

# Fifth Asia Pacific Linguistics Olympiad

9 – 23 April 2023

## Problems

- Listen carefully to the invigilators and follow their instructions.
- The contest lasts five hours. The problem set consists of seven pages and contains five problems. You may solve the problems in any order.
- You are not allowed to use any electronic devices, written or printed material, or other external sources of information during the contest.
- If you have a question about any of the problems, put up your hand and ask an invigilator. The invigilator will consult with the jury before answering.
- Rules for writing out solutions:
  - Do not copy the statements of the problems.
  - Write down your solution to each problem on a separate sheet or sheets.
  - Use only the front side of the answer sheet.
  - On each sheet, write your name, the number of the problem, and the page sequence of that sheet within the problem, e.g.:

Name	...	Name	...	Name	...
Problem #	5	Problem #	5	Problem #	5
Page #	1 / 3	Page #	2 / 3	Page #	3 / 3

meaning first, second, and third sheet out of three for the fifth problem.

Otherwise, your work may be mislaid or misattributed.

- Unless stated differently, you should describe any patterns or rules you identified in the data. Otherwise, your solution will not be awarded full marks.

**The contest problems must be kept confidential until they are published on the official APLO website <https://aplo.asia>. Do not disclose nor discuss the problems online until that date.**

**Problem 1 (20 points).** Here are some verb forms in Yimas and their English translations:

1. <b>impakulat</b>	<i>They two have walked.</i>
2. <b>kapwapaykiat</b>	<i>You two have slept.</i>
3. <b>nayat</b>	<i>He has come.</i>
4. <b>kapayat</b>	<i>We two have come.</i>
5. <b>antpukularm</b>	<i>They two have almost walked.</i>
6. <b>taŋkulkrarum</b>	<i>They all haven't cut you two.</i>
7. <b>nakratut</b>	<i>He has killed us all.</i>
8. <b>taŋkrapaykiarm</b>	<i>We two haven't slept.</i>
9. <b>ipwawat</b>	<i>You all have gone.</i>
10. <b>antkaypaykiarum</b>	<i>We all have almost slept.</i>
11. <b>antŋkrankularm</b>	<i>You two have almost walked.</i>
12. <b>antnantut</b>	<i>You all have almost killed him.</i>
13. <b>takulwaykrm</b>	<i>They two haven't bought you all.</i>
14. <b>tanankularum</b>	<i>You all haven't walked.</i>
15. <b>naŋkrakrat</b>	<i>He has cut us two.</i>
16. <b>antkaykrarm</b>	<i>We all have almost cut them two.</i>
17. <b>nananwaykt</b>	<i>You all have bought him.</i>

(a) One of the verb forms above can actually be translated into English in two ways. Indicate which one it is and provide the alternative translation.

(b) Translate into English:

18. **ipapaykiat**
19. **antŋkrankrarm**
20. **tapuyat**

(c) Translate into Yimas:

21. *He has almost gone.*
22. *We two haven't killed him.*
23. *They all haven't bought us two.*
24. *You two have almost killed them all.*
25. *They two have cut you all.*

△ Yimas belongs to the Lower Sepik language family. It is spoken by approx. 300 people in the Yimas village of Papua New Guinea.

ŋ = ng in *king*, w = w in *week*, y = y in *yet*.

**Problem 2 (20 points).** Here are some words and phrases in Ktunaxa and their English translations in random order:

- |                            |                                   |
|----------------------------|-----------------------------------|
| 1. <b>?a·k†u</b>           | a. <i>young white-tailed deer</i> |
| 2. <b>?a·k†aʔnam</b>       | b. <i>bone</i>                    |
| 3. <b>?a·ki†miyit</b>      | c. <i>bad weather</i>             |
| 4. <b>?a·ki†wi·nam</b>     | d. <i>snow</i>                    |
| 5. <b>?a·knuq†u†aʔ</b>     | e. <i>it is angry again</i>       |
| 6. <b>?a·kwum</b>          | f. <i>Little Strong Belly</i>     |
| 7. <b>?a·q†a</b>           | g. <i>someone's heart</i>         |
| 8. <b>?a·qatnananam</b>    | h. <i>stomach</i>                 |
| 9. <b>¢makwumnana</b>      | i. <i>inside (noun)</i>           |
| 10. <b>†a suki†miyitni</b> | j. <i>it is blind</i>             |
| 11. <b>†a sani†wi·ni</b>   | k. <i>Piegans</i>                 |
| 12. <b>†it†i†ni</b>        | l. <i>American eagle</i>          |
| 13. <b>kamnuq†uqatnana</b> | m. <i>someone's short tail</i>    |
| 14. <b>mak</b>             | n. <i>it is sunny again</i>       |
| 15. <b>maknana</b>         | o. <i>someone's head</i>          |
| 16. <b>san†a</b>           | p. <i>token (for a game)</i>      |
| 17. <b>sani†miyit</b>      | q. <i>sky</i>                     |

