

Twelfth International Olympiad in Linguistics

Beijing (China), July 21–25, 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:

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

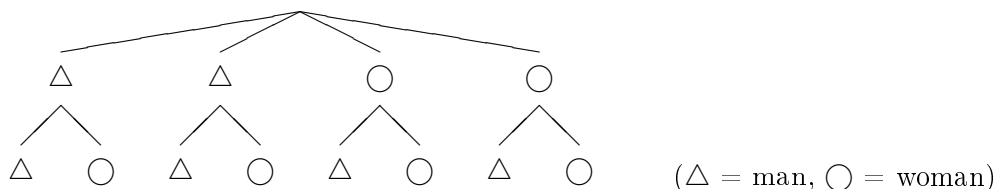
singular	dual	plural	
adɔ	a	a	tree
mat ^h ɔnsjan	mat ^h ɔnsjan	mat ^h ɔnsjadɔ	little girl
k'ɔ	k'ɔ	k'ɔgɔ	knife
t ^h ot'olagɔ	t ^h ot'ola	t ^h ot'olagɔ	orange
aufi		aufigɔ	fish
p ^h jaboado		p ^h jaboa	street lamp
mat ^h ɔn		mat ^h ɔdɔ	girl
k'ɔnbohodo		k'ɔnbohon	hat
t'ɔ		t'ɔgɔ	spoon
		e	bread
alɔsɔhjegɔ	?	alɔsɔhjegɔ	plum
?	tsegun	tsegudo	dog
alɔguk'ogɔ	alɔguk'o	?	lemon
?	k'ap ^h t ^h ɔ	k'ap ^h t ^h ɔgɔ	old man
k ^h ɔdɔ	k ^h ɔ	?	blanket
k'ɔdɔ	?	k'ɔdɔ	tomato
?	alɔ	?	apple
?	p ^h ɔ	?	buffalo
?	?	sadɔ	child
ɔlsun	?	?	comb
?	pitso	?	fork
?	t ^h ɔp ^h paa	?	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', k^h, p^h, t^h** 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.



Below you see statements in the Tangut language concerning the relations between these people. The name **Lhie²nyn²** belongs to a man.

1. Ldiu²še¹ Nie²tse¹ 'yn¹ kâj¹ ngu².
2. Lhie²nyn² Ngwi¹mbyn² 'yn¹ lio² ngu².
3. Sei¹na¹ Wa²nie¹ 'yn¹ ndon¹ ngu².
4. Ldiu²še¹ Śan¹nia¹ 'yn¹ ndon¹ ngu².
5. Śan¹nia¹ Syn¹mei¹ 'yn¹ źwej¹ ngu².
6. Ldiu²še¹ Syn¹mei¹ 'yn¹ źwej¹ ngu².
7. Ldiu²še¹ Wa²nie¹ 'yn¹ źwej¹ ngu².
8. Kei¹zey² Ldiu²še¹ 'yn¹ źwej¹ ngu².
9. Ldiu²še¹ Kei¹zey² 'yn¹ źwej¹ ngu².
10. Lhie²nyn² Syn¹mei¹ 'yn¹ wia¹ ngu².
11. Lhie²nyn² Sie¹tsie¹ 'yn¹ 'iə¹ ngu².
12. Kei¹zey² Wa²nie¹ 'yn¹ lio² ngu².
13. Kei¹zey² Sie¹tsie¹ 'yn¹ źwej¹ ngu².
14. Lhie²nyn² Kei¹zey² 'yn¹ wiej² ngu².
15. Syn¹mei¹ Nie²tse¹ 'yn¹ źwej¹ ngu².
16. Ngon²ngwe¹ Mbe²phon¹ 'yn¹ kâj¹ ngu².
17. Syn¹mei¹ Sei¹na¹ 'yn¹ kâj¹ ngu².
18. Ldiu²še¹ Sie¹tsie¹ 'yn¹ ndon¹ ngu².
19. Lhie²nyn² Wa²nie¹ 'yn¹ wia¹ ngu².
20. Ldiu²še¹ Sei¹na¹ 'yn¹ źwej¹ ngu².
21. Wa²nie¹ Sei¹na¹ 'yn¹ mu¹ ngu².
22. Śan¹nia¹ Wa²nie¹ 'yn¹ źwej¹ ngu².
23. Ngon²ngwe¹ Ldiu²še¹ 'yn¹ la² ngu².
24. Lhie²nyn² Mbe²phon¹ 'yn¹ mu¹ ngu².
25. Mbe²phon¹ Ldiu²še¹ 'yn¹ ma¹ ngu².
26. Lhie²nyn² Nie²tse¹ 'yn¹ 'iə¹ ngu².
27. Lhie²nyn² Ngon²ngwe¹ 'yn¹ mu¹ ngu².
28. Śan¹nia¹ Sie¹tsie¹ 'yn¹ lio² ngu².
29. Lhie²nyn² Ldiu²še¹ 'yn¹ 'iə¹ ngu².
30. Lhie²nyn² Sei¹na¹ 'yn¹ wiej² ngu².
31. Śan¹nia¹ Nie²tse¹ 'yn¹ mu¹ ngu².
32. Lhie²nyn² Śan¹nia¹ 'yn¹ 'iə¹ ngu².
33. Ngon²ngwe¹ Kei¹zey² 'yn¹ ny¹ ngu².
34. Syn¹mei¹ Śan¹nia¹ 'yn¹ źwej¹ ngu².
35. Mbe²phon¹ Sie¹tsie¹ 'yn¹ ma¹ ngu².
36. Nie²tse¹ 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. â, ê, ẹ, ọ, y, ɤ are vowels; ś, ź, ' are consonants.

