UNIVERSITY OF GOTHENBURG
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# AF1111 <br> Introduction to Linguistics and African Languages Key Concepts and Assignments 

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Valid for Autumn term 2022

Updated 04.01.2023

## Obligatory Readings for this course

BLLL $=$ Culicover, Peter W. \& Hume, Elizabeth V. 2017. Basics of language for language learners. 2nd edn. Columbus: Ohio State University Press. (price comparison)

LSAAL $=$ Eifring, Halvor \& Theil, Rolf. 2005. Linguistics for Students of Asian and African Languages. Manuscript. University of Oslo. (Chapter 1-2.2, 5, 7-8, Open Access)

FSTAL = Richter, Borbála (ed.). 2006. First Steps in Theoretical and Applied Linguistics. Budapest: Bölcsész Konzorcium. (Chapter 1-6, 8, Open Access)

Wolff, H. Ekkehard. 2016. Language and development in Africa. Cambridge: Cambridge University Press. (Chapter 9, distributed during the course)

## For reference

Joint catalogue for all major Swedish libraries: Libris.
The Catalogue of Gothenburg University Library.
Ethnologue, login with you student credentials through our university library to get full access.

The World Atlas of Language Strucutres, WALS
Linguistic Society of America's Unified Stylesheet for the List of References.
Leipzig Generic Style Rules for Linguistics.
Leipzig Glossing Rules
Wikipedia's list of glossing abbreviations
Childs, George Tucker. 2003. An Introduction to African Languages. Amsterdam \& Philadelphia: John Benjamins.
Dimendaal, Gerrit J. 2011. Historical linguistics and the comparative study of African languages. Amsterdam \& Philadelphia: John Benjamins.
Dryer, Matthew S. \& Haspelmath, Martin (eds.). 2013. The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info
Eberhard, David M. \& Simons, Gary F. \& Fennig, Charles D. (eds.). 2022. Ethnologue: Languages of the World. 25th edn. Dallas, Texas: SIL International. http://www.ethnologue.com

Güldemann, Tom (ed.). 2018. The languages and linguistics of Africa, The World of Linguistics 11. Berlin \& Boston: de Gruyter.
https://gu-se-primo.hosted.exlibrisgroup.com/permalink/f/rmbr1s/46GUB KOHA2601442
Mutaka, Ngessimo M. 2000. An introduction to African linguistics, LINCOM handbooks in linguistics 16. München: LINCOM Europa.

Vossen, Rainer \& Dimmendaal, Gerrit J. (eds.). 2020. The Oxford handbook of African languages. Oxford: Oxford University Press.
https://gu-se-primo.hosted.exlibrisgroup.com/permalink/f/15agpbr/TN_cdi_proquest_ebookcentral_EBC6461114
Welmers, Wm. E. 1973. African language structures. Berkely. (UB Gbg: Fv 393)

## When to read what

Unit 1. Introduction to the Course (BLLL ch. 1-4)
Unit 2. Linguistics (LSAAL ch. 1, FSTAL ch. 1)
Unit 3. Languages in Africa (LSAAL 5, Wolff 9)
Unit 4. Semantics and Pragmatics (LSAAL 2.2-2.2.4, FSTAL 5-6)
Unit 5. Phonetics and Phonology (BLLL 5 + FSTAL 2)
Unit 6. Vowels and Consonants (BLLL 6-7)
First exam, worth 2.5 ects credits (short online test)
Unit 7. Phonotactics and Morphophonology (BLLL 8-9)
Unit 8. Structures and Categories (BLLL 10, FSTAL 3)
Unit 9. Nouns and Determiners (BLLL 11)
Unit 10. Modifying nouns: Adjectives and Relative Clauses (BLLL 12)
Unit 11. Verbs and Roles (BLLL 13)
Unit 12. Tense and Aspect (BLLL 14)
Second exam, worth 2.5 ects credits (short online test)

## Unit 13. Phrases and Clauses (FSTAL 4.1-4.5)

Unit 14. Types of Clauses and Sentences (BLLL 15, FSTAL 4.6)
Unit 15. Writing (LSAAL 8)
Unit 16. Sociolinguistics: Varieties and Norms (BLLL 16, LSAAL 7, FSTAL 8)
Unit 17. Politeness and Taboos (BLLL 17-18)
Unit 18. Summing up and Review (BLLL ch. 19)
Final Exam, worth 2.5 ects and the final grade for the course (longer online test)

## Corrections and comments to the main textbook

Culicover, Peter W. \& Hume, Elizabeth V. 2017. Basics of language for language learners. 2nd edn. Columbus: Ohio State University Press.

Page 42, line 13, instead of ä, ö, å read å, ä, ö.
Page 42 , line 15 , instead of two read three.
Page 42, line 20, instead of almost at the end read at the end.

The Finnish alphabet has three additional vowels (å, ä, ö) as compared to the English alphabet. Two (ä, ö) are typical Finnish sounds, whereas the vowel (å) mostly occurs in names of Swedish origin. The order of the extra vowels of the Finnish alphabet, just like in the Swedish alphabet, is ... $a, \ddot{a}, \ddot{o}$. https://en.wikipedia.org/wiki/Finnish orthography
However, the Norwegian and Danish alphabet ends with ... $\propto, \emptyset, a ̊$.
https://en.wikipedia.org/wiki/Danish and Norwegian alphabet
Page 42, line 1 f.b. (from bottom), instead of [mâ] read [mǎ].
Page 44, line 12 f.b., instead of Swedish-English read English-Swedish.
Page 44, line 10 and 7 f.b., instead of grasten read gråsten.
Page 44 , line 7 f.b., instead of häleberg read hälleberg.
Page 66, line 4: instead of $[q]$ thin, bath read $[p]$ or $[\theta]$ thin, bath.
Page 85, line 2-3 f.b., instead of French, Greek, German, Hawaiian, Hebrew, Hungarian, Italian, Japanese, Navajo, Spanish
read Greek, Hawaiian, Hebrew, Hungarian, Japanese, Navajo.
Page 85, line 1 f.b., instead of English read English, French, German, Italian and Spanish.
Page 87, line $1-3$ : instead of two mid nasal vowels, spelled 'ę' [ $\tilde{\varepsilon}]$ and ' $a ̨$ ' [ว̃]. The nasal quality of a vowel can differentiate the words ' $I$, me' (contains an oral vowel) and 'she, her' (contains a nasal vowel) read two mid nasal diphthongs, spelled ' $e$ ' [ $[\varepsilon \tilde{w}]$ and ' $a$ ' ' $^{\prime}[\rho \tilde{w}]$. The nasal quality of a vowel can differentiate the words ' it , that' (contains an oral vowel) and 'with it, with that' (contains a nasal diphthong).

Page 87, line 8: instead of [jo] 'I, me'
read to [to] 'it, that' (neuter singular, nominative case).
Page 87, line 9: instead of [jõ] 'she, her' read $t a[t 5 \tilde{w}]$ 'with it, with that (feminine singular, instrumental case).

In Polish, [jo] occurs as a dialectal pronunciation corresponding to standard $j a$ [ja] ‘I (nominative)', as opposed to $j q$ [jow̃] 'her (accusative)'.

Page 87, line 6-16 f.b.
Exemplifying vowel length with Turkish is not very fortunate, since Turkish only marginally has long vowels, mainly in borrowed words from Arabic. There are so many other good examples of languages that really has a full fledged system of contrasting long and short vowels, such as Swedish, Norwegian, Finnish, Estonian, Czech, Hungarian, and among African languages Arabic, Somali, Oromo, Hausa, Fula, Wolof...

Page 94, lines 15-16 f.b., instead of In Arabic read In classical Arabic.

In classical Arabic every word begins with a consonant. The letter alif ( 1 ) denotes a glottal stop, not a vowel, e.g. انا/Rana:/ 'I'. But in modern colloquial Arabic words can be pronounced without this initial glottal stop (and final long vowels are pronounced as short ones), which gives انا [ana] 'I', which in turn would most naturally be analysed as /ana/ in modern colloquial Arabic. So whether "every Arabic word begins with a consonant" depends on the analysis that you choose to adopt, which in turn depends on the variety that you want to analyse.

Page 97, line 13 f.b.
There are also Greek words ending in /ks/, e.g. $\pi \tau \varepsilon ́ \rho v \xi /$ /'ptદriks/.
Page 100, line 1 f.b., instead of cedilla read ogonek or tail.
A cedilla is found, e.g., in French <ç>> or Turkish < $<$ s $>$. The Polish and Lithuanian vowel symbols, however, carry a so called ogonek (Polish for 'tail') which is turned the other way around: <ą, ę, i, ų>.

Page 111, line 2-4: instead of French, Greek, German, Hawaiian, Hebrew, Hungarian, Italian, Japanese, Navajo, Spanish read Greek, Hawaiian, Hebrew, Hungarian, Japanese, Navajo.

Page 125, line 8: instead of the other six read the other three.
Page 141, line 10: instead of the children read (the) children.
Swahili does not make any distinction between indefinite and definite form of nouns through the use of determiners.

Page 149, line 14: instead of kazhdyje zelënyje list'ja read kazdyj zel ${ }^{j}$ onyj list.
Page 149 , line 4 f.b., instead of the strange house read the small house.
Page 149 , line $1 \mathrm{f} . \mathrm{b}$., instead of the strange houses read the small houses.
Page 153, line 18: instead of at how read how.
Page 156, line 9 and 12: instead of il uomo read l'uomo.
Page 169, line 12: instead of le livre à ... Marie read le livre ... à Marie.
Page 171, line 16 and 20: instead of man read father.
Page 171, line 12 f.b., instead of that some action was accomplished read a tool or instrument with which some action was accomplished.

Page 172, line 14: instead of the form of a noun is the same read the form of a noun can be the same.

Page 172, line 8 f.b., instead of 3SG-past-3SG-see-INDIC read 1SG-PAST-1SG-see-INDIC

In Swahili (and Bantu) grammar, 1SG, 3SG etc. refers to the noun class of the noun that the verb prefix is referring to, i.e., $1 \mathrm{SG}=$ noun class 1 (which contains singular nouns) etc.

Page 172, line 6 f.b., instead of a-ni-ki-soma read a-na-ki-soma.
Page 185, line 2, 4 and 6 f.b., instead of $\mathbf{v}$ kote read na kota.
Page 186, line 1 : instead of present tense form of the verb be read future tense form of the verb be.

Page 186, line 4: instead of future by using the present tense of the verb itself read future time by using the present tense forms of the verb itself.

Page 189, line 15: instead of pisat and napisat read pijet and napijet.
Page 198, line 10: instead of he-asks read (s)he-asks.
To the Polish examples, one could add, just like in German, a polite request: Prosze pytać! 'Please ask!'

## Unit 1. Introduction

Read BLLL, chapter 1-4. This is rather 'light reading'. If you don't get the textbook in time, there is no need to worry. You will be able to catch up later on.

The course will cover

- Basic linguistic concepts
- Basic information about languages in Africa
- Basic library searches for linguistic information
- Basic analysis of language data
- Glossing examples
- Handling references


## Key concepts

Bilingual dictionary vs. monolingual dictionary
Word-classes, traditionally also called parts of speech, are e.g. nouns, adjectives, pronouns, verbs...
Gender: In many languages nouns are divided into a number of groups based on their behaviour together with other words. Swedish has two genders, since nouns require either en or ett, den/det, ny/nytt etc. German has three genders since nouns require either der, die or das.
Base form: the most basic (simplest, shortest, most frequent) form of a word. The exact definition may differ between languages and scholars.
Infinitive: a form of the verb that is typically used together with another verb in many languages, e.g. I can read, Jag kan läsa. Not all languages have an infinitive, and use expressions like 'I can that I read', 'Jag kan att jag läser' instead.
[bra:] (Swedish for 'good') these parentheses are used in order to give information about pronunciation, they contain phonetic transcription of a word or a phrase. The transcription is written using phonetic script.
/bra:/ these slashes are used in order to give information about the 'sound image' of a word or a phrase, i.e. what the speaker and listener in a particular language 'imagine' that they say. This is called a phonological or phonemic transcription. Ordinary speakers are often not aware of all the details in their own pronunciation.
<bra> these 'parentheses' are used in order to give information about spelling or orthography, i.e. about the letters of a word ord phrase.

Would you like to discuss any of the above concepts in more detail?
Did you notice any other important concepts in the readings?
Please write them down and bring them to our next class.

## Unit 2. Linguistics

Read LSAAL chapter 1 and FSTAL chapter 1

## Key concepts

Linguistics: The scientific study of language(s)
Descriptive vs. prescriptive statements about language

## Grammar

Phonetics

## Phonology - Phonemes

Morphology - Morphemes
Syntax
Morphosyntax: Morphology + Syntax; it's often difficult to tell exactly where to draw the borderline between them, and therefore easier to treat them together.
Lexicon: The set of words in a language and our knowledge about these words.

Lexicology: the science dealing with the lexicon, vs.
Lexicography: (the science dealing with) the construction of dicitionaries.
Semantics

## Pragmatics

Sociolinguistics

## Corpus linguistics

## Historical lingustics

Form vs. Meaning: Every linguistic expression (word, phrase etc.) has two 'sides'. On the one hand there are the words themselves, which have a form consisting of sounds; on the other hand there are the meanings, what we imagine when we use a specific word.
Arbitrariness: the realtion between form and meaning is arbitrary, i.e. there is no 'natural' way of explaining the connection between the form and the meaning (with the exception of a few words that imitate sounds).
Recursiveness: the same words can be used over and over again, in new combinatioins, thus giving us the possibility to create an indefinite number
of different, new phrases and sentence of different length and complexity.

Would you like to discuss any of the above concepts in more detail? Did you notice any other important concepts in the readings?
Please write them down and bring them to our next class.

## The Character of Linguistics

is descriptive:

- It finds out how people use language(s),
- it finds patterns, makes generalisations, draws conclusions, finds
explanations, makes predictions, and tests them.
It is not prescriptive:
- it doesn't say that something is good or bad, right or wrong,
- but it can describe what people consider to be (in)correct,
- as well as describe what is frequent and what is unfrequent.


## There are No Primitive Languages

All langauges have an enormous, indefinite potential to develop new means of expression. It all depends on the needs of the community. It's mainly the vocabulary that may be restricted in a specific language, but new words can always be created, if needed.

Grammatical constructions may be very different in different languages. Some constructions are more condensed, other constructions use more words.
$\begin{array}{lll}\text { bilnyckeln } & \text { vs. } & \text { nyckeln till bilen } \\ \text { the car key } & \text { vs. } & \text { the key to the car }\end{array}$
Different stylistic levels of language may use different grammar and vocabulary. Different styles develop over time if a need is felt for it in the community/society.

## Assignments for class based on Unit 1-2:

1. Bring questions relating to the readings and the key concepts that have been introduced there.
2. Think of some structural difference(s) between any two languages that you know (even English and Swedish). Write down an example that illustrates what you mean. Be prepared to share your screen in Zoom and tell us about the structural difference(s) in your example(s).

# Unit 3. Languages in Africa 

Read LSAAL, chapter 5 + Wolff (2016), chapter 9

## Key Concepts

> 2000 languages in Africa
Language versus Dialect, division due to either intelligibility or standardisation, e.g. Swedish \& Norwegian; Bosnian \& Croatian \& Serbian; Zulu \& Xhosa; Moroccan Arabic \& Iraqi Arabic
Language family (=phylum) and subgroups
Language Isolate - Languages with no genetic 'relatives'

## Language Death

Lingua Franca - If two persons don't know each other's languages, they need to choose a third one in order to be able to communicate with each other. This is then their lingua franca - a language that is foreign to both participants, but used for practical communicative purposes. Examples of major lingua francas in today's world are English, Spanish, Arabic, Chinese, but in e.g. Ethiopia, the traditional lingua franca is Amharic.
Pidgin - A "lingua franca" that is not a previously existing language, but a new, simplified mix of two languages, usually the mother tongue's of the persons who want to communicate.

Creole - A "new" language that was previously a pidgin, but has become the mother tongue of new generations who were raised by speakers of a pidgin language.
Pidgin är inte ett språk utan en typ av språk. När personer med olika modersmål inte kan något gemensamt språk så "skapar" de ett "hjälpspråk" för att kunna kommunicerat.

Det innebär att det liksom utvecklas en "standard" för "hemmagjord" engelska i olika länder där stora delar av befolkningen behöver engelskan för att kommunicera då det talas många olika språk i landet. Om vi hade använt engelskan när vi gick till affären i Sverige för att det talades 80 olika modersmål i Sverige, då hade även svengelskan betraktats som en pidgin.
Ett pidgin-språk är ett språk som växer fram spontant som ett hjälpspråk i befolkningar där många språk samexisterar och majoriteten saknar kunskaper i
ett gemensamt språk som alla skulle kunna använda.
Ett annat hjälpspråk är t.ex. esperanto, men skillnaden är att esperanto är ett språk som planerats och utvecklats av språkvetare, medan pidgin är ett helt oplanerat språk och växer fram spontant på en viss plats, ofta i stora städer där många nationaliteter möts och behöver kommunicera, men få har tillräcklig skolgång för att kunna använda den standardiserade formen av det internationella språk som dominerar på platsen.

I Västafrika är det främst engelskan och franskan som är de stora officiella språken i många länder. Därmed är det också vanligt att ett av dessa båda språk utgör basen i det lokala pidgin-språket. Men skillnaderna mellan t.ex. standard-engelska och pidgin-engelska är vanligtvis så stora att den som inte kan pidgin-engelska i stort sett inte förstår någonting utan att lära sig språket. Dels finns massor av ord från andra språk blandade med de engelska orden, dels är både uttal och grammatik kraftigt förändrad. Till exempel kan flera av de engelska ljuden saknas eftersom de är svåra att uttala för folk på den aktuella platsen, då de viktiga lokala språken saknar ljuden. Vidare kan många detaljer i den engelska grammatiken ha fallit bort eftersom de saknar motsvarighet i de stora lokala språken. Ett intressant exempel är att många av världens språk inte skiljer mellan 'han' och 'hon'. Så är det ju till exempel också i finskan som bara har 'hän'. I Pidgin-språk går ofta sådana förändringar ännu längre, eftersom ingen som talar språket har det som modersmål. T.ex. är det i nigeriansk pidgin så att det finns ganska få pronomen och att ett och samma pronomen får fylla flera funktioner, t.ex. im i betydelsen 'han, hon, hans, hennes' och am för 'honom, henne' (se Rotimi \& Faraclas, s. 96-99). En annan intressant detalj är att verben inte böjs och att det därmed inte finns några ändelser som signalerar förfluten tid i motsats till nutid.

## Indo-European languages

## Germanic:

English, German, Dutch, Afrikaans, Swedish, Norwegian, Danish, Icelandic, Faroese etc.

## Romance:

French, Italian, Romanian, Spanish, Portuguese etc.

## Slavic:

Russian, Ukrainian, Polish, Czech, Slovak, Slovene etc.

## Celtic:

Irish, Welsh, Gaelic etc.

## Greek

## Albanian

## Iranian:

Persian (aka Farsi), Tajik, Kurdish, Pashto etc.

## Indo-Aryan:

Hindi, Urdu, Gujarati, Nepali, Bengali, Kashmiri, Punjabi, Sinhala, Romani etc.
etc.

## Niger-Congo languages

## Kordofanian languages (appr. 20 langauges):

Mande langauges (appr. 35 langauges):
Bambara, Jula, Mandinka...

## Atlantic languages:

Fula, Wolof...

## Ijoid languages

## Dogon languages

Volta-Congo languages
North Volta-Congo
Kru languages
Gur languages
South Volta-Congo
Kwa languages
West Benue-Congo
Central Nigerian
Cross
Bantoid
Tivoid langauges
Tiv, Bitare...
Bantu languages (appr. 450 lang.)
Swahili, Kongo, Shona, Bemba, Zulu, Xhosa...

## Afro-Asiatic languages

Semitic (ca. 77 lang.):

## Central Semitic

Arabic, Hebrew...

## South Semitic

Ahmaric (ca. 35 mill.), Tigrinya (ca. 10 mill.),
Tigre (ca. 3 mill.), South Arabic (Yemen \& Oman)...
Cushitic (ca. 47 lang.):
Oromo (ca. 40 mill.), Somali (ca. 26 mill.), Sidamo (ca. 3 mill.), Afar (1,5 mill.)...

Chadic (ca. 195 lang.)
Hausa...
Berber (ca. 26 lang.)
Tamazight, Tarifit, Taqbaylit, Tamasheq...
Omotic (ca 28 lang.)
Wolaytta (ca. 2 mill.)

## Egyptian ${ }^{\dagger}$

Coptic ${ }^{\dagger} .$.

## Nilo-Saharan languages

A total of some 50-60 mill. speakers.
Large disagreement on the subdivision into groups.
Kanuri (3 mill. in Nigeria)
Luo (3 mill. in Kenya)
Dinka (2 mill. in South Sudan)
Nubian (1.7 mill. in Sudan and Egypt)
Maasai (1 mill. in Kenya and Tanzania)

## Khoi-San languages

Less than 1 mill. speakers.
Large disagreement on the subdivision into groups.
Nama (ca 250000 speakers in Namibia, Botswana, South Africa) Sandawe (ca 50000 speakers in Tanzania)

## Austronesian languages

Ca. 1200 languages, spoken by a total of 400 million people.

## Northern Austronesian

26 languages in Formosa/Taiwan, half of which are now extinct.
Eastern Austronesian (the largest number of languages)
Polynesian, Samoan, Tongan, Tahitian, Maori, Hawaiian...
Western Austronesian (the largest number of speakers)
Javanese, Malay, Indonesian, Tagalog (Philippines), Malagassy (Madagascar, ca. 25 mill.)...

## Problem 3.1 - The number of speakers of individual languages in Africa

Have a look at the numbers of speakers mentioned in as many different sources as possible for two of the major languages of Africa. Alongside with other sources, you might also compare Wikipedia's different language versions about a specific language.

