



# Saek as a not-so-aberrant Tai language



จุฬาลงกรณ์มหาวิทยาลัย  
Chulalongkorn University  
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# Saek as a not-so-aberrant Tai language

Pittayawat Pittayaporn

[Pittayawat.P@chula.ac.th](mailto:Pittayawat.P@chula.ac.th)

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# Coelacanth

- The coelacanth has been nicknamed a “**living fossil**”, because it originally was known only through fossils, long before the first discovery of a live specimen. The coelacanth is thought to have evolved into roughly its current form approximately 400 million years ago.

(Wikipedia contributors 2012)



## Coelacanth fossil

The coelacanth were thought to have been extinct since 99.6–65.5 years ago. It was rediscovered in 1938 off the southern coast of Africa (Wikipedia contributors 2012)



## Saek and its discovery

- First mentioned in late 19<sup>th</sup> and early 20<sup>th</sup> centuries
- Previously thought to be Mon-Khmer (e.g. Seidenfaden 1930)
- Recognized as Tai by Fraise (1950) and Haudricourt (1958)



# Distribution and history

- Spoken in NE Thailand, central Laos, and possibly central Vietnam.
- Arrived in Thailand in the early 19<sup>th</sup> century.
- Oral history suggests that its speakers migrated from Vietnam (Hudak 1993; Chamberlain 1998)
- Possibly ultimately from Guangxi (Haudricourt 1958).





## Saek as an NT language

- Haudricourt (1958; 1963) believes that Saek belongs to the Northern branch of Tai (NT).
- Gedney (1970) demonstrates that Saek shows distinctively NT lexical and phonological traits.



# NT features in Saek

- Vocabulary
  - /pul<sup>1</sup>/ 'body hair'
  - /p<sup>h</sup>iəŋ<sup>4</sup>/ 'city'
  - /p<sup>h</sup>iə<sup>5</sup>/ 'shirt'
- Rimes
  - /vi:<sup>4</sup>/ 'fire' < PT \*-ɣj
  - /ɣaj<sup>6</sup>/ 'feces' < PT \*-ɯj
  - /ra:n<sup>4</sup>/ 'house' < PT \*-ɣ:n
  - /suək<sup>6</sup>/ 'elbow' < PT \*-wo:k
- Onsets/tone
  - /ɣam<sup>4</sup>/ 'bitter' < PT \*Ç.k-
  - /ma<sup>2</sup>/ 'come' < PT \*<sup>h</sup>m-
  - /p<sup>h</sup>al<sup>4</sup>/ 'to be' < PT \*m̩.p-





## Retentions in Saek

- PT clusters (cf. Haudricourt 1963)
  - \*pr- : /p<sup>h</sup>rak<sup>4</sup>/ ‘vegetable’, /p<sup>h</sup>ram<sup>2</sup>/ ‘head hair’,
  - \*p.r- : /pra:k<sup>6</sup>/ ‘to be exposed’, /pre:k<sup>6</sup>/ ‘broken’
  - \*bl- : /bliən<sup>1</sup>/ ‘moon’, /blɔ:k<sup>6</sup>/ ‘flower’
- PT \*-l (cf. Gedney 1993)
  - \*-el : /mlɛl<sup>4</sup>/ ‘body louse’, /ɲɛl<sup>6</sup>/ ‘civet’
  - \*-al : /ɣal<sup>4</sup>/ ‘dike’, /hal<sup>2</sup>/ ‘to crow’



## “Aberrancies” in Saek

- Correspondences to PSWT \*d-
  - /d-/: /di:<sup>1</sup>/ ‘good’, /dam<sup>1</sup>/ ‘to smell’
  - /r-/: /rip<sup>4</sup>/ ‘raw’, /rɔk<sup>6</sup>/ ‘catfish’
  - /tl-/: /truəl<sup>1</sup>/ ‘earthworm’, /tram<sup>1</sup>/ ‘to transplant’
- Viewed as divergent outcomes of cluster resolutions by Pittayaporn (2009), i.e.
  - \*d- vs. \*Ç.d- vs. \*t.n-

