



First Hong Kong Linguistics Olympiad (2019)

Individual Contest Problems

24 March 2019

The Hong Kong Polytechnic University

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Rules for writing out the solutions

Do not copy the statements of the problems. Write down your solution to each problem on the answer booklet. 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 (15 points). Taiwanese Southern-Min

Taiwanese Southern-Min is a Sinitic tonal language with 7 tones. Historically, due to the 50 years of Japanese occupation that ended with World War II, many loan words are borrowed through Japanese, but originally from (mostly) English. This means that many of Japanese language's constraints on loan words are also adopted by Taiwanese. The following is a selected list of Taiwanese loan words and their English (French in one example) origin, without showing their Japanese pivot. Note that the numerical subscripts are tone makers, with 1 being the highest and 5 being the lowest. Hence 51 means high falling, 33 means mid-level, while a single 3 means that the duration is short; etc.

Taiwanese Southern-Min	English/French
ba ₅₅ tah ₃	butter
bat ₃ te ₅₅ lih ₃	battery
bi ₅₁ lu ₁₁	beer
ha ₅₅ muh ₃	ham
khe ₃₃ tsiap ₅ puh ₃	ketchup
sap ₅ -bûn ₃₅	savon
se ₃₃ bi ₅₅ looh ₃	Savile Row
oo ₃₃ too ₅₅ bai ₅₁	auto-bike
uai ₃₅ siat ₅ tsuh ₃	white shirt

(1) The following are 15 Taiwanese loan words, please give their English correspondents:

1. a₃₃ lu₅₅ mih₃
2. a₃₃ moo₅₅ ni₅₅a₅₁
3. a₃₃ sir₅₅ phi₅₅lin₅₁
4. ai₅₅ sir₃ khu₃₃lin₅₁ mu₁₁
5. au₅₁ tsuh₃
6. kha₃₃ la₅₅ oo₅₅khe₅₅
7. kha₃₃ me₅₅ lah₃
8. kha₃₃ ta₅₅ lok₅guh₃
9. kha₃₃ tian₅₁
10. khi₅₅ looh₃

11. khok₅ puh₃
12. khong₁₁ ku₃₃ li₅₁
13. khoo₃₃ le₅₅ lah₃
14. khoo₃₃ mi₅₅si_{ong}₅₁
15. khoo₅₁ too₁₁

- (2) What is your observation of the constraints on words borrowed into Taiwanese through Japanese?
- (3) There are only a few syllables with short ('abrupt') duration. Can you find any common features among them?

Problem 2 (15 points). Czech

Czech language features rich morphology and a free word order which you will explore in this task. Study the sentences in Czech and their English translations:

	Czech	English
1	Na hory Jana jela s Petrem.	Jana went to the mountains with Petr.
2	Jakub letěl s Maruškou k moři.	Jakub flew with Maruška to the sea.
3	Maruška nechce jet na hory s Jakubem.	Maruška doesn't want to go to the mountains with Jakub.
4	Do Prahy Anna se mnou neletěla.	Anna didn't fly to Prague with me.
5	Rudolf letěl do Prahy aby tam potkal Janu.	Rudolf went to Prague to meet Jana.
6	Nejela jsem s Janou na hory.	I didn't go to the mountains with Jana
7	Jakub nechce letět se mnou k moři.	Jakub doesn't want to fly with me to the sea.
8	S Janou v Praze žil Jakub.	Jakub lived with Jana in Prague.
9	Nejel jsem s ním do kina.	I didn't go to the cinema with him.
10	Anna potkala Petra v Praze.	Anna met Petr in Prague.
11	Petr nechce abych žil s Janou v Praze.	Petr doesn't want me to live with Jana in Prague.

(1) Translate the following sentences into Czech. As the word order is free, several translations are acceptable, for your convenience though you might use the standard 'English-like' word order.

1. Petr wants to fly with Jana.
2. Maruška lived in Prague with Filip.
3. I didn't live with Jakub.
4. Jakub went with Anna to the cinema.

(2) Translate the following sentences into English:

5. Neletěla jsem s Petrem k moři.
6. Rudolf nechce abych letela do Prahy.
7. Anna chce aby Petr žil v Praze s Janou.
8. Potkal jsem Janu.

Note:

Czech language belongs to West Slavic family of Indo-European languages. It is spoken by over 10 million people.