You may ignore the prefix **?a·k** and its variants **?a·** and **?a·q** in this problem. Its exact function is not yet understood, but it is known that it does not contribute to the word meaning. You will not be graded on whether you include or omit the **?a·**, **?a·k**, or **?a·q** prefix.

(!) No additional explanation besides the answers is required, nor will be marked.

(a) Determine the correct correspondences, given that **†it¢makqa·ni** means *it is weak*.

(b) What are the two meanings of **†a**?

(c) Translate literally into English:

18. **?a·qatwum†a** *dress (noun)*

19. **†a†it†u** *spring season*

(d) Translate into English:

20. **†itqatni**

21. **?a·ki†wi·nana**

(continued on next page)

(e) Translate into Ktunaxa:

22. *someone's good stomach*

23. *eye*

△ Ktunaxa is a Native American language isolate spoken by fewer than 100 people in Idaho and Montana, USA, and British Columbia, Canada.

ʔ, †, ɕ, k and m̄ are consonants. The mark · prolongs the preceding vowel.

The *American eagle* is a large native bird of prey with white feathers on its head and brown feathers on its body. *Little Strong Belly* is a person's name. The *Piegans* are an enemy tribe that obtained its first horses from the Ktunaxa before relations soured. *Tokens* are playing pieces made out of bone, wood, or stone, used in various (board) games. — *Jerome Jochems*

**Problem 3 (20 points).** Here are some numerals in Kobon and their values. Some of the numbers can be expressed in Kobon in two different ways, only one of which is given:

- 1 **wañig nibö**
- 4 **yigwo milö**
- 7 **mudun**
- 11 **agip**
- 17 **mudun böŋ daŋ**
- 18 **kagoŋ böŋ daŋ**
- 21 **yigwo aŋ nibö böŋ daŋ**
- 22 **ñinjuöl ado gi da yigwo**
- 25 **ñinjuöl ado gi da mamid**
- 46 **ñinjuöl mihöp ado gi da kagoŋ**
- 60 **ñinjuöl mihöp ado gi da yigwo milö böŋ daŋ**

(a) Write the following equality in digits:

$$\text{yigwo} \times \text{ñinjuöl ado gi da kagoŋ böŋ daŋ} = \text{ñinjuöl mihau nigaŋ ado gi da raleb böŋ daŋ}$$

(b) Write in Kobon in all possible ways: 8, 19, 23, 53, 61, 66.

△ Kobon belongs to the Madang branch of the Trans-New Guinea family. It is spoken by approx. 10,000 people in Papua New Guinea. — *Vlad A. Neacşu, Michał Boroń*

**Problem 4 (20 points).** Here are some sentences in Inanwatan and their English translations:

- |                                                                 |                                                                                        |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <b>Idabe meqebi.</b><br><i>The hawk speaks.</i>              | 7. <b>Ato ewai buqaritawodawo.</b><br><i>This mouse belongs to the writer (F).</i>     |
| 2. <b>Murowo nasabi.</b><br><i>He will cry in the river.</i>    | 8. <b>Qibiro aga qido meriqaqabe.</b><br><i>The tortoise's mother bites us.</i>        |
| 3. <b>Qotoqoware nesabi.</b><br><i>His son will sleep.</i>      | 9. <b>Qeqake osoi buquro meqaqabi.</b><br><i>That cockatoo bites the taro.</i>         |
| 4. <b>Buquro obosabe.</b><br><i>She will hit the taro.</i>      | 10. <b>Ewaidaga medo aga qide meseebi.</b><br><i>This snake's father cuts him.</i>     |
| 5. <b>Bidora meraqaqabi.</b><br><i>He bites me for the sow.</i> | 11. <b>Uto aga qidera naqaqasabi.</b><br><i>He will bite me for the fish's father.</i> |
| 6. <b>Maroqo moootebe.</b><br><i>His sister becomes ill.</i>    | 12. <b>Peraqote aga maroqo merabe.</b><br><i>The devil's sister cries.</i>             |
- 
- |                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------|
| 13. <b>Naqido aga medo noosabe.</b><br><i>My mother's snake will fall.</i>                                                  |
| 14. <b>Idabe esai buqaritawo aga qotoqowaredaso.</b><br><i>This hawk belongs to the writer (F)'s son.</i>                   |
| 15. <b>Qido naqotoqoware aga meqarowo obosabe.</b><br><i>His mother will hit him in my son's house.</i>                     |
| 16. <b>Qeqake aga qotoqoware qido aga medora meriobobi.</b><br><i>The cockatoo's son hits us for his mother's snake.</i>    |
| 17. <b>Taragaro ewai owoidaga mesidao aga bide aga qidodawo.</b><br><i>This lake belongs to that woman's boar's mother.</i> |