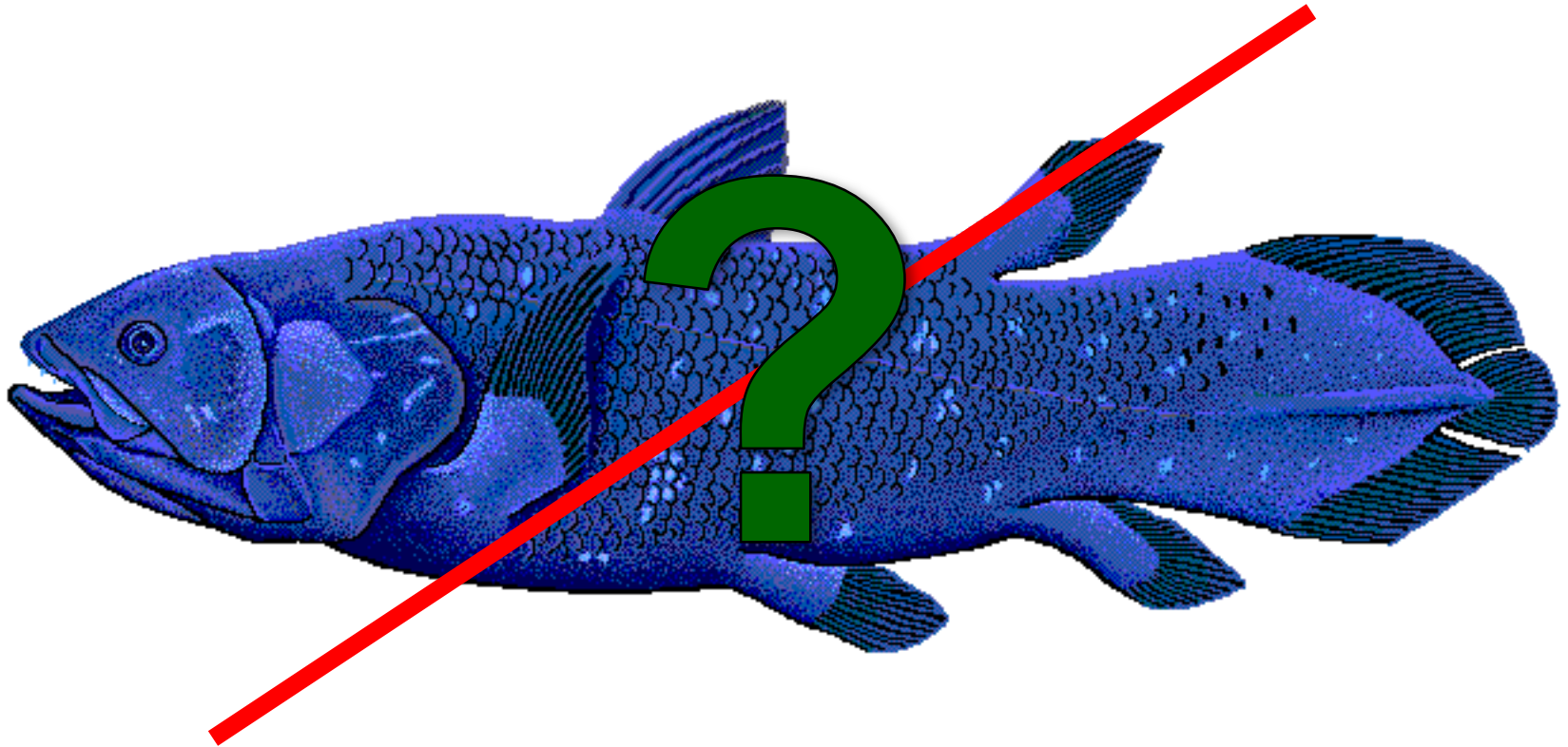


## “Aberrancies” in Saek (cont.)

- Multiple correspondences of Saek /j-/
  - Saek /j-/ ~ PSWT \*j-, \*ʔj-, \*z-, and \*ɟ-
  - What are the sources of Saek /j-/?
- Split of \*A1H
  - /hi:ŋ<sup>2</sup>/ ‘ginger’ vs. /ke:n<sup>1</sup>/ ‘arm’
  - How is the alleged split of \*A1H explained?
- Unique set of the twelve year names
  - /thriw<sup>3</sup>/ ‘year of the ox’, /rwn<sup>4</sup>/ ‘year of the ox’
  - Where did Saek acquire the set?