—Ivan Derzhanski

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

1. *edèi âno nwasesè ozyí lèlemù à? edèi ânò wei ga òkí nwasese ozyí lèlemù.*
Will this man frighten the deceived thief?
This man said that he_{this man} would not frighten the deceived thief.
2. *avùràrà mù kìnono amemùrè ânò à? avùràrà mù wei ga òkí kìnono amemùrè ânò.*
Did the woman resemble this girl?
The woman said that she_{the woman} did resemble this girl.
3. *amó lèlemù ânó wuese avùràrà mù à? amodhyòmù wei ga ò wuese avùràrà mù.*
Did this deceived child not kill the woman?
The youth said that he_{this deceived child} did kill the woman.
4. *edèi dhia gbúnonò amò à? avùràrà mù kofilomù wei ga o gbúnonò amò.*
Will the evil man heal the child?
The coughing woman said that he_{the evil man} would heal the child.
5. *amemùré dhiá kìnono opilopo ânò à? avùràrà mù wei ga ò kìnono opilopo ânò.*
Did the evil girl not resemble this pig?
The woman said that she_{the evil girl} did not resemble this pig.
6. *ozyi gbunono okàá nyamù ânò à? ozyi wei ga òkí gbunono okàá nyamù ânò.*
Did the thief heal this beaten old man?
The thief said that he_{the thief} did not heal this beaten old man.
7. *ozyi âno kìnnonò edèi kofilomù à? amò ânò wei ga ò kìnnonò edèi kofilomù.*
Will this thief resemble the coughing man?
This child said that he_{this thief} would not resemble the coughing man.

(a) Translate into English:

8. *edèi ânò nwasese ozyi à? amemùrè wei ga ò nwasese ozyi.*
9. *amemùré lèlemu wúesè amodhyòmù ânò à?*
amemùré lèlemù wei ga òkí wúesè amodhyòmù ânò.

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

10. *ozyi ânò wei ga amó gbunono edèi.*

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_{the old man} would not resemble this coughing youth.
12. Did this beaten woman not frighten the man?
This beaten woman said that she_{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 \cdot underneath a word's first vowel indicates that all of the word's vowels are pronounced with a slightly lowered tongue. The marks $\acute{}$, $\grave{}$ and $\hat{}$ 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, bú má yík, bú má zù yík, dǎng 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: **bú má zù, kò, lébé gòk, lébé wí.**
- (c) Translate into Northwest Gbaya: at the center; 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*

Editors: Bozhidar Bozhanov, Ivan Derzhanski, Hugh Dobbs, Dmitry Gerasimov, Ksenia Gilyarova, Stanislav Gurevich, Gabrijela Hladnik, Boris Iomdin, Bruno L'Astorina, Jae Kyu Lee (editor-in-chief), Elitsa Milanova, Aleksejs Peguševs, Alexander Piperski, Maria Rubinstein, Daniel Rucki, Estere Šeinkmane, Artūrs Semeņuks, Pavel Sofroniev, Milena Veneva.

English text: Ivan Derzhanski, Boris Iomdin, Aleksejs Peguševs, Artūrs Semeņuks.

Good luck!