Twelfth International Olympiad in Linguistics

Beijing (China), 21–25 July 2014

Individual Contest Problems

Do not copy the statements of the problems. Write down your solution to each problem on a separate sheet or sheets. On each sheet indicate the number of the problem, the number of your seat and your surname. Otherwise your work may be mislaid or misattributed.

Your answers must be well-supported by argument. Even a perfectly correct answer will be given a low score unless accompanied by an explanation.

Problem #1 (20 points). Here are some verb forms of Benabena and their English translations:

nohobe	I am striking him
kahalune	we will strike you$_{sg}$
nokoho'ibe	we both are striking you$_{sg}$
nolenufu'inagihe	because we both are piercing you$_{pl}$
nolifi'ibe	you both are piercing us
nofunagihe	because I am piercing him
nofine	you$_{sg}$ are piercing him
nifila'ibe	you both will pierce me
nonahatagihe	because you$_{sg}$ are striking me
lenahalube	I will strike you$_{pl}$
nahalanagihe	because you$_{pl}$ will strike me
lahala'ibe	you both will strike us
nofutagihe	because we are piercing him
lenifilu'ibe	we both will pierce you$_{pl}$
noho'inagihe	because we both are striking him

(a) Translate into English:

nonifibe, halu'ibe, lifilatagihe, nokufune, nolahanagihe.

(b) Translate into Benabena:

- you both are striking him;
- we will pierce you$_{sg}$;
- because we are striking you$_{pl}$;
- because you$_{pl}$ will pierce him.

⚠ The Benabena language belongs to the Trans-New Guinea family. It is spoken by approx. 45,000 people in Papua New Guinea. —*Ivan Derzhanski*

Problem #2 (20 points). Here are the singular, dual and plural forms of some Kiowa nouns and their English translations. Not all forms are given, although all exist.

| singular	dual	plural	
adɔ	**a**	**a**	tree
matʰɔnsjan	**matʰɔnsjan**	**matʰɔnsjadɔ**	little girl
k'ɔ	**k'ɔ**	**k'ɔgɔ**	knife
tʰot'olagɔ	**tʰot'ola**	**tʰot'olagɔ**	orange
aufi		**aufigɔ**	fish
pʰjaboadɔ		**pʰjaboa**	street lamp
matʰɔn		**matʰɔdɔ**	girl
k'ɔnbohodɔ		**k'ɔnbohon**	hat
t'ɔ		**t'ɔgɔ**	spoon
		e	bread
alɔsɔhjegɔ	?	**alɔsɔhjegɔ**	plum
?	**tsegun**	**tsegudɔ**	dog
alɔguk'ogɔ	**alɔguk'o**	?	lemon
?	**k'apʰtʰɔ**	**k'apʰtʰɔgɔ**	old man
kʰɔdɔ	**kʰɔ**	?	blanket
k'ɔdɔ	?	**k'ɔdɔ**	tomato
?	**alɔ**	?	apple
?	**pʰɔ**	?	bison
?	?	**sadɔ**	child
ɔlsun	?	?	comb
?	**pitso**	?	fork
?	**tʰɔpʰpaa**	?	chair

Fill in the cells with the question marks.

⚠ The Kiowa language belongs to the Kiowa–Tanoan family. It is an endangered language, only spoken by a few hundred people in Oklahoma, USA.

The Kiowa words are given in a simplified transcription. **k', t', p', kʰ, pʰ, tʰ** are consonants; **ɔ** is a vowel. —*Aleksejs Peguševs*

Problem #3 (20 points). Once upon a time in the Tangut Empire ("the Great State of the White and the Lofty") there lived two brothers and two sisters. They each had a son and a daughter.

($\triangle$ = man, $\bigcirc$ = woman)
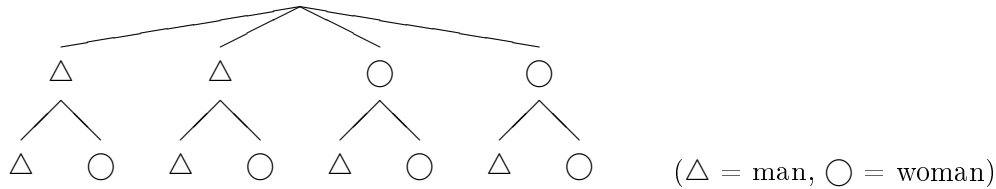
Below you see statements in the Tangut language concerning the relations between these people. The name **Lhie²nyn²** belongs to a man.