# Tai coelacanth?





# Proposal

- The so-called “aberrancies” outcomes of contact-induced changes.





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What are the sources of Saek /j-/?

**Multiple correspondences of Saek /j-/**



## Correspondences to PSWT

	PSWT	Saek
*j-	*ja: <sup>B</sup> *ja:n <sup>A</sup>	/ja: <sup>5</sup> / 'grandmother' /ja:l <sup>4</sup> / 'slack'
*ʔj-	*ʔjiəp <sup>D</sup> *ʔju: <sup>A</sup>	/jiəp <sup>6</sup> / 'to step on' /ju: <sup>6</sup> / 'to be at'
*z-	*zak <sup>D</sup> *zaj <sup>A</sup>	/jak <sup>6</sup> / 'to wash (clothes)' /jaj <sup>4</sup> / 'fish trap'
*ɰ-	*ɰu: <sup>C</sup> *ɰa:j <sup>A</sup>	/ju: <sup>6</sup> / 'lover' /ja:j <sup>4</sup> / 'eave'

Data from Hudak (2008)



## Known developments

- \*ʔj- and \*j- merged after tone split in most Tai dialects

	Thai	Shan	Saek	Gloss
*j-	/jun <sup>1</sup> /	/jun <sup>4</sup> /	/nun <sup>4</sup> /	'mosquito'
	/ja: <sup>3</sup> /	/ja: <sup>3</sup> /	/nua <sup>3</sup> /	'grass'
*ʔj-	/ju: <sup>2</sup> /	/ju <sup>2</sup> /	/ju: <sup>6</sup> /	'to be at'
	/ja: <sup>1</sup> /	/ja: <sup>1</sup> /	/ja: <sup>1</sup> /	'medicine'



