

# Fourteenth International Linguistics Olympiad

Mysore (India), 25–29 July 2016

Individual Contest Solutions

**Problem 1.** The words **bete'**, **dai'**, **naung**, **pano**, **sau** and **tama** reflect the direction at the last stage of the journey:

- **bete'** — across a river;
- **dai'** — upwards;
- **naung** — downwards;
- **pano** — on a flat road;
- **sau** — downstream;
- **tama** — upstream.












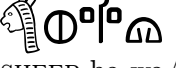
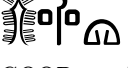



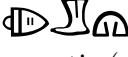

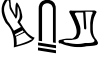




Answers:

1. In **Kahangang** hamlet: **Lamaoä' dai' di Palembang.**
2. In **Kombeng** hamlet: **Lamaoä' dai' di Palembang.**
3. In **Kota** hamlet: **Lamaoä' bete' di Bulung.**
4. In **Kota** hamlet: **Lamaoä' sau di Sohongang.**
5. In **Palempang** hamlet: **Lamaoä' naung di Bulung.**
6. In **Palempang** hamlet: **Lamaoä' sau di Kota.**
7. In **Palempang** hamlet: **Lamaoä' naung di Pahihuang.**
8. In **Bulung** hamlet: **Lamaoä' tama di Kota.**
9. In **Bulung** hamlet: **Lamaoä' naung di Pikung.**
10. In **Panampo** hamlet: **Lamaoä' pano di Kota.**
11. In **Pikung** hamlet: **Lamaoä' bete' di Bulung.**
12. In **Pikung** hamlet: **Lamaoä' tama di Kahangang.**
13. In **Pikung** hamlet: **Lamaoä' dai' di Panampo.**
14. In **Tamonseng** hamlet: **Lamaoä' bete' di Kahangang.**
15. In **Tamonseng** hamlet: **Lamaoä' dai' di Palembang.**








**Problem 2.** The direction of writing is from left to right. Words can be written in three ways:

- with a logogram;
  - with syllabograms;
  - with a logogram and syllabograms which partially or fully reflect the sound of the word.
- n** before a consonant is never expressed by a syllabogram.

(a)

1. <b>runtiyas</b> 'deer'	B.  DEER	H.  DEER-ya-s(a)
2. <b>patis</b> 'foot'	E.  FOOT-s(a)	U.  FOOT
3. <b>harnisas</b> 'fortress'	J.  ha-FORTRESS	O.  FORTRESS-ni-s(a)-s(a)
4. <b>iziyanta</b> 'they made'	F.  i-zi-ya-ta	T.  i-zi-ya-ta
5. <b>turpis</b> 'bread'	L.  BREAD	W.  BREAD-pi-s(a)
6. <b>tarhunzas</b> 'thunder'	S.  THUNDER-hu-za-s(a)	V.  ta-THUNDER-s(a)
7. <b>hawis</b> 'sheep'	C.  ha-wa/wi-s(a)	K.  SHEEP-ha-wa/wi-s(a)
8. <b>sanawas</b> 'good'	I.  s(a)-na-wa/wi-s(a)	Q.  GOOD-wa/wi-s(a)
9. <b>nimuwizas</b> 'son'	M.  ni-mu-wa/wi-za-s(a)	Y.  ni-SON-za-s(a)
10. <b>zitis</b> 'man'	D.  MAN	N.  MAN-ti-s(a)
11. <b>piyanti</b> 'they give'	G.  TO GIVE	P.  TO GIVE-ya-ti
12. <b>hantawatis</b> 'king'	A.  ha-ta-wa/wi-ti-s(a)	X.  ha-ta-KING
13. <b>istaris</b> 'hand'	R.  HAND	Z.  i-HAND-s(a)

(b) 1.  — tarhunzas 'thunder'; 2.  — nimuwizas 'son'.

- (c) 1.  — **ta**;  
 2.  — KING (**hantawatis**);  
 3.  — **wa, wi**;  
 4.  — **ta**;  
 5.  — **s(a)**;  
 6.  — **ti**, FOOT (**patis**);  
 7.  — **zi**, MAN (**zitis**).

**Problem 3.** Rules:

- Word order: S (O') O V  
(S = subject, O' = indirect object, O = direct object, V = predicate).
- noun:
  - ROOT
  - number:
    - \* singular: -∅
    - \* plural:  $\begin{cases} \text{-i} & \text{after a consonant} \\ \text{-:cci} & \text{after a vowel} \end{cases}$
  - case:
    - \* S: -∅
    - \* O', O:  $\begin{cases} \text{-:g} & \text{after a vowel} \\ \text{-gi} & \text{after a sonorant consonant} \\ \text{-ki} & \text{after an obstruent consonant} \end{cases}$
- verb:
  - tense (present **a-**, future **bi-**)
  - ROOT
  - for somebody: 'to give' (to the first person: **de:n**, to the second or third person: **tir**)
  - | object:             | singular | plural                                |
|---------------------|----------|---------------------------------------|
| O', if there is one | -∅       | <b>-ccir</b> (-C > ∅   <b>-ccir</b> ) |
| otherwise O         | -∅       | <b>-ir</b>                            |
  - tense: past **-s**, present/future **-r** (**r** > **d** | **n** \_\_)
  - subject: 1st person sg **-i**, 1st person pl/3rd person sg **-u**, 3rd person pl **-a**

