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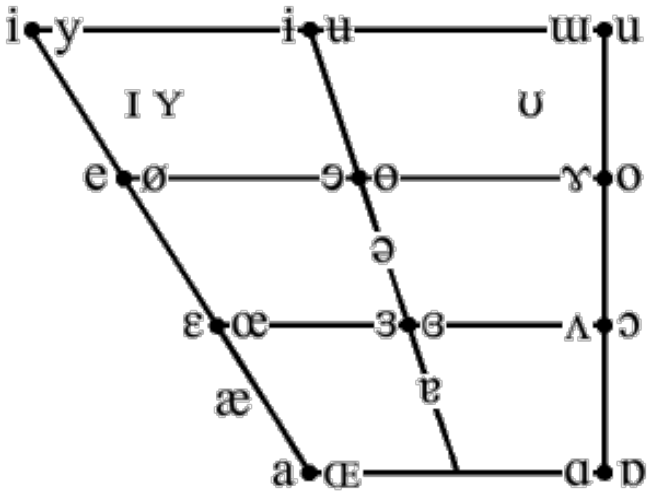
**Linguistic Diversity**
**WiSe 22/23**
**Exam I 17-02-2023 10.15-11.45**

There are 9 questions in total. Please write as clearly as possible!

1. Which of the following is **a claim based on typological classification**, rather than other types of classification/study? State for each claim **why** it is / is not a typological claim.
    a. The major non-Germanic languages of Germany are from the Turkic, Semitic, and Slavic language families.
    b. If a language has a tense system, it is most likely to distinguish both past and future from the present.
    c. Mandarin Chinese is the most widely spoken language of the world, with over 1.8 billion speakers.
    d. Dutch and German have a cognate diminutive suffix; in Dutch pronounced /-*jə*/; in German pronounced /-*çən*/.
    e. All spoken languages have vowels.
    f. Word order universals, such as 'if a language has SOV word order, it also has postpositions' have been explained in terms of consistent head-dependent order across phrases, which is beneficial for processing.

2. **Phonological typology**. On the final pages of this exam are a list of words and sentences in Fwe, a Bantu language spoken in Botswana. Use both part (A) and (B).
    a. Fwe has more than one phoneme that is **rare cross-linguistically** (appears in 5% or less of the world's languages). Which are these?
    b. Describe Fwe's **vowel inventory** using the terms ‘symmetry’, ‘periphery’ and ‘contrast’. Use the IPA vowel chart as given below.
    c. What type of **syllable structure** does Fwe have (simple, moderately complex, complex)? Present evidence for your answer.



3. **Morphological typology.** Below are four sentences in Yagua and and four sentences in Halkomelem. Describe both languages in terms of their **synthesis and fusion** (as interpreted by Bickel & Nichols 2005, 2007). Be explicit regarding your reasoning and give examples.

**text in Yagua**:

1. *Dííy rabeejérya trámpa jidyéy rácąątąąsa.*
   *dííy ray-baay-jáy-rà trámpa jidyéy rá-cąą-tąąsa*
   there 1SG-put-PROX2-INAN net afternoon INAN-division-middle
   'There I put the net in the afternoon in the middle (of the stream, yesterday).'

2. *Rayąąsiy jííta ránaachǫǫ.*
   *ray-jiya-jásiy jííta rá-naachǫǫ*
   1SG-go-PROX1 JITTA INAN-towards
   'I went towards it.'

3. *Rįįtachéésiy jííta rúúva.*
   *ray-jitay-siy-jásiy jííta riy-úva*
   1SG-say-DEPART-PROX1 JITTA 3PL-DAT
   'I said to them upon leaving:'

4. *"Trámpa rąą junúudyįįy"*
   *trámpa ray-ą junúu-dííy*
   trap 1SG-IRR see-PRIORATIVE
   ' "The trap I'm going to see first." '

**collection of sentences in Halkomelem**:

1. *ni? qʷəl-əłc-ɵamš-əs ʔə kʷɵə sce:łtən.*
   AUX bake-BEN-TR:1OBJ-3ERG OBL DET salmon
   'He baked the salmon for me'.