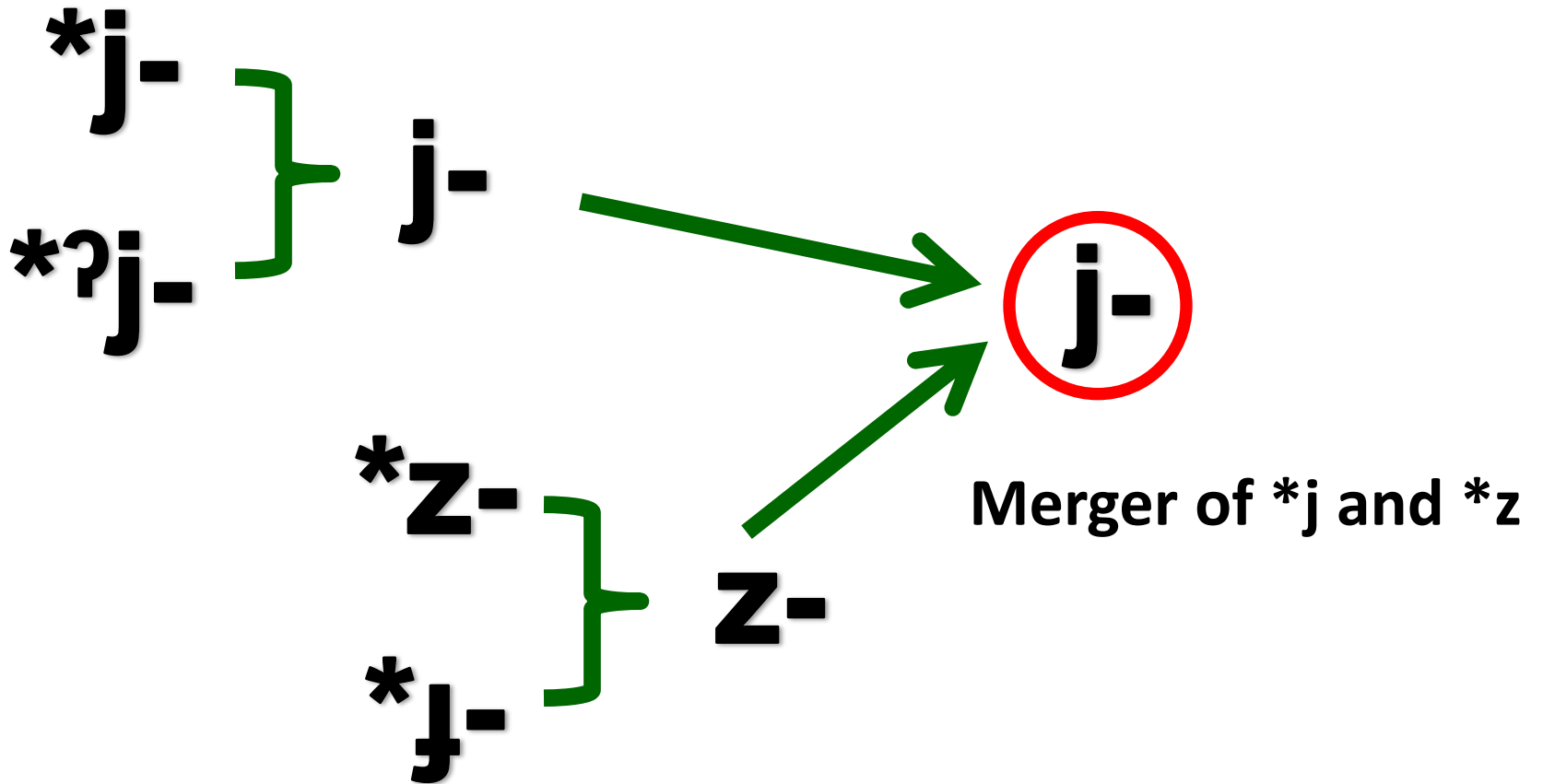


- Some etyma has reflexes \*z- in **all** NT but \*j- in SWT (Li 1977; Kosaka 1992; Pittayaporn 2009)

	White Tai	Yay	Saek	Gloss
*z-	/sw <sup>5</sup> / /sak <sup>4</sup> /	/θo <sup>5</sup> / /θak <sup>1</sup> /	/jɔ: <sup>5</sup> / /jak <sup>6</sup> /	‘straight’ ‘to wash’
*j-	/ca:ŋ <sup>6</sup> / /cw <sup>5</sup> /	/sa:ŋ <sup>6</sup> / /so <sup>6</sup> /	/sa:ŋ <sup>6</sup> / /sɔ: <sup>6</sup> /	‘elephant’ ‘morning’
*z-~*j-	/cu <sup>6</sup> /	/ju <sup>6</sup> / /θa:j <sup>4</sup> /	/ju: <sup>6</sup> / /ja:j <sup>4</sup> /	‘lover’ ‘eaves’



## Cleaner picture





# Merger of /j-/ and /z-/ in Vietnamese dialects

Proto-Vietnamese	Spelling	North	Fangchéng	North-Central	Central	South
*r	r	z	j	ɺ	ɺ	ɺ
*j	d	z	j	tʃ	j	j
*tʃ	gi	z	j	z	j	j
*v	w	v	v	v	j	j



## Saek /j-/ as a result of contact

- The change  $*z- > j-$  is unlikely to have been internally motivated because earlier  $*\gamma-$  and  $*v-$  are still allowed, cf.
  - / $\gamma$ al<sup>4</sup>/ ‘grandmother’ < PT  $*\gamma$ al<sup>A</sup>
  - /vi<sup>4</sup>/ ‘grandmother’ < PT  $*wi$ :<sup>A</sup>
- Given Vietnamese loanwords (Kosaka 1997), the merger of  $*j-$  and  $*z-$  was most likely induced by contact with Vietnamese.



How is the alleged split of \*A1H explained?

