en

Sixth Asia Pacific Linguistics Olympiad

7 – 21 April 2024

Solutions

Problem 1.

1. Sentence structure: (S) T V O

– T =

past tense	future tense	
nno	**ka**	S = 1st SG
o	**e**	S = 2nd SG
mV *	**a**	S = 3rd SG

* **V** = following vowel

2. Possession (N_1's N_2):

Possessee		Possessor
N_2- kin terms, body parts	+	**-ku** 1st SG
N_2 **a-** food		**-m** 2nd SG
N_2 **ma-** drinks		**-na** 3rd SG
N_2 **bula-** animals (∌ *pig*)		**-n** N_1 noun
N_2 **no-** others (∋ *pig*)		

(a) *pig*

(b) 13. *I ate the chief's pig.*
14. *He will bite his chicken meat.*
15. *You (SG) looked at the cat.*

(c) 16. **viriu bulam ma an batun masi**
17. **mo ote niu nom**
18. **ka sile vamol maku**

(d) 19. **baheo amiu** — D. *your (PL) shark meat*
20. **nani bulara** — C. *their goat*
21. **tinamam** — B. *our (EXCL) mother*
22. **voi noda** — A. *our (INCL) guest*

Problem 2.

(a)

1.	**kali lar**	—	E.	*door*	← *cover* + *house*
2.	**kali mir**	—	F.	*eyelid*	← *cover* + *eye*
3.	**katjin mir**	—	J.	*tears*	← *water* + *eye*
4.	**kurrki mir**	—	C.	*red eyes*	← *blood* + *eye*
5.	**marti karr**	—	B.	*big nose*	← *big* + *nose*
6.	**marti katjin**	—	G.	*flood*	← *big* + *water*
7.	**miRk-purrp**	—	D.	*brain*	← *egg* + *head*
8.	**purrp**	—	H.	*head*	← *head*
9.	**purrpi lar**	—	I.	*roof*	← *head* + *house*
10.	**puRt kurrk**	—	A.	*bad/evil spirit*	← *smoke* + *blood*

(b)

11.	**kalki tjina**	—	K.	*bones of the foot*	← *tree/bone* + *foot*
12.	**kalki werp**	—	S.	*spine, backbone*	← *tree/bone* + *stem/root*
13.	**kurri**	—	L.	*kangaroo*	← *kangaroo*
14.	**murti kalk**	—	Q.	*short tree*	← *short* + *tree/bone*
15.	**murti paR**	—	P.	*short river*	← *short* + *river*
16.	**paR**	—	O.	*river*	← *river*
17.	**paR manya**	—	N.	*octopus*	← *river* + *hand*
18.	**putj**	—	U.	*stomach*	← *inside*
19.	**putji karr**	—	M.	*nostril*	← *inside* + *nose*
20.	**putji tjina**	—	R.	*sole (of the foot)*	← *inside* + *foot*
21.	**wartipi kalk**	—	T.	*stick*	← *young* + *tree/bone*
22.	**wartipi kurri**	—	X.	*young kangaroo*	← *young* + *kangaroo*
23.	**wartipi liti**	—	W.	*unmarried woman*	← *young* + *woman*
24.	**wartipi tjina**	—	V.	*toe*	← *young* + *foot*

(c) 25. **kalk** — *tree, bone* 26. **katjin** — *water* 27. **liti** — *woman*

(d) 28. *old kangaroo* — **marti kurri** 29. *finger* — **wartipi manya** 30. *skull* — **kalki purrp**

Problem 3.

French	Bambara
v	**w**
ʃ	**s**
ʒ	**z**
ʁ	**r**
y	**i**
ə	**e**
œ	**ɛ**
ɑ	**a**
CC	$\underline{\underline{\mathsf{CV}_\epsilon}}\mathsf{C}$ *
...C	...$\underline{\underline{\mathsf{CV}_\epsilon}}$ *

* $\mathsf{V}_\epsilon = \begin{cases} \mathsf{V}_\alpha & \left[\begin{array}{l} \ldots \underbrace{\mathsf{CV}_\epsilon}_{\sigma_{2k-1}} \underbrace{\mathbf{r}\overset{(\sim)}{\mathsf{V}}_\alpha}_{\sigma_{2k}} \ldots \\ \ldots \underbrace{\mathsf{C}\overset{(\sim)}{\mathsf{V}}_\alpha}_{\sigma_{2k-1}} \underbrace{\mathbf{r}\mathsf{V}_\epsilon}_{\sigma_{2k}} \ldots \end{array}\right. & (\mathsf{C} \notin \{\mathbf{m}, \mathbf{n}\}) \\ \mathbf{i} & \text{otherwise} \end{cases}$

