

# Evidences of Hlai dental and velar clusters from Savina's Đày variety

WEERA Ostapirat  
University of California, Berkeley

## 1. Introduction

The Hlai language is spoken on the Hainan Island, southernmost China, and is nowadays classified as belonging to the Tai-Kadai family. In the past decade, Chinese linguists Ouyang and Zheng have published a monumental work containing around 1,600 words of ten Hlai varieties (1983). Matisoff (1988) then used these valuable data in developing his proposal for the proto Hlai initials.

Earlier, the data source for Hlai had been based on the work of Savina (1931), who collected a good number of lexical items of what he called "Southern Đày" and a few items (around 150 words) of what he called "Central Hlai". This work has been recently somewhat neglected, partly due to its irregular transcription and his use of the Vietnamese script (quốc ngữ). Though there are certainly some ambiguous recordings, we find that Savina's transcriptions are in general fairly consistent, at least they cannot be regarded as unreliable. We will present a detailed treatment of Savina's Southern Đày in our next article. In the following short note, we focus our discussion on Southern Đày (hereafter SĐ) *d/dr-* and Central Hlai (hereafter CH) *tl-*.

## 2. Southern Đày *d/dr-*

SĐ *d-* corresponds to six of Matisoff's proto Hlai initials (hereafter MPL), i.e. *\*d-*, *\*t-*, *\*r-*, *\*vr-*, *\*ʃ-*, and *\*ɣw-*. The correspondence SĐ *d-* to MPL *\*d-* is apparently direct, and will not be discussed here, while the SĐ *d-* to MPL *\*t-* will be discussed under 3. The correspondence SĐ *d-/dr-* to the other four MPL initials will be discussed below in turn.

### 2.1 SĐ *d/dr-* = MPL *\*r-*

	SĐ	Baoding	Heitu	Qiandui	Xifang
star	đráo	rau <sup>1</sup>	rau <sup>1</sup>	lau <sup>4</sup>	rau <sup>1</sup>
mortar	đráu	rau <sup>1</sup>	rau <sup>1</sup>	lau <sup>4</sup>	rau <sup>1</sup>
to pick (fruit)	đráu/đáu	rou <sup>1</sup>	rou <sup>1</sup>	lou <sup>4</sup>	rou <sup>1</sup>
to whet (knife)	đrá	ra <sup>1</sup>	ra <sup>1</sup>	la <sup>4</sup>	ra <sup>1</sup>
to speak	điến	rim <sup>1</sup>	rim <sup>1</sup>	-	riŋ <sup>1</sup>

hungry	đén	ran <sup>1</sup>	ren <sup>1</sup>	lan <sup>4</sup>	raŋ <sup>1</sup>
knee	đầu	rou <sup>1</sup>	rou <sup>1</sup>	lou <sup>4</sup>	rou <sup>1</sup>
noise, thunder	đáng	roŋ <sup>1</sup>	raŋ <sup>1</sup>	loŋ <sup>4</sup>	roŋ <sup>1</sup>
to cook	đàng	roŋ <sup>2</sup>	raŋ <sup>2</sup>	loŋ <sup>2</sup>	roŋ <sup>2</sup>
bamboo	đần	ro:n <sup>2</sup>	ran <sup>2</sup>	lo:n <sup>2</sup>	ro:ŋ <sup>2</sup>
to fish	đrông/dông	roŋ <sup>3</sup>	ruŋ <sup>3</sup>	loŋ <sup>6</sup>	roŋ <sup>3</sup>
to hang	điêng	riŋ <sup>3</sup>	riŋ <sup>3</sup>	liŋ <sup>6</sup>	riŋ <sup>3</sup>
intestine	đày	rai <sup>3</sup>	rai <sup>3</sup>	lai <sup>6</sup>	rai <sup>3</sup>
centipede	đríp/díp	ri:p <sup>7</sup>	rip <sup>7</sup>	li:p <sup>8</sup>	rip <sup>7</sup>

All nine varieties used by Matisoff show only *r-* or *l-* for the above examples. But then, SĐ *d-/dr-*, not attested elsewhere, seem to lead us to *\*dr-* rather than MPL *\*r-*. While we can assume that the stop was lost to give *r-* or *l-* in other dialects, it seems to be *-r-* which was in the process of being lost in SĐ at the time Savina collected the data. As can be seen from Savina's data in 2.1, SĐ still preserves *dr-* in some words, shows both *d-* and *dr-* in the others, and completely loses *-r-* in the rest.