## Split of \*A1H



## A1H items

- A1H items are etyma that go back to \*A and the following onsets:
  - Voiceless unaspirated stops: \*p<sup>h</sup>-, \*t<sup>h</sup>-, \*c<sup>h</sup>-, \*k<sup>h</sup>-
  - Voiceless fricatives: \*f-, \*s-, \*x-, \*h-
  - Voiceless nasals: \*<sup>h</sup>m-, \*<sup>h</sup>n-, \*<sup>h</sup>ɲ-, \*<sup>h</sup>ŋ-
  - Voiceless liquids and glides: \*<sup>h</sup>w-, \*<sup>h</sup>l-, \*<sup>h</sup>r-



## Normal reflexes of A1H

- Normal reflexes of A1H etyma have tone 2 in Saek (Gedney 1970, 1989; Kosaka 1992)

	PSWT	White Tai	Saek	Gloss
*s	*sa:w <sup>A</sup>	/θa:w <sup>1</sup> /	/sa:w <sup>2</sup> /	'unmarried woman'
* <sup>h</sup> m	* <sup>h</sup> ma: <sup>A</sup>	/ma: <sup>1</sup> /	/ma: <sup>2</sup> /	'dog'
* <sup>h</sup> r	* <sup>h</sup> ra:w <sup>A</sup>	/ha:w <sup>1</sup> /	/ra:w <sup>2</sup> /	'to yawn'
* <sup>h</sup> w	* <sup>h</sup> wa:n <sup>A</sup>	/va:n <sup>1</sup> /	/va:l <sup>2</sup> /	'sweet'



## “Regular” tone 1?

- Tone 1 is expected for A1M items
  - Voiceless unaspirated stops: \*p-, \*t-, \*c-, \*k-
  - Glottalized stops and glide: \*b-, \*d-, \*ʔj-, \*ʔ-

PSWT	White Tai	Saek	Gloss
*ka: <sup>A</sup>	/ka: <sup>1</sup> /	/ka: <sup>1</sup> /	‘crow’
*pla: <sup>A</sup>	/pa: <sup>1</sup> /	/pla: <sup>1</sup> /	‘fish’
*blɰəŋ <sup>A</sup>	/bɰŋ <sup>1</sup> /	/blian <sup>1</sup> /	‘moon’
*ʔaw <sup>A</sup>	/ʔaw <sup>1</sup> /	/ʔaw <sup>1</sup> /	‘to take’
*dam <sup>A</sup>	/dam <sup>1</sup> /	/ram <sup>1</sup> /	‘black’

Data from Hudak (2008)





## “Aberrant” tone 1

- Gedney (1989) states that “aberrant” tone 1 **tends** to occur on A1H etyma having initial /x-/ in White Thai.

White Tai	Saek	Gloss
/xim <sup>1</sup> /	/kim <sup>1</sup> /	‘needle’
/xɛn <sup>1</sup> /	/ke:nt <sup>1</sup> /	‘arm’
/xaw <sup>1</sup> /	/kaw <sup>1</sup> /	‘horn’

