Introduction to Linguistics

1. Phonology – Part B.

2. Morphology – Part A.

Class 3

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Revision - Stress and Reduction

See ya later!

*ya*

is not slang!

is not familiar language

is not because you speak quickly

The queen would say *ya* speaking carefully and slowly

it is grammar!
Revision - Stress and Reduction

The stress system and the reduction system interact but are independent.

Here we have a word with stress, but not reduction.

Where is the stress in French?
Revision - Stress and Reduction
Sometimes it is obvious, but sometimes it is not
Revision - Stress Rules

1. Two syllable words:
The stress is on the first syllable, unless it’s a “French” word

2. Three syllable words
The stress is on the first syllable, unless it’s an “Italian” word

3. Long words
The stress is on the 3rd last syllable, unless it ends in -ic, -ity, -tion

These three rules will get you a long way, but it is more complicated than that and there are plenty of exceptions....
Lexical Stress
Put a mark above stress syllables, put a line through reduced syllables, leave unstressed but unreduced syllables without a mark.

E.g.: biology
police
biography
photography
yellow
thermometer
simplicity
contentious
courageous
decision
application
jumping
again
happy
terrible
Revision

Rhythm

In French, the length of a sentence (how long it takes to say) depends on the number of syllables not in English!!

da DUM da DUM da DUM da DUM da DUM
Rhythm

Syllable-timed languages –
Japanese, French, Finnish, Hungarian, Icelandic, Polish, Cantonese, Mandarin, Georgian, Welsh, Italian, Slovene, Spanish

Stress-timed languages –
Arabic, Persian, English, Dutch, Thai, German, Russian, Danish, Swedish, Norwegian, Faroese, Dutch, European Portuguese,
Reduction – Stress – Rhythm

French has no reduction (or almost none)
French has fixed stress (almost always)
French syllables are of equal length (more or less)

English has massive reduction
English has highly mobile stress
English has a rhythm based syllable structure

English prosody is a nightmare for French speakers
surely the hardest thing in the language
**Weak-Strong Words**

35 words in English that have two pronunciations
A normal – neutral pronunciation, called “weak” and
A marked – empathic pronunciation, called “strong”

a, am, an, and, are, as, at, be, been, but, can, could, do, does, for, from, had, has, have, he, her, him, his, just, me, must, of, shall, she, should, some, than, that (conjunction), the, them, there, to, us, was, we, were, who, would, you
Weak-Strong Words

But ➔ strong form: /bʌt/ weak form: /bət/

Tell him to go ➔ strong forms /hɪm/ /tuː/ weak form: /tel əm tə ɡəʊ/

I would like some fish and chips

/ɑɪ wʊd laɪk sʌm fɪʃ ənd tʃɪps/

/ɑɪd laɪk səm fɪʃ ən tʃɪps/
Adjective – Compound Disambiguation

Stress is not just pronunciation, it is meaning too!

All black birds are black but some blackbirds are white!
Remember the blackbird
Compounds vs. adjectives

GREENhouse – green HOUSE
BLACKboard – black BOARD
DARKroom – dark ROOM
EVEning dress – evening SKY
WALKing stick – walking PEOPLE

MOBile phone – mobile PERson
STONE Age – stone BUILDing
HOT dog – hot TEA
PAPer knife – paper BAG
ENGLish teacher – English TEACHer
FRENCH student – French STUDent
Stress and Reduction – Effects on Pronunciation

A stressed syllable is emphasised, spoken louder than the other syllables.
In English, only long syllables are stressed.

A reduced syllable is one where the vowel is a schwa or, depending on the speed of speech, is deleted entirely.

<table>
<thead>
<tr>
<th>Stress</th>
<th>equal</th>
<th>equality</th>
<th>equalise</th>
<th>equalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction</td>
<td>O o</td>
<td>o O o O</td>
<td>O o O</td>
<td>O o O O o</td>
</tr>
</tbody>
</table>

/ x x / x x  
/ x x  
x x x / x
Stress and Reduction – Effects on Rhythm

The beautiful Mountain appeared transfixed in the distance.

