

Fourteenth International Linguistics Olympiad

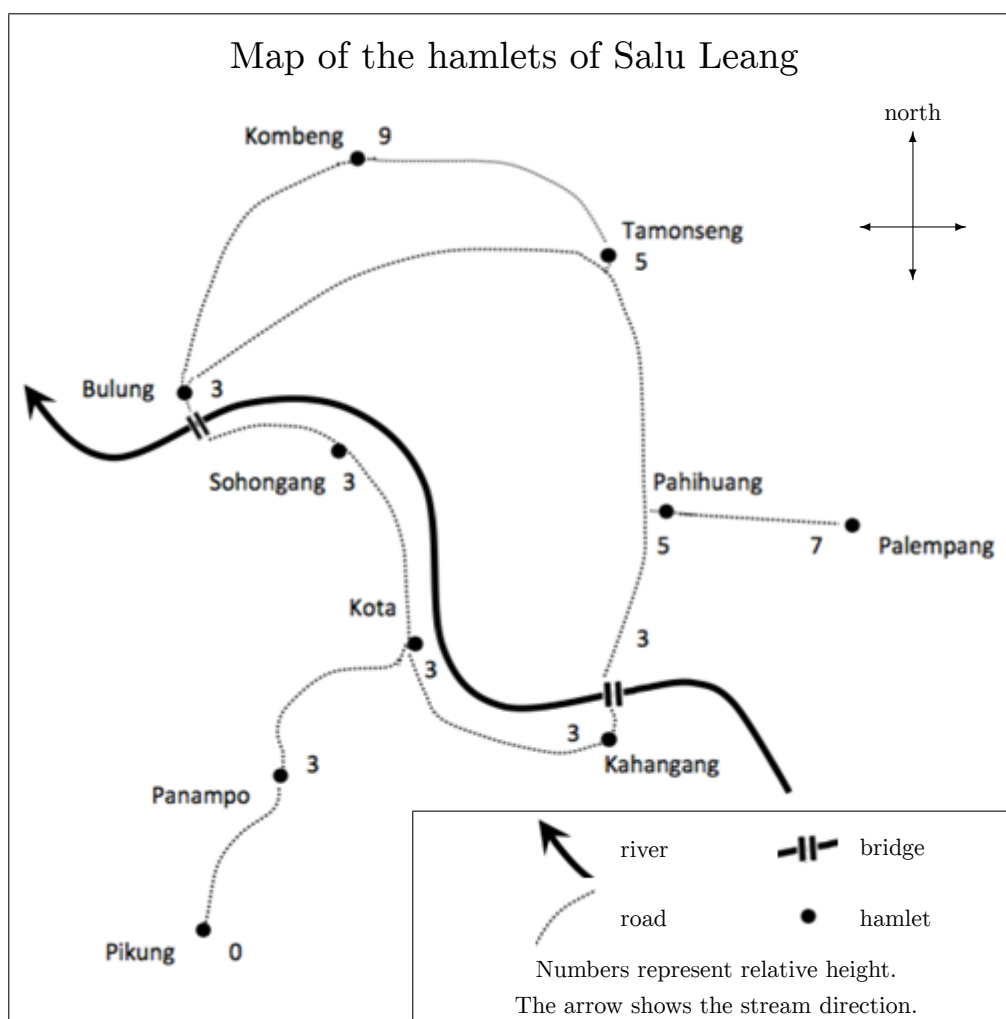
Mysore (India), 25–29 July 2016

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). A linguist came to Salu Leang (Sulawesi) to study the Aralle-Tabulahan language. He visited various hamlets of Salu Leang (see the map¹) and asked local residents: **Umba launggola?** ‘Where are you going?’



¹The names of the hamlets are authentic, the map is not.

Below are the answers he got. There are gaps in some of them.

• In **Kahangang** hamlet:

- L_{maoä}' bete' di Bulung.
- L_{maoä}' sau di Kota.
- L_{maoä}' ____₁ di Palembang.

• In **Kombeng** hamlet:

- L_{maoä}' pano di Pahihuang.
- L_{maoä}' tama di Sohongang.
- L_{maoä}' naung di Tamonseng.
- L_{maoä}' ____₂ di Palembang.

• In **Kota** hamlet:

- L_{maoä}' dai' di Kombeng.
- L_{maoä}' dai' di Palembang.
- L_{maoä}' naung di Pikung.
- L_{maoä}' ____₃ di Bulung.
- L_{maoä}' ____₄ di Sohongang.

