

Tenth International Olympiad in Linguistics

Ljubljana (Slovenia), 30 July – 3 August 2012

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-argued. Even a perfectly correct answer will be given a low score unless accompanied by an explanation.

Problem #1 (20 points). Here are some sentences in the central dialect of Dyirbal as well as their English translations:

1. **bayi yaɾa ɲunʒaymuɲa baŋgu gurugugu biŋgunman.**
Booze is making the man that is always being blamed tired.
2. **balan yabu bimabanʒalɲaymuɲa baŋgul yaɾaŋgu guliŋgu ɲunʒaɲu.**
The strong man is blaming the mother that is always following death adders.
3. **balan waymin bambun baŋgu ʒagaŋgu ʒamiman.**
Sugar is making the healthy mother-in-law fat.
4. **bala yila wura baŋgul bargandu biŋgundu guniɲu.**
The tired wallaby is searching for the little feather.
5. **balan malayigara baŋgu garandu biŋgunman.**
The smoke is making the scorpion tired.
6. **bala gurugu baŋgul ɲumaŋgu munduŋgu dimbaɲu.**
The offended father is carrying the booze.
7. **bayi midin baŋgun bimangu malayigaraguninaymuɲagu banʒan.**
The death adder that is always searching for scorpions is following the possum.
8. **bayi gubimbulu biŋgun baŋgu gurugugu ʒagunman.**
Booze is making the tired doctor fall asleep.
9. **bala garan baŋgul biɲʒiriɲu banʒan.**
The lizard is following the smoke.
10. **balan duɲan baŋgul yiriɲʒilagu guniɲu.**
The dragonfly is searching for the stinging tree.
11. **bala ʒuga baŋgun yabuŋgu ɲaʒilmuɲagu dimbaɲu.**
The mother that is always being ignored is carrying the sugar.
12. **bala diban ʒagiɲ baŋgul gubimbulugu ʒamiŋgu bilmban.**
The fat doctor is pushing the big stone.
13. **bala garan baŋgun waymindu dibanbilmbalɲaymuɲagu buɾan.**
The mother-in-law that is always pushing stones is looking at the smoke.
14. **balan baŋgay waɾu baŋgun bundiɲu ʒagiɲu guniɲu.**
The big grasshopper is searching for the bent spear.
15. **bayi biɲʒiriɲ biŋgun baŋgul ɲalɲagaŋgu mugurugu buɾan.**
The quiet boy is looking at the tired lizard.
16. **bayi ɲuma guli baŋgul yaɾaŋgu banʒalmuɲagu munduman.**
The man that is always being followed is offending the strong father.

(a) A linguist thought there was an error in one of the Dyirbal sentences above. In fact there is no error. The explanation for what seemed strange to him is that one of the animal species is regarded as “old women” in one of the myths of the Dyirbal people. Which animal is it? What did the linguist consider to be an error?

(b) Translate into English:

17. **balan ɲalɲga baŋgul ɲumaŋgu guniymuŋagu bambunman.**

18. **bala diban bilmbalmuŋa baŋgun biɲɟiriɲɟu guniɲu.**

19. **bayi bargan baŋgul yaɾaŋgu gubimbuluŋuŋanaymuŋagu baɲan.**

(c) Here are three more Dyirbal words:

bayimbam — grub, caterpillar;

mugunanɲa — aunt (mother’s elder sister);

muŋga — loud noise.

Translate into Dyirbal:

20. The little wallaby is looking at the dragonfly.

21. The aunt that is always being followed is bending the feather.

22. The sleeping possum is ignoring the loud noise.

23. The caterpillar is searching for the man that is always carrying stones.

⚠ The Dyirbal language belongs to the Pama–Nyungan family; it is a dying Australian Aboriginal language spoken in northeast Queensland.

ɲ = *ng* in *hang*.

ɲ ≈ *ni* in *onion*; **ɟ** is a stop (as **d**) articulated in the same place in the mouth as **ɲ**.