The river ran through the valley down to the sea
Prosody

Rhythm, Stress and Intonation

Joshua Steele (1779) *Prosodia Rationalis*

Rhythm – speed structure (vitesse)
Stress – volume structure (intensité / niveau sonore)
Intonation – pitch structure (tonalité / hauteur)

These structures in language are more complex in English than in French but you have to learn them...
Phrasal Stress and Intonation

So far we have had Reduction and Rhythm and Stress

but it gets worse

English has complex “phrasal stress” and “intonation”

Although French has both of these, they are much less complex and important than in English

Let’s begin with Phrasal Stress
Phrasal Stress – Effects on Meaning (Topicalisation)

/ o o o o o o o
Can you come to help next Tuesday? Est-ce que c’est vraiment possible que... ?

o / o o o o o o
Can you come to help next Tuesday? C’est toi qui peut venir ou.... ?

o o o o o / o o
Can you come to help next Tuesday? Tu peux nous nous aider... ?

o o o o o o / o
Can you come to help next Tuesday? C’est mardi prochain que... ?

o o o o o o o /
Can you come to help next Tuesday? C’est mardi ou un autre jour que... ?
Phrasal Stress Exercise - Paraphrase each of the following without prosodic ambiguity

1. I didn’t say we should kill him. =

2. I didn’t say we should kill him. =

3. I didn’t say we should kill him. =

4. I didn’t say we should kill him. =

5. I didn’t say we should kill him. =

6. I didn’t say we should kill him. =

7. I didn’t say we should kill him. =
Tone

Remember that there are three elements to prosody
Rhythm - Speed
Stress - Volume
Tone - Pitch
Tone vs. Intonation – similar but different

Pitch *(ton)* in a phoneme

Tone is an essential part of the phonology of many of the worlds largest and most important languages

Most African and Asian languages are tonal

  !! Mandarin, Cantonese, Vietnamese, Thai, Lao,
  !! Wolof, Bantu, Hausa, Ewe, Igbo, Somali, Zulu

Many American languages are tonal (Yucatec, Navajo, Cherokee)

Ancient European (PIE) and Ancient Greek were tonal

Tone is a phonological feature, that we use to distinguish words

Intonation is a prosodic feature we use to create meaning!!
Intonation

Neither English nor French are tonal languages, but they still have intonation and in English it can be quite complex and quite important.

What is the difference in meaning between?

Maintenant, vous avez l’information

and

Maintenant, vous avez l’information
What about.... ?

allez! and allez!

English has such structure integrated into its grammar in a more systematic way
**English Tonal Patterns**

There are simple three tone in English

- / \  

flat, rise, fall

Some of the tonal patterns are the same as French, others are not

English speak at a higher pitch than French speakers, one probable reason is to permit more “room” to manoeuvre the pitch of the voice

Some dialects of English (Scots, Northumbrian *etc.*.) have a very wide tonal range. Other dialects (American, Indian *etc.*.) have narrow tonal range, in some ways closer to French.

Generally, for a given dialect, less tonal range is associated with poor humour

Every day countless arguments are had between English speakers because of tone – it is very important!

When English speakers are angry (or tired), they speak flatly, when they are happy (or polite) they speak “sing-songly”
Fall – Affirmation

Q. Would you give me a hand?
   – \ \ – \ \ – \ – \ – \ – \ – \ – \\
A. Yes!    Sure!    Absolutely
Rise – Interrogation

Q. She is brilliant!

    – /  – /  – /  – /

A. Yes?  Sure?  huh?
Rise-Fall – Request !!! Very Important Pragmatically

Can I have a ticket to London, please?

Can I have a ticket to London?

It is important to use this intonation pattern, especially in polite situations.

Perhaps a comparison in French would be the failure to use “vous” or to say please.

If you don’t use it, you sound very rude and arrogant, indeed, making a request with just a rise, like in French, is how we politely give orders.

Get down from the chair!
Rise-Fall – Surprise

Sarkozy is classed as a great president

/ \       / \
Really!    Wow!
Rise-Fall-Rise – Negation  !!! Very Important Pragmatically!