• In **Palempang** hamlet:

- L_{maoä}' bete' di Kahangang.
- L_{maoä}' dai' di Kombeng.
- L_{maoä}' pano di Panampo.
- L_{maoä}' sau di Sohongang.
- L_{maoä}' ____₅ di Bulung.
- L_{maoä}' ____₆ di Kota.
- L_{maoä}' ____₇ di Pahihuang.

• In **Pahihuang** hamlet:

- L_{maoä}' naung di Bulung.
- L_{maoä}' naung di Pikung.

• In **Bulung** hamlet:

- L_{maoä}' pano di Pahihuang.
- L_{maoä}' pano di Panampo.
- L_{maoä}' ____₈ di Kota.
- L_{maoä}' ____₉ di Pikung.

• In **Panampo** hamlet:

- L_{maoä}' tama di Kahangang.
- L_{maoä}' pano di Tamonseng.
- L_{maoä}' ____₁₀ di Kota.

• In **Pikung** hamlet:

- L_{maoä}' pano di Kota.
- L_{maoä}' dai' di Pahihuang.
- L_{maoä}' sau di Sohongang.
- L_{maoä}' ____₁₁ di Bulung.
- L_{maoä}' ____₁₂ di Kahangang.
- L_{maoä}' ____₁₃ di Panampo.

• In **Sohongang** hamlet:

- L_{maoä}' bete' di Bulung.
- L_{maoä}' tama di Kahangang.
- L_{maoä}' tama di Kota.
- L_{maoä}' dai' di Pahihuang.

• In **Tamonseng** hamlet:

- L_{maoä}' pano di Pahihuang.
- L_{maoä}' pano di Panampo.
- L_{maoä}' ____₁₄ di Kahangang.
- L_{maoä}' ____₁₅ di Palembang.











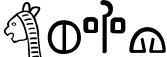




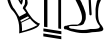


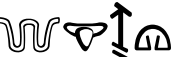







Fill in the gaps.

⚠ Aralle-Tabulahan belongs to the Austronesian family. It is spoken by approx. 12,000 people in Indonesia. —*Ksenia Gilyarova*

Problem 2 (20 points). Here are some words in Luwian written in Roman script and their English translations:



- | | |
|--------------------------------|--------------------------------|
| 1. runtiyas ‘deer’ | 8. sanawas ‘good’ |
| 2. patis ‘foot’ | 9. nimuwizas ‘son’ |
| 3. harnisas ‘fortress’ | 10. zitis ‘man’ |
| 4. iziyanta ‘they made’ | 11. piyanti ‘they give’ |
| 5. turpis ‘bread’ | 12. hantawatis ‘king’ |
| 6. tarhunzas ‘thunder’ | 13. istaris ‘hand’ |
| 7. hawis ‘sheep’ | |

All of the words above can be written in multiple ways in Luwian Hieroglyphs. In what follows, each word has been written in two possible ways, but in arbitrary order:

- A.  B.  C.  D.  E.  F. 
- G.  H.  I.  J.  K. 
- L.  M.  N.  O.  P. 
- Q.  R.  S.  T.  U. 
- V.  W.  X.  Y.  Z. 

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

- (a) Match each Luwian word written in Roman script to its two corresponding hieroglyphic forms. State the correspondences as follows: “number ~ two letters”.
- (b) Here are two of the 13 words given above, written in a further possible way:

1. ; 2. 

Determine which words they are.

- (c) Briefly explain all the possible functions of the following Luwian symbols:

1. ; 2. ; 3. ; 4. ; 5. ; 6. ; 7. 

⚠ Luwian belongs to the Indo-European family. It was spoken in Asia Minor around 3,000 years ago.
—Tae Hun Lee

Problem 3 (20 points). Here are some sentences in Kunuz Nubian and their English translations:

1. **ar kanarri:cci:g kami:g ja:nticcirsu.**
We bought the camels for the neighbours.
2. **tirt kade:g allesu.**
The owner repaired the dress.
3. **jahali wali:g darbadki biticcirra.**
The young men will give the chicken to the dogs.
4. **man jahalgi kade:cci:g ma:gtirsu.**
He stole the dresses for the young man.
5. **ay beyye:cci:g aja:nirri.**
I am buying the necklaces.
6. **wal aygi ba:bi:g elde:nsu.**
The dog found the doors for me.
7. **magas ikki wali:g ticcirsu.**
The thief gave you (pl.) the dogs.
8. **i:di magaski kami:g tirsu.**
The men gave the camels to the thief.
9. **ay hanu:g bijomri.**
I will strike the donkey.
10. **sarka:yi aygi beyye:cci:g ade:nda.**
The cowards are giving me the necklaces.