(a) Translate into English:

18. **Meqaro ewai naqidedawo.**
19. **Ato ewaidaga utora qesabe.**
20. **Niqido aga bide moobobi.**
21. **Idabe osoidaga peraqote aga meqarowo meroobi.**

One of the sentences has two possible translations. Provide them both.

(b) Translate into Inanwatan:

22. *The sow sleeps.*
23. *That devil will hit us for our daughter.*
24. *That taro belongs to his brother.*
25. *This man's father hits him in that river.*
26. *The writer (M)'s tortoise cuts me in the lake.*

△ Inanwatan belongs to the South Bird's Head group of the Trans-New Guinea family. It is spoken by approx. 800 people in the Southwest Papua province, Indonesia.

The subscripts (M) and (F) refer to masculine and feminine gender, respectively.

A *boar* and a *sow* represent a male and a female pig, respectively. A *cockatoo* is a kind of bird. A *taro* is a plant.

— Kazune Sato

**Problem 5 (20 points).** Here are some sentences in Kombai and their English translations. For most sentences, an example is provided between square brackets to clarify the context in which the sentence could be used:

1. **Khuro khemomofa na babamano.**  
*His uncle's friends are usually in the jungle [having tea].*
2. **Nare leikhe?**  
*Is my father there [sleeping in his bed]?*
3. **Dodo nalana gwari lei.**  
*My wife's snake is in the tree [resting on a branch].*
4. **Areya la leikhe?**  
*Is the father's wife there [ill in hospital]?*
5. **Elo khuro namomo leno.**  
*My uncles are in the bird jungle [hunting pigs].*
6. **Khemakhü lekhe?**  
*Is his dog there [barking up a tree]?*
7. **A dodofa gwari leino.**  
*The tree snakes are in the house [crawling around].*
8. **Afa makhü lenokho?**  
*Are the house dogs there [standing at the gate]?*
9. **O khenareye e bakha?**  
*Is his father's bird in the water [bathing itself]?*
10. **A khalakha amiya lei.**  
*The yam worm is in the house [on the floor].*
11. **Namiyaye edolo nane banokho?**  
*Are my birds on my worm's fruit [sitting on it and pecking at it]?*
12. **Dodo nanaya a le.**  
*My friend's house is in the tree.*
13. **Namiyo leileima.**  
*My child is usually there [in its crib].*
14. **Khela yarimo naramu lei.**  
*My cucumber is in his bird's garden [on the table].*
15. **Dodofa a la babamakha?**  
*Is the wife usually in the tree house [weaving baskets on the floor]?*

(a) Translate into English:

16. **Okha yarimo miyo bano.**
17. **Nano khelana amiya leileimakha?**

(b) Translate into English and give an example context, similar to those above:

18. **Nadodo miyo lelema.**
19. **Nala babamakha?**

(continued on next page)

(c) Translate into English in all possible ways:

20. **Khekhuro khena leno.**

(d) Translate into Kombai:

21. *His worms are on his fruit.*

22. *Is the father's tree there [standing]?*

23. *My houses are in the friend's jungle.*

24. *Is my dog usually in the jungle [running around]?*

△ Kombai is a Greater Awyu language of the Trans-New Guinea family. It is spoken by approx. 6000 speakers in South Papua Province, Indonesia.

A *yam* is a root vegetable.

**kh**, **gw** and **y** are consonants. **ü** is pronounced like **i** but with rounded lips.

— Farhan Ishraq, Jerome Jochems (consultant: Lourens de Vries)

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Good luck!

# Fifth Asia Pacific Linguistics Olympiad

9 – 23 April 2023

## Questionnaire

Name: \_\_\_\_\_

Contest site: \_\_\_\_\_

For which problems are you submitting solutions? ..... 

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which problem did you like best? ..... 

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
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Which problem did you find hardest? ..... 

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which problem did you find easiest? ..... 

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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