Problem 3 (10 points). Welsh

The following data comes from Welsh, which is a Celtic language spoken in Wales, in the United Kingdom by around half a million people. One way that linguists like to classify the grammar of a language is in terms of the basic word order of subject, object, and verb. For instance, both English and Chinese are SVO languages (subject, verb, object) as seen in sentences such as:

I (S) read (V) books (O)

我 (S) 看 (V) 書 (O)

Study the sentences from Welsh below and their English translations.

	Welsh	English
1	Gwelodd Rhiannon ddraig.	'Rhiannon saw a dragon.'
2	Mae Rhiannon wedi gweld draig.	'Rhiannon has seen a dragon.'
3	Dw i 'n credu <u>yr</u> hoffai Gwyn fynd adre.	'I believe Gwyn would like to go home.'
4	Dw i 'n gwybod <u>y</u> bydd Sioned yn canu.	'I know Sioned will be singing.'
5	y dyn <u>a</u> welais i.	'the man that I saw'
6	y llyfr <u>y</u> mae Gwyn yn ei ddarllen.	'the book that Gwyn is reading'
7	Rhiannon <u>a</u> welodd ddraig.	'It was Rhiannon that saw a dragon.'
8	Draig <u>a</u> welodd Rhiannon.	'It was a dragon that Rhiannon saw.'

(1) What is the basic word order of Welsh? Explain your reasoning.

(2) Can you find and list all forms of the verb 'see' in the above sentences? Can you explain why they are different in each case?

(3) Look at the short words that are underlined in the examples. What do you think is the meaning or the purpose of these words?

Reference:

Borsley, R.D., Tallerman, M., & Willis, D. (2007). *The Syntax of Welsh*. Cambridge: Cambridge University Press.

Problem 4 (20 points). Tibetan

The Tibetic languages, consisting of a number of modern dialects such as Central Tibetan, Khams Tibetan and Amdo Tibetan, are typically written in the Tibetan alphabet. The writing system of Tibetan is relatively conservative, reflecting the phonology of the prestigious Classical Tibetan. The modern Tibetan dialects (New Tibetan, NT) have undergone tremendous changes in their phonological systems compared with Classical Tibetan (CT).

- (1) The Wylie scheme is a method for transliterating the Tibetan script into Latin letters. Some examples of the Wylie transliteration are illustrated in the following table.

གི	ཁྲ	ཏ	འཕུར	མོ	སཔ	དེ	བརྗོད	ང	ན	ལ
gi	khra	ta	'phur	mo	sbal	de	brjod	nga	na	lda
སོགས	བསམ	ཀུན	གཡུ	ཐབ	རྟུ	བརྗོས	སྐྱེ	དཔྱིད	སྐྱོད	བྲག
sogs	bsam	kun	g.yu	thab	rgyu	bzlos	skye	dpyid	spyod	brag

Read the examples given above and transliterate the following Tibetan texts.

1	2	3	4	5	6	7
དབང	གྲོལ	འཐམས	ཡུག	བསྐྱེབ	བརྗོས	བརྗོད

- (2) The following table displays some examples of the typical sound changes that have occurred in the development of the Tibetic languages from CT to NT.

CT		>	NT			
			Central: Lhasa	Khams: Dege	Amdo: Bla-brang	
1	མ	'hair'	>	tʂa	tʂa	htea
2	ར	'mountain'	>	ri	ri	rə
3	འབྲེས	'rice'	>	tʂe	ndʒe	ndʒe
4	བདུན	'seven'	>	tʃ̥	den	hdən
5	ལྔ	'six'	>	tʂhu	tʂhu	tʂək

6	བུ	‘son’	>	phu	pu	wə
7	དགའ	‘glad’	>	ka	ga	hga
8	ཁྱེད	‘you’	>	chø	təhø	təhol
9	གོན	‘wear’	>	khõ	teen; ken	kon
10	མེ་རྟོག	‘flower’	>	me to	me thu	me tok
11	མགོ	‘head’	>	ko	ngo	ngo
12	ད	‘now’	>	tha	ta	ta
13	ཉིན	‘day’	>	ɲĩ	ɲin	ɲən
14	ཡིག	‘letter’	>	ji	ji	jək
15	ལོ	‘year’	>	lo	lo	lo

Read the examples given above and write down the modern pronunciations of the following Tibetan words.