2. *ni? kʷələš-ɵət kʷɵə swəyqeʔ.*
   AUX s hoot-TR:REF DET man
   'The man shot himself '.

3. *ni? cən tᵊəxʷ-šén-əm.*
   AUX 1SBJ wash-foot-INTR
   'I washed my feet'.

4. *Waʔ-khe-taʔnar-atyaʔt-hahɵ.*
   PST-1SG/3OBJ.FEM-bread-buy-APPL:PUNC
   'I bought her some bread'.

4. **Word classes.**
    a. Assign each word of the excerpt below to one of the following word classes: nouns, pronouns, verbs, adjectives, adverbs, articles, adpositions, numerals, auxiliary verbs, conjunctions, interjections.
    b. Two words that appear twice (*book*, *like*) belong to different word classes in each of their usages. What word classes do the two instances of *book* and the two instance of *like* belong to, and how can you tell?

*A: Since Alex likes fast cars, we ought to book her a day on the circuit for her birthday.*
*B: Oh, yeah! Or like a book about Ferrari, that would be a lot less effort.*

5. **Word order universals**. In class, we have discussed the **Greenbergian word order correlations**, especially making reference to an overview by Haspelmath (2005) printed below. Below is a set of phrases and sentences in Iraqw.
    a. Determine **as many possible word orders** as you can in the Iraqw data.
    b. Determine **as many possible word orders** as you can in the Fwe data (see the end of the exam, use part (B)).
    c. **Do the word orders correlate for each language,** i.e. do all word orders you can identify fall in the 'VO correlate' or in the 'OV correlate' column of Haspelmath's table below? If not, what could be reasons why the word order correlations do not hold up? Answer separately for Iraqw and Fwe.

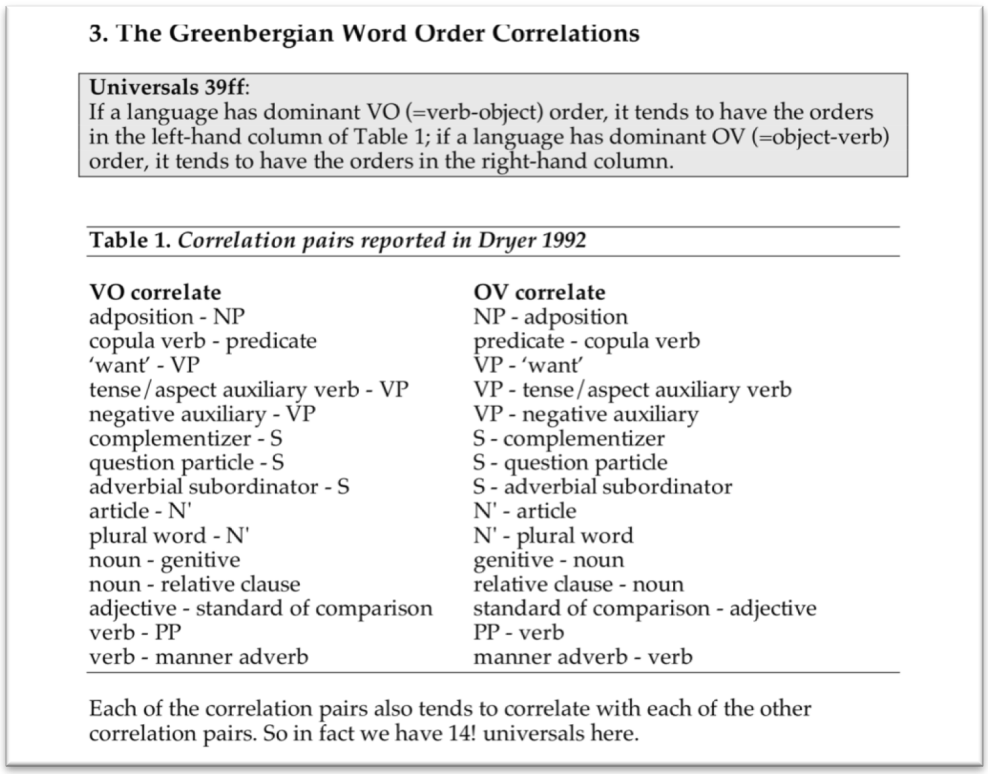
1. *dóo* *úr* *gwa* *tleehh-ii-ká*
   house:CON big:M O.3:O.M:PREF build-INF:PAST-NEG
   'He didn't build a big house.'