## How much variation did you find? What are the extremes for the same language?

## What different reasons can there be for the sometimes large variation in numbers?

If you want to get inspired (or maybe puzzled or confused), have a look at some of these videos:

## 10 most spoken langauges in Africa

1. Swahili, 2. Arabic, 3. Zulu, 4. French, 5. English, 6. Oromo, 7. Yoruba, 8. Amharic, 9. Igbo, 10. Hausa
https://www.youtube.com/watch?v=NimJsEGGbDk
7 most spoken languages in Africa
2. Swahili, 2. Arabic, 3. Hausa, 4. Yoruba, 5. Oromo, 6. Igbo, 7. Zulu
https://www.youtube.com/watch?v=8CwJemzfDhc

## 10 most spoken languages in Africa

1. Arabic, 2. English, 3. French, 4. Swahili, 5. Hausa, 6. Yoruba, 7. Igbo, 8. Amharic, 9. Oromo, 10. Berber
https://www.youtube.com/watch?v=BdS5dgZ pPo
10 most spoken languages in Africa
2. English, 2. Arabic, 3. Swahili, 4. French, 5. Amharic, 6. Hausa, 7. Oromo, 8. Yoruba, 9. Portugese, 10. Zulu
https://www.youtube.com/watch?v=waBAzHlxmqA

## Problem 3.2 - Your Top 10 List of Most Spoken African Languages

1. Put together your own list of the 10 major African languages.
2. For each language, tell us: 1 . the number of speakers, 2. the language family that it belongs to, 3 . the countries where it is mainly spoken. 4 . The sources of your data.
3. Explain what kind of considerations have been important to you in order to be systematic and deliver numbers on comparable grounds for all the languages on your list.

# Unit 4. Semantics and Pragmatics 

Read: LSAAL, sections 2.2-2.2.4 + FSTAL, chapters 5-6

## Key Concepts

Semantics: the study of linguistic meaning
Synonymy: synonyms are words or phrases that mean more or less the same, e.g. elderly $\approx$ senior; watch out $\approx$ be careful; black gold $\approx$ oil. There are however almost always some kind of small differences between synonyms in their finer nuances. It is often a matter of REGISTER, i.e. under what circumstances one or the other would be used, e.g. in FORMAL or INFORMAL use of the language.
Polysemy: a polysemous word is a lexeme with different related meanings, e.g. date 'number denoting a specific day' or 'meeting'. Sometimes the relation can be difficult to figure out, because the historical development has made us think in new ways, and the old associations have become very distant.

Metonymy: a derived meaning by close association to the original meaning, e.g. Ankara says that major progress has been made in the operation. It's of course not the city itself, but the politicians in the city, that have made this statement.

Metaphor: a meaning transferred from a very different domain based on some kind of similarity, e.g. Hope is on the horizon. This is of course not saying anything about where hope is situated, but that one can begin to see some hope, like the sun rising at the horizon.

Homonymy: when two different lexemes have an identical form, e.g. date 'number representing a specific day' vs. date 'kind of fruit'.

Homonyms may be subdivided into
homophones - are only pronounced in the same way:

> no, know; be, bee; see, sea; root, route
homographs - are only written in the same way:
sow [səw] verb, Sw. 'så’ (to plant seeds)
sow [saw] noun, Sw. 'so' (female pig)

Antonymy: antonyms are words with opposite meanings. The relation between the words can be
gradable: big - small, good - bad
complementary: open - closed, exhale - inhale
relational: student - teacher, come - go, over - under

## Pragmatics - the study of the use of language in a social context

Many utterances are ambiguous, but in real life ambiguity is usually quite easily avoided in a specific social situation, if people cooperate.
Cooperation - speaker and listener strive to understand each other. Good cooperation can be seen as a propotionate mix of

> finding a Common Ground using a SuITABLE QuANTITY of words applying an appropriate degree of Politeness only saying things that are ReLevant to the situation only telling the Truth

Utterances have an intention \& an effect. In successful communication they coincide.
Speech acts may be direct (I want you to tell me his phone number.) or indirect (Do you happen to have his number?). Very often people don't express their thoughts straightforwardly, they only imply them. There are large socio-cultural differences regarding how we express ourselves and how we interpret others. Cross-cultural pragmatics studies such differences.

The notion of word can be understood in different ways. Therefore, in order to be more precise, different terminological concepts are used:
token (Sw. löpord) - the occurrences in a text. Every occurrence is a separate token, even if the same form is repeated.
Therefore car, car, cars, cars are 4 tokens
type (Sw. typord) - the different word forms. If the same form occurs several times in a text, it still only countes once.
Therefore car, car, cars, cars are 2 types.
lexeme (Sw. lexem) - the abstract word based on the meaning, not the form. If different inflectional forms occurs in a text, all the different forms only count as one lexeme.

Therefore car, car, cars, cars are 1 lexeme.

Most of the time a sequence of words are also a sequence of lexemes, and the meaning of a phrase can be derived from the individual words go out, red neck, a piece of cake
But sometimes that is not so. The reason is that there are also multi-word lexemes: the meaning cannot be derived from the individual words. Therefore certain combinations of words jointly constitute one lexeme, e.g.

## phrasal verbs

go out 'date etc.' Macmillan

## compounds

redneck 'OFFENSIVE a working-class white person from the southern US, especially one who is not educated and does not like people who are not white' Macmillan

## idioms

a piece of cake 'something easy' Macmillan

## A note on correspondence between languages

Languages, through their words, sometimes 'organise' the world differently, e.g. the words we use to chunk up the day in Swedish and English:
dag, dygn, kväll, natt, morgon, förmiddag...
day, evening, night, morning...
If we compare them, we'll see that they don't correspond exactly to each other, they don't last for exactly the same amount of time.

## Unit 5. Phonetics and Phonology

Read BLLL 5 and FSTAL 2

## Key Concepts

Phonetics
Articulatory phonetics
Acoustic phonetics
Auditory phonetics
IPA - International Phonetic Alphabet / International Phonetic Association Phonetic transcription / script is given between [ ]

## Phonology

Phoneme
Allophone
Phonemic or Phonological transcription is given between / /
Phonotactics
Syllable

## What's the difference?

Phonetics deals with the exact quality of any speech sound as pronounced by a specific speaker in a specific word at a specific occasion, i.e. phones, e.g. all the different ways of pronouncing /r/ in Swedish. Phoneticians works with real speech production, recordings, technical equipent that measures and analyses. Phonetics is a piece of natural sciences (physics, anatomy) implemented within linguistics.
Phonology does not deal with the small differences between individual instance of a sound as produced by specific speakers in specific words. Instead phonologists deal only with the sound system in a specific language, i.e. such differences between sounds that may change the meaning of words, i.e. phonemes or distinctive speech sounds, e.g. how do we use /r/ in Swedish, English, Swahili etc.? Does it occur word initially, word finally, does it cluster with other consonants, e.g. tree, but not *rtee

## Phonetics

Articulatory phonetics deals with the production of speech sounds Acoustic phonetics deals with the transmission of speech sounds

Auditive phonetics deals with the perception of speech sounds (lat. audire 'hear')

IPA
International Phonetic Association \& International Phonetic Alphabet
Narrow transcription - every detail is transcribed

$$
\text { e.g. Swedish ['t } \mathrm{t}^{\mathrm{h}} \mathrm{a} \text { :] 'take' }
$$

Broad transcription - only the most necessary information

> e.g. Swedish [ta:] 'take'

The rest can be figured out following some simple rules:
['] default stress in on the first syllable (and this word has only one)
[ $\mathrm{t}^{\mathrm{h}}$ ] this consonant is aspirated before stressed vowel
[ a :] when long this vowel is automatically pronounced as back
So a simplified or broad transcription does not necessarily need to indicated these facts, but a more user-friendly trasncirption can of course do so.

## Phonology

Phonemes are distinctive sounds (sounds that allow the speakers to distinguish between different words) in a specific langauge.
Phoneme inventory


Phonotactics (fonotax) describes the possible combinations of sounds
Prominence: at word level - one syllable is more prominent than the rest at sentence level - one word is more prominent than the rest

Prominence can be realized as stress or tone or a combination of both
Stress (betoning): more energy: louder (and often slightly longer)
Tone: pitch level on a specific syllable or vowel Intonation: pitch variation through a strech of words
e.g. questions are characterized by intonation in some languages, but by a question particle in others

Stress basically means that more energy is added to a specific part of a word, e.g., English import (noun) versus impórt (verb), whereas tone means that the pitch level (the 'melody' or musical tone) is higher or lower on specific vowels or syllables than in the rest of the word. This means that the tone in a word can go up or down more or less the way it does when you sing, and that this melody gives the words their exact meaning, so that two words may be distinguished only by having different tones (or melody). This is what happens when we distinguish between Swedish stegen (plural) 'the steps' and stegen (singular) 'the ladder'.

Allophones: two (or more) sounds that actually sound slightly differently, but are used in a specific language as if they were one and the asme sound.

Two different pronunciations of the phoneme written <sj> in Swedish, e.g. sju 'seven' pronounced [ $\int \mathrm{H}_{\mathrm{t}}$ ] or [ $\mathrm{ht}_{\mathrm{t}}$ ], but it is still the same phoneme, since it doesn't change the meaning of the word. The two sounds are therfore allophones (variants) of the same phoneme.

Swedish has some different sounds corresponding to the combination of letters $<\mathrm{sj}>$. Even though they are without doubt different sounds, it's still only one (abstract) phoneme, since the meaning of the word sju 'seven' doesn't change, even though you pronounce it with very different sounds for $<\mathrm{sj}>$. Also Swedish $<\mathrm{r}>$ can be pronounced in quite many different ways, but it is only one phoneme. Such pronunciation variants of a phoneme are called allophones (allofoner).

## Phonotactics

The principles for how sounds may be combined in any specific langauge
Syllable: a group of sounds consisting of a vowel (or diphthong) at the center (called nucleus) and consonants before (and after) the vowel

Syllables What is the possible structure of a syllable?
V= vowel, C = consonant

CCCVCCC strengths
CVC sun

CV
be
VC
is
Somali maximal syllable is CVC
ambulance > Somali: ambalaas
/n/ omitted, CVCC is not possible!
film > Somali: filin
/i/ inserted to avoid CVCC

## /m/ replaced by /n/ since a final /m/in

 impossible in Somalis phonotacticsAssimliation:neighbouring sounds influence or affect each other so that they are pronounced in a more similar way

en bank [ $\varepsilon$ mbayk] 'a bank'<br>en ko [ $\varepsilon \eta k u:]$ 'a cow'<br>havsörn [hafsœ:n] 'sea eagle'

The result of such assimilation processes are usually considered allophones, so that, depending on the neighbouring sounds, [ n$]$ and [m] and [ y ] are three allophones of the Swedish phoneme /n/, and [v] and [f] are two allophones of $/ \mathrm{v} /$. Such allophones that depend on the surrounding sounds are called positional or contextual allophones. Such allophones often coincide with sounds that also occur as phonemes in the same language!

And even if the use of specific allophones is completely automatic in a specific language, there is no guarantee that the same is true in another language, e.g. Russian has no [ y ] - it's [bank] in Russian! Actually the use of allophones accoridng to the principles of one's mother tongue is one of the most important things that give you a foreign accent in another language.

## Unit 6. Vowels and Consonants

Read BLLL 6-7

## Key Concepts

IPA charts, IPA symbols vowel, diphtong, consonant
high=closed vowel, mid vowel, low=open vowel
back vowel, central vowel, front vowel
rounded vowel, unrounded vowel
oral vowel, nasal vowel
short vowel, long vowel

Vowels

## Vowels

Where symbols appear in pairs, the one to the right represents a rounded vowel.


Source: ipachart.com
On that site you can click on the symbols and listen to the sounds.
high $($ tongue $)=\operatorname{closed}(j a w) \quad$ i $u$

| mid <br> low $($ tongue $)=$ open $($ jaw $)$ | $\begin{gathered} \text { e } \varepsilon \text { г o } \\ \mathrm{a} \end{gathered}$ |
| :---: | :---: |
| front | i e $\varepsilon$ |
| central | ә а |
| back | u 0 〕 |
| rounded | u 00 |
| unrounded | i e $\varepsilon$ ə a |
| oral, e.g. | כ $\varepsilon$ |
| nasal, e.g. | ว $\tilde{\varepsilon}$ |
| short, e.g. | Ј $\varepsilon$ |
| long, e.g. | ग: $\varepsilon$ : |

monophthongs diphthongs
stable vowel quality throughout the vowel
vowel quality change between beginning and end

An example of a less common sound system:
Ewe $[\varepsilon \beta \varepsilon]$, an Atlantic language in the Niger-Congo family, spoken in southern Togo and south-east Ghana (Source: mustgo.com)

|  | Oral |  | Nasal |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Front | Back | Front | Back |
| Close | i | u | I | ũ |
| Close-mid | e | 0 |  |  |
| Mid | $\varepsilon$ | $\bigcirc$ | $\tilde{\varepsilon}$ | ก |
| Open | a |  | ã |  |

There are 7 oral vowels +5 nasal vowels
Three tones: high / $/$ /, mid / ${ }^{-} /$, low / $/$
The syllables are maximally CV
high: /tó/ 'ear'
mid: /tō/ 'mortar'
low: /tò/ 'buffalo'

## Consonants

|  | $\mathrm{Bi}-$ labial |  | Labiodental |  | Dental |  | Alve olar |  | Post alveolar |  | Retro flex |  | Pala tal |  | Velar |  | Uvu lar |  | Phary ngeal |  | Glot tal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosive | p | b |  |  |  |  | t | d |  |  | t | d | c | f | k | g | q | G |  |  | ? |  |
| Nasal |  | m |  | m |  |  |  | n |  |  |  | $\eta$ |  | л |  | $\eta$ |  | N |  |  |  |  |
| Trill |  | B |  |  |  |  |  | r |  |  |  |  |  |  |  |  |  | R |  |  |  |  |
| Tap or Flap |  |  |  | v |  |  |  | r |  |  |  | [ |  |  |  |  |  |  |  |  |  |  |
| Fricative | $\phi$ | $\beta$ | f | v | $\theta$ | б | 5 | z | J | 3 | S | $z$ | ç | j | x | 8 | $\chi$ | в | ћ | $\uparrow$ | h | ¢ |
| Lateral Fricative |  |  |  |  |  |  | 4 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Approximant |  |  |  | ט |  |  |  | 1 |  |  |  | 1 |  | j |  | $\underline{\square}$ |  |  |  |  |  |  |
| Lateral Approximant |  |  |  |  |  |  |  | 1 |  |  |  | I |  | $\kappa$ |  | L |  |  |  |  |  |  |

Where symbols appear in pairs, the one to the right represents a voiced consonant.
Areas shaded grey indicate articulations judged impossible.
Source: ipachart.com
On that site you can click on the symbols and listen to the sounds.

| Classification of NAE Consonant Phonemes |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manner of Articulation | Place of Articulation |  |  |  |  |  |  |
|  | Bilabial | Labiodental | Dental | Alveolar | Palatal | Velar | Glottal |
| Stop <br> Voiceless <br> Voiced | $\begin{aligned} & \mathrm{p} \\ & \mathrm{~b} \end{aligned}$ |  |  | $\bar{t}$ |  | $\begin{aligned} & \mathrm{k} \\ & \mathrm{~g} \end{aligned}$ |  |
| Fricative Voiceless Voiced |  | $\begin{aligned} & \mathrm{f} \\ & \mathrm{v} \end{aligned}$ | $\begin{aligned} & \theta \\ & \text { б } \end{aligned}$ | $\mathrm{s}$ | $\begin{aligned} & 5 \\ & 3 \end{aligned}$ |  | h |
| Affricate Voiceless Voiced |  |  |  |  | $\begin{aligned} & \mathrm{t} \int \\ & \mathrm{~d} 3 \end{aligned}$ |  |  |
| Nasal Voiced | m |  |  | n |  | $\eta$ |  |
| Liquid Voiced |  |  |  | I | r |  |  |
| $\begin{array}{\|l\|} \hline \text { Glide } \\ \text { Voiced } \end{array}$ | w |  |  |  | y |  |  |

A simpler table only showing North American English phonemes
Source: weebly.com

```
place of articulation
    labial
    dental
    alveolar
    palatal
    velar
    uvular
    pharyngeal
    glottal
manner of articulation
    plosive = stop
    fricative
    approximant
    affricate
    nasal
    trill
    tap, flap
    lateral
voicing
    voiced
    voiceless
    vocal folds vibrating
    vocal folds not vibrating
Accompanying traits
duration
plain \(=\) short \(\quad\) standard duration
long
longer than standard duration
aspiration
plain \(=\) non-aspirated
aspirated
pronounced with a puff of air
palatalisation
plain \(=\) non-palatalised
palatalised
pronounced with raised tongue body and the tip of the tongue behind the lower teeth
```

|  | Bilabial | Bilabial-dental | Dental | Alveolar | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosives/Stops | $\begin{aligned} & \mathbf{p} \\ & \mathbf{b} \end{aligned}$ |  |  | $\begin{aligned} & \mathbf{T} \\ & \mathbf{d} \end{aligned}$ |  | $\mathbf{k}$ |  |
| Fricative | m | $\begin{aligned} & \mathbf{f} \\ & \mathbf{v} \end{aligned}$ |  | $\begin{aligned} & \mathrm{S} \\ & \mathrm{z} \end{aligned}$ | J | $\gamma$ | h |
| Affricates |  |  |  |  |  |  |  |
| Nasal | M |  |  | N | n | $1)$ |  |
| Lateral |  |  |  | L |  |  |  |
| Trill |  |  |  | R |  |  |  |
| Approximants | W |  |  |  | j |  |  |

Swahili (Mgullu 1999)

| Allofoner | иями |  | coroma |  |  |  | corsal |  |  | matical |  | $\begin{array}{\|l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|} \hline \text { clotal } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bilabial | Labio- <br> dental | Dental | Alveolar ${ }^{\text {P }}$ | Palato- | Retroflex | Palatal | velar | Uvular | Pharyngeal | Epiglottal |  |
| Nasal | m | m |  | n |  |  |  | 〕 |  |  |  |  |
| Plosive | p b |  |  | t d |  | t d |  | k g | q G |  |  | $?$ |
| Fricative | $\beta$ | f | ð |  | $\int$ |  |  | 8 | $\chi$ b | ћ $¢$ |  | h 6 |
| Affricate |  |  |  |  | t d d |  |  |  |  |  |  |  |
| Trill |  |  |  | r |  |  |  |  |  |  |  |  |
| Approximant | W |  |  | 1 |  |  | j |  |  |  |  |  |


| Fonem | neme |  |  |  | consel |  |  |  |  | Whancteral |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bilabial | ${ }_{\text {L }}^{\substack{\text { Labio- } \\ \text { dental }}}$ |  |  | Palatal | velar | Uvilar | Pharn |  |  |
| Nasal | m |  | n |  |  |  |  |  |  |  |
| Plosive | b |  | t d | d |  | k g | G |  |  | ? |
| Fricative |  | f | $s$ S |  |  |  | X | ћ |  | h |
| Affricate |  |  | d3 |  |  |  |  |  |  |  |
| Till |  |  | r |  |  |  |  |  |  |  |
| Approximant | w |  | 1 |  | j |  |  |  |  |  |

Somali (Nilsson 2018)

## Problem 6.1 Read IPA

## Read the following list of major cities and countries.

The phonetic script renders typical American English pronunciation.
The source of this exercise is page 36 in Grover Hudson's textbook Essential Introductory
Linguistics, published by Blackwell (Oxford 2000).

1. [maskawrəfə] = Moscow, Russia
2. [ləndənıylənd]
3. [hદlsiŋkifinlənd]
4. [vienəostriə]
5. [romıtəli]
6. [kopənhagəndenmark]
7. [azlonorweI]
8. [dəblinajrlənd]
9. [brəsəlzbeldjəm]
10. [barsəlonəspein]
11. [æӨənzgris] or [æpənzgris]
12. [krakawpolənd]
13. [bərlinḑərməni]
14. [stakhomswidən]
15. [budəpesthəŋgəri]
16. [pragtfkkripəblik]
17. [ḑənivəswitsərlənd]
18. [æmstərdæmhalənd]
19. [lizbənportfogal]
20. [rigalætviə]

## Problem 6.2 Homophonous words

Read the following list of English homophones or words that sound the same. Give two spellings for each pronunciation.
The source of this exercise is page 39 in Grover Hudson's textbook Essential Introductory Linguistics, published by Blackwell (Oxford 2000).
Hudson gives only typical American English pronunciation.
British pronunciations have been added according to Macmillan Dictionary.

1. Am. [flawər] Br. [flavə(r)] flower or flour
2. Am. [fil] Br. [fil]
3. Am. [tiz] Br. [ti:z]
4. Am. [red] Br. [red]
5. Am. [rajt] Br. [rait]
6. Am. $[\sin ] \quad$ Br. $[\sin ]$
7. Am. [ḑım] Br. [d3ım]
8. Am. [for] Br. [fĐ:(r)]
9. Am. [baw] Br. [bau]
10. Am. [no] Br. [nəv]
11. Am. [rod] Br. [rəud]
12. Am. [hol] Br. [həul]
13. Am. [sent] Br. [sent]
14. Am. [pen] Br. [pein]
15. Am. [brek] Br. [breik]
16. Am. [prins] Br. [prins]
17. Am. [sid] Br. [si:d]
18. Am. [trækt] Br. [trækt]
19. 

Am. [tot]
Br. [to:t]
20. Am. [gret]

Br. [greit]

## Problem 6.3 Descriptions of sounds

## Read the following list of descriptions of different sounds. Each example makes up a word. Match the words with the descriptions.

The source of this exercise is page 39-40 in Grover Hudson's textbook Essential Introductory Linguistics, published by Blackwell (Oxford 2000).

