

Seventh Asia Pacific Linguistics Olympiad

April 20 – May 4, 2025

Solutions

Problem 1.

1. Syllable: $\begin{cases} \sigma_H & \dots V:(C) \text{ or } \dots VC_{\notin S} \\ \sigma_L & \text{otherwise} \end{cases}$

2. Stress:

- verbs: $\begin{cases} \text{present tense} & \dots \overset{\downarrow}{\sigma} \\ \text{past tense} & \dots \overset{\downarrow}{\sigma}\sigma \end{cases}$
- otherwise: $\begin{cases} \dots \overset{\downarrow}{\sigma}_H \\ \dots \overset{\downarrow}{\sigma}\sigma_L \end{cases}$

Abbreviations

σ	syllable
σ_H	heavy syllable
σ_L	light syllable
C	consonant
V	vowel
S	coronal obstruents {s, š, t, ʈ}

1. čí:ňju

2. čuču

3. əamáχ

4. əíyǝ

5. ʈkukóhɔʈ

6. ma:kíɕis

7. máqʈti:ʈ

8. paqəʒəŋqá:

9. síksi

10. skitiní:t

11. špa:pi:nán

12. šyá:hkuš

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Problem 2.

1. Sentence structure:

$$\begin{cases} \text{S (O) V—zu} & \text{V = active} \\ \text{S V—}\beta\epsilon & \text{V = stative} \end{cases}$$

2. Pronouns/nouns:

	S		O
	active	stative	
1SG	gà	∅, V _o → V _• [*] (otherwise: V _o)	
3SG	tɔ		
1PL	ga	ge	
3PL	ta	te	
N	N ɣa	N	

* first syllable $\begin{cases} \text{tone} = \text{low} & \text{1SG} \\ \text{tone} = \text{high} & \text{3SG} \end{cases}$

– Noun structure:

N			$\emptyset$
the N	$\emptyset$	N $_{\bullet}$	-i
my N	nà		
our N	ga	N $_o$	$\emptyset$
their N	ta		

Abbreviations

S	subject	1	first person
O	object	3	third person
V	verb	SG	singular
N	noun	PL	plural

3. Initial consonants:

N $_{\bullet}$ /V $_{\bullet}$	N $_o$ /V $_o$	
	before V_{+w}	before V_{-w}
t, d	w	l
p, b		β
k, g		γ

4. Verbs:

V $_{\bullet}$	active		stative
	$\exists O$	$\nexists O$	
da	lay down	lie down	—
tɛ	lift	climb	—
bala	grow (it)	grow	be big
gutɔ	shorten		be short
ka	see		—
paa	kill		—
tuli	call		—
bii	—		be heavy
pa	—		be good

- (a) 1. $\begin{bmatrix} \text{their green bean} \\ \text{their market} \end{bmatrix}$ 2. our lesson 3. goat 4. my tree
- (b) 5. It is good.
6. I grow it.
7. We see our pipe.
8. They kill their dog.
- (c) 9. bàlaβɛ
10. ta dàzu
11. ge βiiβɛ
12. ga wupu ɣa lazɔ
13. gà te βaazu
14. tɔ ta wɔvi lɛzu

Problem 3.

1. Writing direction: left → right.

2. Consonants:

-ʔ	k	g	ŋ-	-ŋ	s	j	p	b	m	n	l	t	d	r	ʃ	tɕ	tʰ	t̚
∅	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ	᠎ᠠ

3. Vowels:

a	o	u	ɯ	uu	i	ɤ	ə	tone	coda
ᠠ	ᠡ	ᠢ		ᠤ	ᠥ	ᠦ	ᠦ	tone “0”	P or ʔ
ᠡ		ᠣ	ᠣ	ᠤ				tone 1	} N or ∅
ᠢ		ᠤ	ᠤ	ᠥ	ᠦ	ᠦ		tone 2	
ᠣ		ᠥ						tone 3	

4. Verb structure:

Root +

C			V(C)				T	
		VT	VI	1SG	-aʊŋ			
				1PL	-i			
PST	AFF	t-			PST	AFF	-o	tone “0” * -n/ŋ/∅ → -t/k/? (i.e. N/∅ → P/?)
	NEG	m-		2SG		NEG	-u	
					FUT/IMP		-uu	
	FUT	ʃ-	t-	2PL	-uŋ		FUT	tone 2
	IMP	ʃ-	k-	3PL	-ɤ		IMP	tone 1

Abbreviations

PST	past tense	1	first person	C	consonants
FUT	future tense	2	second person	V	vowels
IMP	imperative	3	third person	T	tone
AFF	affirmative	SG	singular		
NEG	negative	PL	plural		
VT	transitive	P	voiceless stops {p, t, k}		
VI	intransitive	N	nasals {m, n, ŋ}		

- | | | |
|--------------------------------------|-------------------------------------|----------------------------------|
| (1) gap toʔ | (6) you _{pl} sold | (11) you _{pl} will dive |
| (2) rui ² ʃi ² | (7) you _{sg} emerge (imp.) | (12) ᠬᠣᠭᠤ ᠰᠠᠭᠤ |
| (3) ju ¹ muʔ | (8) ᠬᠣᠭᠤ ᠰᠠᠭᠤ | (13) ᠰᠣ ᠰᠠᠭᠤ |
| (4) you _{sg} didn't run | (9) ᠰᠣ ᠰᠠᠭᠤ | (14) ᠠᠨᠠᠭᠤ ᠰᠠᠭᠤ |
| (5) you _{sg} will stand | (10) ᠰᠣ ᠰᠠᠭᠤ | (15) kauk ʃuŋ ¹ |

Problem 4.