1. **Ldiu²śe¹ Nie²tsẹ¹ 'yn¹ kậj¹ ngu².**
2. **Lhie²nyn² Ngwi¹mbyn² 'yn¹ lio² ngu².**
3. **Sei¹na¹ Wa²nie¹ 'yn¹ ndọn¹ ngu².**
4. **Ldiu²śe¹ Śan¹nia¹ 'yn¹ ndọn¹ ngu².**
5. **Śan¹nia¹ Syn¹mei¹ 'yn¹ źwẹj¹ ngu².**
6. **Ldiu²śe¹ Syn¹mei¹ 'yn¹ źwẹj¹ ngu².**
7. **Ldiu²śe¹ Wa²nie¹ 'yn¹ źwẹj¹ ngu².**
8. **Kẹi¹źey² Ldiu²śe¹ 'yn¹ źwẹj¹ ngu².**
9. **Ldiu²śe¹ Kẹi¹źey² 'yn¹ źwẹj¹ ngu².**
10. **Lhie²nyn² Syn¹mei¹ 'yn¹ wia¹ ngu².**
11. **Lhie²nyn² Sie¹tsie¹ 'yn¹ 'iə¹ ngu².**
12. **Kẹi¹źey² Wa²nie¹ 'yn¹ lio² ngu².**
13. **Kẹi¹źey² Sie¹tsie¹ 'yn¹ źwẹj¹ ngu².**
14. **Lhie²nyn² Kẹi¹źey² 'yn¹ wiej² ngu².**
15. **Syn¹mei¹ Nie²tsẹ¹ 'yn¹ źwẹj¹ ngu².**
16. **Ngon²ngwe¹ Mbe²phon¹ 'yn¹ kậj¹ ngu².**
17. **Syn¹mei¹ Sei¹na¹ 'yn¹ kậj¹ ngu².**
18. **Ldiu²śe¹ Sie¹tsie¹ 'yn¹ ndọn¹ ngu².**

19. **Lhie²nyn² Wa²nie¹ 'yn¹ wia¹ ngu².**
20. **Ldiu²śe¹ Sei¹na¹ 'yn¹ źwẹj¹ ngu².**
21. **Wa²nie¹ Sei¹na¹ 'yn¹ mu¹ ngu².**
22. **Śan¹nia¹ Wa²nie¹ 'yn¹ źwẹj¹ ngu².**
23. **Ngon²ngwe¹ Ldiu²śe¹ 'yn¹ la² ngu².**
24. **Lhie²nyn² Mbe²phon¹ 'yn¹ mu¹ ngu².**
25. **Mbe²phon¹ Ldiu²śe¹ 'yn¹ ma¹ ngu².**
26. **Lhie²nyn² Nie²tsẹ¹ 'yn¹ 'iə¹ ngu².**
27. **Lhie²nyn² Ngon²ngwe¹ 'yn¹ mu¹ ngu².**
28. **Śan¹nia¹ Sie¹tsie¹ 'yn¹ lio² ngu².**
29. **Lhie²nyn² Ldiu²śe¹ 'yn¹ 'iə¹ ngu².**
30. **Lhie²nyn² Sei¹na¹ 'yn¹ wiej² ngu².**
31. **Śan¹nia¹ Nie²tsẹ¹ 'yn¹ mu¹ ngu².**
32. **Lhie²nyn² Śan¹nia¹ 'yn¹ 'iə¹ ngu².**
33. **Ngon²ngwe¹ Kẹi¹źey² 'yn¹ ny¹ ngu².**
34. **Syn¹mei¹ Śan¹nia¹ 'yn¹ źwẹj¹ ngu².**
35. **Mbe²phon¹ Sie¹tsie¹ 'yn¹ ma¹ ngu².**
36. **Nie²tsẹ¹ Sie¹tsie¹ 'yn¹ _____ ngu².**

(a) Reconstruct the family tree.

(b) Fill in the blank in the last sentence (there is only one way to do this).

⚠ Tangut is an extinct language of the Tibeto-Burman family that was spoken in the Tangut Empire (1038–1227, present-day central China). There is no agreement among scholars on what it sounded like, therefore the transcription is based on one of the reconstructions. The superscript numbers indicate its two tones (¹ = flat, ² = rising); in particular, the words for 'father' and 'mother' are in the first tone. ậ, ê, ẹ, ọ, y, ə are vowels; ś, ź, ' are consonants.