(a) Translate into English:

11. **magasi argi ajomirra.**
12. **ay kanarri:g ba:bki alletirsi.**
13. **hanu tirti:g elirsu.**
14. **tirti argi kamgi de:ccirsa.**
15. **ay darbadki bija:ndi.**

(b) Translate into Kunuz Nubian:

16. *The neighbours are giving the necklace to the owner.*
17. *The young man bought the dog for us.*
18. *We will steal him.*
19. *The owners struck the thieves.*
20. *The dogs found the chickens for the coward.*

⚠ Kunuz Nubian belongs to the Eastern Sudanic family. It is spoken by approx. 50,000 people in Egypt.

y = y in *yum*. The mark : indicates that the preceding vowel is long.

—Aleksejs Peguševs

Problem 4 (20 points). Recent contact with Western civilization has brought some changes into the Iatmül language. New words and expressions have emerged and some existing ones have developed new meanings.

Here are some words and word combinations in Iatmül and their English translations in arbitrary order:

- | | |
|----------------------------|--|
| 1. guna vaala | a. <i>banana</i> |
| 2. ka'ik | b. <i>cow</i> |
| 3. ka'ikgu | c. <i>canoe</i> |
| 4. klawun | d. <i>book</i> |
| 5. laavu | e. <i>carbonated beverage, alcohol</i> |
| 6. laavuga vi' | f. <i>rifle</i> |
| 7. laavuga | g. <i>picture, shadow</i> |
| 8. ni'bu | h. <i>car</i> |
| 9. ni'buna vaala | i. <i>I got</i> |
| 10. nyaka'ik | j. <i>mirror</i> |
| 11. vi | k. <i>I saw</i> |
| 12. vi'wun | l. <i>watch (timepiece)</i> |
| 13. walini'bana bâk | m. <i>spear</i> |
| 14. walini'bana gu | n. <i>to read</i> |
| 15. walini'bana vi | o. <i>ground, land</i> |

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

(a) Determine the correct correspondences.

(b) Translate into English:

1. **vaala**; 2. **gu**; 3. **vi'**

One of these three words has a more recent synonym among the words and word combinations (1–15). Identify that synonym. Why did it come into use?

(c) Translate into Iatmül:

1. *pig*; 2. *banana leaves*; 3. *sun*; 4. *white people*

One of the answers should coincide with one of the words and word combinations (1–15).

⚠ Iatmül belongs to the Sepik family. It is spoken by approx. 46,000 people in Papua New Guinea.

' and **ny** are consonants. â is a vowel.

—Artūrs Semēņuks

Problem 5 (20 points). Here are some words in Jaqaru and their English translations:

aq''ipsa	<i>the cave too</i>	qucxap''a	<i>through the lake</i>
aq''na	<i>in the cave</i>	qucxst''psa	<i>from our₁₊₂ lake too</i>
chushp''a	<i>his corner</i>	marka	<i>the town</i>
chushuntxi	<i>is it in the corner?</i>	markp''t''a	<i>from his town</i>
ishinhna	<i>in my bed</i>	markstxi	<i>is it our₁₊₂ town?</i>
ishma	<i>your bed</i>	utamt''a	<i>from your house</i>
p''ak''u	<i>the pot</i>	utnha	<i>my house</i>
p''ak''unhpsa	<i>my pot too</i>	yaputxi	<i>is it the field?</i>
qaqat''a	<i>from the cliff</i>	yapsanpsa	<i>in our₁₊₂ field too</i>

(a) Translate into English:

1. **utnhantxi**
2. **yapp''psa**
3. **yapup''psa**

(b) Translate into Jaqaru:

4. *our₁₊₂ cliff*
5. *in your corner*
6. *in your corner too*
7. *from your corner too*
8. *is it from the cave?*
9. *is it the house?*

⚠ Jaqaru belongs to the Aymaran family. It is spoken by approx. 730 people in Peru.

nh = *ng* in *hang*. **ch**, **cx**, **q**, **sh**, **tx** are consonants. The mark '' indicates aspiration.

our₁₊₂ = 'mine and yours'.

—Ivan Derzhanski

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Good luck!