	CT		>	NT		
				Central: Lhasa	Khams: Dege	Amdo: Bla-brang
1	མཁའ་གྲིངས་	‘cloud’	>	_____	_____	*
2	རྒྱུག་	‘dragon’	>	_____	*	_____
3	མདའ་	‘arrow’	>	_____	_____	_____
4	ཡོད་	‘exist’	>	_____	*	_____
5	ལྗང་	‘fertilizer’	>	_____	*	_____
6	དུ་	‘nine’	>	_____	_____	_____
7	ལྗོ་	‘knife’	>	_____	_____	_____

Note:

1. The sign > denotes “changes into”.
2. The modern pronunciations are transcribed according to *International Phonetic Alphabet (IPA)*.
3. The data are from the online database The Sino-Tibetan Etymological Dictionary and Thesaurus. URL: <http://stedt.berkeley.edu/~stedt/cgi/rootcanal.pl>


Problem 5 (20 points). Mongolian

You plan to travel in Inner Mongolia. When you read a map of Inner Mongolia, you saw a number of place names in Mongolian and you would like to choose the place you want to go.

Now look at the following place names on the map:

ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ
0	1	2	3	4	5	6	7	8

ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ
9	10	11	12	13	14	15	16	17

As you may be unfamiliar with Mongolian script, here is an example of the Mongolian word. The Latin transliteration of Mongolian word  (No.0 in the map above) is “*mongol*”, which means Mongolia.

- (1) Match each Mongolian name with its Latin transliteration. Fill in the blank by writing down the number of the Mongolian place names listed above.

Hint:

As Mongolian scripts reflect Mongolian pronunciations long time ago, different letters in modern Mongolian may be written in the exactly same form in Mongolian scripts.

	Mongolian	Latin transliteration
example	0	<i>mongol</i>
a		<i>ordos</i>
b		<i>bugutu</i>
c		<i>xöndelen</i>
d		<i>jarud</i>
e		<i>tümed</i>
f		<i>arun</i>
g		<i>xaraqin</i>
h		<i>üjümüqin</i>
i		<i>naiman</i>
j		<i>xoringer</i>
k		<i>buiir</i>
l		<i>dalat</i>
m		<i>sönid</i>
n		<i>xölin</i>
o		<i>dörbed</i>
p		<i>darxan</i>
q		<i>xoolin</i>

(2) Write down the correct Latin transliterations for the following place names.

Hints:

- a. Please use the following vowels: a, e, i, o, u. Answers with vowels outside the list are incorrect.
- b. The ending letters of the Latin transliterations of the following four words are different.

No.	Mongolian	Latin transliteration
i.		
ii.		
iii.		
iv.		

Note:

Mongolian belongs to the Mongolic language family. The number of speakers across all its dialects may be 5.2 million, including the vast majority of the residents of Mongolia and many of the Mongolian residents of the Inner Mongolia Autonomous Region.

Problem 6 (20 points). Skolt Sami

Below are ten Skolt Sami sentences and their translations:

Hint:

Definiteness need not be considered in this problem.

Skolt Sami	English
ââ'lj poo'rdid ta'ncce	The boys stepped on tables.
ââ'lj pōrggâp	We kick a boy.
aa'rbid kau'nmem oō'ljivui'm	I found treasures with the boys.
lâ'dd čōō'lmid kaauni	A bird found flakes.
lââ'dd smaa'ttid kâu'ne saa'ltin	The birds find lizards with salt.
pââ'rd pōōrgam oō'ljjin	I kick a table with a boy.
šââ'ld tancčâp poo'rdivui'm	We step on a floor with tables.
smä'tt čââ'lm pârgg	A lizard kicks a flake.
smä'tt sää'lt käunn	A lizard finds salt.
smää'tt ta'nccem	I stepped on a lizard.

(1) Translate the following Skolt Sami sentences into English:

1. **sää'lt ta'nccem**
2. **lâ'dd ää'rb kaauni smaa'ttivui'm**
3. **smä'tt poo'rdid täncce**
4. **oō'ljid taancam**

(2) Translate the following English sentences into Skolt Sami:

5. A bird kicks salt.
6. I found a table with a flake.
7. A lizard stepped on the birds.
8. I find a bird with a lizard.

(3) Here's a Skolt Sami word in its dictionary form: **norddâd** "to smash", translate:

9. I smashed the floors.
10. The boys smash a lizard with a table.

(4) Please write down your observations about Skolt Sami language.

Note: Skolt Sami belongs to Sami branch of Uralic family. It is spoken by approx. 300 people in Finland.

Data Source:

1. Neahttadigisánit (Dictionary): <http://saan.oahpa.no/> & <https://people.uta.fi/~km56049/same/skolt/koltansaame.html>
2. Feist, Timothy. (2010). A grammar of Skolt Saami. Manchester: The University of Manchester.