2. *tsaxwel-ú* *daangw*
   trap-LNK elephant
   'elephant trap'

3. *inós* *i* *bará* *qaymo*
   s/he BE in field
   'S/he is in the field.'

4. *kitangw* *nee* *mesa* *i* *gwarangwarimit-iyá'* *asmá* *kunseeli*
   chair and table BE shake-PL because earthquake
   'The chair and the table shake because of the earthquake.'

5. *ma/andu-dá-dá'* *naa* *aní* *hanís* *i* *tsuu'*
   fruits:M-DEM4-DEM4 HIT:PAST1.SG:DIR 1.SG give:2.SG BE be:nice:3.SG.F
   'The fruits that you gave me are nice.'



**3. The Greenbergian Word Order Correlations**

**Universals 39ff**:
If a language has dominant VO (=verb-object) order, it tends to have the orders in the left-hand column of Table 1; if a language has dominant OV (=object-verb) order, it tends to have the orders in the right-hand column.

**Table 1.** ***Correlation pairs reported in Dryer 1992***

| VO correlate | OV correlate |
|---|---|
| adposition - NP | NP - adposition |
| copula verb - predicate | predicate - copula verb |
| 'want' - VP | VP - 'want' |
| tense/aspect auxiliary verb - VP | VP - tense/aspect auxiliary verb |
| negative auxiliary - VP | VP - negative auxiliary |
| complementizer - S | S - complementizer |
| question particle - S | S - question particle |
| adverbial subordinator - S | S - adverbial subordinator |
| article - N' | N' - article |
| plural word - N' | N' - plural word |
| noun - genitive | genitive - noun |
| noun - relative clause | relative clause - noun |
| adjective - standard of comparison | standard of comparison - adjective |
| verb - PP | PP - verb |
| verb - manner adverb | manner adverb - verb |

Each of the correlation pairs also tends to correlate with each of the other correlation pairs. So in fact we have 14! universals here.

6. **Nominal categories**. This question again uses the dataset on Fwe at the end of the exam. Fwe has overt gender, meaning that the gender of nouns is indicated by prefixes on the nouns (as well as on various targets). On the basis of the material in part (A), determine:
    a. the genders that are distinguished in the singular and plural
    b. how these combine to form singular-plural pairings
    c. any semantic basis for these genders

7. **Verbal categories**. In Velupillai (2012), we find the following examples used when talking about the difference between tense and aspect:

   *He coughed (once) vs. He was coughing (repeatedly or over a period of time)*
   *He will cough (once) vs. He will be coughing (repeatedly or over a period of time)*