1. Animate:

- Noun phrase structure:

	♂	♀		♂	♀
1	bak^wõ	bak^wuhu		N-õ	N-uhu
2	dũhũtaha		human	N	N tsuhu
3	wãmeduk^wa		animal		

2. Inanimate:

- Noun phrase structure:

numeral	N—classifier
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- Classifier: $-(V_1)CV_2$ *

* $V_1 = \emptyset \Leftrightarrow V_2 \in \{\mathbf{o}, \mathbf{e}\}$

oblong	-ʔbo
container	-ʔdo
small and round	-de
liquid	-obu
curved, arched	-ĩpĩ
⋮	⋮

- Numeral: $X-V'_1CV_2-(Y)$ **

- 1 — **bak^w-V'_1CV_2**
 2 — **d-V'_1CV_2-latahi**
 3 — **wãp-V'_1CV_2-k^wa**

	$V_2 = \mathbf{o}$	$V_2 = \mathbf{e}$	$V_2 \notin \{\mathbf{o}, \mathbf{e}\}$
** $V'_1 =$ 1	a	a	V_1
2	o	i	V_1
3	u	i	V_1

Abbreviations

N noun C consonant V vowel

- (a) 1. D 2. G 3. F 4. E 5. B 6. C 7. A
- (b) 8. **bak^wõ bolodo** 10. **dilelatahi ibahale** 12. **wãpop^hak^wa itsop^ha**
 9. **bak^waʔdo oʔdo** 11. **doʔbolatahi iwariʔbo** 13. **bak^wuhu otiduhu**

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Problem 5.

1. **u** N MSG (masculine singular) — males, smaller objects, or long, thin objects
ka N FSG (feminine singular) — females, bigger objects, or wide, flat objects
ki N PL (plural)
2. Compound nouns: $\boxed{\text{N}} - \boxed{\text{Modifier}}$ *N: $C_1 C_2 \dots \rightarrow \cancel{C}_1 C_2 \dots$
3. **pin-V** CAUS — ‘to make (something/someone) V’

Abbreviations N noun V verb

- (a)
 1. **ka blaŋ** — I. *she-goat* ... FSG goat
 2. **ka (kh)mat-yoŋ** — H. *pupil (of the eye)* ... FSG eye-black
 3. **ka (s)nieh-blaŋ** — E. *goatskin* ... FSG skin-goat
 4. **ka sla** — B. *big leaf* ... FSG leaf
 5. **ki dien** — J. *trees* ... PL tree
 6. **u kpa** — D. *father* ... MSG father
 7. **u (s)la-dieŋ-tla:y** — G. *palm tree leaf* ... MSG leaf-tree-palm
 8. **u (b)laŋ-kpa** — C. *breeding goat* ... MSG goat-father
 9. **u nar** — F. *iron (e.g. as a rod)* ... MSG iron
 10. **yoŋ** — A. *to be black* ... black
- (b)
 11. **ka yit** — M. *glass (e.g. as a sheet)* ... FSG glass
 12. **ki (kh)la-ba:m-briew** — R. *man-eating tigers* ... PL tiger-eat-person
 13. **ki yit-khmat** — O. *spectacles (plural)* ... PL glass-eye
 14. **pin-ba:m** — L. *to feed* ... CAUS-eat
 15. **u khla** — Q. *male tiger* ... MSG tiger
 16. **u (ph)laŋ-yap** — P. *straw* ... MSG grass-die
 17. **u phlaŋ** — N. *(blade of) grass* ... MSG grass
 18. **yap** — K. *to die* ... die
- (c)
 19. **ba:m** — *to eat* ... eat
 20. **ka snieh** — *skin* ... FSG skin
 21. **ki khmat** — *eyes* ... PL eye
 22. (i) **u (b)laŋ-yoŋ** — *black he-goat* ... MSG goat-black
 - (ii) **u (ph)laŋ-yoŋ** — *black grass* ... MSG grass-black
- (d)
 23. **u yit** — *glass (e.g. as a bottle)* ... MSG glass
 24. **ka nar** — *iron (e.g. as a sheet)* ... FSG iron
 25. **pin-yap** — *to kill* ... CAUS-die
 26. **ka khla** — *tigress* ... FSG tiger
- (e)
 27. **ki (b)riew-lieŋ** — *sailors* ... PL person-boat