$\left(\because \text{Syllable structure (Bambara):} \quad \begin{cases} \sigma_1 \quad \text{(word-initial):} & \mathsf{CV} \text{ or } \mathsf{V} \\ \sigma_{n\neq 1} \quad \text{(elsewhere):} & \mathsf{CV} \end{cases} \right)$

(1) **tɔrɔsi** (2) **gitari** (3) **farãsi** (4) **ɛ̃sipɛkitɛrɛ** (5) **marisi**
(6) **zaradɛ̃** (7) **direkitɛri** (8) **etamazɔri** (9) **mɔrifini** (10) **ɛ̃fɔrimatiki**

Problem 4.

1. Sentence structure:

   S O (Inst) V

2. Pronouns:

	1st	2nd
SG	**omo**	**neme**
PL	**eeme**	**eme**

3. Noun phrase structure:

   (Poss) N (Adj)

   – Possessor (Poss):

Poss	1st	2nd	3rd
SG	**o-**	**ne-**	**na-**
PL	**ee-**	**e-**	**ne-**

   \+ { **-N** body parts; **-bae** N otherwise }

   – Adjective (Adj):

N	
na-	animate (SG)
ne-	animate (PL)
a-	inanimate

   — STEM

4. Instrument (Inst): noun + **-t**

5. Verb stems: **mesi-** *hide;* **nay-** *chase;* **imbi-** *drop;* **bu-** *hit;* **maitav-** *carry.*

O =	inanimate	animate
navairj-	*pull back*	*catch (fish)*
te-	*cut*	*sacrifice*
uvu-	*dip in the water*	*make swim*

   ∗ Reduplication (*keep ...ing*):

   bu- → **bumbu-** *keep hitting*

   maitav- → **maimaitav-** *keep carrying*

6. Verb structure:

   STEM — SUBJ — OBJ

O =	inanimate	animate	
SUBJ	**-onggai**	**-omn**	1st SG
	-osei	**-osny**	1st PL
	-onai	**-onn**	2nd SG
	-oiei	**-ony**	2nd PL
	-emai	**-emny**	3rd SG
	-enggei		3rd PL
OBJ	∅	**-ai**	SG
		-ev	PL

(a) 13. *I carried the black sheep (PL).*
14. *You (SG) dropped our bow.*
15. *We dipped our hair in the water using our hands.*
16. *I cut (PAST) the small net.*

(b) 17. **tat neii javii avwer imbiemai**
↓ PL; ↓ S = SG
{ *The small child dropped the big basket.*; *The small children dropped the big basket.* }

(c) 18. **eeme uratu nevwer teosnyev**
19. **omo nebae aasi nasai uvuomnai**
20. **eme nabae avu fuatit mesionyai**
21. **neme nebae javii aii nerovot bumbuonai**

Problem 5.

	X	10X
1	**ka**	**ter**
2	**ana**	**metsy̰**
3	**asy̰m**	**semy̰r**
4	**pezy̰**	**lir**
5	**pungu**	**tenem**
6	**trok**	**roky̰r**
7	**tenet**	**tenem ser metsy̰**
8	**ti**	**lir anasy̰**
9	**ty̰ko**	**telang ty̰ko**

$$10\mathsf{X}+\mathsf{Y} = \begin{cases} \boxed{10\,\mathsf{X}}\textbf{-ri}^{*}\ \mathsf{Y} & 0 < \mathsf{Y} \leq 4 \\ \boxed{10\,(\mathsf{X}{+}1)}\ \textbf{maben}\ \mathsf{Y} & 4 < \mathsf{Y} \leq 9 \end{cases}$$

* **ri** $\rightarrow$ **i** / **r** _

(a)
(1) $51 + 23 = 74$
(2) $44 + 25 = 69$
(3) $7 + 8 = 15$
(4) $16 \times 5 = 80$
(5) $12 \times 2 + 63 = 87$
(6) $28 + 42 = 70$
(7) $9 \times 6 = 54$
(8) $84 - 35 = 49$
(9) $13 \times 6 = 78$

(b)
10 **te(r)**
31 **semy̰ri ka**
36 **lir maben trok**
58 **roky̰(r) maben ti**
93 **telang ty̰kori asy̰m**

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