Again, this exercise is based on typical American pronunciation.
top, tree, road, car, key, note, gate, lake, feed, know, see, need, run, move, play, take, red, hat, old, new, big, now, soon, wool, then, thin

1. see $a$ voiceless alveolar fricative $+a$ high front vowel
2. a voiced velar stop + a mid front vowel + a voiceless alveolar stop 3. a voiceless alveolar stop + a mid front vowel + a voiceless velar stop 4. a voiceless velar stop + a low back vowel + a retroflex approximant 5. a voiced dental fricative + a mid front vowel + an alveolar nasal 6. an alveolar nasal + a low back vowel + a labial glide 7. a voiceless alveolar stop + a retroflex approximant $+a$ high front vowel 8. a labial nasal + a high back vowel + a voiced labial fricative 9. a voiceless labial fricative + a high front vowel + a voiced alveolar stop 10. a lateral approximant + a mid front vowel + a voiceless velar stop 11. a labial glide $+a$ high back vowel $+a$ lateral approximant 12. an alveolar nasal + a high front vowel + a voiced alveolar stop 13. a voiceless alveolar stop +a low back vowel +a voiceless labial stop 14. a voiceless dental fricative + a high front vowel + an alveolar nasal 15. a glottal fricative + a low front vowel + a voiceless alveolar stop 16. an alveolar nasal + a mid back vowel + a voiceless alveolar stop 17. a retroflex approximant + a mid central vowel + an alveolar nasal 18. a voiceless labial stop + a lateral approximant + a mid front vowel 19. an alveolar nasal + a high back vowel
3. a mid back vowel + a lateral approximant + a voiced alveolar stop
4. a retroflex approximant + a mid front vowel + a voiced alveolar stop
5. a voiceless velar stop + a high front vowel
6. a voiced labial stop +a high front vowel +a voiced velar stop
7. a voiceless alveolar fricative + a high back vowel + an alveolar nasal
8. an alveolar nasal + a mid back vowel
9. a retroflex approximant + a mid back vowel + a voice alveolar stop

## Problem 6.4 Describe the sounds of three words

Choose three words in a language that you know, preferably not English or Swedish. Describe each of the sounds in the words using phonetic terminology. Also say something about the stress and similar things. Tell us what language it is, and if the words are not easy to recognize and understand, also tell us what they mean.
The rest of us will try to write down these words using phonetic script.
Two examples:
Persian: a bilabial voiced nasal consonant, an oral mid front vowel, an alveolar trill, an alveolar fricative consonant, an oral high front vowel, and the stress is on the first syllable.
Russian: a labiodental voiced fricative consonant, an oral rounded mid back vowel, a voiceless alveolar stop, a voiceless velar stop, an oral mid central vowel, and the stress is on the first syllable.

## Unit 7. Phonotactics and Morphophonology

Types of consonants

## Obstruents

stops + fricatives + affricates (more friction noise) e.g. $\mathrm{t} \quad \mathrm{s}$ tg

## Sonorants

nasals + liquids + glides $\quad$ (less friction noise) e.g. $n \quad r \quad j$
often obstruent + sonorant in Swedish CCV: tre, slå, dra, flå, bjud
Other important issues
Nasal vs. Oral Vowels
Aspirated vs. Unaspirated Stops
The stops/plosives differ between languages with regard to whether they are pronounced with additional aspiration or not. Aspiration is common in Germanic voiceless stops, but not in Romance and Slavic. E.g. Somali has aspirated voiceless stops [t, k].

## Alveolar vs. Dental consonants

The exact position of the tip of the tongue varies between languages with respect to sounds like [ $\mathrm{d}, \mathrm{t}, \mathrm{s}, \mathrm{z}, \mathrm{n}$ ].

Released vs. Unreleased Stops
Reduced vs. Full Vowels
In some languages vowels are reduced (pronounced less distinctly) in weak positions (e.g. when not stressed, end of word etc.)

In Russian $[\varepsilon, כ]$ are only possible if stressed, when unstressed they are reduced to [a/ə, i], e.g. Borís [ba'ris] Peterbúrg [pitir'burk].

Diphthongs vs. Monophthongs
Rounded vs. Unrounded Vowels

## Phontactics

## How sounds may be combined into words

Languages have important restrictions on

- word-initial / syllable-initial consonant sequences
- word-final / syllable-final consonant sequences

English/Swedish

- at least three consonants initially
- at least four consonants finally
- maximum syllable: CCCVCCCC

Somali (Cushitic)

- one initially and one finally
- maximum syllable: CVC

Ewe (Atlantic)

- one initially and zero finally
- maximum syllable: CV

There are usually also restriction on what consonants may occur in intital/final position?

English/Swedish no initial [ y ], no final [ h ]
Somali no final [t], [k], [m], [d]
Japanese finally only [ N ]

## Morphophonology

## Phonological principles that apply in specific morphological contexts:

 when words are derived or when they are inflected.What if a verb stem ends in $/ \mathrm{r} /$, when the present tense suffix is $/ \mathrm{r} /$ ?
Swedish: Reduce to a single /r/

| att kör-a | kör! | hon kör |
| :--- | :--- | :--- |
| 'to drive' | 'drive!' | 'she drives' |

Norwegian: Insert a vowel
å kjør-e kjør! hun kjører </çø:r/-/r/

What about genitive $[\mathrm{s} / \mathrm{z}]$ after a word ending in $[\mathrm{s} / \mathrm{z}]$ ?
Swedish:
Tomas bok [tu:mas bu:k] /tu:mas/+/s/> /tu:mas/
English:
Chris's book [krisəz buk] /kris/+/z/ > /krisəz/

Somali definite article -ta:
$\mathrm{kab} \rightarrow$ kabta 'the shoe' rule: $\mathrm{b}+\mathrm{t}>$ [pt] (assimilation)
kubbad $\rightarrow$ kubbadda 'the ball' rule: $\mathrm{d}+\mathrm{t}>\mathrm{d}$ : (assimilation)
mindi $\rightarrow$ mindiða 'the knife' rule: $t>\delta$ bewteen vowels
bil $\rightarrow$ bifa $\quad$ 'the month' rule: $\quad \mathrm{l}+\mathrm{t}>\int$

## Problem 7.1

## Somali stress

Somali has a stress system where the 'stressed' syllable is pronounced with a high tone (that is a voice with high pitch).

## Can you figure out any rules for where to put the stress in Somali nouns?

Stress is marked with an accent in the following words. Double vowel letters represent long vowels.

| árday | 'male student' |
| :--- | :--- |
| ardayád | 'female student' |
| askári | 'male soldier' |
| askariyád | 'female soldier' |
| bisád | 'she-cat' |
| bóqor | 'king' |
| boqorád | 'queen' |
| díbi | 'ox' |
| gabár | 'girl' |
| gúri | 'house' |
| inan | 'boy' |
| inán | 'girl' |
| islaán | 'old woman' |
| macallimád | 'female teacher' |
| macálin | 'male teacher' |
| mindí | 'knife' |
| naág | 'woman' |
| walaál | 'sister' |
| wíl | 'boy' |

## Problem 7.2 <br> Progressive forms in Yoruba

Try to give a rule for how to form the progressive verb form in Yoruba.
<' > marks high tone, < \gg marks low tone
bá 'meets'
ḿbá 'is meeting'
be 'cuts off'
mbe 'is cutting off'
bò 'covers'
mbò 'is covering'
bù 'cuts'
ḿbù 'is cutting'
dà 'pours'
ńdà 'is pouring'
dì 'ties'
ńdì 'is tying'
dúró 'stands'
ńdúró 'is standing'
ká 'folds'
ýká 'is folding'
kó 'gathers'
ýkó 'is gathering'
kù 'remains'
ýkù 'is remaining'
From:
Cowan \& Rakušan. 1987. Source Book for Linguistics. Amsterdam: John Benjamins, p. 45.

## Problem 7.3 <br> Singular and plural forms of Swahili nouns

Explain the rules for the formation of both the singular form and the plural form of the following Swahili nouns.
The words are given in broad phonetic transcription
$\check{s}=[]]$, as in English she
ñ = [n], as in Spanish España.
[ p ], as in English long

| sg. | pl. |  | sg. |  | pl. |
| :--- | :--- | :--- | :---: | :--- | :--- |
| 1. ubale | mbale | strip | 7. ugimbi | Øgimbi | beer |
| 2. ubugu | mbugu | cord | 8. ugono | ngono | intercourse |
| 3. ubiši | mbiši | argument | 9. ugwe | ngwe | string |
| 4. uduvi | nduvi | shrimp | 10. waraka | ñaraka | document |
| 5. udago | ndago | weed | 11. wenzo | ñenzo | roller |
| 6. udui | ndui | pustule | 12. wimbo | ñimbo | song |

From:
Cowan \& Rakušan. 1987. Source Book for Linguistics. Amsterdam: John Benjamins, p. 52.

## Unit 8

## Structures and Categories

## Word classes (parts of speech)

Words belong to different categories/types/classes, such as
Verbs, Nouns, Pronouns, Adjectives, Adverbs, Prepositions, Conjunctions...

The words in a word class are

- inflected (morphology) and/or
- used (syntax) in the same way

Languages are different
They have different grammatical categories and rules/prinicples.
Therefore somewhat different word classes in different languages!
Not all languages have, e.g.
Adjectives
Definite Article
Obligatory Subject Pronouns
Plural Forms of Nouns
Bound Word Order
Question Particle
Marking of subject \& object etc.

## Definite article

English: the house

Swedish: huset
Arabic al bayt
Somali: guriga
Swahili: no definite article

AF1111, Autumn term 2021
University of Gothenburg Morgan Nilsson

Subject Pronouns

| English: | Sahra runs. | She runs |
| ---: | :--- | :--- |
| Swedish: | Sahra springer. | Hon springer. |
| coll. | Sahra hon springer. |  |
| Italian: | Sahra corre. | Corre. |
| Amharic: | Sahira tirot'alechi. | Tirot'alechi. |
| Somali: | Sahro waa ay oroddaa. | Waa ay oroddaa. |
| Swahili: | Sahra anakimbia. | Anakimbia. |

On the other hand, many languages have affixes (suffixes or prefixes) on the verb as a 'substitute' for subject pronouns.

## Plural Forms

Suffix in the plural:
English: shoe - shoes
Swedish: sko - skor
Somali: kab-kabo 'shoe(s)'
Prefix in singular and plural:
Swahili: kiatu - viatu 'shoe(s)'
Different infixes in singular and plural
Arabic: kita:b - kutub 'book(s)’
Some languages use plural forms very seldom or even don't have plural forms of nouns.

## Basic Word Order

Subject Verb Object
English/Swedish:
Swahili:
Colloquial Arabic:
Subject Object Verb
Somali:
Amharic:

Verb Subject Object:
Classical Arabic:
Verb Object Subject:
Malagassy:
Other word orders are possible in most languages, but only under specific conditions.

## Word Order in noun phrases

Adjective + Noun
English: a long knife
Swedish: en lång kniv 'a long knife'
Finnish:
pitkä veitsi 'a long knife'
Noun + Adjective
French, Spanish, Italian:
Arabic:
Somali: mindi dheer 'a long knife'
Swahili: kisu kirefu 'a long knife'

## Question Particle

None - Word order instead
Hon springer. 'She runs.'
Springer hon? 'Does she run?'
None - Intonation instead
Czech: Běží. 】 'She runs.
Běží? $\nearrow \quad$ 'Does she run?'
Yes -
Finnish: Combined with word order
Hän juoksee. Juokseeko hän?
'She runs.' 'Does she run?'
Somali: Contrasting with a statement particle

## Waa ay oroddaa. Ma ay oroddaa? <br> 'She runs.' 'Does she run?'

## Grammatical relations of subject and object

Marked by word order

| English | S V O |
| :--- | :--- |
| Swedish | S V O |
| Colloquial Arabic | S V 0 |
| Swahili | S V 0 |

Marked by suffixes

| Russian | Object endings | + | relaxed S V O |
| :--- | :--- | :--- | :--- |
| Classical Arabic | Object endings | + | V S O |
| Somali | Subject endings | + | relaxed S O V |

Marked by particles
Japanese topic / object particles + S OV

## Morphemes, morphs, allomorphs

Words are made up of smaller parts - morphs - each part carries some meaning.

Sometimes there are different morphs carrying the same meaning. They are alternative expressions for the same meaning: allomorphs

| bil | bilar | 'car, cars' | bil-ar-na |
| :--- | :--- | :--- | :--- |
| 'the cars' |  |  |  |
| ros | rosor | 'rose, roses' |  |
| banan | bananer | 'banana, bananas' |  |

Together these three morphs constitute the Swedish plural morpheme which could abstracly be represented as /Vr/.
Some morphemes can be used on their own.
They are free morphemes: /bil/, /ros/, /banan/.
Other morphemes can only be used together with a free morpheme. They are bound morphemes: /ar/,/or/,/er/

## Types of morphemes

| Root | Has a lexcial meaning |
| :--- | :--- |
| Affixes | Usually has grammatical functions (or meanings) |
| Prefix | Added before a root or stem |
| Suffix | Added after a root or stem |
| Infix | Added into the middle of a root or stem |
| However  <br> a Stem - is not a morpheme and it is often not one morpheme long, <br> - it may consist of one or more Roots + derivational affixes   |  |

## STEM

| Prefix Root Root | Suffix | Suffix |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Derivational | Inflect |  |  |
| ro giv | ande |  | rogivande | 'calming' |
| ro | lig | a | roliga | 'fun (pl.)' |
| ro | lig | a | oroliga | 'worried (pl.)' |
| ut tal | ande | t | uttalandet | 'the statement |
| bok buss |  | ar -na | bokbussarna | 'the bookmobiles' |
| sam arbet | a | r | samarbetar | 'cooperates' |
| arbet | e | $t$ | arbetet | 'the work' |

Infixes

Arabic

| kita:b 'book' | root: k-t-b | singular infixes i-a: |
| :--- | :--- | :--- |
| kutub 'books' |  | plural infixes: u-u |

Somali

| Adejctive |  | root | infix | Noun |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| adag | 'hard' | ad-g | -ay- | adayg | 'hardness' |
| culus | 'heavy' | cul-s |  | culays | 'heaviness, weight' |
| jecel | 'fond (of)' | jec-l |  | jacayl | 'love' |

Omljud / Umlaut - Not infix! SINGULAR PLURAL

| bu:k | bøk:ər | <bok, böcker $>$ | 'book(s)' |
| :--- | :--- | :--- | :--- |
| fu:t | føt:ər | $<$ fot, fötter $>$ | 'foot, feet' |

## Word Classes

Verbs, Nouns, Pronouns, Adjectives, Adverbs, Prepositions, Conjunctions...

## Inflected vs. Uninflected words

If words are inflected, they usually are divided into word classes based on the forms they exhibit.
If words are not inflected, the are divided into word classes based on their function in sentences.

## Open vs. Closed Word Classes

New words easily enter into the classes Verb, Noun, Adjective
New words very seldom enter into the classes Pronoun, Preposition, Conjunction.

## Word formation vs. Inflection

sjuk > sjuk-ling
suffix deriving a noun meaning 'sick person' from the adjective 'sick'
sjuk $>$ sjuk-a
suffix forming the plural of the adjective

## Derivation vs. Compounding

sjuk-ling 'sick person, patient' free morpheme + bound morpheme sjuk-hus 'hospital' two free morphemes

## Prepositions vs. Postpositions

English has the postposition 'ago', and there are some less commonly used postpositions in Swedish:
Det går visst att visa och prata känslor vänner emellan.
De cyklade Vättern runt. Godispåsen gick laget runt.
När vårt eget släkte dött ut snurrar jorden oss förutan.
Frihet är det bästa ting, som sökas kan all världen kring.

Under hösten äter björnen upp sig och lägger på ett fettlager som ska räcka vintern igenom.

## Problem 8.1

Word order in Lotuko
Lotuko or Otuho is a Nilotic language spoekn by a couple of hundred thousand people in South Sudan.
1.

Gloss all the sentences according to the Leipzig golssing rules. Rule No 1 will be sufficient for this exercise.
2.

What is the word order in these examples?
3.

What will sentence ( h ) be in Lotuko?
Lotuko (Sudan; adapted from Merrifield et al. 1987, prob. 131)
a idulak atulo ema
b idulak atulo aful
c ohonya eito erizo
d amata eito aari
e ohonya odwoti aful
f abak atulo ezok g amata odwoti aari
h $\qquad$
i ohonya ezok erizo
'The man is planting grain.'
'The man is planting peanuts.'
'The child is eating meat.'
'The child is drinking water.'
'The girl is eating peanuts.'
'The man hit the dog.'
'The girl is drinking water.'
'The girl hit the child.'
from Kroeger (2005: 9)

## Problem 8.2 <br> Sidama verb morphemes

Sidama is an Afro-Asiatic langauge in the Cushitic sub-group, spoken by appr. 3 million people in southern Ethiopia.
Divide the following Sidama words into the relevant morphs.

1. Mark the division with a hyphen.

Work out the meaning of each of the morphemes.
2. Gloss all the example words according to the Leipzig glossing rules in Appendix 2.
3. Do any of the morphemes exhibit allomorphs (different variants)?
4. How would you say 'she burned', 'he ate', 'she drinks' and 'he opens'?
> aganno 'he drinks'
> agi 'he drank'
> muri 'he cut'
> murtanno 'she cuts'
> murtu 'she cut'
> giiranno 'he burns'
> lail 'he saw'
> laPanno 'he sees'
> umanno 'he digs'
> untu 'she dug'
> umi 'he dug'
> untanno 'she digs'
> fantu 'she opened'
> fani 'he opened',
> rumi 'he cursed'
> runtu 'she cursed'
> runtanno 'she curses'
> rumanno 'he curses'
> itanno 'he eats'
> ittu 'she ate'

The source of this exercise is page 81 in Grover Hudson's textbook Essential Introductory Linguistics, published by Blackwell (Oxford 2000).

## Problem 8.3 <br> Swahili noun morphemes

1. 

Divide the following Swahili words into the relevant morphs with hyphens.
2.

Work out the meaning and use of each one of the inflectional morphemes and gloss all the exampel words according to the Leipzig glossin rules in Appendix 2.

```
msichana 'girl', wasichana 'girls'
mvulana 'boy', wavulana 'boys'
mtoto 'child', watoto 'children'
mtu 'man', watu 'men'
mti 'tree' miti 'trees'
mgomba 'banana tree', migomba 'banana trees'
mguu 'foot', miguu 'feet'
kitu 'thing', vitu 'things'
kiti 'chair, viti 'chairs'
kitanda 'bed', vitanda 'beds'
```

Also adjectives are inflected in a similar way.
3.

If mtoto mzuri means 'a good child’, how would you say ‘good children', 'a good thing' and 'good things'? Gloss your answers.

The source of this exercise is page 77 in Grover Hudson's textbook Essential Introductory Linguistics, published by Blackwell (Oxford 2000).

## Problem 8.4 <br> Amharic verb morphemes

1. 

Divide the following Amharic verb into the relevant morphs with hyphens.
2.

Work out the meaning of each one of the morphemes and gloss all the example words according to the Leipzig glossing rules in Appendix 2.
3.

Are there different allomorphs (variant morphs) that together constitute an 'abstract' morpheme?
Present tense
isəbir
tisabir
ti break'
tisabiri
'you (m.) break' (f.) break'

Past tense
səbbərku 'I broke'
səbbərk 'you (m.) broke'
səbbər 'you (f.) broke'
4.

How would you inflect the verb dəkkəmku 'I tired'? Gloss all forms in your answer.

The source of this exercise is page 65 in Grover Hudson's textbook Essential Introductory Linguistics, published by Blackwell (Oxford 2000).

## Unit 9

## Nouns \& Determiners

How do we determine the wordclass of a word?

- form

Does the word inflect? What different forms does it have?

- function

How is it used? What is its sentence function? What is its position?

- meaning

What kind of meaning does it convey?

## Noun

might be inflected for singular/plural, definite/indefinite...
might belong to a gender class or another kind of noun class
is generally used as subject or object or adverbial complement
generally denotes living beings, objects and abstract ideas

## Determiner

tends to appear next to a noun
might be inflected so that it agrees with the noun
(gender, number, defininteness)
tends to express definiteness, possession, uniqueness, quantity...

## Subdivision of nouns

Gender / Class

| FRENCH | RUSSIAN | HAUSA | SomALI |
| :--- | :--- | :--- | :--- |
| Masculine livre 'book' | dom 'house' | tebur 'table' | miis 'table' |
| Feminine maison 'house' | kniga 'book' <br> okno 'window' | taga 'window' | daaqad 'window' |
| Neutre |  |  |  |


| Countables | table, idea |
| :--- | :--- |
| Uncountables | furniture, peace |
| Mass nouns | milk, water, air, sugar |

Concrete table, furniture, milk
Abstract idea, peace

| Common nouns | car, milk, idea |  |
| :--- | :--- | :--- |
| Proper nouns | London, Susan, Africa | (=names) |

Inflection of nouns

|  | Slovene | Swahili | Arabic |
| :---: | :---: | :---: | :---: |
| Singular | miza 'table' | kiatu 'shoe' | kita:b 'book' maktab 'offic |
| Dual | mizi 'two tables' |  |  |
| Plural | mize '3+ tables' | viatu 'shoes' | kutub 'books' maka:tib |

Definiteness marked by determiner

|  | English | ARabic | ItaLIAN |
| :--- | :--- | :--- | :--- |
| Indefinite | shoe | hiða:? | scarpa |
| Definite | the shoe | al hiða:? | la scarpa |

Definiteness marked by inflectional endings

|  | Somali | SWEDISH | BULAGRIAN | HAUSA |
| :--- | :--- | :--- | :--- | :--- |
| Indefinite | kab | sko | obuvka | takalma |
| Definite | kabta | skon | obuvkata | takalmin |

Many languages do not mark nouns for definiteness, e.g., Finnish, Russian, Persian, Swahili...

## Inflection of determiners

Determiners don't belong to a gender or noun class.
Only nouns belong to a gender or noun class.
Determiners have different forms for each gender or noun class.

## Agreement

In many languages
determiners adjust to/agree with the noun's gender or noun class.
They may also adjust to/agree with the nouns with respect to number.

| Italian | FEMININE | MASCULINE |  |
| :--- | :--- | :--- | :--- |
| SINGULAR | la bambina | il bambino <br> PLURAL | le bambine |
| 'the child, girl, boy' |  |  |  |
| i bambini | 'the children' |  |  |


| SINGULAR | en bil 'a car' | en gata 'a street' | ett hus 'a house' |
| :--- | :--- | :--- | :--- |
|  | bilen 'the car' | gatan 'the street' | huset 'the house' |


| Norwegian | MaSCULINE | FEmININE | NEUTRE |
| :--- | :--- | :--- | :--- |
| SINGULAR | en bil 'a car' <br> bilen 'the car', | ei gate 'a street' <br> gata 'the street' | et hus 'a house' <br> huset 'the house' |
| PLURAL | biler'cars' <br> bilene 'the cars' | gater 'streets' <br> gatene 'the streets' | hus 'houses' <br> husene 'the houses' |


| Somali | FEMININE | MASCULINE |
| :--- | :--- | :--- |
| SINGULAR | kab '(a) shoe' | safar '(a) journey' <br> kabta 'the shoe' |
| safarka 'the journey' |  |  |
| PLURAL | kabo 'shoes' <br> kaba-ha 'the shoes' | safarro 'journeys' <br> safarra-da 'the journeys' |

## Noun classes or genders

Some languages do not divide nouns into classes/genders, e.g.
English, Finnish, Persian, Turkish
Some languages divide nouns into two classes, generally referred to as genders, usually masculine och feminine, e.g.