Sarkozy was a great president!
///     ///
Yes    Sure

This is very common in short answers to questions, where the speaker doesn’t want to be impolite. If you hear this pattern, the speaker is probably politely disagreeing with you

Would you like to go to dinner with me?
///     ///    ///    
Yes    Sure    I’d love to (but)
Summary – Phonetics, Phonology, Prosody

**Phonetics** – The description of sounds
Articulatory Phonetics – where and how the sounds are produced

**Phonology** – The “grammar” of sounds
Phonemes and allophones – distinctive features and non-distinctive features

**Prosody** – Complex grammar of sounds
Multipart sound structures that we use to convey meaning
Summary – Phonology – Phonemic System

Consonants
   Dimension 1 – Voice
   Dimension 2 – Manner (mouth)
   Dimension 3 – Place (tongue)

Vowels
   Dimension 1 – Tone
   Dimension 2 – Front-Back
   Dimension 3 – High-Low

Phonology – Prosodic System

   Rhythm – Syllable patterns
   Stress – Emphasis – Reduction Patterns
   Intonation – Tone patterns
Introduction to Linguistics

Sound System and Word Formation

Class 3
Morphology

Building Words and Grammatical Meaning

Our morphological knowledge has two components: knowledge of the individual morphemes and knowledge of the rules that combine them. One of the things we know about particular morphemes is whether they can stand alone or whether they must be attached to a base morpheme. Some morphemes like boy, desire, gentle, and man may constitute words by themselves. These are free morphemes. Other morphemes like -ish, -ness, -ly, pre-, trans-, and un- are never words by themselves but are always parts of words. These affixes are bound morphemes. We know whether each affix precedes or follows other morphemes. Thus, un-, pre- (premeditate, prejudge), and bi- (bipolar, bisexual) are prefixes. They occur before other morphemes. Some morphemes occur only as suffixes, following other morphemes. English examples of suffix morphemes are -ing (sleeping, eating, running, climbing),
çalıştırmamalıymış
(Turkish, Turkic)

‘apparently, they say he ought not to be made to work’
(English, Indo-European)
çalıştırılmamalıyımış

çalış - tir – il – ma – maliy – mış
work - cause passive negation obligation inference
The Morpheme!

The smallest unit of meaning

*Cat* is a morpheme

But so is the *s*, in *cats*

For example

*runner* – *run* and *er*

*blackbird* – *black* and *bird*

*preamble* – *pre* and *amble*

*uncontrollable* – *un* and *control* and *able*
Free and Bound Morphemes

A bound morpheme is a morpheme whose meaning is dependent on other morphemes
e.g.: -s in cats

A free morpheme is one who can stand alone
e.g.: cat in cats
Free and Bound Morphemes

This is less obvious that it first appears
b/c it is not always so obvious what it means to stand alone.
It should be standing alone with the same meaning.... but what is the same meaning?

controllable

control and able

he is willing and able

Is this the same meaning of able? is it the same morpheme?
Bound Morphemes

Prefixes – Infixes – Suffixes

Suffix – *cat-s* (English – Indo-European)
Prefix – *pre-voir* (French – Indo-European)
Infix – *me-het-tem* (Hungarian – Finno-Ugric)

English – Explicative Infixing
fanbloodytastic, Philafuckingdelphia, Jesus fucking Christ. emancibloodypation
Morphs and Allomorphs

Just like in phonology with allophones, allomorphs are different forms (variations) of a morpheme that do change its meaning.

**English (Indo-European)**

- bus ➞ buses
- ship ➞ ships
- cherub ➞ cherubim
- datum ➞ data
- datum ➞ data
- pizza ➞ pizze
- blitzkrieg ➞ blitzkrieger
- château ➞ châteaux
- wolf ➞ wolves
- walk ➞ walked /t/
- ground ➞ grounded /d/
- swim ➞ swam
- go ➞ went
- run ➞ ran
Grammatical Categories

Before we go further into morphology, we need to think about grammatical categories.

Most languages in the world have a much richer (complex) grammar than English or French. That means, they express much more meaning in grammatical structures.

`szeretlek`

I love you (Hungarian - Finno-Ugric)

In English is three words, in Hungarian it is one.