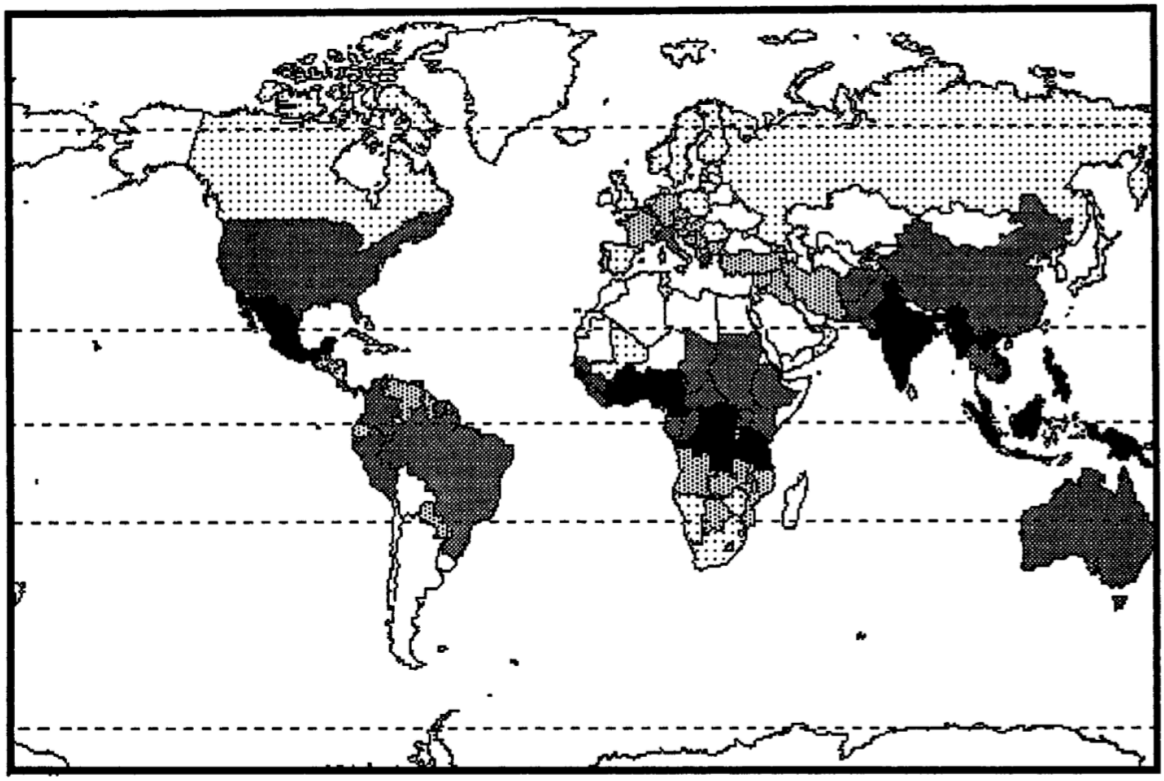
   Describe the difference between tense and aspect using these sentences. Draw the time lines for each of the sentences and discuss what differentiates tense from aspect and vice versa.

8. **Clausal syntax.** Find below a set of sentences in Cashinahua, a Panoan language of Peru. How are **grammatical relations** marked in this language? Through case marking (dependent marking), person/number/gender agreement on the verb (head marking), constituent order, or some combination of those three? Be sure to indicate how you reached your conclusions (refer to examples):

**Cashinahua (Panoan, Peru)**

| | | |
|---|---|---|
| 1. | ĩ bɨtsã tsakakĩ. | 'My brother shoots it.' |
| 2. | ĩ bɨtsã isu haida tsakakĩ. | 'My brother shoots many spider monkeys.' |
| 3. | ĩ bɨtsã piawĩ isu tsakakĩ. | 'My brother shoots spider monkey with arrows.' |
| 4. | ĩ isu tsakai kaʂũ. | 'I went shooting spider monkey.' |
| 5. | ĩ kuka isu tsakai kanũ. | 'My father-in-law will shoot spider monkey.' |
| 6. | Mĩ kaʂũ. | 'You went.' |
| 7. | Miarã ĩ ũĩʂũ. | 'I saw you.' |
| 8. | Ɨarã ĩ bɨtsã ũĩkĩ. | 'My brother sees me.' |
| 9. | Hasĩ ĩ bɨtsa ũĩkĩ. | 'A wild turkey sees my brother.' |
| 10. | ĩ bɨtsã hasĩ ũĩkĩ. | 'My brother sees wild turkey.' |

9. **Explanations of linguistic diversity.** Below, one of the maps from Nettle's (1998) paper 'Explaining Global Patterns of Language Diversity' is given.
    a. Use the map to give a short summary of Nettle's (1998) main idea, methods, and conclusion.
    b. The map suggests a relation between linguistic and biological diversity. Does such a link exist? Why/why not?