French, Spanish, Italian, Arabic, Amharic, Somali, Oromo, Hausa Some languages have three genders, typically MASCULINE, FEMININE and NEUTRE, e.g.

Latin, German, Norwegian, Russian, Greek

Some languages have many more noun classes, e.g.
Swahili and other Bantu languages

## Somali genders

## Masculine

Stress on second to last vowel position dukáan 'shop'
Definite article -ka
dukáanka 'the shop'
Possessive kayga 'my'
dukáankayga 'my shop'

Swahili noun classes

| Class 1/2 | 3/4 | 7/8 | 5/6 | 9/10 | 11/10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| mtoto 'child' | mfuko 'bag' | kitabu 'book' | gari 'car' | paka 'cat' | usiku 'night' |
| watoto 'children' | mifuko 'bags' | vitabu 'books' | magari 'cars' | paka 'cats' | siku 'night' |
| Agreeing possessives, e.g. mtoto wangu 'my child' |  |  |  |  |  |
| wangu 'my (sg.)' | wangu | changu | langu | yangu | wangu |
| wangu 'my (pl.)' | yangu | vyangu | yangu | zangu | zangu |

Nominal Categories
often expressed in nouns and determiners

| Definiteness | Indefinite | Definite |
| :--- | :--- | :--- | :--- |
| (unfamiliar | familiar) |  |


| Number | Singular Plural | Dual |
| :---: | :---: | :---: |
|  | (one many | two) |

Gender - Masculine Feminine Neutre
Class $\quad-\quad 1,2,3,4,5,6,7,8,9,10 \ldots$

Gender is not sex!
Somali sac 'cow', xaas 'wife', dumar'women (coll.)' are masculine nouns.

## Problem 9.1 The definite article in Lyélé

Lyélé is an Niger-Congo language in the Atlantic sub-group, spoken by some 130,000 people in Burkina Faso.

How would you define the form of the definite article in Lyélé?
The acute accent (') denotes a high tone, whereas the grave accent (') denotes a low tone. Vowels without an accent are pronounced with a mid tone.

kúmí 'bird'<br>kúmíí 'the bird'<br>yálá 'millet'<br>yáláá 'the millet'<br>nà 'foot'<br>nàá 'the foot'<br>yijì 'church'<br>yijií 'the church'<br>ya 'market'<br>yaá 'the market'<br>cèlé 'parrot'<br>cèléé 'the parrot'<br>kùlí 'dog'<br>kùlíi 'the dog'

Source: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics.

## Problem 9.2

Noun classes in Kikuyu
Kikuyu is a Bantu language, spoken by some 7 million people in Kenya.
Each English noun in the list below is followed first by the Kikuyu singular form, then by the plural form.

1. How many noun classes do we need to establish in order to account for all the nouns in the list?
2. What are the prefixes for the singular and the plural in each of the classes?
$/ \mathfrak{y} /$ is similar to Swedish/English <ng>, / $/$ / is similar to English $<\mathrm{sh}>, / \mathrm{n} / \mathrm{i}$ similar to Swedish $<\mathrm{nj}>$ or the beginning of English <new>.

| teacher | murutani | arutani |
| :---: | :---: | :---: |
| elderly person | muduuri | aduuri |
| girl | muiretu | iretu |
| woman | mutumia | atumia |
| parent | mufiari | afiari |
| buyer | muguri | aguri |
| traveler | mugendi | agendi |
| politician | muteti | ateti |
| root | muri | miri |
| tree | muti | miti |
| lion | muroodi | miroodi |
| gun | mufiinga | mifiinga |
| inattress | muuto | miuto |
| bottle | mufuuba | mijuuba |
| comb | gifanundi | ifanundi |
| chair | geti | eti |
| cup | gikombe | ikombe |
| yam | gikoa | ikoa |
| tray | gitaruru | itaruru |
| muscle | gijoka | ifoka |
| crocodile | kijaŋi | ijayi |
| sugar cane | kigoa | igoa |
| worm | kijgunu | ingunu |
| folk song | kibata | ibata |
| flood | kinguo | inguo |
| steering wheel | kibara | ibara |
| hiding place | kimamo | imamo |
| spider | mbombue | mbombue |
| donkey | bunda | bunda |
| cow | yombe | yombe |
| pig | ygurue | ygurue |
| stomach | nda | nda |
| house | jumba | numba |
| mole | huko | huko |
| wave | ikombi | makombi |
| foot | ikina | makina |
| tooth | igago | magago |
| banana | irigu | marigu |
| cloud | itu | matu |
| stone | ihiga | mahiga |

Source: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics.

## Problem 9.3

## Possessive suffixes in Hausa

Hausa is an Afro-Asiatic language in the Chadic sub-group. It is mainly spoken Nigeria, Niger, Cameroon, Benin and Chad, where it is an important lingua franca. It is estimated to be spoken by some 60 million mother tongue speakers and some 30 million second language speakers.

1. What is the basic form of the possessive suffixes?
2. What morphophonological rules are applied when these suffixes are added to nouns?
$/ \mathrm{Z} /$ is a glottal stop, the sound that may replace $/ \mathrm{t} /$ in butter in some varieties of English, e.g., Cockney.

2yakka 'your (m.sg.) sister'
2yakki 'your (f.sg.) sister'
2yassa 'his sister'
2yatta 'her sister'
?yammu 'our sister'
2yakku 'your (pl.) sister'
?yassu 'their sister'
gidanka 'your (m.sg.) house'
gidanki 'your (f.sg.) house'
gidansa 'his house'
gidanta 'her house'
gidammu 'our house'
gidanku 'your (pl.) house'
gidansu 'their house'
Source: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics.

## Problem 9.4

Plural formation of nouns in Kasem
Kasem is a Niger-Congo language in the Volta-Congo sub-group. It is spoken in Ghana and Burkina Faso by some 250,000 people.

The plural formation in Kasem is quite complicated. It involves quite many morphophonological alternations.

How would you describe the plural formation in Kasem?

This is a rather difficult question, and you don't have to account for all the details. It's enough to mention a few regularities that you have noticed.

```
Singular - Plural:
jıja - jı 'hand(s)'
fəla-fali 'white person(s)'
kuә - kui 'bone(s)'
tfoy% - tfue 'path(s)'
loŋa - loi 'bile(s)'
fana - fanr 'knife(s)
daa - d\varepsilon 'stick(s)'
3әgə - зe 'place(s)'
miz - mi 'bowstring(s)'
koga - ku\varepsilon 'back(s)'
lida - lidi 'medicine(s)'
yaga - y\varepsilon 'market(s)'
tua - tor 'bee(s)'
bugə - bui 'river(s)'
lə\etaə-le 'song(s)'
luә - lui 'funeral(s)'
poyz - pue 'shelter'
tfiga - tfi 'truth(s)'
buda - budi 'fishnet(s)'
kada - kadı 'farm(s)'
naga - n\varepsilon 'leg(s)'
z0\etaa-zuI 'calabash(es)'
kwia - kwi 'dry season(s)'
tula - tuli 'granary(ies)'
bəŋว - be 'roof beam(s)'
noa - nor 'finger(s)'
kala - kalı 'pot(s)'
diga - di 'room(s)'
nuga - nui 'shea nut oil(s)'
taja-t\varepsilon'bow(s)'
```

Source: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics.

## Unit 10

Modifying nouns: Adjectives \& Relative clauses
There are two common ways two give additional information about a noun by building a more complex
noun phrase:

|  | English | Somali |
| :--- | :--- | :--- |
| Noun + Adjective | the new student | ardayga cusub |
| Noun + Relative Clause | the student that laughed | ardayga qoslay |

The English relative clause is marked by the relative word that
The Somali relative cluase is marked by the absence of the three main clause characterictics:
a subject suffix on the noun phrase a declarative marker a subject pronoun

> Ardaygu waa uu qoslay. student.the DECL he laughed 'The student laughed.'

Not all languages have adjectives.
Some languages only have a smaller number of adjectives.
Verbs or nouns are often used instead
Somali gaari buluug ah 'a blue car' car blue.thing being gaari cusub 'a new car' gaari-ga buluug-ga ah 'the blue car' gaari-ga cusub 'the new car'

Swahll ndege aliyekufa 'a dead bird' bird which.died mlango uliofunguliwa 'an open door' door which.was.opened

Adjectives precede nouns
English, Swedish, Amharic: təlləq bet 'big house’
Qualities precede, Categories follow
Polish: nowy dworzec autobusowy '(the) new bus station' [dvozets]
Adjectives follow nouns
Romance languages, Arabic, Somali, Swahili
The adjective does not agree with its head noun
English
Basic adjectives (may) agree with their head noun, but only in number
Somali
The adjective agrees with its head noun in both number and gender/class
Italian, Swahili
The adjective agrees with its head noun in both gender, number and definiteness

Swedish, Arabic

Adjective + definite article + possessive

| SWEDISH |  | FRENCH |
| :--- | :--- | :--- |
| hus | 'house' | maison |
| hus-et | 'the house' | la maison |
| ny-tt hus | 'new house' | nouvelle maison |
| det ny-a hus-et | 'the new house' | la nouvelle maison |
| mitt ny-a hus | 'my new house' | ma nouvelle maison |


| BULGARIAN |  | ITALIAN |
| :--- | :--- | :--- |
| kəft-a | 'house' | casa |
| kəft-a-ta | 'the house' | la casa |
| nov-a kəft-a | 'a new house' | nuova casa |
| nov-a-ta kəft-a 'the new house' | la nuova casa | guri-ga |
| moj-a-ta nov-a kəft-a | guri cusub |  |
|  | 'my new house' |  |
|  |  | la mia nuova casa |$\quad$| guri-ga cusub |
| :--- |
| guri-ga cusub |

ARABIC noun+poss

AmHARIC adjective+defininte noun+possessive təlləq-u bet-e 'his big house' big-the house-his

## Somali genders

MASCULINE FEminine

Stress on second to last vowel position
dukáan 'shop'
Definite article -ka
Possessive -kayga 'my'
dukáanka 'the shop'
dukáankayga 'my shop'

Stress on last vowel position
laán 'branch'
Definite article -ta
Possessive -tayda 'my'
laánta 'the branch'
laántayda 'my branch'

Adjectives don't have different gender forms.
dukáankayga yar 'my little shop'
Subject pronoun uu 'he, it'
Verbs 3rd p. sg. masc. -aa
heesaa 'sings'
wíllka yari wáa uu heesaa
'the little boy sings'
laántayda yar 'my little branch'
Subject pronoun ay 'she, it'
Verbs 3rd p. sg. fem. -taa
heestaa 'sings'
gabárta yari wáa ay heestaa
'the little girl sings'

Wáa is a sentence type marker that marks this clause as a statement.
-i is the subject noun phrase suffix added to an adjective.

## Swahili noun classes

| Class $1 / 2$ | $3 / 4$ | $7 / 8$ | $5 / 6$ | $9 / 10$ | $11 / 10$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Agreeing adjectives, e.g., mtoto mrefu 'a tall child'

| mrefu 'long' | mrefu | kirefu | refu | ndefu | mrefu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| warefu | mirefu | virefu | marefu | ndefu | ndefu |

Agreeing possessives, e.g. mtoto wangu 'my child'

| wangu 'my' | wangu | changu | langu | yangu | wangu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| wangu | yangu | vyangu | yangu | zangu | zangu |

## Relative clause types

that, which, who (subject, object), whom (object), whose (owner), where (place), when (time)
the children that participated (gap=subject)
the house that Jack built
(gap=object)
the woman who waited
(gap=subject)
the woman who we saw
(gap=object)
the children whose parents paid a bribe paid a bribe (gap=genitive)
the city where I once lived
(gap=adverbial of place)
the summer when I learned to fly summer (gap=adverbial of time)
that the children participated
that Jack built the house
who the woman waited
who we saw the woman
whose the children's parents
where I once lived in the city
when I learned to fly that

## Relative clauses

| Languages with gap | English, Swedish, |
| :--- | :--- |
| Languages without gap | Persian, Slovenian |
| The gap is filled with a suitable pronoun |  |

Languages with obligatory relative word: French, Italian
Languages with relative word that may be omitted: English, Swedish
Languages without any relative word:
Somali

Descriptive and restrictive use of adjectives and relative clauses

- descriptive/nonrestrictive/appositive use
the head noun can be identified without the information given by the adjective/relative clause
- restrictive/contrastive use
the head noun can only be identified by the information given by the adjective/relative clause

Some languages mark descriptive and restrictive adjectives and/or relative clauses in different ways.

Somali
A descriptive relative clause is marked by the conjunctional particle 'oo'. A restrictive relative clause directly after the head noun is not marked, but a restrictive relative clause after another modifier, e.g. an adjective, is marked by the conjunctional particle 'ee'.

## Problem 10.1 Egyptian Arabic determiners

1. What grammatical rules can you give for Egyptian Arabic?
2. Gloss these examples according to the Leipzig glossing rules
il walad da yigi il madrasa 'this boy comes to the school'
il binti di tigi il madrasa 'this girl comes to the school'
il Pawla:d dool yigu il madrasa 'these children come to the school'
faaṭima tiḥibb il walad da 'Fatima loves this boy'
hasan yiḥibb il binti di 'Hassan loves this girl'
is siri:r ig gidi:d 'the new bed'
is siri:r gidi:d 'the bed is new'
il 乌arabiy: a ig gidi:da 'the new car'
il Yarabiy: a gidi: da 'the car is new'
di Carabiy: a 'this is a car'
il 乌arabiy:a di 'this car'
da siri: $\mathbf{r}$ 'this is a bed'
is siri:r da 'this bed'
From: W. Cowan \& J. Rakušan. 1987. Source Book for Linguistics. Amsterdam: John Benjamins, p. 103, and J. Wightwick \& M. Gaafar. 2014. Colloquial Arabic of Egypt. London \& New York: Routledge.

## Problem 10.2 Describing things in Swahili

1. What grammatical rules can you give for Swahili based on these sentences?
2. Gloss these examples according to the Leipzig glossing rules
kisu ni kidogo 'the knife is small'
kisu kidogo kinafaa 'the small knife is useful'
mti ni mdogo 'the tree is small'
mti mdogo unafaa 'the small tree is useful'
watu ni wadogo 'the men are small'
watu wadogo wanafaa 'the small men are useful'

From: W. Cowan \& J. Rakušan. 1987. Source Book for Linguistics. Amsterdam: John Benjamins, p. 110.

## Problem 10.3 Somali relative clauses

1. What grammatical rules can you give for Somali based on the following examples?
2. Gloss these examples according to the Leipzig glossing rules
waa ay ordaysaa 'she is running'
waa uu ordayaa 'he is running'
Sahro waa ay ordaysaa 'Sarah is running'
Xasan waa uu ordayaa 'Hassan is running'
waxa ay cunaysaa moos 'she is eating a banana'
waxa uu cunayaa moos 'he is eating a banana'
Sahro waxa ay cunaysaa moos 'Sarah is eating a banana'
Xasan waxa uu cunayaa moos 'Hassan is eating a banana'
Sahro waxa ay fiirinaysaa wiilka 'Sarah is watching the boy'
Xasan waxa uu fiirinayaa gabarta 'Hassan is watching the girl'
Sahro waxa ay fiirinaysaa wiilka ordaya 'Sarah is watching the boy that is running'
Xasan waxa uu fiirinayaa gabarta ordaysa 'Hassan is watching the girl that is running'
Sahro waxa ay fiirinaysaa wiilka cunaya moos 'Sarah is watching the boy that is eating a banana'

Xasan waxa uu fiirinayaa gabarta cunaysa moos 'Hassan is watching the girl that is eating a banana'

Sahro waxa ay fiirinaysaa Xasan oo cunaya moos 'Sarah is watching Hassan, who is eating a banana'

Xasan waxa uu fiirinayaa Sahro oo cunaysa moos 'Hassan is watching Sarah, who is eating a banana'

## Unit 11. Verbs \& Roles

A verb usually constitutes the central part of a cluase.
The children ate their sandwitches.
Verbs are (usually) accompanied by one or more nouns (noun phrases, pronouns), e.g. subject, object etc. Some are obligatory, and some are optional.

The children ate their sandwitches (with good appetite) (in the park) (before school).
Some languages also allow verbs completely on their own, e.g.
Italian: Piove. 'It rains.'
In many languages, verbs are inflected for different time relations, e.g.
Italian: present: piove
past: pioveva
future: pioverà
In many languages the nouns go into specific positions relative to the verb. The grammatical functions SUBJECT and OBJECT are in some languages initmately related to the word order. Such languages are, e.g., English, Swedish and Swahili.

| SUBJECT | + VERB | + 0 | OBJECT(S) |  |
| :---: | :---: | :---: | :---: | :---: |
| NounPhrase | + Verb |  |  |  |
| NounPhrase | + Verb | + N | NounPhrase |  |
| NounPhrase | + Verb | + N | NounPhrase + | NounPhrase |
| Stefan | föll. |  |  |  |
| Stefan | fell. |  |  |  |
| Stefan | köpte gla | glass. |  |  |
| Stefan | bought ic | ce-cream. |  |  |
| Stefan | visade p | polisen | sitt leg. |  |
| Stefan | showed th | the police | his ID. |  |

## Intrasitive vs. transitive verbs

Verbs that are used without an object are called intransitive, e.g.
sleep, fall, smile, laugh, walk

Verbs that are used with an object are called TRANSITIVE, e.g.
buy, steal, say, watch, take, send
Some verbs are used both as transitive and intransitive, e.g.
see, eat, read

## Basic word order

SVO : Subject - Verb - Object
More strict: Swahili, Swedish, English
Less strict: Russian
SOV: Subject - Object - Verb
More strict: Amharic, Tigrinya, Japanese, Persian
Less strict: Somali
VSO: Verb - Subject - Object
Classical Arabic, Berber languages, Celtic languages
VOS: Verb - Object - Subject
Malagassy

## Grammatical functions vs. Semantic roles

The grammatical functions SUBJECT and OBJECT correspond to sEmantic roles. The correspondence between grammatical functions and semantic roles is specific to each verb.
fall subject $=$ theme
The kid fell
walk subject = agent
Grandpa is walking
see $\quad$ subject $=$ experiencer $\quad$ object $=$ theme Lea saw an elephant
eat subject $=$ agent
object $=$ theme
Tom ate a sandwitch

$$
\begin{array}{cl}
\text { enter subject }=\text { agent } & \text { object }=\text { goal } \\
\text { Sue entered the airport terminal } & \\
\text { receive subject }=\text { recipient } & \text { object }=\text { theme } \\
\text { Mike received a letter } &
\end{array}
$$

The grammatical function, such as subject and object, is expressed differently in different languages:

1. by the word order, i.e. the position relative to the verb

Swahili, Colloquial Arabic, English, Swedish
2. by case endings on the nouns / noun phrases

Somali, Classical Arabic, Finnish, Russian, Latin,
3. by prepositions or particles that accompany the nouns / noun phrases Japanese, Swedish, English
4. by affixes on the verb that agree with and indicate the subject and/or object

Swahili
5. by pronouns that co-occur with the verb and indicate the subject and/or object

Somali
fall: $\quad$ SUBJECT $=$ THEME (the 'thing' involved in what happens)
[Stefan] [fell]
buy: $\quad$ SUBJECT = AGENT
OBJECT = THEME
[Stefan] [bought] [ice-cream]
show: $\quad$ SUBJECT = AGENT
OBJECT1 = RECIPIENT
OBJECT2 = THEME
[Stefan] [showed] [the police] [his ID]
OR SUBJECT = AGENT
OBJECT = THEME
to + NounPhrase $=$ RECIPIENT
[Stefan] [showed] [his ID] [to the police]
In Somali the grammatical function is defined by inflectional endings on the noun phrase. Word order also contributes, but is not very reliable.

Defininte article ends in $-u$ if subject, in -a if not subject.

> Gabar-tu waa ay girl-the.SUBJ deacday. del she fell

Waa ay dhacday gabar-tu.
Gabar-tu ayskiriin-ka baa ay soo iibsatay.
girl-the.SUBJ ice-cream-the FOC she PF bought
'The girl bought the ice-cream.'
Ayskiriin-ka baa ay gabar-tu soo iibsatay.
Ayskiriin-ka baa ay soo iibsatay gabar-tu.
Gabar-tu waxa ay soo iibsatay ayskiriin-ka.
Waxa ay gabar-tu soo iibsatay ayskiriin-ka.
Waxa ay soo iibsatay gabar-tu ayskiriin-ka.
Russian has a much richer system of CASES, i.e. endings on nouns that express grammatical functions
How the grammatical functions correspond to the semantic roles depends on the individual verb.

| Form | Masculine | Feminine |  |  | Dominating |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | FUNCTION | Role |
| Nominative | Ivan | dom | Marina | kniga | SUBJECT | AGENT, THEME |
| Accusative | Ivana | dom | Marinu | knigu | DIRECT OBJECT | THEME |
| Dative | Ivanu | domu | Marine | knige | Indirect Object | RECIPIENT |
| Genitive | Ivana | doma | Mariny | knigi | MODIFIER | POSSESSOR |
| Instrumental | Ivanom | domom | Marinoj | knigoj | ADV. OF MANNER | InSTRUMENT |

[^0]
## Marine dal knigu Ivan <br> Knigu dal Marine Ivan <br> Knigu Ivan dal Marine

Marine dal knigu Ivan

Marina kupila Ivanu dom
Marina kupila dom Ivanu
Marina Ivanu kupila dom
Marina dom kupila Ivanu
Dom Marina kupila Ivanu
accusative - direct object - theme
dative - indirect object - recipient
and several other combinations...
'Marina bought a house for Ivan'
and many more options...