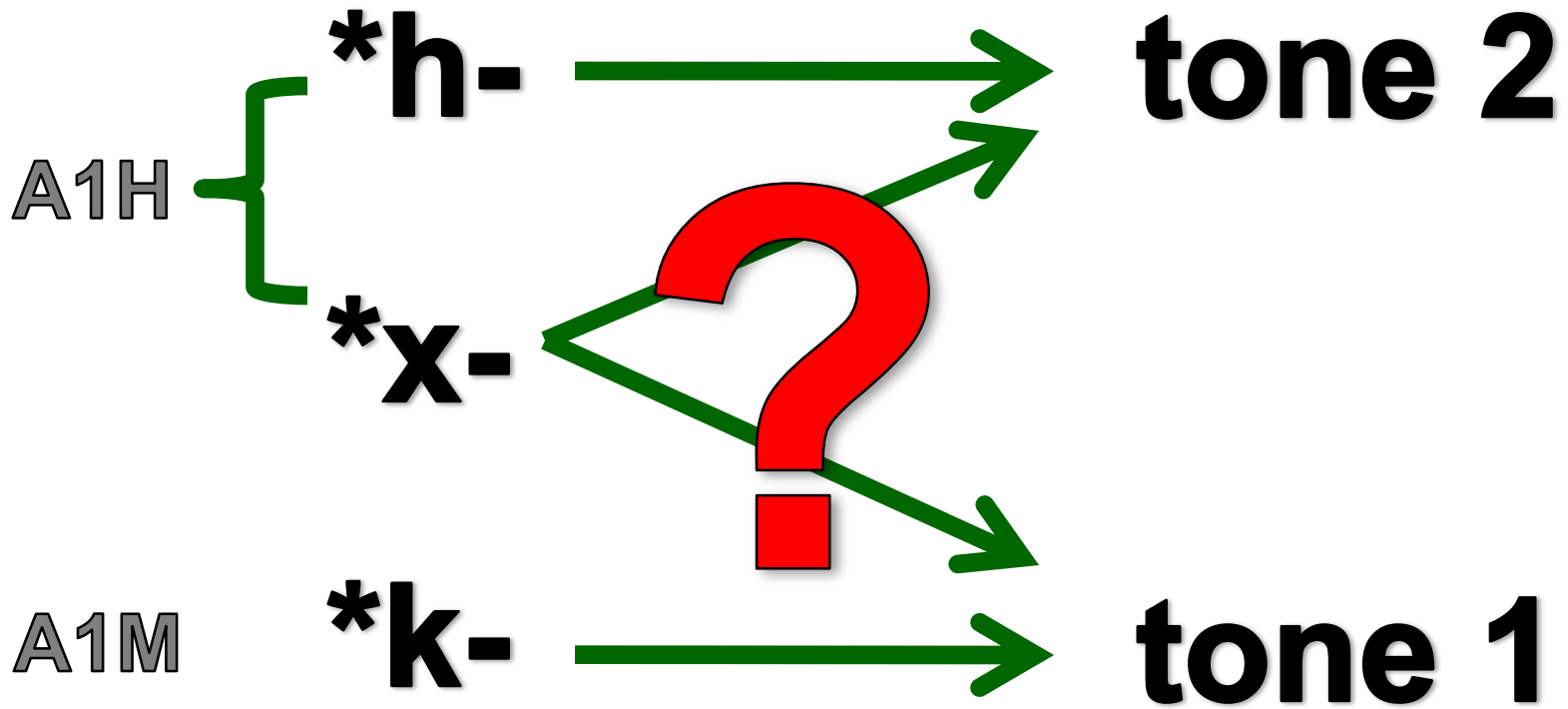


- However, certain A1H etyma with /x-/ in White Thai also show the expected tone 2.

White Tai	Saek	Gloss
/xɛw <sup>1</sup> /	/he:w <sup>2</sup> /	'green'
/xiŋ <sup>1</sup> /	/hi:ŋ <sup>2</sup> /	'ginger'
/xan <sup>1</sup> /	/hal <sup>2</sup> /	'to crow'



## A conditioned split?





# Chamberlain's phonetic explanation?

- Chamberlain (1991: 108)
  - states that Saek words going back to PT  $*k^h-$ ,  $*f-$ ,  $*^hr-$ , and  $*^hl-$  tends to have Tone 1.
  - speculates that the split may involves the pull on the larynx by palatal and velar consonants.



## PT uvular \*q-

- Gedney (1989) notes that the “regular” and “aberrant” tone 1s have different reflexes in Yay.
- Pittayaporn (2007) posits a distinctive uvular series in PSWT.
- Pittayaporn (2009) projects the distinction back to PT.