**MAP 1.** Map of the world showing the relative language diversity of the major countries. This is calculated by regressing the logarithm of the number of languages spoken in the country (Source: Grimes 1993) against the logarithm of the area of the country, and shading each country according to the standardised residual. The shading sheme is as follows: White (least diversity), $zres < -0.5$; Light dooting, $-0.5 < zres < 0$; Heavy hathcing: $0 < zres < 0.75$: Black (most diversity): $zres > 0.75$.

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**Data on Fwe**. The following list of words and sentences is from Fwe, a Bantu language spoken in Botswana. Note that m- and n- are allomorphs.

(A)

mù-ntù ‘person’
mù-àmbì ‘speaker’
bà-ntù ‘people’
bà-àmbì ‘speakers’
ba-ánce 'children'
mù-bìrì ‘body’
mw-îngà ‘thorn’
mù-mè ‘dew’
mù-rízìngè ‘ivy’
mw-êzì ‘moon, month’
mì-bìrì ‘bodies’
mì-îngà ‘thorns’
Ø-sèsì ‘bullfrog’
Ø-nôkà ‘hip’
Ø-nshwê ‘breast’
mà-sèsì ‘bullfrogs’
mà-nôkà ‘hips’
má-tà ‘bows’
má-twì ‘ears’
mà-ùrù ‘legs’
cì-bâtà ‘scar’
cì-ᵑǀûshù ‘sore’
cì-fwìnsò ‘stopper’
cì-shá!mátwà ‘kind of illness (involving nausea)’
zì-bâtà ‘scars’
zì-fwìnsò ‘stoppers’
m-búfù ‘bream (a kind of fish)’
n-gù ‘sheep’
m-pâmpà ‘forked stick’
n-cùpà ‘whip’
m-búfù ‘breams’
m-pâmpà ‘forked sticks’
n-cùpà ‘whips’
n-kânì ‘jaws’
n-shôshò ‘shinbones’
rù-kânì ‘jaw’
rù-shôshò ‘shinbone’
rú-ᵑǀáᵑǀà ‘sedge-leaf (*Kylinga alba*), kind of long grass’
kà-cíyó!cíyò ‘chick’
kà-nàmánì 'calf'
ká-!nénsà 'pink, little toe'
tù-cíyó!cíyò ‘chicks’
bú-tà ‘bow’
kú-twì ‘ear’
kù-ùrù ‘leg’

(B)

1. òmùrìrò ùtùmbúkà
   o-mu-riro u-tuH mbuk-á
   AUG-NP3-fire SM3-burn-FV
   ‘The fire burns.’

2. ndìrìs’ ó!mwáncè nkôkò
   ndi-riH -is-á o-mu-ánce N-kóko
   SM.1SG-eat-CAUS-FV AUG-NP1-child NP9-porridge
   ‘I feed the child porridge.’

3. nàdàmwá !kúbàntù bângî:
   na-dam-w-á kú-ba-ntu bá-ngí:
   SM1.PST-beat-PASS-FV NP17-NP2-person PP2-many
   ‘S/he was beaten by many people.’

4. bàntú bàrôtù
   ba-ntú ba-rótu
   NP2-person NP2-beautiful
   ‘beautiful people’

5. òzyú mùntù àbá bàntù
   o-zyú mu-ntu a-bá ba-ntu
   AUG-DEM.I1 NP1-person AUG-DEM.I2 NP2-person
   ‘this person’ 'these people'

6. mìnwè yómwânce
   mi-nwe i-ó= mu-ánce
   NP4-finger PP4-con= NP1-child
   ‘the fingers of the child’

7. àbàntw’ ábò báhùpúrè
   a-ba-ntú a-bo bá-hupur-é
   AUG-NP2-person AUG-DEM.III$_2$ SM2.REL-think-PFV.SBJV
   ‘people who should think’