Yet other languages work with prepositions or other small particles that accompany the noun phrases in order to tell their grammatical function.

## Persian

ivan ketáb rá be mariná dád. 'Ivan gave the book to Marina'
Ivan book DEF.OBJ to Marina gave
mariná baráye Iván xáne xarid. 'Marina bought a house for Ivan.'
Marina for Ivan house bought

An example
The English My foot hurts corresponds to Swedish Jag har ont i foten (literally 'I have ache in the foot'), Russian $U$ menyá bolít nogá (lit. 'At me the foot/leg hurts'), and Polish Boli mnie stopa (lit. 'The foot hurts me'). In Swedish 'I' seems to be 'in charge', whereas in the other languages 'the foot' is 'in charge'. In Swedish 'the foot' is the place where it happens, whereas in Russin 'I' am the place where it happens.
And in Polish 'I' am being 'affected' by the behviour of the foot, which is not the case in any of the other languages...

## Active and passive sentence structure

Active Clause
Passive Clause
active verb form
SUBJECT = AGENT
OBJECT $=$ THEME
passive verb form
SUBJECT $=$ THEME
by + NounPhrase $=$ AGENT (may be omitted)

Sahra opened the window The window was opened by Sahra grammatical function (syntax)
subject object subject
semantic role
agent
theme
theme

## agent

agent

Two main purposes of the passive:
To put the agent at the end of the clause (for information structure purposes).
To 'hide' the identity of the agent.
Not all languages have a passive, e.g. Somali.
Somali has flexible word order, and the subject can occur at the end of an active clause.
active verb with clause final subject (Somali lacks passive verb forms)
Buug-gan waxa qor-ay saaxiib-kay. book-this FINAL.FOC write-PST friend-my 'This book was written by a FRIEND of mine.'
Somali has an indefinite subject pronoun, that can be used in order to 'hide' the identity of the agent.
active verb with indefinite subject la 'one':
Buug-gan waxa la qor-ay waqti dhow. book-this FINAL.FOC one write-PST time close 'This books was written RECENTLY.'

Therefore, there is really no need for a passive construction in Somali.
On the other hand, Somali has special verb forms to express that there is No agent involved.

Waxa aan fur-ay albaab-ka.
FINAL.FOC I open-PST door-the
'I opened the door.'
Waa la fur-ay albaabka.
DECL one open-PST the.door
'Somebody opened the door. / The door was opened (by somebody).'

Albaab-ku waa uu fur-m-ay. door-THE.SBJ DECL it open-ANT.CAUS-PAST 'The door opened.' (not by anybody, by itself)

This type of verbs are called AnTi-CAUSATIVE. The anti-causative suffix in Somlai is -m-. It is very different from a passive form!!

## Problem 11.1 <br> Word order in Sidama

Sidama is an Afro-Asiatic language in the Cushitic group. It is spoken by approximately 3 million people in southern Ethiopia.

What rules can you give for word order in Sidama?

## sama:go ka:j:ite la?í <br> Samaago Kaajite saw

'Samaago saw Kaajite.'
dangiso n : a ledamo danca ja:la: $\mathbf{t i}$
Dangiso and Ledamo good friend are
'Dangiso and Ledamo are good friends.'

## tini sa:da lowil:a:d:a te

these cows big
are
'These cows are big.'
o:so se bar:u tuk'a hajjitan:o
children her days all washes
'She washes her children every day.'

## wa:re ba:ramo ra di:na ho

Waare Baaramo to enemy is
'Waare is an enemy to Baaramo.'

## ba:ramo lek:ate n:i dajnó

Baaramo foot on came
'Baaramo came on foot.'
kabi:co he:Pran:o man:i fi:t'a? ja: ti
here live people relatives mine are
'The people who live here are my relatives.'
bis:o insera se waj n:i wanfitino
Bisso pot her water with filled
'Bisso filled her pot with water.'
sama:go doda no
Samaago running is
'Samaago is running.'
an:u mini ra e?i wate wa:re ita n:ino
father home to came when Waare eating was
'When his father came home, Waare was eating.'

From: Grover Hudson. 2000. Essential Introductory Linguistics. Oxford: Blackwell. Page 347.

## Problem 11.2

## Word order and roles in Wolaytta

Wolaytta is an Afro-Asiatic language in the Omotic group. It is spoken by approximately 1.6 million people in southern Ethiopia.
a) Gloss all the example sentences as precisely as you can.
b) What rules can you give for word order and grammatical marking of syntactic functions in Wolaytta?

## ta napai ne matf:ijo be?i:s

'My son saw your wife.'

## ne a:wai ta a:jijo be?i:s

'Your father saw my mother.'

## ta matf:iya ne a:jijo mad:a:su

'My wife helped your mother.'

## ta ifai ne ifa: matf:ijo mad:i:s

'My brother helped your brother's wife.'

## ne a:wa: a:wai ne na?a: be2i:s

'Your father's father saw your son.'

## ne na?a: matf:iya ta matf:iyo a:wa: be?a:su

'Your son's wife saw my wife's father.'
From: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics. Problem 173.

## Problem 11.3

## Grammar in Engenni

Engenni is a endangered Niger-Congo language in the Volta-Niger group. It is spoken by just a few thousand people in southern Nigeria.

What grammatical information can you give for Engenni?

## adiðæ næ wu

rich.man the died
'The rich man died.'
edei ðemu næ du eseni
man fat the bought fish
'The fat man bought fish.'

## ade do eseni

Ade stole fish
'Ade stole fish.'

## edei næ aðiðæ

man the rich.man
'The man is a rich.man.'

## edei dori næ ade

man tall the Ade
'The tall man is Ade.'

## ade dorija

Ade tall
'Ade is tall.'
aðiðæ næ ðemuja
rich.man the fat
'The rich man is fat.'

From: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics. Problem 231.

Problem 11.4
'And' in Amharic
English nouns are connected with the conjunction 'and'. How is this expressed in Amharic?

1. mark'os mətt'a

Mark came.
2. aster hedəと

Esther went.
3. irbik'a mətt'ač

Rebecca came.
4. mamo hedo

Mamo went.
5. birhane hedoč

Birhane went.
6. yohannis mott'a

John came.
7. yohannisinna mark'os hedu

John and Mark went.
8. asterinna mamo mott'u

Esther and Mamo came.
9. mamonna mark'os hedu

Mamo and Mark went.
10. birhanenna irbik'a hedu

Birhane and Rebecca went.
11. irbik'anna mamo mark'osim hedu Rebecca, Mamo, and Mark went.
12. mark'osinna yohannis asterim mott'u Mark, John, and Esther came.
13. asterinna mark'os birhanem mamom hedu

Esther, Mark, Birhane, and Mamo went.

From: W. R. Merrifield, C. M. Naish, C. R. Rensch \& G. Story. 1987. Laboratory manual for morphology and syntax. Dallas, Texas: Summer Institute of Linguistics. Problem 289.

## Unit 12. Tense \& Aspect

Tense is not equal to time!
Tense is a grammatical form, expressed by some affixe(s) (=bound morpheme).

| present tense: | work-s | arbeta-r |
| :--- | :--- | :--- |
| past tense: | work-ed | arbeta-de |

Time, on the other hand, is a semantic category, hence part of the meaning. There is no one to one realtion between form (tense) and meaning (time). There is only some general (frequent) relation to between them.

English and Swedish present tense can express both present, past and future time!

Both English and Swedish report about past events in the present tense to make to story more vivid.

Yesterday at breakfast, he walks over to my table and sits down.
This is a so called historical use of the present tense
Both English and Swedish can express future time through the use of the present tense.

Jag kommer med tåget i morgon klockan åtta.
I arrive by train tomorrow at eight.
All languages can express time, but not all languages has tenses. Especially laguages without morphology, or with very little morphology, e.g. Chinese. Then adverbs and particles do the job.

## Tense: Form vs. Construction

If tenses are forms, there is strictly speaking no future tense in English and Swedish, only constructions expressing the future: will arrive, is going to arrive...

But... if we consider both forms and constructions to be tenses, then Sw. and Eng. have a future tense.

Once again... grammatical traditions differ!
The crucial point is do distinguish between

- forms
- constructions


## The Past

English and Swedish have one past tense form + two past (tense) constructions, all of which primarily express past time in different ways.

Tense
PRETERITE: work-ed arbeta-de

## Constructions

| PERFECT | has worked | har arebtat |
| :--- | :--- | :--- |
| PLUPERFECT: | had eaten | hade arebtat |

But... the preterite may express a condition, which can also be related to the future.

If I had enough money, I would travel around the world. Om jag hade tillräckligt med pengar skulle jag resa världen runt.
The perfect may express a future event that is prior to another future event.
When you have paid, you will receive an electronic receipt.
När du har betalat kommer du att få ett elektroniskt kvitto.

## Conjugation = Verb inflection

To conjugate a verb is to list its inflectional forms (and possibly also the constructions). Many languages, but not all, inflect verbs for:

Persons: 1st, 2nd, 3rd;
Numbers: Singular, Plural, Dual;
Genders: Masculine, Feminine, Neutre, Noun Class
Tenses: Past, Present, Future, etc. (distant past, immediate past, today's past, immediate future, distant future...)
Aspects: Perfective, Imperfective, Progressive, Habitual
Moods: Realis (Indicative), Irrealis (Subjunctive, Conditional), Imperative (Prohibitive, Optative)

All the above forms are often referred to as
TAM-forms (abbreviation for Tense/Aspect/Mood-forms), or
Finite verb forms, which are forms inflected for person (automatically including TAM).
Infinite verb forms are

## Infinitive(s) / Deverbal nouns (verbalsubstantiv)

## Participles / Deverbal adjectives

## Auxiliary verbs:

- Temporal auxiliaries,
- Modal auxiliaries


## Problem 12.1

## Tense and aspect in Somali

The following sentences show the full set of tenses and aspects in Somali. How many tenses are there, and how many aspects are there? Why do you think so? Gloss the examples indicating the morphological structure.

Waa ay orodday. 'She ran.'
Waa ay oroddaa. 'She runs.'
Waa uu orday. 'He ran.'
Waa uu ordaa. 'He runs.'
Waa ay ordaysaa. 'She is running.'
Waa ay ordaysay. 'She was running.'
Waa uu ordayaa. 'He is running.'
Waa uu ordayay. 'He was running.'
Waa ay ordi doontaa. 'She will run.'
Waa uu ordi doonaa. 'He will run.'
Waa ay ordi jirtay. 'She used to run.'
Waa uu ordi jiray. 'He used to run.'

## Problem 12.2

## Verb prefixes in Swahili

How would you account for all the verb prefixes in the following Swahili examples? Gloss the examples indicating the morphological structure.

Group the prefixes into different categories that have some semantic trait in common and occur in the same position (slot) before the verb stem. Prepare a table showing the ordering of these groups of prefixes.

NB. Swahili doesn't have a definite article, so all the nouns could equally well be translated with the indefinite article $a$ instead of the definite the. Gloss them without any article.
ninasema 'I speak’
unasema 'you speak'

# anasema 'he speaks' <br> wanasema 'they speak' <br> ninaona 'I see' <br> niliona 'I saw' <br> ninawaona 'I see them' <br> nilikuona 'I saw you' <br> ananiona 'he sees me' <br> utaniona 'you will see me' <br> from Kroeger (2005: 24) 

Mtoto alisoma kitabu. 'The child read the book.'
Mtoto alikisoma. 'The child read it.'
Watoto walisoma vitabu. 'The children read the books.'
Watoto walivisoma. 'The children read them.'
Mtoto alikula ndizi. 'The child ate the banana(s).'
Mtoto aliikula. 'The child ate it.'
Mtoto alizikula. 'The child ate them.'
Mwalimu alipiga mtoto. 'The teacher beat the child.'
Mwalimu alimpiga. 'The teacher beat him/her.'
Walimu walipiga watoto. 'The teachers beat the children.'
Walimu waliwapiga. 'The teachers beat them.'

## Problem 12.3

Gee verb morphology
It's not entirely clear which language this exercise is about, but it seems quite probable that the authors mean the Gen language, one of the Gbe languages of Togo, aslo considered a dialect of Ewe. Gen has appr. a quarter of a million speakers.

How would you account for all the morphemes in the following Gee examples? Gloss the examples indicating the morphological structure. Then group the affixes into different categories that have some semantic trait in common and occur in the same position (slot) relative to the verb stem. Prepare a table showing the ordering of these groups of affixes.

Gee (Togo; Bendor-Samuel and Levinsohn 1986; Roberts 1999, ex. M-4.8)
a bip-fu-ni
b bai- $\int u$-ni
c dos-fu-me
d me?-fu-mi
e bai-te-mi-le?
f bip-pap-ni-do
g dos-fu-ni-risa
h bai-par-me-dupa
i dos-te-mi-risa-le?
$j$ bai-fu-ni-tufi
k me?-te-mi-risa-do-le?
1 bip-te-me-duPa-do
m me?-paP-mi-tufi-le?
'I came'
'I went'
'you (sg) ran’
'they spoke'
'will they go?'
'I am not coming'
'I ran first'
'you (sg) only are going'
'will they run first?'
'I went suddenly'
'will they not speak first?'
'you (sg) only will not come'
'are they suddenly speaking?'
from Kroeger (2005: 18)

## Unit 13. Phrases \& Clauses

Richter, Sections 4.1-4.5

Morphology - How morphemes combine to form words

Syntax - How words combine to form phrases, clauses, sentences (and texts), e.g. word order, or how prepositions are used, or how number forms of nouns are used (e.g. with numerals), etc. etc. etc.

Phrase (fras) - A phrase consists of one or more words Clause (sats) - A clause consists of one or more phrases Sentence (mening) - A sentence consists of one or more clauses Sentences are not directly (only indirectly) made up of words.

## Word classes

are important, since words in different word classes are used in different ways in syntax, i.e. when building larger units than the word: phrases, clauses and sentences.

Subdivisions of word classes are also very relevant: proper nouns, common nouns, countable nouns, uncountable nouns, mass nouns; auxiliary verbs etc.

## Some Common Types of Phrases

Verb Phrases (VP’s): particles + auxiliaries + head/main verb
Many linguists, but not all, also include the rest of the clause in the VP, with the exception of the subject NP. Every clause is then first divided into just one NP + one VP.


This is a good example showing that linguists (and scientists in general) don't always agree with each other on all details.

Noun Phrases (NP's): determiner(s) + modifier(s) + head noun (not necessarily in that order!)
my big house

Preposition Phrases (PP’s): preposition + noun phrase in my big house

Adjective Phrases (AP's): adjective (head word) + modifier(s) tired of this job

Phrases often consist of only one word.
Stephen became tired.
NP VP AP

My friend Stephen <> has become <> tired of his job.
NP VP AP

Noun phrase (NP)
Jane; she; the child; the young student; the children in the garden; the sleeping child

Verb phrase (VP)
works; has been working intensely; woke up; saw the accident

Preposition phrase (PP) - a preposition + a NP
in the garden; in the beautiful garden

Adjective phrase (AdjP) -
beautiful, incredibly beautiful

Adverb phrase (AdvP)
incredibly, very intensely
Testing what is a phrase

- replacement (with e.g. a pronoun)
- movement (changing the word order)

A phrase can usually not be divided, even if there exist examples of the contrary.

Sw./En. preposition phrases, where the preposition can be left at the end of a clause

Russian adjectives can be separated from their head noun In many languages, certain conjuntions can go into the middle of the first phrase och the second clause.

Not all languages have the same types of phrases
Somali doesn't have prepositions phrases, but instead it has sentence particle phrases

| NP | SpP | NP | VP | NP |
| :---: | :---: | :---: | :---: | :---: |
| Naciima $<>$ waxa ay $<>$ buug $<>$ ku soo iibsatay $<>65000$ shilin Focshe book for compl bought |  |  |  |  |
| 'Naeema <> bought <> a book <> for 65000 shillings' |  |  |  |  |
| NP | VP |  |  |  |


'Halima $<>$ bought $<>$ the following things $<>$ at the market'

SpP - Sentence Particle Phrase
FOC - focus on the last Noun Phrase

[^1]
## Varying stuctures between languages

The same meaning can be expressed morphologically in one language syntactically in another language both ways in a third language

| JUXTAPOSITIONSomALI |  | 'the name of the village' magaca tuulada |
| :---: | :---: | :---: |
|  |  |  |
| Arabic | umm Monika |  |
| CASE: GENITIVE |  |  |
| English | Monica's mother |  |
| Russian | mama Moniki |  |
| Slovene |  | ime vasi |
| Norwegian | Monikas mor |  |
| POSSESSIVE DET. |  |  |
| Somali | Monika hooyadeed |  |
| Norwegian | Monika si mor |  |
| CONNECTOR |  |  |
| SWAHILI | mama ya Monika |  |
| Persian | mádar e Monika | nám e rustá |
| English |  | the name of the village |
| Spanish | la madre de Monica |  |
| Norwegian | mora til Monika |  |
| POSS. ADJECTIVE |  |  |
| SLOVENE | Monikina mama |  |

Some languages have very little or no inflectional morphology (e.g. English, Chinese).

Sometimes it is also difficult to draw the exat borderline between morphology and syntax.

It can therefore be practical to talk about morphosyntax instead of morphology \& syntax.

Deep vs. surface structure

## Ex 1

Deep structure:
children (agent, definite) see (verb, past) cat (theme, definite)
Surface structure 1: The children saw the cat.
Surface structure 2: The cat was seen by the children.
Ex 2
Deep structure 1: Man, has an interest: (people,) hunt, lions Deep structure 2: Man, has an interest: lions, hunt, (animals)
Surface structure: He is interested in huntig lions.
structure 1: hunting is the head noun, lions is its direct object He is interested in huntig (lions).
structure 2: lions is the head noun, hunting is its modifier He is interested in (huntig) lions.

## Problem 13.1 - Deep structure

These sentences are (potentially) ambiguous.
Mr Smith is too old to visit.
Herr Smith är för gammal för besök.
Explain the differences in grammatical deep structure that can account for the ambiguity.
From: Richter, Borbála (ed.). 2006. First Steps in Theoretical and Applied Linguistics. Budapest: Bölcsész Konzorcium. Page 60.

## Problem 13.2 - Empty constituents

In the second example, there is an empty slot (Ø) corresponding to a filled slot in the first example.
Do you think that one could argue that this empty slot has a function and conveys a meaning? What would be the deep structure corresponding to this empty slot in the surface structure?

Sue wanted him to leave. Sue wanted Ø to leave.
From: Richter, Borbála (ed.). 2006. First Steps in Theoretical and Applied Linguistics. Budapest: Bölcsész Konzorcium. Page 60.

## Unit 14. Types of Clauses and Sentences

Clause - A minimal syntactic structure that can function as a full sentence.
Usually: one VP + one or more NP's

+ maybe PP's, AP's..., depending on language
Clauses can be independent or dependent.
Independent clauses are also called main clauses.
Dependent clauses are also called subordinate clauses or subclauses.
Känner du den där killen som sitter där borta?
'Do you know that guy who is sitting over there?'
Sentence - A textual unit.
Simple sentence $\quad=$ one independent clause
I am eating. You are playing with your phone.
Compound sentence = two coordinated independent clauses
I am eating and you are playing with your phone.
Joined by a coordinator word / conjuntion
Complex sentence $=$ main/independent clause + subordinate/dependent clause(s)

I am eating while you are playing with your phone.
I am eating since you are playing with your phone.
I am eating even if you are playing with your phone.
I am not eating if you are playing with your phone.
Dependent/subordinate clause introduced by a subordinator word / subjunction
Major/full/regular sentence

- a complete clause

That's great!
Minor/incomplete sentence

- not a complete clause just a phrase


## Sentence Forms

Declarative
Interrogative
Imperative
Exclamative

## Sentence Functions

Statement
Question
Request/Order
Reaction/Feeling

They do not always match.

When are you going to clean your room?
There is no cake left!
might be an order might be a question

Can't you do anything right?
rhetorical questions are reactions/statements

Two types of interrogative sentences:
Content Question or wh-question or Open Question

- you want some content as an answer
the words used begin with wh... + how
What would you like to drink?
Polar Question or yes/no-question - you just want yes/no as an answer Would you like som tea?
Disjunctive questions
- gives alternatives to choose between

Would you like tea or coffee?

| Sentence Content | the action and the roles involved |
| :--- | :--- |
| Sentence Forms | Declarative, Interrogative, Imperative, Exclamative |
| Sentence Functions | Statement, Question, Request/Order, Reaction |
| Sentence Force | the intended effect |

Do you happen to know what time it is?
This sentence is about some person's knowledge about the current time. That's the content.
It has an interrogative form, beginnig with an auxiliary, which makes it a polar question, but the function is rather a request. You do not want the person to anwer yes or no. Instead, you want the person to tell you what time it is, which is then the sentence force.

All languages can of course do all this, but each language has its own ways. The functions are universal, but the syntactic forms of sentences differ a lot between languages.

## Swedish

Declarative: One constituent + Verb + (Subject) + Rest (VERb SECOND) Anders kom sent till jobbet igår. 'Anders came late to work yesterday.' Igår kom Anders sent till jobbet. 'Yesterday Anders came late to work.'

Content Question: Question word + Verb + (Subject) + Rest (VERB SECOND) Varför kom Anders sent till jobbet? 'Why did Anders come late to work?'

Polar Question: $\quad$ Verb + Subject + Rest (Verb initial)
Kom Anders sent till jobbet igår? 'Did Anders come late to work yesterday?'
Imperative:
Verb + Rest (Verb initial)
Kom inte sent till jobbet imorgon! 'Don’t come late to work tomorrow.'

## Somali

Declarative:
(NPs) + Declarative particle + Subject pronoun + Verb $+(N P s)$
Ardaydu waa ay ordayaan. Waa ay ordayaan.
Waa ay ordayaan ardaydu.
'The students are running. They are running.'
Content Question or Open Question:
Q. word + Focus particle + Subj. pro. $+(\mathrm{NPs})+\mathrm{VP}+(\mathrm{NPs})$

Xaggee baa ay u ordayaan ardaydu? Xaggee baa ay u ordayaan?
Xaggee baa ay ardaydu u ordayaan?
Ardaydu xaggee baa ay u ordayaan?
'Where are the students running (to)? Where are they running (to)?'
Polar Question: Q. particle + (Subj. pro.) $+(\mathrm{NPs})+\mathrm{VP}+(\mathrm{NPs})$
Ma (ay) ordayaan (ardaydu)?
'Are the students running?'
Imperative: $\quad(\mathrm{NPs})+\mathrm{VP}+(\mathrm{NPs})$
Orda! U orda iskuulka!
'Run! Run to school!'