—Ivan Derzhanski

Problem #4 (20 points). Here are some short dialogues in Engenni and their English translations:

1. *edèì âno nwásesè ozyí lẹlemù à? edèì ânò wei ga òkí nwạsese ozyí lẹlemù.*
   Will this man frighten the deceived thief?
   This man said that he$_{\text{this man}}$ would not frighten the deceived thief.

2. *ạvùràmù kịnono amemùrè ânò à? ạvùràmù wei ga òkì kịnono amemùrè ânò.*
   Did the woman resemble this girl?
   The woman said that she$_{\text{the woman}}$ did resemble this girl.

3. *ạmó lẹlemù ậnó wuese ạvùràmù à? ạmodhyòmù wei ga ò wuese ạvùràmù.*
   Did this deceived child not kill the woman?
   The youth said that he$_{\text{this deceived child}}$ did kill the woman.

4. *edèí dhia gbúnonò ạmò à? ạvùràmú kofilomù wei ga o gbúnonò ạmò.*
   Will the evil man heal the child?
   The coughing woman said that he$_{\text{the evil man}}$ would heal the child.

5. *amemùré dhiá kịnono opilopo ânò à? ạvùràmù wei ga ọ́ kịnono opilopo ânò.*
   Did the evil girl not resemble this pig?
   The woman said that she$_{\text{the evil girl}}$ did not resemble this pig.

6. *ozyì gbunono okàá nụamù ậnò à? ozyì wei ga òkí gbunono okàá nụamù ậnò.*
   Did the thief heal this beaten old man?
   The thief said that he$_{\text{the thief}}$ did not heal this beaten old man.

7. *ozyi âno kịnonò edèí kofilomù à? ạmò ậnò wei ga ọ́ kịnono edèí kofilomù.*
   Will this thief resemble the coughing man?
   This child said that he$_{\text{this thief}}$ would not resemble the coughing man.

(a) Translate into English:

8. *edèì ânò nwạsese ozyi à? amemùrè wei ga ọ̀ nwạsese ozyi.*

9. *amemùré lẹlemu wúesè ạmodhyòmù ậnò à?*
   amemùré lẹlemù wei ga òki wúesè ạmodhyòmù ậnò.

Here is also an answer in Engenni without a question for it:

10. *ozyi ânò wei ga ạmó gbunono edèì.*

Translate it into English. If it can be translated in more than one way, provide all translations and explain your reasoning.

(b) Translate into Engenni:

11. Will the old man resemble this coughing youth?
    The child said that he$_{\text{the old man}}$ would not resemble this coughing youth.

12. Did this beaten woman not frighten the man?
    This beaten woman said that she$_{\text{this beaten woman}}$ did not frighten the man.

(c) If you were to compile an Engenni dictionary, what would the base forms of the words 'thief' and 'girl' be? Explain your answer.

⚠ The Engenni language belongs to the Benue–Congo family. It is spoken by approx. 20,000 people in Nigeria.

The mark ˌ underneath a word's first vowel indicates that all of the word's vowels are pronounced with a slightly lowered tongue. The marks ´, ` and ˆ indicate high, low, and falling tone, respectively; if none is present, the syllable has middle tone.

—*Artūrs Semeņuks*

Problem #5 (20 points). Here are some words and word combinations in Northwest Gbaya and their English translations in arbitrary order:

ʔáá, ʔáá náng nú kò, ʔáá sèè, búmá yík, búmá zù yík, dáng gòk, dí fò, dí sèè, kò yík, kò zòk, náng wí, nú fò, nú lébé, sèè wí, yík, yík wí, zù

at the surface; eye socket; eyebrow; eyelash; eyes/face;
field edge; foot; happiness; liver; good field; nostril;
above, on; poisonous snake; tip of the tongue;
to be dying; to envy; to put

(a) Determine the correct correspondences.

(b) Translate into English: **búmá zù, kò, lébé gòk, lébé wí**.

(c) Translate into Northwest Gbaya: at the centre; head; displeasure; nose.

⚠ The Northwest Gbaya language belongs to the Ubangian family. It is spoken by approx. 200,000 people in the Central African Republic.

The Northwest Gbaya words are given in a simplified transcription. **ʔ** is a consonant.

—*Boris Iomdin*

Good luck!