A death adder is an Australian venomous snake. A wallaby is a small animal, related to kangaroo. A possum is an Australian arboreal marsupial. Stinging trees are a genus of shrubs and trees with stinging hairs, some of which are dangerous to humans. —*Artūrs Semeņuks*

Problem #2 (20 points).

	Umbu-Ungu		Umbu-Ungu
10	<i>rureponga talu</i>	35	<i>tokapu rureponga yepoko</i>
15	<i>malapunga yepoko</i>	40	<i>tokapu malapu</i>
20	<i>supu</i>	48	<i>tokapu talu</i>
21	<i>tokapunga telu</i>	50	<i>tokapu alapunga talu</i>
27	<i>alapunga yepoko</i>	69	<i>tokapu talu tokapunga telu</i>
30	<i>polangipunga talu</i>	79	<i>tokapu talu polangipunga yepoko</i>
		97	<i>tokapu yepoko alapunga telu</i>

telu < yepoko

- (a) Write in numerals: *tokapu polangipu*,
tokapu talu rureponga telu,
tokapu yepoko malapunga talu,
tokapu yepoko polangipunga telu.

- (b) Write out in Umbu-Ungu: 13; 66; 72; 76; 95.

⚠ The Umbu-Ungu language belongs to the Trans–New Guinea family. It is spoken by approx. 34 200 people in Papua New Guinea. —*Ksenia Gilyarova*

Problem #3 (20 points). Here are some sentences in Basque as well as their English translations in arbitrary order. One of the English sentences corresponds to two sentences in Basque:

ahaztu ditut, ahaztu zaizkit, ahaztu zaizu, hurbildu natzaizue, hurbildu zait,
lagundu ditugu, lagundu dituzu, lagundu dute, lagundu nauzue, mintzatu
natzaizu, mintzatu gatzazkizue, mintzatu zaizkigu, ukitu ditugu, ukitu naute

you(sg) forgot him, they talked to us, I approached you(pl), I talked to you(sg), we helped them, you(pl) helped me, he approached me, we touched them, they touched me, you(sg) helped them, they helped him, we talked to you(pl), I forgot them

- (a) Determine the correct correspondences.
- (b) Translate into Basque: you(sg) touched me, they approached me.
- (c) Translate into English: *lagundu dut, hurbildu gatzazkizu*.
- (d) One of the English sentences can be translated into Basque in one more way. Identify this sentence and give the other possible translation.

—*Natalya Zaika*

Problem #4 (20 points). One linguist decided to write a grammar of the Teop language. First she asked her informants to translate separate sentences into their mother tongue. Here is what she got:

- | | |
|--|--|
| 1. You (sg.) struck me. | <i>Ean paa tasu anaa.</i> |
| 2. He ate the fish. | <i>Eove paa ani bona iana.</i> |
| 3. We struck the child. | <i>Enam paa tasu a beiko.</i> |
| 4. The man saw the bag. | <i>A otei paa tara bona kae.</i> |
| 5. The boy killed him. | <i>A visoasi paa asun bona.</i> |
| 6. I saw the food. | <i>Enaa paa tara a taba'ani.</i> |
| 7. You (pl.) heard him. | <i>Eam paa baitono e.</i> |
| 8. I gave the coconut to the man. | <i>Enaa paa hee a otei bona overe.</i> |
| 9. The woman gave the food to you (pl.). | <i>A moon paa hee ameam bona taba'ani.</i> |
| 10. I struck you (sg.) with the stone. | <i>Enaa paa tasu vuan a vasu.</i> |
| 11. They killed the woman with the axe. | <i>Eori paa asun bona moon bona toraara.</i> |
| 12. We called the boy a sorcerer. | <i>Enam paa dao a visoasi bona oraoraa.</i> |

(a) Translate into English:

13. *Eam paa ani a overe.*
14. *Ean paa tasu a oraoraa bona kae.*
15. *Eove paa tara ameam.*

(b) Translate into Teop:

16. We gave the food to you (sg.).
17. He called me a child.
18. I killed him with it (*lit.* with him).
19. The sorcerer gave the fish to the boy.