## Fronting of question word

Some languages front the question word, some don't.
If not fronted in English and Swedish - special effects are achieved
What did you say? Where are you going? - Real questions
You said WHAT? You are going WHERE? - Reactions (Disbelief)

## Somali

Free variation - for information packaging purposes
Xaggee baa ay ardaydu u ordayaan?
Ardaydu xaggee baa ay u ordayaan?
'Where are the students running (to)?'

Kani waa kuma?
this DECL who
Waa kuma kani?
DECL who this
Kuma weeye kani?
who DECL this
'Who is this?'

In some languages the question word normally stays in the same position as the corresponding answer word. This is the case in Mandarin Chinese.
nǐ shuō shénme?
you say what 'What did you say?'

In other languages the answer word might be fronted, just like the question word.

This is one of the psosibilities in Somali.
Maxaa aad soo iibsatay?
what you bought
Gaari ayaa aan soo iibsaday.
car FOC I bought
But Somali has very flexible word order and it is also possible to give the answer word at the end of the answer.

Waxa aan soo iibsaday gaari.
FOC I bought car
The word order in Somali is not so much dictated by the syntax or grammar, but rather by so called information packaging, i.e., in which order you want to present the words or the information to the listener. You often present it so that you first mention things that are known and then add things that are new. But in order to put enphasis on a word, you might put it in a less expected position.

## Problem 14.1 - Sentence types in Ewe

Ewe is spoken in southern Ghana and Togo by some 7 million people. It is a Niger-Congo language in the Atlantic-Congo subgroup.

How are different sentence types expressed in Ewe? What more can you tell about Ewe grammar?
Gloss the following examples.
atí kókó 'a tall tree’
mó didi 'a long way’
agble lolo 'a big farm'
atí kókó lá 'the tall tree'
mó didi lá 'the long way'
agble lolo lá 'the big farm'
Atí lá kó. ‘The tree is tall.'
Mó lá didi. ‘The way is long.'
Agble lá lolo. 'The farm is big.'
Atí lá kóa? 'Is the tree tall?'
Mó lá didia? 'Is the way long?’
Agble lá loloa? 'Is the farm big?'
Atí lá mékó o. 'The tree isn't tall.'
Mó lá médidi o. 'The way isn’t long.'
Agble lá mélolo o. 'The farm isn't big.'
Atí lá mékj́ oa? ‘Isn’t the tree tall.'
Mó lá médidi oa? 'Isn’t the way long.'
Agble lá mélolo oa? 'Isn't the farm big.'

## Problem 14.2 - Sentence types in Gede'o

Gede'o is spoken in southern Ethiopia by approximately 1 million people. It is an Afro-Asiatic language in the Cushitic subgroup.

How are different sentence types expressed in Gede'o? What more can you tell about Gede'o grammar?
Gloss the following examples.
Isi dageen. 'He came.'
Isi dagee? 'Did he come?'
Isi dageebaan. 'He did not come.'
Isi dageebaa? 'Didn't he come?'
Isi soodo dagan. 'He will come tomorrow.'
Isi soodo daga? 'Will he come tomorrow?'
Ise muuze itteen. 'She ate banana.'
Ise muuze ittee? 'Did she eat banana?'
Ise muuze itteebaan. 'She didn't eat banana.'
Ise muuze itteebaa? 'Didn't she eat banana?'

Looni wiisalloten. 'Looni is a farmer.'
Ise wiisallote? 'Is she a farmer?'
Doori wiisalloken. 'Doori is a farmer.'
Isi wiisalloke? 'Is he a farmer.'
Ise barattoten. 'She is a student.'
Ise barattotebaan. 'She is not a student.'
Ise barattote? 'Is she a student?'
Ise barattotebaa? 'Isn't she a student?'

Isi baraftfisandzoken. 'He is a teacher.'
Isi baratffisandzokebaan. 'He is not a teacher.'
Isi baraftfisandzoke? 'Is he a teacher?'
Isi baraftyisandzokebaa? 'Isn't he a teacher?'

## Unit 15. Writing

## Writing versus Other Symbols

What is the difference between
writing and other systems of symbols?


There are many systems of iconic symbols, e.g.

- roadsigns, washing advice, find your way symbol: toilet, telephone, entrance, exit, elevator etc.
- mathematical symbols, e.g. $1+1=2$
- chemical symbols, e.g. $\mathrm{H}_{2} \mathrm{O}$

Some are more iconic, others are more conventionalized, i.e., more difficult to "figure out".
BUT such symbols do not relate directly to any individual spoken language.

Writing differs from such symbols through its

- direct connection to a specific spoken language,
- heavy conventionaliztion,
- ability to convey a complex message.

The basic unit of writing in a specific writing system is a grapheme.
It may represent

- a word or a morpheme, as in Chinese
in pictographic/logographic writing systems
(or iconic, hieroglyphic)
Such symbols are called logograms
(also our digits are a kind of logograms)
- a sound
in phonographic writing systems


## The oldest writing

Complex question
How do we define writing? Based on the definition, dates may differ.
New archeological findings change the dates.
Were the systems borrowed or independently invented?

Most probably invented in three (or four) independent places
Middle East and Egypt appr. 3200 BC in Mesopotamia and 3000 BC in Egypt
China
Central America
appr. 1500 BC
appr. 1000 BC according to quite recent findings

Early writing (not necessarily the earliest!!)



China


Central America

## How writing developed

Original connection:
a spoken word $\leftarrow \rightarrow$ a meaning $\leftarrow \rightarrow$ a written sign
Later connection:
a spoken word $\leftarrow \rightarrow$ a written sign $\leftarrow \rightarrow$ a meaning
a written sign $\leftrightarrow \rightarrow$ a spoken word $\leftarrow \rightarrow$ a meaning
a written sign $\leftrightarrow \rightarrow$ a spoken word $\leftarrow \rightarrow$ several meanings (homonymous)
Then the meanings need to be disambiguated through the used of additional 'supportive' signs, so called determinatives. This is called the rebus principle.

The iconicity is fading away and the conventionalisation of the signs is increasing.

## Syllabic script



## From logographic to phonographic writing





Grock A／pha


Source：readingtothecore．wordpress．com
Next，symbols that had used to represent whole words came to represent only the initial sound of that word．
Iconicity is pracitically lost and the signs are fully conventionalised．
The number of graphemes is reduces as the level of abstraction incerases．

## Purely Phonemic Consonantal script

The first fully phonographic system，the Phoenician script，was developed in the Middle East around 1500 BC．

The Phoenician script is the historical source of many of today＇s scripts， e．g．Latin，Cyrillic，Arabic，Hebrew．．．

Possible derivation of Brāhmī from the Phoenician script

| Greek | A | B | $\Gamma$ | $\triangle$ |  | E | $\Upsilon$ | Z |  | H |  | $\bigcirc$ | I | K |  | $\Lambda$ | M | N | $\Xi$ | O |  | I | M |  |  | P | $\Sigma$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phoenician | ＊ | $\leq$ | 1 |  |  | ヨ | $Y$ | I |  | 日 |  |  | ₹ | $\lambda$ |  | $L$ | ＂ | 4 | 丰 | $\bigcirc$ |  |  | $r$ |  |  | 4 | W |  | $x$ |
| Aramaic | $\times$ | y | A |  |  | 7 | 7 |  |  | 11 |  |  | 1 | $y$ |  | 6 | \％ | ） | そ | U |  | ） | $\boldsymbol{r}, \mathrm{r}$ |  |  | 4 | $v$ |  |  |
| Brahmi | Y | $\square$ | $\wedge$ | D | 6 | ？ | d | ？ | 「 | ？ | $\bigcirc$ | $\bigcirc$ | 山 | ＋ | d | $\checkmark$ | ૪ | $\perp \mathrm{I}$ | $\uparrow$ | ？ | し | 6 | $\lambda$ | 1 | d | \} | 七 | $\lambda$ | C |

The Brahmi script of India：findings from appr． 300 BC ，but probably much older

The Ge＇ez script（used for today＇s Amharic，Tigrinya etc．）has existed since around 100 AD．
The Arabic script was developed around 400 AD ．

In the Phoenician script only consonants are written, not vowels, almost like in today's Arabic.
This kind of writing system is called an abjad.
In Arabic (from right to left)


## Sحمد mhmd 'Muhammed'

## Diacritic signs

Later, small diacritic signs were sometimes added above, under or at the side of the consonants to indicate vowels.

landan مُحَمَّ ${ }^{\text {مُ }}$ mham ${ }^{\text {mad }}$

The diacritic signs became obligatory in some writing systems, like Amharic, but they are quite seldom used in some other systems, like Arabic.

| 入ЗР3 | London |
| :---: | :---: |
|  | Liverpool |
|  | Nagasaki |

Notice the tiny differences between Amharic /lo/, /li/ and /l/ in the names above! Also notice the similarity in the diacritic sign of /li/ and /ki/. Finally notice the similarity between the /l/ in Amharic, Greek and Cyrillic script (e.g. Russian).

A system with obligatory diacritic signs for vowels is called an abugida, whereas a system where vowels are mostly not indicated is called an abjad.

## Alphabetic or Fully Phonemic script

The first alphabet with signs for all the vowels was developed for Greek around 800 BC .

This was taken to the Italian peninsula by the Etruscans, who developed the Latin alphabet around 700 BC .
The Cyrillic script, used for Russian etc., was developed from the Greek script around 900 AD.
However, for some 50 years before that, another script, called Glagolitic, was invented to write Slavic, but it was surprisingly soon abandoned in favour of the more Greek-like Cyrillic script.

## Types of writing systems

## Logographic

Chinese, Egyptian hieroglyphs

## Syllabic

arbitrary signs for each syllable
Japanese

## Phonemic

Abjad (consonantal)
Abugida (semi-syllabic)
Alphabet (fully phonemic)
(quasi syllabic)

Arabic, Hebrew
Ge'ez, Amharic, Tigrinya
Greek, Latin, Russian, Somali Osmania script

Korean

But languages with a basically alfabetic script have gone through some amount of historical development that has made pronunciation become different from the the writing, and the alphabetic script is then not fully phonemic any more...

## Some of the Scripts used in Africa

| Hieroglyphs | logographic script | Old Egyptian |
| :--- | :--- | :--- |
| Arabic script | phonographic abjad | Arabic |
| Ge'ez scrpit | phonographic abugida | Amharic, Tigrinya etc. |
| Tifinagh script | phonographic abjad | Tuareg etc. <br> (Berber in Libya) <br> Tamazigh etc. <br> (Berber in Morocco) |
|  | phonographic alphabetical | Fulfulde |
| Adlam script <br> https://ff.wikipedia.org/wiki/Fulfulde/adlam |  |  |

Osmania script phonographic alphabetical Somali (1930's \& 1940's)

Latin script $\quad$ phonographic alphabetical $\quad$| the majority of |
| :--- |
| languages in Africa |

## Arabic script



The "upper case" version of the Arabic abjad,
i.e. the forms used word finally

Source: Wikipedia

Geez script


The beginning of the Ge'ez abugida.

Source: Wikipedia

## Tifinagh script



Source: Wikipedia, Created by: Serg!o

## Osmania script

Letters [edit]

| Osmanya | Name | Latin | IPA | Osmanya | Name | Latin | IPA | Osmanya | Name | Latin | IPA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\chi$ | alef | , | [?] | щ | ba | b | [b] | of | ta | t | [ t ] |
| I | ja | J | [ ${ }^{\text {d }}$ ] | M | xa | x | [ ${ }^{\text {] }}$ | $\kappa$ | kha | kh | [ X ] |
| 0 | deel | d | [d] | 7 | ra | r | [r] | 3 | sa | s | [s] |
| Q | shiin | sh | [] | $\zeta$ | dha | dh | [d] | $y$ | cayn | c | [¢] |
| r | ga | g | [g] | 4 | fa | f | [f] | $\mathcal{H}$ | qaaf | q | [q] |
| 4 | kaaf | k | [k] | $\Omega$ | Iaan | 1 | [1] | 5 | miin | m | [m] |
| 2 | nuun | n | [ n ] | Ho | waw, uu | w, uu | [w, ut, u:] | ¢ | ha | h | [h] |
| 8 | ya, ii | y, ii | [j, i., İ] | S | a | a | [æ, a] | $l$ | e | e | [e, $\varepsilon$ ] |
| 9 | i | i | [i, I] | $h$ | 0 | 0 | [ $\mathrm{B}, \mathrm{J}$ ] | $\lambda$ | u | u | [ $\mathrm{H}, \mathrm{u}]$ |
| G | aa | aa | [æ:, a] | U | ee | ee | [e:, e:] | m | 00 | 00 | [ $6:$, 0 ] |

## Numbers [edit]

| Digit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Osmanya | $O$ | $S$ | $\mathcal{E}$ | $\hbar$ | $\delta$ | $\mathcal{Z}$ | $y$ | $J$ | $C$ | $U$ |

Used for Somali in the first half of the 1900's.

Source: Wikipedia.

## Problem 15.1

## Read Amharic script

Try to read the following names in Amharic．All are cities in Europe，with the exception of Nagasaki．

There is a good table on Wikipedia containing all the Amharic graphemes：https：／／en．wikipe－ dia．org／wiki／Amharic
入ろคそ
lə．n．də．n
London
入ñ̈cta
दว่h
li．ßə．r．pu．l Liverpool
na．ga．sa．ki Nagasaki
८
กС․ 3

مС3
03
กी6ロア3
กСの\}
か入 3

## TGの

## えウ入。

## Сロロ

## 几のチ入午

## Problem 15.2

Ngbaka，Kongo，determiners
Ngbaka is a Niger－Congo language in the Savannas group，and it is spoken by around a million people in the Democratic Republic of Congo．
Gloss the data and write down all the grammatical rules that are necessary in order to produce the following phrases．

1．toa kpo＇one house＇
2．toa ke＇this house＇
3．toa ge＇that house＇
4．gã folo kpo＇one big elephant＇
5．folo ge tũ＇that black elephant＇
6．bisĩ gbogbo kpo＇one small lion＇
7．gbogbo ge fẽ＇that white lion＇
8．bisĩ gbogbo ke fẽ＇this small white lion＇
9．gã folo kpo tũ＇one big black elephant＇
from Kroeger（2005：48－49，citing Roberts 1999）．

```
Unit 16. Sociolinguistics: Varieties & Norms
Language varieties
    depending on
    georgraphical region
    age
    gender
    social status
    education
    profession
    religion
    interests
    friends
    family
    formality of the situation
    etc.
```


## Variety

"the language spoken by a group of people who belong to a particular social or cultural group"
"a set of linguistic items with similar social distribution"
All languages have multiple varieties.
Differences in both pronunciation, vocabulary and grammar, i.e. different norms about language usage.

## Variation

Can be observed in linguistic items or variables.
A specific variable may correspond to two or more linguistic items.
The variable could be the pronunciation of Swedish <sj>, and the two most typical items would be [ $[\mathrm{J}]$ and [ G$]$.

## Language vs. Dialect

Dialect: "a geographical variety of a language, spoken in certain areas" "one of several mutually intelligible geographical varieties" layman definition: "a 'provincial' variety that differs from the standard" the standard is then regarded as non-dialectal

We all speak a dialect (= variety) of out mother tongue.

## Langauge:

Abstand / Distance Languages: "languages that are different enough to be mutually unintelligible"
Ausbau / Development Languages: "languges that have developed a recognized standard variety"
Dialect continuum: a chain of dialects where the intelligibility decreases as the distance increases.
e.g. Scandinavian language varieties (i.e. dialects of Danish, Norwegian and Swedish)
e.g. Arabic language varieties (Classic, Modern Standard, Moroccan, Egyptian, Levantine...)
e.g. Turkic language varieties (i.e. Turkish, Azeri, Turkmen, Uzbek, Kasakh, Kirgiz, Uighur...)

The dialect continuum problem: varieties 1, 2, 3, 4 are all mutuall intelligible, as are varieties $2,3,4,5$.
Varieties 1 and 5 are not mutually intelligible, hence: Are the different languages?

Languages (especially development lang.) may emerge at several points of one dialect continuum.

Linguists usually let speakers decide/define themselves what language and/or dialect they speak.

## Isogloss

a 'geographical' border between varieties with respect to one (or more) specific indivdual linguistic item(s)

## Standard Language = Standard Variety

The standard is just another variety. No variety is inherently better than another. But knowing the standard is often crucial for functioning as a member of modern society.
However, due to historical factors (historical accidents), the standard variety
enjoys greater prestige than other varieties of a specific language.
A standard language is first of all a written language.
A standard language is an idealization, it is almost never the natural mother tongue variety of any group.
Usually, people are better at writing it than speaking it.
For some languages, some speakers grow up learning a mother tongue variety in their childhood, that is quite close to the standard, even if not identical.

For some languages, instead, the stadard is quite distant from all the naturally occuring varieties that people learn when growing up. The standard is then only learnt at school. This is so, to defferent degrees, for Arabic, Slovene, Czech...

Not all languages have a standard variety.
Standard varieties change over time, new standard varieties are sometimes born, and some disappear.

Low German used to enjoy the prestigeous position of a standard language, but it doesn't anymore.

A standard variety is typically used by people with
greater political power (influence)
greater social influence (power)
greater economic power (wealth)
higher/better education

It is used in
administration education
mass media
literature (entertainment)

It is defined/described/taught in
dictionaries
grammar books
textbooks

It has a stable form, above all in writing.
It is perceived as
more correct and acceptable than other varieties

## Regional Varieties \& Pluricentric Languages

Standard languages often have "more than one standard", or slight variation within the standard, e.g.
the differences between stadard English in the USA, Canada, Britain, South Africa, Australia, New Zeeland etc., the differences between standard Swedish in Sweden and Finland. also Arabic, German, Spanish, French, Russian, Somali etc. etc.

Such different standard varieties or close-to-standard varieties are often referred to as regional varieties (of the standard language), but of course, also non-standard geographical varieties can be referred to as regional varieties.

Languages with multiple/varying standards are often referred to as pluricentric languages.

## Social varieties $=$ Sociolects

Due to
social stratification of society and
solidarity within social networks and everyday contacts
Some types of social stratifications can be influenced by the individual, others cannot, e.g. rank vs. class.

If the individual's social position can be influenced, the social variety of language plays a more important role.

## Slang \& Jargon

Only about a part of the vocabulary.
Slang: informal vocabulary typical of a certain group of people
Jargon: professional vocabulary typical of a certain professional group

## Contextual variation

Variation within an individual due to different contexts or situations.
One such difference might be the degree of formality or politeness.
Commonly, one and the same person uses slightly different varieties depending on the situation and mix of the different factors that influence the (unconscious) choice of language variety.

## Mulitlingual societies

e.g. Djibouti, at the Gib lake on the Ethiopian border

Let's imagine an Amharic speaker belonging to the quite small Amharic minority in Djibouti


First Language
Amharic
Second languages
Neighbours
Afar
Lingua Franca
Somali
e.g. talking to police, bus drivers, admin etc... or when travelling to the capital

Official language(s)
French
(to a much smaller extent also Arabic)
e.g. in school, mass media, newspapers, books, etc.

## Accents

Accents are different from geographical and social dialects, because they only involve differences in pronunciation.

## Gestures

Strictly speaking gestures are not part of language. They have more in common with traffic signs and other symbols that convey a message. The massage is not dependent on any specific language. The message can be spelled out in any language, and the exact wording may differ.

## Problem 16.1 Serbo-Croatian

A few decades ago, Serbo-Croatian was considered one language with two slightly differing regional forms of a common standard language. The differences were probably not larger than between American, Australian, British, and South African English.

Today, Serbian, Croatian, Bosnian, and more recently also Montenegrinian, are usually considered different languages.

What arguments could you think of in support of each of these opposite standpoints?

## Problem 16.2 <br> Arabic

Is Arabic in Morocco and Arabic in Iraq one and the same language, or different languages?
List arguments in favour of both viewpoints.

## Unit 17. Politeness \& Taboos

Swedish "du"
politeness vs. rudeness: a word - or a smile ?

Unit 18. Summing up \& Review

### 18.1 Bariba syntax

Bariba or Baatonum is a Niger-Congo language.
It is spoken by appr. 0.5 million people in Benin, Nigeria, Togo and Burkina Faso.

Gloss the following examples.
Prepare an alphabetical list of all the glossing labels that you use.
Prepare an alphabetical wordlist with English translations.
State as many facts as possible about Bariba syntax.

1. Sabii 'Sabii'
2. Sabiin kuro 'Sabii's wife'
3. duro 'man'
4. duro wi 'that man'
5. duro boko 'big man'
6. duro win kuro 'that man's wife'
7. duro bokon kuro 'the big man's wife'
8. duro geo wi 'that good man'
9. duro geo win kuro 'that good man's wife'
10. Sabiin kuro geo wi 'that good wife of Sabii's'
11. Sabiin wono geo 'Sabii's good younger brother'

Kroeger (2005: 99-100, citing Roberts 1999)

### 18.2 Agatu syntax

Agatu (or North Idoma) is a Niger-Congo language.
It is spoken by appr. 0.1 million pepople in Nigeria.

Gloss the following examples.
Prepare an alphabetical list of all the glossing labels that you use.
Prepare an alphabetical wordlist with English translations.
State as many facts as possible about Agatu syntax.

1. Oi wa. 'The child came.'
2. Ewo wa ole. 'The dog came to the compound.'
3. Ada wa. 'Father came.'
4. Oi ma ewo. 'The child saw the dog.'
5. Ada goi epa wa. 'The father of the two children came.'
6. Oi ma ewo gada. 'The child saw the father's dog.'
7. Oi ma ewo epa. 'The child saw two dogs.'
8. Ada ma ewo epa goi. 'Father saw the child's two dogs.'
9. Oi ma ole. 'The child saw the compound.'
10. Ada gole ma ehi goi. 'The head of the compound saw the child's pot.'
11. Ewo ma oi gada gole. 'The dog saw the head of the compound's child.'
12. Ewo epa gada gole wa. 'The head of the compounds two dogs came.'

