=)vio

a ella.

Eduardo 3sg.FEM=see-3sg-PAST DAT 3sg.FEM

‘Eduardo saw her.’

Welsh Agreement

- *Gwelodd y bachgen ddraig*
saw-3sg the boy dragon
- *Gwelasant hwy ddraig*
saw-3pl they dragon
- *Gwelodd y bechgyn ddraig*
saw-3sg the boys dragon
- **Gwelasant y bechgyn ddraig*
saw-3pl the boys dragon



Slide Credits

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