*Szere* –  
*lekle*  
love you (sing)  
1st person sing + transitive
Number

In English and French, we both have number.

frog / grenouille

frogs / grenouilles
Number – Nouns and Verbs

Many (most?) languages have cases and
Many (?most) languages do not normally express pronouns

Let’s Look at **Polish (Indo-European)**

<table>
<thead>
<tr>
<th>Nouns – ‘cat’</th>
<th>Verbs – ‘like’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominative</strong></td>
<td>First Pers. Sing.</td>
</tr>
<tr>
<td>Kot (sing.)</td>
<td></td>
</tr>
<tr>
<td>Koty (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Dative</strong></td>
<td>Second Pers. Sing.</td>
</tr>
<tr>
<td>Kotu (sing.)</td>
<td></td>
</tr>
<tr>
<td>Kotom (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Accusative</strong></td>
<td>Third Pers. Sing.</td>
</tr>
<tr>
<td>Kota (sing.)</td>
<td></td>
</tr>
<tr>
<td>Koty (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Instrumental</strong></td>
<td>First Pers. Pl.</td>
</tr>
<tr>
<td>Kotem (sing.)</td>
<td></td>
</tr>
<tr>
<td>Kotami (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Genitive</strong></td>
<td>Second Pers. Pl.</td>
</tr>
<tr>
<td>Kota (sing.)</td>
<td></td>
</tr>
<tr>
<td>Kotów (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Locative</strong></td>
<td>3\textsuperscript{rd} Person Pl.</td>
</tr>
<tr>
<td>Kocie (sing.)</td>
<td></td>
</tr>
<tr>
<td>Kotach (pl.)</td>
<td></td>
</tr>
<tr>
<td><strong>Vocative</strong></td>
<td></td>
</tr>
<tr>
<td>Kocie (sing.)</td>
<td></td>
</tr>
<tr>
<td>Koty (pl.)</td>
<td></td>
</tr>
</tbody>
</table>
Number

So, *s* is the bound morpheme for plural in both English and French.
You may think this is obvious.... but

Morphology Exercise 1

In pairs or small groups,

1. Write down 3 allomorphs for number in English and French (Indo-European)

2. In the personal pronouns, how is number expressed?
Write down the down the different forms for the different numbers in the personal pronouns.

3. Find and Arabic speaker.
Ask him or her, what different numbers exist in “standard” Arabic (Semitic).
Morphology Exercise 2

Luganda (Niger-Congo) is the most widely spoken language in Uganda.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>(“doctor”)</td>
<td>omusawo</td>
</tr>
<tr>
<td>(“woman”)</td>
<td>omukazi</td>
</tr>
<tr>
<td>(“girl”)</td>
<td>omuwala</td>
</tr>
<tr>
<td>(“heir”)</td>
<td>omusika</td>
</tr>
<tr>
<td></td>
<td>abasawo</td>
</tr>
<tr>
<td></td>
<td>abakazi</td>
</tr>
<tr>
<td></td>
<td>abawala</td>
</tr>
<tr>
<td></td>
<td>abasika</td>
</tr>
<tr>
<td>(“doctors”)</td>
<td></td>
</tr>
<tr>
<td>(“women”)</td>
<td></td>
</tr>
<tr>
<td>(“girls”)</td>
<td></td>
</tr>
<tr>
<td>(“heirs”)</td>
<td></td>
</tr>
</tbody>
</table>

What is the plural morpheme in Luganda? Where is it placed?
Morphology Exercise 3

Ilokano (Austronesian) is the 3rd most widely spoken language of the Philippines. It is spoken in the North of the Philippines and is quite close to Bahasa Indonesia.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>(“head”)</td>
<td>ulúlo</td>
</tr>
<tr>
<td>(“road”)</td>
<td>dalódaló</td>
</tr>
<tr>
<td>(“life”)</td>
<td>bibíag</td>
</tr>
<tr>
<td>(“plant”)</td>
<td>mulmúla</td>
</tr>
</tbody>
</table>

What is the plural morpheme in Ilokano? Where is it placed?
Gender

Grammatical vs. natural gender

Natural gender is based on the real world – men, women, things

Grammatical Gender is a structural pattern in language – la chaise, le plafond etc...

but, what is a natural gender and what is grammatical blurs since our understanding of the world is influenced by our language

To French speakers, liberty or the moon, appear to have an femininity to them, which is, in reality not natural
Natural Gender

Dyirbal “natural” gender (Australia)
There exists a gender specifically for women, fire and dangerous things....