- (a) 1. **magasi argi ajomirra.**  
*The thieves are striking us.*
2. **ay kanarri:g ba:bki alletirsi.**  
*I repaired the door for the neighbour.*
3. **hanu tirti:g elirsu.**  
*The donkey found the owners.*
4. **tirti argi kamgi de:ccirsa.**  
*The owners gave us the camel.*
5. **ay darbadki bija:ndi.**  
*I will buy the chicken.*
- (b) 6. *The neighbours are giving the necklace to the owner.*  
**kanarri:cci tirtki beyye:g atirra.**
7. *The young man bought the dog for us.*  
**jahal argi walgi ja:nde:ccirsu.**
8. *We will steal him.*  
**ar mangi bima:gru.**
9. *The owners struck the thieves.*  
**tirti magasi:g jomirsa.**
10. *The dogs found the chickens for the coward.*  
**wali sarka:ysi darbadi:g eltirsa.**

**Problem 4.**

- |     |                             |   |  |
|-----|-----------------------------|---|--|
| (a) | 1. <b>gu-na vaala</b>       | water- <span style="border: 1px solid black; padding: 0 2px;">possessor</span> canoe        | c. <i>canoe</i>                        |
|     | 2. <b>ka'ik</b>             | picture/shadow  | g. <i>picture, shadow</i>              |
|     | 3. <b>ka'ik-gu</b>          | picture+water   | j. <i>mirror</i>                       |
|     | 4. <b>kla-wun</b>           | to get- <span style="border: 1px solid black; padding: 0 2px;">1st person sg</span>         | i. <i>I got</i>                        |
|     | 5. <b>laavu</b>             | banana  | a. <i>banana</i>                       |
|     | 6. <b>laavu-ga vi'</b>      | book+to see   | n. <i>to read</i>                      |
|     | 7. <b>laavu-ga</b>          | banana+leaves   | d. <i>book</i>                         |
|     | 8. <b>ni'bu</b>             | ground, land  | o. <i>ground, land</i>                 |
|     | 9. <b>ni'bu-na vaala</b>    | ground, land- <span style="border: 1px solid black; padding: 0 2px;">possessor</span> canoe | h. <i>car</i>                          |
|     | 10. <b>nya-ka'ik</b>        | sun+picture   | l. <i>watch (timepiece)</i>            |
|     | 11. <b>vi</b>               | spear   | m. <i>spear</i>                        |
|     | 12. <b>vi'-wun</b>          | to see- <span style="border: 1px solid black; padding: 0 2px;">1st person sg</span>         | k. <i>I saw</i>                        |
|     | 13. <b>walini'ba-na bâk</b> | white people- <span style="border: 1px solid black; padding: 0 2px;">possessor</span> pig   | b. <i>cow</i>                          |
|     | 14. <b>walini'ba-na gu</b>  | white people- <span style="border: 1px solid black; padding: 0 2px;">possessor</span> water | e. <i>carbonated beverage, alcohol</i> |
|     | 15. <b>walini'ba-na vi</b>  | white people- <span style="border: 1px solid black; padding: 0 2px;">possessor</span> spear | f. <i>rifle</i>                        |
- (b) 1. **vaala** — *canoe*
2. **gu** — *water*
3. **vi'** — *to see*

The word **vaala** is a synonym of **guna vaala** ‘canoe’. The later expression **guna vaala** (lit. ‘water canoe’) came into use because the Iatmül people were introduced to cars (and also planes), and **vaala** has slowly started to expand its meaning.

- (c)
1. *pig* — **bâk**
  2. *banana leaves*  $\equiv$  *book* — **laavuga** (because of similarity of shape and material)
  3. *sun* — **nya**
  4. *white people* — **walini'ba**

**Problem 5.** The word forms in the problem consist of a root and up to three suffixes. Each suffix may cause the elision of the preceding vowel:

	possessor	case	
oral suffixes	<b>-p'a</b> <b>-sa</b>	<b>-p'a</b> <b>-t'a</b>	<b>-psa</b> <b>-txi</b>
	always consume the vowel	consume the vowel if it belongs to another suffix, but leave it if it belongs to the root	
nasal suffixes	<b>-nha, -ma</b>	<b>-na</b>	
	consume the vowel if they keep theirs, but leave it if they give up theirs		

Answers:

- (a)
1. **utnhantxi** — *is it in my house?*
  2. **yapp'psa** — *his field too*
  3. **yapup'psa** — *through the field too*
- (b)
4. *our<sub>1+2</sub> cliff* — **qaqsa**
  5. *in your corner* — **chushumna**
  6. *in your corner too* — **chushmanpsa**
  7. *from your corner too* — **chushumt'psa**
  8. *is it from the cave?* — **aq'it'txi**
  9. *is it the house?* — **utatxi**