## “Regular” vs. “aberrant”

PSWT	Kapong	White Tai	Yay	Saek	Gloss
*x-/		/xɛw <sup>1</sup> /	/hew <sup>1</sup> /	/he:w <sup>2</sup> /	‘green’
	/hi:ŋ <sup>1</sup> /	/xiŋ <sup>1</sup> /	/hiŋ <sup>1</sup> /	/hi:ŋ <sup>2</sup> /	‘ginger’
	/han <sup>1</sup> /	/xan <sup>1</sup> /	/han <sup>1</sup> /	/hal <sup>2</sup> /	‘to crow’
*q-		/xim <sup>1</sup> /	/cim <sup>1</sup> /	/kim <sup>1</sup> /	‘needle’
	/hɛ:n <sup>1</sup> /	/xɛn <sup>1</sup> /	/cen <sup>1</sup> /	/ke:n <sup>1</sup> /	‘arm’
	/haw <sup>1</sup> /	/xaw <sup>1</sup> /	/kaw <sup>1</sup> /	/kaw <sup>1</sup> /	‘horn’



# Saek tone 1 as a result of contact

- Tone 1 is in fact expected for items going back to PT \*q-.
- Other A1H items with tone 1 are mostly loanwords
  - Lao/Thai:
  - Vietnamese:



Where did Saek acquire the set?

**Unique set of the twelve year names**





# The twelve year names in Saek

- Saek has two sets of the twelve year names (Gedney 1993)
  - New set borrowed from Thai/Lao
  - Old set of unclear origin
- The old set is clearly related to the Yay set (< Chinese)



	New	Old
Rat	suət <sup>5</sup>	ti: <sup>6</sup>
Ox	sa <sup>6</sup> .lu: <sup>1</sup>	t <sup>h</sup> riw <sup>3</sup>
Tiger	k <sup>h</sup> an: <sup>1</sup>	rwn <sup>4</sup>
Rabbit	t <sup>h</sup> ɔʔ <sup>4</sup>	mɛ:w <sup>4</sup>
Dragon	ma <sup>6</sup> .lo:ŋ <sup>4</sup>	sin <sup>4</sup>
Snake	ma <sup>6</sup> .seŋ <sup>1</sup>	ti: <sup>5</sup>
Horse	ma <sup>6</sup> .miə <sup>4</sup>	ŋɔ: <sup>5</sup>
Sheep	ma <sup>6</sup> .mɛ: <sup>4</sup>	muj <sup>4</sup>
Monkey	vɔ:k <sup>4</sup>	t <sup>h</sup> rwn <sup>1</sup>
Chicken	la <sup>6</sup> .ka: <sup>1</sup>	raw <sup>3</sup>
Dog	ɔ: <sup>1</sup>	tut <sup>4</sup>
Pig	kun <sup>1</sup>	hɯ:j <sup>5</sup>



## Ultimate origin

- Boltz (1991) claims that the set was borrowed from Chinese in its entirety.
  - Borrowed from Chinese around AD 200 to 600
  - Vietnamese “flavors” but
  - “cannot have any direct relation to the Vietnamese borrowings (Boltz 1991: 60).



	Character	Early Middle Chinese	Old Chinese	Vietnamese	Saek
Rat	子	tsi'/tsi'	*tsəʔ	tử / tý	ti: <sup>6</sup>
Ox	丑	tr <sup>h</sup> uw'	*ŋruʔ	sửu	t <sup>h</sup> riw <sup>3</sup>
Tiger	寅	jin	*gər	dần	rwn <sup>4</sup>
Rabbit	卯	maiw' / mɛ:w'	*m <sup>ɻ</sup> ruʔ	mẹo/mão	mɛ:w <sup>4</sup>
Dragon	辰	ɟin	*dər	thin/thần	sin <sup>4</sup>
Snake	巳	zi'/zi'	*s-gəʔ	tị	ti: <sup>5</sup>
Horse	午	ŋw'	*m.q <sup>h</sup> aʔ	ngọ	ŋw: <sup>5</sup>
Sheep	未	muj <sup>h</sup>	*mət-s	mùj/vị	muj <sup>4</sup>
Monkey	壬	ŋim	*nəm	thân	t <sup>h</sup> rwn <sup>1</sup>
Chicken	酉	juw'	*m.ruʔ	dầu	raw <sup>3</sup>
Dog	戌	swit	*s.mit	tuất	tut <sup>4</sup>
Pig	亥	ɣəj'	*g <sup>ɻ</sup> əʔ	hợi	hɣ:j <sup>5</sup>



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# Vietnamese flavors