!! Is this a natural or grammatical gender?

Semitic pronouns
What are the Semitic languages?

Find a Semitic speaker near you, establish the genders of the personal pronouns.
(note that modern dialects of Aramaic lost many Gender distinctions...)
Grammatical Gender

West European Languages tend to have 2-3 genders
East European Languages tend to have 3-5 genders

The Classic Latin distinction (German, Romanian, Greek, Czech, etc.) is
Feminine  Masculine  Neuter

Some languages (French, Spanish, Portuguese, Catalan and Italian) have lost neuter
Feminine  Masculine

Other languages (Dutch, Danish, Swedish...) have lost masculine and feminine
Masc / Fem  Inanimate

Some Slavic languages have a complex system, where the animacy of the masculine system is distinguished
**Gender**

Polish – 5 genders  
masculine personal  
masculine animate  
masculine inanimate  
feminine  
neuter

**Polish Pride**

<table>
<thead>
<tr>
<th>Gender Type</th>
<th>Polish Forms</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine animate singular accusative</td>
<td>dumnego</td>
<td>(mężczyznę – to the man)</td>
</tr>
<tr>
<td>Masculine inanimate singular accusative</td>
<td>dumny</td>
<td>(pomnik – to the statue)</td>
</tr>
<tr>
<td>Feminine singular accusative</td>
<td>dumną</td>
<td>(kobietę – to the woman)</td>
</tr>
<tr>
<td>Neuter singular accusative</td>
<td>dumne</td>
<td>(dziecko – to the child)</td>
</tr>
<tr>
<td>Masculine personal plural accusative</td>
<td>dumnych</td>
<td>(mężczyzn – to the men)</td>
</tr>
<tr>
<td>Masculine impersonal plural accusative</td>
<td>dumne</td>
<td>(pomniki – to the statues)</td>
</tr>
</tbody>
</table>
Morphology Exercise 4

Imagine you are linguists, work in groups,
identify the formal rules for three genders in Polish

człowiek (masc.) = human, person, man
dziecko (neut.) = child
kobieta (fem.) = woman
Kraków (masc.) = the city
książka (fem.) = book
mama (fem.) = mom
miasto (neut.) = town
morze (neut.) = sea
pies (masc.) = dog
rodzina (fem.) = family
samochód (masc.) = car
stół (masc.) = table
syn (masc.) = son
Warszawa (fem.) = the city
Zakopane (neut.) = a town in the south
żyrafa (fem.) = giraffe
Derivation vs. Inflection!

Morphemes that inflect and morphemes that derive
Inflection

Inflection is a word building process in morphology. It is when a morpheme adds information to another morpheme. Gender and plural of nouns and verbs are typical examples:

*le chat, la chatte, les chats, les chattes*
Derivation

Derivation is different to inflection because it changes the nature of the thing it modifies.

Typically, it changes the part of speech or 'lexical class

write => writer
chair => to chair
fax => faxer
traiter => traiteur
**Morphology Exercise 5**

For each of the following bound morphemes, determine whether it is derivational or inflectional and give two words in which it appears:

Example:  
- **–able:**  
  derivational  
  eatable; readable

(5)  
   a.  
   b.  
   c.  
   d.  
   e.  
   f.  
   g.  

- **–ity**  
- **–s**  
- **un–**  
- **–ing**  
- **–al**  
- **–er**  
- **–ed**
Morphology Exercise

In pairs,
- find 1 inflectional morpheme in French and 1 in English
- fine 1 derivational morpheme in French and 1 in English
An example – the polysemy of the morpheme / s / in English

Plural – cat – s
Genitive – Michael – ‘s
Singular – walk – s

Morphology Exercise
Find a French morpheme that is polysemous
We have looked at two grammatical categories associated with nouns but there are many more!