Kroeger (2005: 98-99, citing Roberts 1999)

### 18.3 Ekpeye verb morphology

Ekpeye is a Niger-Congo language.
It is spoken by appr. 30,000 pepople in Nigeria.

Gloss the following examples.
Prepare an alphabetical list of all the glossing labels that you use.
Prepare an alphabetical morpheme list with translations/glossing.
State as many facts as possible about Ekpeye verb morphology.

1. edi 'he will eat'
2. edikpo 'he will finish eating'
3. edile 'he has eaten'
4. eme 'he will make'
5. emegba 'he will make again'
6. adikpole 'we have finished eating'
7. edikpohwo 'he will eventually finish eating'
8. adigbale 'we have eaten again'
9. emekpohwole 'he has eventually finished making'
10. amekpogbale 'we have finished making again'
11. amegbahwo 'we will eventually make again'

Kroeger (2005: 169, citing Roberts 1999)

## Appendix 1. Linguistics overviews

Linguistic Network<br>http://www.linguisticsnetwork.com/tutorials/<br>http://www.linguisticsnetwork.com/an-introduction-to-phonology/<br>http://www.linguisticsnetwork.com/category/tutorials/tutorials-syntax/

## Linguistics on YouTube

There are several quite good series of lectures on linguistics on YouTube. Here are some tips.

Elementary

TrevTutor
https://www.youtube.com/c/Trevtutor/playlists
CrashCourseLinguistics
https://www.youtube.com/playlist?list=PL8dPuuaLjXtP5mp25nStsuDzk2blnc|DW

## AzeLinguistics

https://www.youtube.com/c/AzeLinguistics/playlists

## FingtamLanguages

https://www.youtube.com/c/FingtamLanguages/playlists

NativLang<br>https://www.youtube.com/user/NativLang/playlists

Intermediate
Love Linguage
https://www.youtube.com/channel/UCgPcnblzRYEouc 8ylTkWZQ/playlists
Evan Ashworth
https://www.youtube.com/channel/UC4NHPS-ApMmYuguXTCZGWPw/playlists
Randall Eggert
https://www.youtube.com/channel/UCUg-q09ENTiMSy2FC6mwDqQ/playlists
Advanced

The Virtual Linguistics Campus, Marburg

https://www.youtube.com/c/LinguisticsMarburg/playlists

# Appendix 2. How to do Glossing 

Source: https://www.eva.mpg.de/lingua/resources/glossing-rules.php

## About the rules

The Leipzig Glossing Rules have been developed jointly by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology (Bernard Comrie, Martin Haspelmath) and by the Department of Linguistics of the University of Leipzig (Balthasar Bickel). They consist of ten rules [...] and an appendix with a proposed "lexicon" of abbreviated category labels. [...]

## The rules

(revised version of February 2008)

## Preamble

Interlinear morpheme-by-morpheme glosses give information about the meanings and grammatical properties of individual words and parts of words. Linguists by and large conform to certain notational conventions in glossing, and the main purpose of this document is to make the most widely used conventions explicit.

Depending on the author's purposes and the readers' assumed background knowledge, different degrees of detail will be chosen. The current rules therefore allow some flexibility in various respects, and sometimes alternative options are mentioned.

The main purpose that is assumed here is the presentation of an example in a research paper or book. When an entire corpus is tagged, somewhat different considerations may apply (e.g. one may want to add information about larger units such as words or phrases; the rules here only allow for information about morphemes).

It should also be noted that there are often multiple ways of analyzing the morphological patterns of a language. The glossing conventions do not help linguists in deciding between them, but merely provide standard ways of abbreviating possible descriptions. Moreover, glossing is rarely a complete morphological description, and it should be kept in mind that its purpose is not to state an analysis, but to give some further possibly relevant information on the structure of a text or an example, beyond the idiomatic translation.

A remark on the treatment of glosses in data cited from other sources: Glosses are part of the analysis, not part of the data. When citing an example from a
published source, the gloss may be changed by the author if they prefer different terminology, a different style or a different analysis.

## Rule 1: Word-by-word alignment

Interlinear glosses are left-aligned vertically, word by word, with the example. E.g.
(1) Indonesian (Sneddon 1996:237)
Mereka di Jakarta sekarang.
They in Jakarta now
'They are in Jakarta now.'

## Rule 2: Morpheme-by-morpheme correspondence

Segmentable morphemes are separated by hyphens, both in the example and in the gloss. There must be exactly the same number of hyphens in the example and in the gloss. E.g.
(2) Lezgian (Haspelmath 1993:207)

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| now | ey-OBL-GEN |  | forever | behind |  |

'Now their farm will not stay behind forever.'
Since hyphens and vertical alignment make the text look unusual, authors may want to add another line at the beginning, containing the unmodified text, or resort to the option described in Rule 4 (and especially 4C).
Clitic boundaries are marked by an equals sign, both in the object language and in the gloss.
(3) West Greenlandic (Fortescue 1984:127)
palasi=/u niuirtur=/u
priest=and shopkeeper=and
'both the priest and the shopkeeper'

## Rule 3: Grammatical category labels

Grammatical morphemes are generally rendered by abbreviated grammatical category labels, printed in upper case letters (usually small capitals). A list of standard abbreviations (which are widely known among linguists) is given at the end of this document.

Deviations from these standard abbreviations may of course be necessary in particular cases, e.g. if a category is highly frequent in a language, so that a shorter abbreviation is more convenient, e.g. CPL (instead of COMPL) for "completive", PF (instead of PRF) for "perfect", etc. If a category is very rare, it may be simplest not to abbreviate its label at all.

In many cases, either a category label or a word from the metalanguage is acceptable. Thus, both of
(5) Russian

| My s | Marko | poexa-I-i | avtobus-om | v Peredelkino. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1PL COM | Marko | go-PST-PL | bus-INS | All Peredelkino. |
| we with | Marko | go-PST-PL | bus-by | to Peredelkino. |

'Marko and I went to Perdelkino by bus.'

## Rule 4: One-to-many correspondences

When a single object-language element is rendered by several metalanguage elements (words or abbreviations), these are separated by periods. E.g.
(6) Turkish

## çık-mak

come.out-INF
'to come out'
(7) Latin
insul-
arum
island-GEN.PL
'of the islands'
(8) French

## aux chevaux

to.ART.PL horse.PL
'to the horses'
(9) German

## unser-n Väter-n

our-DAT.PL father.PL-DAT.PL
'to our fathers'
(10) Hittite (Lehmann 1982:211)

```
n=an apedani mehuni essandu.
CONN=him that.DAT.SG time.DAT.SG eat.they.shall
'They shall celebrate him on that date.' (CONN = connective)
```

(11) Jaminjung (Schultze-Berndt 2000:92)
nanggayan guny-bi-yarluga?
who 2DU.A.3SG.P-FUT-poke
'Who do you two want to spear?'

## Rule 5: Person and number labels

Person and number are not separated by a period when they occur in this order. E.g.
(20) Italian

## and-iamo

go-PRS.1PL (not: go-PRS.1.PL)
'we go'

## Rule 6: Non-overt elements

If the morpheme-by-morpheme gloss contains an element that does not correspond to an overt element in the example, it can be enclosed in square brackets. An obvious alternative is to include an overt " $\varnothing$ " in the objectlanguage text, which is separated by a hyphen like an overt element.
(22) Latin

```
puer or: puer-\varnothing
boy[NOM.SG] boy-NOM.SG
'boy' 'boy'
```


## Rule 7: Inherent categories

Inherent, non-overt categories such as gender may be indicated in the gloss, but a special boundary symbol, the round parenthesis, is used. E.g.
(23) Hunzib (van den Berg 1995:46)

```
oz#-di-g xõxe m-uq'e-r
boy-OBL-AD tree(G4) G4-bend-PRET
```

'Because of the boy the tree bent.' (G4 = 4th gender, AD = adessive, PRET = preterite)

## Rule 8: Bipartite elements

Grammatical or lexical elements that consist of two parts which are treated as distinct morphological entities (e.g. bipartite stems such as Lakhota na-x?u 'hear') may be treated in two different ways:
(i) The gloss may simply be repeated:
(24) Lakhota

## na-wíčha-wa-xpu

hear-3PL.UND-1SG.ACT-hear
'I hear them' (UND = undergoer, $\mathrm{ACT}=$ actor)
(i) The gloss may simply be repeated:
(25) Lakhota

## na-wíčha-wa-x?u

hear-3PL.UND-1SG.ACT- STEM
'I hear them'
Circumfixes are "bipartite affixes" and can be treated in the same way, e.g.
(26) German

```
ge-seh-en or: ge-seh-en
PTCP-see-PTCP PTCP-see-CIRC
'seen' 'seen'
```


## Rule 9: Infixes

Infixes are enclosed by angle brackets, and so is the object-language counterpart in the gloss.
(27) Tagalog

## b<um>ili (stem: bili)

<ACTFOC>buy
'buy'
(28) Latin

```
reli<n>qu-ere (stem: reliqu-)
```

leave<PRS>-INF
'to leave'
Infixes are generally easily identifiable as left-peripheral (as in 27) or as rightperipheral (as in 28), and this determines the position of the gloss corresponding to the infix with respect to the gloss of the stem. If the infix is not clearly peripheral, some other basis for linearizing the gloss has to be found.

## Rule 10: Reduplication

Reduplication is treated similarly to affixation, but with a tilde (instead of an ordinary hyphen) connecting the copied element to the stem.
(29) Hebrew

## yerak~rak-im

green~ATT-M.PL
'greenish ones' (ATT= attenuative)
(30) Tagalog

## binbili

IPFV~buy
'is buying'
(31) Tagalog

## b<um>inbili

<ACTFOC>IPFV~buy
'is buying' (ACTFOC = Actor focus)

## List of Standard Glossing Abbreviations

1 first person
2 second person
3 third person
A agent-like argument of canonical transitive verb
ABL ablative
ABS absolutive
ACC accusative
ADJ adjective
ADV adverb(ial)
AGR agreement
ALL allative
ANTIP antipassive
APPL applicative
ART article
AUX auxiliary
BEN benefactive
CAUS causative
CLF classifier
COM comitative
COMP complementizer
COMPL completive
COND conditional
COP copula
CVB converb
DAT dative
DECL declarative
DEF definite
DEM demonstrative
DET determiner
DIST distal
DISTR distributive
DU dual
DUR durative
ERG ergative
EXCL exclusive
F feminine
FOC focus
FUT future
GEN genitive
IMP imperative
INCL inclusive
IND indicative
INDF indefinite
INF infinitive
INS instrumental
INTR intransitive
IPFV imperfective

```
IRR irrealis
LOC locative
M masculine
N neuter
N- non- (e.g. NSG nonsingular, NPST nonpast)
NEG negation, negative
NMLZ nominalizer/nominalization
NOM nominative
OBJ object
OBL oblique
P patient-like argument of canonical transitive verb
PASS passive
PFV perfective
PL plural
POSS possessive
PRED predicative
PRF perfect
PRS present
PROG progressive
PROH prohibitive
PROX proximal/proximate
PST past
PTCP participle
PURP purposive
Q question particle/marker
QUOT quotative
RECP reciprocal
REFL reflexive
REL relative
RES resultative
S single argument of canonical intransitive verb
SBJ subject
SBJV subjunctive
SG singular
TOP topic
TR transitive
VOC vocative
```


## Appendix 3. How to prepare a list of References

Give only the author's last name and year of publication in the text that you are writing.
Make a list of the full titles of all publications that you have referred to. Use this format:

## Books:

Author's last name, first name. Year. Title of book. City: Publisher.
Keenadiid, Yaasiin C. 1976. Qaamuuska af-Soomaaliga. Muqdisho: Akademiyaha Dhaqanka.
Lamberti, Marcello. 1986. Die Somali-Dialekte: Eine vergleichende Untersuchung. Hamburg: Helmut Buske.
Reinisch, Leo. 1903. Die Somali Sprache, Vol. III: Grammatik. Wien: Alfred Hölder. Saeed, John I. 1993. Somali reference grammar. Kensington: Dunwoody Press.

## Articles or chapters in books:

Author's last name, first name. Year. Title of article. In Editor's name (ed.), Title of book, from page-to page. City: Publisher.

Gebert, Lucyna. 1981. La coordinazione. In Annarita Puglielli (ed.), Sintassi della lingua somala, 139-215. Roma: Ministero degli Affari Esteri.
Frascarelli, Mara \& Annarita Puglielli. 2005. The focus system in Cushitic languages: A com-parative-typological analysis. In Pelio Fronzaroli \& Paolo Marrassini (eds.), Proceedings of the 10th meeting of Hamito-Semitic (Afroasiatic) linguistics, 333-358. Firenze: Università di Firenze.

## Articles in journals:

Author's last name, first name. Year. Title of article. Title of journal Issue, from page-to page.

Andrzejewski, Bogumil W. 1969. Some observations on hybrid verbs in Somali. African Language Studies 10, 47-89.
Hyman, Larry M. 1981. Tonal accent in Somali. Studies in African Linguistics 12(2), 169203.

## Web pages and pdf documents:

Author's last name, first name or institution. Year. Title of page/text. Link (Date accessed)
Kotimaisten kielten keskus. 2017. Suomi-somali-sanakirja. http://kaino.kotus.fi/somali/ (2022.08.31)

Nilsson, Morgan. 2022. Beginner's Somali grammar. http://morgannilsson.se/BeginnersSomaliGrammar.pdf (2022.08.31)
WALS. 2022. Language Hausa. https://wals.info/languoid/lect/wals code hau (2022.08.31)
Wikipedia. 2022. Hausa language. https://en.wikipedia.org/wiki/Hausa language (2022.08.31)

For more details, see the Linguistic Society of America's Unified Stylesheet for the List of

## Appendix 4. Dictionaries for African languages

## Electronic dictionaries

## LLACAN

https://corporan.huma-num.fr/Lexiques/dicoLLACAN.php
Bambara-Francais
Beja-Francais-English
Bena-English
Dan -Francais-English
Eton-Francais
Gbaya-Francais
Goo-Francais
Keeraak-Francais
Peul-Francais
Wolof-Francais
Yoruba-Francais
Zaa-Hausa-English
Forthcoming:
Kali'na-Francais
Teko-Francais
Nengee-Francais-English
Kreyol-Francais

Pdf dictionaries
Saho
http://www.sahoarchive.org/dictionaries-wordlists/

## Appendix 5. Suggested Solutions

## 6.1

1. [maskawrəfə] Moscow, Russia
2. [ləndənıŋlənd] London, England
3. [helsıŋkifınlənd] Helsinki, Finland
4. [vi\&nəวstriə] Vienna, Austria
5. [romitali] Rome, Italy
6. [kopənhagənd $\varepsilon$ nmark] Copenhagen, Denmark
7. [azlonorwe] Oslo, Norway
8. [dəblinajrlənd] Dublin, Ireland
9. [brəsəlzb ${ }^{2}$ ldzəm] Brussels, Belgium
10. [barsəlonəspen] Barcelona, Spain
11. [æӨənzgris] or [æpənzgris] Athens, Greece
12. [krakawpolənd] Cracow, Poland
13. [bərlınḑərməni] Berlin, Germany
14. [stakhomswidən] Stockholm, Sweden
15. [budəpesthəŋgəri] Budapest, Hungary
16. [pragtfkkripəblik] Prague, Czech Republic
17. [ḑənivəswitsərlənd] Geneva, Switzerland
18. [æmstərdæmhalənd] Amsterdam, Holland
19. [lizbənportfogel] Lisbon, Portugal
20. [rigalætviə] Riga, Latvia

## 6.2

1. Flower or flour
2. Fill or Phil
3. Tease or teas
4. Read or red
5. Wright or right
6. Seen or scene
7. Gym or Jim
8. For or four
9. Bow or bough
10. No or know
11. Road or rode
12. Whole or hole
13. Sent or scent
14. Pain or pane
15. Brake or break
16. Prince or preens
17. Seed or cede
18. Tract or tracked
19. Taught or taut
20. Great or grate
see: a voiceless alveolar fricative + a high front vowel
gate: a voiced velar stop + a mid front vowel + a voiceless alveolar stop
take: a voiceless alveolar stop + a mid front vowel + a voiceless velar stop
car: a voiceless velar stop + a low back vowel + a retroflex approximant
then: a voiced dental fricative + a mid front vowel + an alveolar nasal
know: an alveolar nasal + a low back vowel + a labial glide
tree: a voiceless alveolar stop + a retroflex approximant + a high front vowel
move: a labial nasal + a high back vowel + a voiced labial fricative
feed: a voiceless labial fricative + a high front vowel + a voiced alveolar stop
lake: a lateral approximant + a mid front vowel + a voiceless velar stop
wool: a labial glide + a high back vowel + a lateral approximant
need: an alveolar nasal + a high front vowel + a voiced alveolar stop
21. top: a voiceless alveolar stop + a low back vowel + a voiceless labial stop
22. thin: a voiceless dental fricative + a high front vowel + an alveolar nasal
23. hat: a glottal fricative + a low front vowel + a voiceless alveolar stop
note: an alveolar nasal + a mid back vowel + a voiceless alveolar stop
run: a retroflex approximant + a mid central vowel + an alveolar nasal
play: a voiceless labial stop + a lateral approximant + a mid front vowel
new: an alveolar nasal + a high back vowel
old: a mid back vowel + a lateral approximant + a voiced alveolar stop
red: a retroflex approximant + a mid front vowel + a voiced alveolar stop
key: a voiceless velar stop + a high front vowel
big: a voiced labial stop + a high front vowel + a voiced velar stop
soon: a voiceless alveolar fricative + a high back vowel + an alveolar nasal
now: an alveolar nasal + a mid back vowel
road: a retroflex approximant + a mid back vowel + a voice alveolar stop

### 7.1 Somali stress

Somali stress is pronounced as a higher tone or pitch on one of the two last vowel positions (moras) of the noun. A long vowel counts as two positions.

Feminine nouns have stress on the last vowel position, e.g.
ardayád 'female student'
askariyád 'female soldier'
bisád 'she-cat'
boqorád 'queen'
gabár 'girl’
inán 'girl'
islaán 'old woman'

| macallimád | 'female teacher' |
| :--- | :--- |
| walaál | 'sister' |
| Masculine nouns have stress on the |  |
| árday | 'male student' |
| askári | 'male soldier' |
| bóqor | 'king' |
| díbi | 'ox' |
| ínan | 'boy' |
| macálin | 'male teacher' |
| wíl | 'boy' |

From this follows that mindí 'knife' is a feminine noun, and that gúri 'house' is a masculine noun.

### 7.2 Progressive forms in Yoruba

The progressive is expressed by a prefix consisting of a nasal consonant that is homorganic (i.e. pronounced with the same organs) with the initial consonant of the verb stem. The nasala consonant in the prefix is always pronounced with a high tone.

### 7.3 Singular and plural forms of Swahili nouns

The singular is expressed by a prefix consisting the vowel [ $u$ ] before a noun stem beginning with a consonant, and $[w]$ before a vowel.
The plural is expressed by a prefix consisting of a homorganic nasal consonant before a noun stem beginning with a consonant, and [ $n$ ] before a vowel.

### 8.1 Word order in Lotuko <br> 1. <br> idulak atulo ema <br> plant man grain <br> 'The man is planting grain.' <br> idulak atulo aful

plant man peanuts
'The man is planting peanuts.'
ohonya eito erizo
eat child meat
'The child is eating meat.'
amata eito aari
drink child water
'The child is drinking water.'
ohonya odwoti aful
eat girl peanuts
'The girl is eating peanuts.'
abak atulo ezok
hit man dog
'The man hit the dog.'
amata odwoti aari
drink girl water
'The girl is drinking water.'
ohonya ezok erizo
eat dog meat
'The dog is eating meat.'
2.

VSO, i.e. verb subject object
3.
abak odwoti eito
hit girl child
'The girl hit the child.'

### 8.2 Sidama verb morphemes

3SF $=3$ rd person singular feminine
3sm $=$ 3rd person singular masculine
PRS = present tense
PST = past tense
ag-anno
drink-PRS.3sm
'he drinks'
ag-i
drink-PST.3SM
'he drank'
mur-i
cut-PST.3SM
'he cut'
mur-tanno
cut-PRS.3SF
'she cuts'
mur-tu
cut-PST.3sF
'she cut'
giir-anno
burn-PRS.3SM
'he burns'
la?-i
see-PST.3SM
'he saw'
lap-anno
see-PRS.3SM
'he sees'
um-anno
dig-PRS.3SM
'he digs'
un-tu
dig-PST.3SF
'she dug'
um-i
dig-PST.3SM
'he dug'
un-tanno
dig-PRS.3SF
'she digs'
fan-tu
open-PST.3sF
'she opened'
fan-i
open-PST.3SM
'he opened'
rum-i
curse-PST.3SM
'he cursed'
run-tu
curse-PST.3SF
'she cursed'
run-tanno
curse-PRS.3SF
'she curses'
rum-anno
curse-PRS.3SM
'he curses'
it-anno
eat-PRS.3SM
'he eats'
it-tu
eat-PST.3SF
'she ate'
3. Do any of the morphemes exhibit allomorphs (different variants)?
rum-/run- 'curse'
um-/un- 'dig'
4.
giir-tu
burn-PST.3SF
'she burned'
it-i
eat-PST.3SM
'he ate'
ag-tanno
drink-PRS.3SF
'she drinks'
fan-anno
open-PRS.3SM
'he opens'

### 8.3 Swahili noun morphemes

1. 

Divide the following Swahili words into the relevant morphs with hyphens.
2.

Work out the meaning and use of each one of the inflectional morphemes and gloss all the exampel words according to the Leipzig glossin rules in Appendix 2.

> m-sichana

SG-girl
'girl'
wa-sichana
PL-girl
'girls'
m-vulana
SG-boy
'boy'
wa-vulana
PL-boy
'boys'
m-toto
SG-child
'child'
wa-toto
PL-child
'children'
m-tu
SG-man
'man'
wa-tu
PL-man
'men'
m-ti

SG-tree
'tree'
mi-ti
PL-tree
'trees'
m-gomba
SG-banana.tree
'banana tree'
mi-gomba
PL-banana.tree
'banana trees'
m-guu
SG-foot
'foot'
mi-guu
PL-foot
'feet'
ki-tu
SG-thing
'thing'
vi-tu
PL-thing
'things'
ki-ti
SG-chair
'chair
vi-ti
PL-chair
'chairs'
ki-tanda
'bed'
vi-tanda
'beds'
If the singular is expressed by the prefix $m-$, then the plural is expressed by the prefix $w a$ - if the word denotes a person, but with the prefix $m i-$ if the word denotes an object.