Later the linguist recorded spontaneous speech in Teop and added some information into the grammar. Here are some extracts from the dialogues in Teop as well as their English translations. The context in which the sentences were uttered is given in brackets.

- | | | |
|--|--|--|
| 20. (What happened to the woman then?) | <i>A moon paa tara bona oraoraa.</i> | The woman saw the sorcerer. |
| 21. (Why wasn't there any food left?) | <i>A taba'ani paa ani nam.</i> | We ate the food. |
| 22. (Why did the boy cry so bitterly?) | <i>A visoasi paa tasu a otei bona overe.</i> | The man struck the boy with the coconut. |
| 23. (Where is the bag?) | <i>A kae paa hee naa a beiko.</i> | I gave the bag to the child. |

(c) Translate the sentences outside the brackets into Teop:

24. (Why was the sorcerer offended?) They called the sorcerer a woman.
25. (Why is this axe wet?) The boy killed the fish with the axe.

⚠ The Teop language belongs to the Austronesian family. It is spoken by approx. 5 000 people in Papua New Guinea.
—Maria Konoshenko

Problem #5 (20 points). Here are some words and word combinations in Rotuman as well as their English translations:

<i>‘el‘ele</i>	shallow	<i>mamasa</i>	solid
<i>‘ele</i>	to be near	<i>matiti</i>	coldness
<i>‘olo</i>	to cut	<i>matit mamasa</i>	ice
<i>a‘öf fau</i>	year’s end	<i>moafmofa</i>	littered with rubbish
<i>fäeag ‘u‘u</i>	to use sign language	<i>niu</i>	copra
<i>fau</i>	year	<i>nu‘suar tiro</i>	window
<i>həfəfəfu</i>	rocky	<i>nu‘sura</i>	door
<i>huag ‘el‘ele</i>	impatient	<i>pala</i>	pierce
<i>huag to‘a</i>	courageous	<i>piri</i>	to curl
<i>hül həfu</i>	to blow (of a hurricane)	<i>poagpoga = palpala</i>	covered with holes
<i>hün kia</i>	base of the neck	<i>pogi</i>	night
<i>huli</i>	to turn over	<i>puhrəki</i>	to boil, to bubble up
<i>huni</i>	lower end	<i>pulu</i>	glue
<i>is ‘ā</i>	sharp-pointed	<i>kəlu</i>	bracelet; to encircle
<i>is susu</i>	nipple	<i>riamrima</i>	shiny
<i>lala</i>	deep	<i>rū huga</i>	stomach-ache
<i>maf tiro</i>	spectacles	<i>to‘a</i>	hero

- (a) Here are the Rotuman names of seven body parts as well as their English translations in arbitrary order. Determine the correct correspondences:

‘u‘u, isu, kia, leva, mafa, susu, huga
breast, eye, arm/hand, hair, heart, neck, nose

- (b) Translate into English:

tiro, poga (noun), *huag lala, həf puhrəki, maf pogi = maf pala*.

- (c) Translate into Rotuman:

round; to cut copra; curly hair; sticky; to flash; rubbish.

- (d) Using the material given above you cannot translate ‘word’ and ‘to exhaust’ into Rotuman with certainty. What would the theoretically possible translations of these words into Rotuman be?

⚠ Rotuman belongs to the Austronesian family. It is spoken by approx. 9000 people in Fiji. ‘ is a consonant (the so-called glottal stop); *a* is an open *o*; *ā* \approx *a* in *crack*; *ō* = French *eu* or German *ö*; *ū* = French *u* or German *ü*. The mark “ $\bar{}$ ” denotes vowel length.

Copra is the dried kernel of a coconut.

—Boris Iomdin, Alexander Piperski

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English text: Boris Iomdin, Maria Konoshenko, Alexander Piperski, Artūrs Semeņuks.

Good luck!