We already spoke of CASE a few times, we can’t hide from it anymore....
Grammatical Case
The grammatical function of a pronoun, noun or an adjective in a sentence

Indo-European had 8 cases
Today – French and Spanish has 0, English has one, German has 4, but Roumanian and Russian have 6, Polish has 7...
Arabic (Semitic) has 3
Estonian (Finno-Ugric) has 14
Finnish (Finno-Ugric) has 15
Hungarian (Finno-Ugric) has 18
Tesz (Caucasion) has 64!
many, if not most, languages have cases....
Grammatical Case

Nominative - subject: We went to the store.

Accusative - direct object: The clerk remembered us.

Dative - indirect object: The clerk gave a discount to us.

Ablative - movement from something or cause:

   The victim went from us to see the doctor / He was unhappy because of depression.

Genitive - possessive: John's book was on the table / The pages of the book.

Vocative - addressee: John, are you all right? Hello, John!

Locative - location: We live in China.

Instrumental - instrument: We wiped the floor with a mop / Written by hand.
Grammatical Case

High German (Indo-European)

1. Nominative: der Seemann
   
   "[the] sailor" [as a subject] (e.g. Der Seemann steht da - the sailor is standing there)

2. Accusative: den Seemann
   
   "[the] sailor" [as a direct object] (e.g. Ich sah den Seemann" - I saw the sailor)

3. Dative: dem Seemann
   
   "to/for [the] sailor" [as an indirect object] (e.g. Ich gab dem Seemann ein Geschenk - I gave a present to the sailor)

4. Genitive: des Seemannes
   
   "the sailor's / of [the] sailor" (e.g. Der Name des Seemannes ist Otto - the sailor's name is Otto)
<table>
<thead>
<tr>
<th>Case</th>
<th>Sing.</th>
<th>Pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>Kot</td>
<td>the cat (subject)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Koty</td>
</tr>
<tr>
<td>Accusative</td>
<td>Kota</td>
<td>the cat (object)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kotom</td>
</tr>
<tr>
<td>Dative</td>
<td>Kotu</td>
<td>to the cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Koty</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Kotem</td>
<td>with the cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kotami</td>
</tr>
<tr>
<td>Genitive</td>
<td>Kota</td>
<td>of the cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kotów</td>
</tr>
<tr>
<td>Locative</td>
<td>Kocie</td>
<td>on the cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kotach</td>
</tr>
<tr>
<td>Vocative</td>
<td>Kocie</td>
<td>Oh, Cat!</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Koty</td>
</tr>
</tbody>
</table>
Finnish (Finno-Ugric)

<table>
<thead>
<tr>
<th>Case label</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>allative</td>
<td>to(wards) (the exterior) of</td>
<td>pöydä-lle “onto the table”</td>
</tr>
<tr>
<td>illative</td>
<td>into</td>
<td>laitokse-en “to the institute”</td>
</tr>
<tr>
<td>ablative</td>
<td>from (the exterior of)</td>
<td>kadu-lta “out of the street”</td>
</tr>
<tr>
<td>elative</td>
<td>from (the inside of)</td>
<td>kaupa-sta “out of the shop”</td>
</tr>
<tr>
<td>inessive</td>
<td>in(side)</td>
<td>talo-ssa “in the house”</td>
</tr>
<tr>
<td>adessive</td>
<td>at</td>
<td>roof-ade “on the roof”</td>
</tr>
</tbody>
</table>
Lezgian (East Caucasian)

(a) sew ‘the bear’ (absolutive)  
(b) sew-re ‘the bear’ (ergative)  
(c) sew-re-n ‘of the bear’ (genitive)  
(d) sew-re-z ‘to the bear’ (dative)  
(e) sew-re-w ‘at the bear’  
(f) sew-re-w-aj ‘from the bear’  
(g) sew-re-w-di ‘toward the bear’  
(h) sew-re-qh ‘behind the bear’  
(i) sew-re-qh-aj ‘from behind the bear’  
(j) sew-re-qh-di ‘to behind the bear’  
(k) sew-re-k ‘under the bear’  
(l) sew-re-k-aj ‘from under the bear’  
(m) sew-re-k-di ‘to under the bear’  
(n) sew-re-l ‘on the bear’  
(o) sew-re-l-aj ‘off the bear’  
(p) sew-re-ldi ‘onto the bear’  
(q) sew-re ‘in the bear’  
(r) sew-raj ‘out of the bear’
Reading