If the singular is expressed by $k i-$, then the plural is expressed by vi-.
3.
m-toto m-zuri
SG-child SG-good
'a good child'
wa-toto wa-zuri
PL-child PL-good
'good children'
ki-tu ki-zuri
SG-thing SG-good
'a good thing'
vi-tu vi-zuri
PL-thing PL-good
'good things'

### 8.4 Amharic verb morphemes

1. +2 .
i-səbị
PRS.1SG-break.PRS
'I break'
tì-sabir
PRS.2SG-break.PRS
'you (m.) break'
tì-səbir-i
PRS.2SG-break.PRS-F
'you (f.) break'
səbbər-ku
break.PST-PST.1SG
'I broke'
səbbər-k
break.PST-PST.2Sm
'you (m.) broke’
səbbər- $\int$
break.PST-PST.2SF
'you (f.) broke'
2. 

There are two different verb stems, səbir in the present tense, and səbbər in the past tense.
There are also different prefixes and suffixes in the present and past.
4.
dəkkəm-ku
tire.PST-PST.1SG
'I tired'
dəkkəm-k
tire.PST-PST.2SM
'you (m.) tired'
dəkkəm- $\int$
tire.PST-PST.2SF
'you (f.) tired'
і̀-dəkím
PRS.1SG-tire.PRS
'I tire’
tì-dəkim
PRS.2SG-tire.PRS
'you (m.) tire'
tì-dəkim-i
PRS.2SG-tire.PRS-F
'you (f.) tire'

### 9.1 Lyélé

How would you define the form of the definite article in Lyélé?
The defininite form of nouns is marked by vowel length and high tone.
The final vowel of a noun is lengthened and the final part of that long vowel is always high,
kúmí 'bird'
kúmíí 'the bird'
yálá 'millet'

yáláá 'the millet'<br>cèlé 'parrot'<br>cèléé 'the parrot'<br>kùlí 'dog'<br>kùlíí 'the dog'

even if the first part of the same vowel is mid or low.
nà 'foot'
nàà 'the foot'
yijì 'church'
yijií 'the church'
ya 'market'
yaá 'the market'

### 9.2 Kikuyu

1. How many noun classes do we need to establish in order to account for all the nouns in the list?
2. What are the prefixes for the singular and the plural in each of the classes?

Singular mu- / Plural $a$ -

| teacher | murutani | arutani |
| :--- | :--- | :--- |
| elderly person | muduuri | aduuri |
| girl | muiretu | airetu |
| woman | mutumia | atumia |
| parent | mufiari | afiari |
| buyer | muguri | aguri |
| traveler | mugendi | agendi |
| politician | muteti | ateti |

Singular mu- / Plural mi-

| root | muri | miri |
| :--- | :--- | :--- |
| tree | muti | miti |
| lion | muroodi | miroodi |
| gun | mufiinga | mifiinga |
| inattress | muuto | miuto |
| bottle | mufuuba | mifuuba |

Singular gi- / Plural $i-$
comb gifanundi ifanundi
cup gikombe ikombe
yam gikoa ikoa

| tray | gitaruru | itaruru |
| :--- | :--- | :--- |
| muscle | gifoka | ifoka |

Singular ge- / Plural e-
chair geti eti

Singular ki- / Plural $i-$

| crocodile | kijaŋi | ijaŋi |
| :--- | :--- | :--- |
| sugar cane | kigoa | igoa |
| worm | kijgunu | iŋgunu |
| folk song | kibata | ibata |
| flood | kiŋguo | iŋguo |
| steering wheel | kibara | ibara |
| hiding place | kimamo | imamo |

Singular and plural are identical = no prefixes (or zero prefix in both sg. and pl.)

| spider | mbombue | mbombue |
| :--- | :--- | :--- |
| donkey | bunda | bunda |
| cow | yombe | yombe |
| pig | ngurue | ygurue |
| stomach | nda | nda |
| house | numba | numba |
| mole | huko | huko |

Singular $i-/$ Plural ma-

| wave | ikombi | makombi |
| :--- | :--- | :--- |
| foot | ikina | makina |
| tooth | igago | magago |
| banana | irigu | marigu |
| cloud | itu | matu |
| stone | ihiga | mahiga |

These three singular prefixes and their plural counterparts look too similar to be just a coincidence:

> Singular gi- / Plural $i-$
> Singular ge- / Plural $e$ -
> Singular ki- / Plural $i-$

Maybe they constitute one class with different allomorphs. The difference in the singular prefixes is mainly in the voiced $/ \mathrm{g} /$ and voiceless $/ \mathrm{k} /$. The pattern seems to be that voiced $g i$ - is used if the stem starts with a voiceless consonant, and voiceless $k i$ - is used if the stem starts with a voiced consonant. The prefix is then made different from to the stem, or less similar to it. That kind of process is called dissimilation. Also the variation between gi- and ge- might be an instance of dissimilation, since ge- occurs before the only stem where the first (and
only) vowel of the stem is $/ \mathrm{i} /$. Hence the $/ \mathrm{i} /$ in the prefix dissimilates into the articulatorily closest 'neighbour' vowel/e/. One would then also suspect that there is a prefix $k e$ - which is used before a stem that starts with a voiced consonant followed by /i/.

### 9.3 Hausa

1. What is the basic form of the possessive suffixes?
2. What morphophonological rules are applied when these suffixes are added to nouns?

Given the data in the exercise, the simplest explanation seems to be that the possessive suffixes begin with a long consonant: $-k: a,-k: i,-s: a,-t: a,-m: u,-k: u,-s: u$ after a stem that ends with a vowel.

| Pyakka | 'your (m.sg.) sister' |
| :--- | :--- |
| Pyakki | 'your (f.sg.) sister' |
| Pyassa | 'his sister' |
| Pyatta | 'her sister' |
| Pyammu | 'our sister' |
| Pyakku | 'your (pl.) sister' |
| Pyassu | 'their sister' |

If the stem ends with a consonant, however, the initial consonant of the suffix is shortened.
Additionally the stem final consonant $/ \mathrm{n} /$ is assimilated to the $/ \mathrm{m} /$ of the suffix: gidan-m:u > gidan-mu > gidam-mu > gidam:u
gidanka 'your (m.sg.) house'
gidanki 'your (f.sg.) house'
gidansa 'his house'
gidanta 'her house'
gidammu 'our house'
gidanku 'your (pl.) house'
gidansu 'their house'

### 9.4 Kasem

## How would you describe the plural formation in Kasem?

First, sort all the examples based on the four different plural endings. Then find the word there nothing changes in the stem. Those probably represent the simples cases.

Then proced to analyze the different types of changes in the stem and try to find explanations.
The most frequent (and maybe then basic) plural endings seem to be the allomorphs $-i /-I$.

There seems to be two series of vowels: $\boldsymbol{\partial}, \mathbf{u}, \mathbf{i}$ and $\mathbf{a}, \mathbf{v}, \mathbf{i}$, and the form of the suffix seems to be fonologically conditioned by the vowels in the stem, and and hamonize with them.
$-i$ if stem contains $/ \mathrm{\partial}, \mathrm{u}, \mathrm{i} / \quad$ suffix $-I$ if stem contains $/ \mathrm{a}, \mathrm{v}, \mathrm{I} /$.

| fala - fali | fana - fanı |
| :---: | :---: |
| kuə-kui | toa-tor |
| tula - tuli | buda - budi |
| lida - lidi | kada - kadi |
| luə - lui | noa - noi |
|  | kala - kalı |

Next, there seems to be a general loss of a stem final $/ \mathrm{g}, \mathrm{y} /$.

| buga - bui | luya - lỡ |
| :--- | :--- |
| nuga - nui | zơa - zUI |

The suffix merges with the stem vowel if they are identical and adjacent.

```
mia, pl. mi-i > mi kwia, pl. kwi-I > kwi
diga, pl.di-i > di tfiga, pl. tfi-1> fir
jı\mp@code{a, pl. ji-I > jı}
```

If the high vowel of the suffix follows immediately after a low vowel in the stem, they merge into a mid vowel.

$$
/ \mathrm{a} /+/ \mathrm{i} / \text { gives } / \mathrm{e} / \quad / \mathrm{a} /+/ \mathrm{I} />/ \mathrm{E} /
$$

| ləŋコ, pl. lə-i > le | daa, pl . da-ı $>$ d $\boldsymbol{\varepsilon}$ |
| :---: | :---: |
| зәgə, pl. зə-i> ${ }^{\text {e }}$ | yaga, pl. ya-I > ye |
| bəŋŋə, pl. bə-i > be | naga, pl. na-I $>\mathbf{n \varepsilon}$ |
|  | $\boldsymbol{t a n a}$, pl. ta-ı $>$ te |

Finally, if the high front vowel of the suffix follows immediately after a mid back vowel in the stem, they both change: the front vowle becomes mid and the back vowel becomes high, i.e. they shift values for height.
tjona, pl. tyo-i > tfue koga, pl. ko-I $>$ kue
родә, pl. po-i > pue
The two full sets of vowels seem to be $/ \mathrm{i}, \mathrm{e}, ~ \partial, \mathrm{o}, \mathrm{u} /$ versus $/ \mathrm{I}, \varepsilon, \mathrm{a}, \rho, \mathrm{v} /$.

### 10.1 Egyptian Arabic

1. What grammatical rules can you give for Egyptian Arabic?

There seem to be long consonants written as double letters.

The definite article is /il/, but it assimilates to certain consonants, e.g. /as sari:r/
The demonstrative determiner comes after the noun, which at the same time takes the defininte article.

There seems to be gender, at least in the singular, since the demonstratives have the forms:
masc. sing. il walad da 'this boy'
fem. sing. il binti di 'this girl',
plural il Pawla:d do:l 'these children'
Also the adjective follows after the noun it describes, and it also takes the definite article if the noun is definite.

Adjectives have different forms, one with and one without -a, probably differing in gender. It seems probably that the form marked with -a is feminine, paritally because -a is a feminine marker in many languages, but mainly because masculine is more often the unmarked form if only one gender has a suffix.

Also verbs show three gender/number forms:

```
masc. sing. yigi '(he) comes' yihibb '(he) loves'
fem. sing. tigi '(she) comes' tihibb '(she) loves'
plural yigu '(they) come'
```

There is no Arabic verb corresponding to the present tense copula verb 'is, are'.

## 2. Gloss these examples according to the Leipzig glossing rules

(1) il walad da yigi il madrasa

DEF boy this.M.SG comes.M.SG DEF school
'this boy comes to the school'
(2) il binti di tigi il madrasa

DEF girl this.F.SG comes.F.SG DEF school
'this girl comes to the school'
(3) il Pawla:d do:l yigu il madrasa DEF child.PL this.PL comes.PL DEF school 'these children come to the school'
(4) faatima tihibb il walad da

Fatima loves.F.SG DEF boy this.M.SG
'Fatima loves this boy'
(5) hasan yihibb il bintidi

Hassan loves.M.SG DEF girl this.F.SG
'Hassan loves this girl'
(6) is siri:rig gidi:d

DEF bed DEF new.M.SG
'the new bed'
(7) is siri:r gidi:d

DEF bed new.M.SG
'the bed is new'
(8) il Yarabiy:a ig gidi:d-a

DEF car DEF new-F.SG
'the new car'
(9) il Carabiy:a gidi:d-a

DEF car new-F.SG
'the car is new'
(10) di Carabiy:a
this.F.SG car
'this is a car'
(11) il 乌arabiy:a di

DEF car this.F.SG
'this car'
(12) $d a \quad$ siri:r
this.M.SG bed
'this is a bed'
(13) is siri:r da

DEF bed this.M.SG
'this bed'

### 10.2 Swahili

1. What grammatical rules can you give for Swahili based on these sentences?

The adjective follows after the noun it is describing.
The copula doesn't seem to inflect in different forms.
The word for 'useful' differs grammatically from the word 'small'. It is not preceded by the copula ni. A possible reason might be that -nafaa is a verb, not an adjective.
2. Gloss these examples according to the Leipzig glossing rules
$\mathrm{CL}=$ class agreement prefix
(1) ki-su ni ki-dogo
CL.SG-knife COP CL.SG-small
'the knife is small'
(2) ki-su ki-dogo ki-nafaa
CL.SG-knife CL.SG-small CL.SG-is.useful
'the small knife is useful'
(3) $m$-ti $n i \quad m-d o g o$
CL.SG-tree COP CL.SG-small
'the tree is small'
(4) m-ti m-dogo u-nafaa
CL.SG-tree CL.SG-small CL.SG-is.useful 'the small tree is useful'
(5) wa-tu ni wa-dogo
CL.PL-man COP CL.PL-small
'the men are small'
(6) wa-tu wa-dogo wa-nafaa
CL.PL-man CL.PL-small CL.PL-is.useful
'the small men are useful'

### 10.3 Somali

1. What grammatical rules can you give for Somali based on the following examples?

All sentences with an intransitive verb contain the particle waa, whereas all sentences with a transitive verb contain the particle waxa.

All sentences contain a subject pronoun, also when there is a subject noun.
Verbs are inflected for gender. There is an extra /s/ in feminine verb forms.
Verbs also seem to have special inflection (short final /a/) when occuring in a relative clause, as opposed to a main clause (with long /a:/).

## 2. Gloss these examples according to the Leipzig glossing rules

(1) waa ay orday-saa

PRT she run-F
'she is running'
(2) waa uu orday-aa

PRT he run-M
'he is running'
(3) Sahro waa ay orday-saa

Sahra PRT she run-F
'Sarah is running'
(4) Xasan waa uu orday-aa

Hassan PRT he run-m
'Hassan is running'
(5) waxa ay cunay-saa moos

PRT she eat-F banana
'she is eating a banana'
(6) waxa uu cunay-aa moos

PRT he eat-M banana
'he is eating a banana'
(7) Sahro waxa ay cunay-saa moos

Sahra PRT she eat-F banana
'Sarah is eating a banana'
(8) Xasan waxa uu cunay-aa moos

Hassan PRT he eat-m banana
'Hassan is eating a banana'
(9) Sahro waxa ay fiirinay-saa willka

Sahra PRT she watch-F the.boy
'Sarah is watching the boy'
(10) Xasan waxa uu firinay-aa gabarta

Hassan PRT he watch-M the.girl
'Hassan is watching the girl'
(11) Sahro waxa ay fiirinay-saa wiilka orday-a

Sahra PRT she watch-F the.boy run-M.REL
'Sarah is watching the boy that is running'
(12) Xasan waxa uu firirinay-aa gabarta orday-sa

Hassan PRT he watch-M the.girl run-F.REL
'Hassan is watching the girl that is running'
(13) Sahro waxa ay firinay-saa wiilka cunay-a moos

Sahra PRT she watch-F the.boy eat-M.REL banana 'Sarah is watching the boy that is eating a banana'
(14) Xasan waxa uu firinay-aa gabarta cunay-sa moos Hassan PRT he watch-M the.girl eat-F.REL banana 'Hassan is watching the girl that is eating a banana'

The relative word oo is not used in the preceding two sentences, but it occurs in the following two. The difference seems to be between the necessary relative clauses in (13) and (14). Without them it would be difficult to identify the boy and the girl. In (15) and (16) we already know who Sahra and Hassan are, so the relative clauses are not necessary, they only provide additional information that describes the two persons.
(15) Sahro waxa ay fiirinay-saa Xasan oo cunay-a moos

Sahra PRT she watch-F Hassan ReL eat-M.REL banana
'Sarah is watching Hassan, who is eating a banana'
(16) Xasan waxa uu firinay-aa Sahro oo cunay-sa moos Hassan PRT he watch-m Sahra ReL eat-F.REL banana 'Hassan is watching Sarah, who is eating a banana'

## 14.1 - Sentence types in Ewe

There is no indefinite article. There is a defininte article: lá.
Noun phrases have the word order: noun + adjective + def. article
No trace of gender distinctions in nouns.
Adjectives are used as predicates without a copular verb, alternatively the "quality words" are verbs in Ewe, not adjectives. These clauses have the sturcture [NOUN + DEF] ${ }_{\text {SUBJ }}$ [ADJ] $]_{\text {RRED }}$ Hence, word order seems to be S + Predicate (SV).

The negative construction involves two morphemes, the prefix mé-, added to the adjective, and the word $o$, following after the adjective. It might be that the negation itself consists of two morphemes, like in French (ne...pas). It might also be the case that one of the morphemes is the copula, and the other is the negation, and that the copula is not used in positive clauses, only in negative ones, like in Somali.

The question suffix $-a$ goes after the adjective + negation. It is attached to the last of the two.
For some unknown reason, the adjective 'tall' has a longer and a shorter variant form or allomorphs, kj́ vs. kj́kj́.
atí kókó
tree tall
'a tall tree'
mó didi
way long
'a long way’
agble lolo
farm big
'a big farm'
atí kókó lá
tree tall DEF
'the tall tree'
mó didi lá
way long DEF
'the long way'
agble lolo lá
farm big DEF
'the big farm'
Atí lá kó.
Tree DEF tall
'The tree is tall.'
Mó lá didi
Way def long
'The way is long.'
Agble lá lolo.
Farm DEF big
'The farm is big.'
Atí lá kó-a?
Tree DEF tall-Q
'Is the tree tall?'
Mó lá didi-a?
Way def long-Q
'Is the way long?'
Agble lá lolo-a?
Farm DEF big-Q
'Is the farm big?'
Atí lá mékó o.
Tree DEF NEG-tall NEG
'The tree isn't tall.'
Mó lá médidi o.
Way DEF NEG-long NEG
'The way isn't long.'
Agble lá mélolo o.
Farm DEF NEG-big NEG
'The farm isn't big.'
Atí lá méḱs o-a?

## Tree DEF NEG-tall NEG-Q

'Isn't the tree tall.'
Mó lá médidi o-a?
Way DEF NEG-long NEG-Q
'Isn't the way long.'
Agble lá mélolo o-a?
Farm DEF NEG-big NEG-Q
'Isn't the farm big.'

## 14.2 - Sentence types in Gede'o

$3 \mathrm{SF}=3 \mathrm{rd}$ person singular, feminine
$3 \mathrm{SM}=3 \mathrm{rd}$ person singular, masculine
AFF $=$ affirmative (form/clause)
$\mathrm{COP}=$ copula $($ copular verb $)$
FUT $=$ future (tense)
NEG $=$ negation, negative (form, clause)
PRS $=$ present (tense)
PST = past (tense)
$\mathrm{Q}=$ question (marker/particle)
Isi dag-ee-n.
3SM come-PST-AFF
'He came.'
Isi dag-ee- $\varnothing$ ?
3SM come-PST-Q
'Did he come?'

Isi dag-ee-baa-n.
3SM come-PST-NEG-AFF
'He did not come.'
Isi dag-ee-baa- $\emptyset$ ?
3SM come-PST-NEG-Q
'Didn't he come?'
Isi soodo dag-a-n.
3SM tomorrow come-FUT-AFF
'He will come tomorrow.'

Isi soodo dag-a-Ø?
3SM tomorrow come-FUT-Q
'Will he come tomorrow?'
Ise muuze itt-ee-n.

3sF banana eat-PST-AFF
'She ate banana.'
Ise muuze itt-ee-Ø?
3SF banana eat-PST-Q
'Did she eat banana?'

Ise muuze itt-ee-baa-n.
3SF banana eat-PST-NEG-AFF
'She didn't eat banana.'
Ise muuze ittee-baa- $\varnothing$ ?
3SF banana eat-PST-NEG-Q
'Didn't she eat banana?'

Looni wiisallo-te-n.
Looni farmer-COP.PRS.3SF-AFF
'Looni is a farmer.'
Ise wiisallo-te- $\varnothing$ ?
3SF farmer-COP.PRS.3SF-Q
'Is she a farmer?'
Doori wiisallo-ke-n.
Doori farmer-COP.PRS.3SM-AFF
'Doori is a farmer.'
Isi wiisallo-ke- $\varnothing$ ?
3SM farmer-COP.PRS.3SM-Q
'Is he a farmer?'
Ise baratto-te-n.
3SF student-COP.PRS.3SF-AFF
'She is a student.'

Ise baratto-te-baa-n.
3SF student-COP.PRS.3SF-NEG-AFF
'She is not a student.'
Ise baratto-te-Ø?
3SF student-COP.PRS.3SF-Q
'Is she a student?'
Ise baratto-te-baa- $\varnothing$ ?
3sF student-COP.PRS.3SF-NEG-Q
'Isn't she a student?'
Isi baratffisandzo-ke-n.
3sm teacher-COP.PRS.3SM-AFF
'He is a teacher.'
Isi barafffisandzo-ke-baa-n.
3SM teacher-COP.PRS.3SM-NEG-AFF
'He is not a teacher.'

Isi baraffisandzo-ke-Ø?
3SM teacher-COP.PRS.3SM-Q
'Is he a teacher?'
Isi baratfifisandzo-ke-baa- $\varnothing$ ?
3SM teacher-COP.PRS.3SM-NEG-Q
'Isn't he a teacher?'

Declarative clauses are marked by the suffix - n clause finally.
Questions are unmarked, i.e. not marked by any particluar morpheme, hence the zero morpheme in the glossed examples.

Negation is marked through the suffix -baa.
Verbs are marked for tense.
The order of the verb suffixes is: tense, negation, declarative.
There seems to be a copula that is attached as a suffix to the predicate noun, but it might also be that this suffix is only a gender marker on nouns, and that this language does not use a present tense copular verb.

3rd person singular personal pronouns as well as the copula suffix distinguish between masculine (isi, $k e$ ) and feminine (ise, te) gender. Nouns, however, seem not to distinguish between the genders, but to be used in the same form for both males and females.


[^0]:    Ivan dal Marine knigu nominative - subject - agent
    'Ivan gave the book to Marina'
    Ivan dal Marine knigu

[^1]:    COMPL - Completed action