## 2.2 SĐ *d-/dr-* = MPL *\*vr-*

The reflexes of MPL *\*vr-* are *v-*, *f-*, *r-*, and *ɣ-*. See examples below:

	SĐ	Baoding	Heitu	Qiandui	Xifang
boat	đá	va <sup>1</sup>	ra <sup>1</sup>	fa <sup>4</sup>	ɣa <sup>1</sup>
navel	đớu	veu <sup>1</sup>	reu <sup>1</sup>	feu <sup>4</sup>	ɣeu <sup>1</sup>
snore	đán	van <sup>1</sup>	ran <sup>1</sup>	fan <sup>4</sup>	ɣan <sup>1</sup>
bone	đrư	vuk <sup>7</sup>	ru: <sup>7</sup>	fua <sup>8</sup>	ɣuk <sup>7</sup>
raw	điep	vi:p <sup>7</sup>	ri:p <sup>7</sup>	fi:p <sup>8</sup>	ɣip <sup>7</sup>
rice, food	*đóp	-	rop <sup>5</sup>	fap <sup>8</sup>	ɣap <sup>7</sup>

Again, we assume that this proto consonant should be a dental cluster, and we propose *\*drw-*. The */r-/* element is kept as the initial in Heitu, Zhongsha, and Xifang (as */ɣ-/*) as in the case of *\*dr-* (MPL *\*r-*) while the */w-/* element accounts for the labial spirants in the rest of dialects.

Notice that we have now a set of imploded dental stops: *\*d-*, *\*dr-*, and *\*drw-*. The fact that they do not result in tone splits in a uniform matter (*\*d-* does not split tones) is not surprising. At the time of tone splits, the latter two complex initials may have developed different properties in daughter forms which split tones, perhaps something like MPL *\*r-* and *\*vr-*. But while the grouping of initials according to tone splits has certainly contributed to the reconstruction of proto sounds, we should not confuse the stage of tone splits with a stage of the proto language, the common ancestor of all Hlai dialects. Many changes can have occurred between these two stages.

## 2.3 SĐ *d-/dr-* = MPL *\*lɰ-*

The reflexes of MPL *\*lɰ-* are mostly velar sounds, i.e. */g-/* (Baoding, Zhongsha, Tongshi), */x-/* (Xifang, Baisha), */kh-/* (Yuanmen), and */h-/* (Qiandui,

Baocheng). Exception to this is Heitu which shows /r-/, otherwise this MPL \*lʒ- would be identical to MPL \*ɣ-. See examples below.

	MPL initials	Baoding	Heitu	Qiandui	Xifang	Yuanmen	SĐ
to ask	*ɣ-	gam <sup>1</sup>	gam <sup>1</sup>	ham <sup>4</sup>	xam <sup>1</sup>	kham <sup>1</sup>	gám
spicy	*lʒ-	geɸ <sup>7</sup>	rit <sup>7</sup>	het <sup>8</sup>	xet <sup>7</sup>	khet <sup>7</sup>	drít

In fact, if we are to reconstruct the consonant in “to ask” as \*ɣ-, the latter should be \*ɣr-. SĐ reflexes given as dental sounds d-/dr-, help to support this assumption. See the following examples.

	SĐ	Baoding	Heitu	Qiandui	Xifang
thin	đớɹ	gew <sup>1</sup>	rew <sup>1</sup>	hew <sup>4</sup>	xew <sup>1</sup>
eight	đú	gou <sup>1</sup>	ru <sup>1</sup>	hou <sup>4</sup>	xou <sup>1</sup>
iron	đai	goi <sup>1</sup>	rai <sup>1</sup>	hai <sup>4</sup>	xoi <sup>1</sup>
brother (younger)	đuống	guŋ <sup>1</sup>	ruŋ <sup>1</sup>	huəŋ <sup>4</sup>	xuŋ <sup>1</sup>
line, row	đài	goi <sup>2</sup>	rai <sup>2</sup>	-	xoi <sup>2</sup>
net	đai	goi <sup>3</sup>	rai <sup>3</sup>	hai <sup>6</sup>	xoi <sup>3</sup>
to sell	điù	-	riu <sup>3</sup>	hiu <sup>6</sup>	xiu <sup>3</sup>
spicy	drít	geɸ <sup>7</sup>	rit <sup>7</sup>	het <sup>8</sup>	xet <sup>7</sup>

Unlike the preceding two sounds (2.1 and 2.2), SĐ d-/dr- in this case are not original but develop secondarily from the velar cluster, i.e., ɣr-> dr- (> d-). The merging of velar sounds or any simple consonants into dental cluster seems less reasonable.

2.4 SĐ d-/dr-= MPL \*ɣw-

The reflexes of MPL \*ɣw- are similar to MPL \*lʒ-, but the -w- element apparently still exists, as is being directly realized in some varieties (Baoding, Tongshi, Baocheng) and as is giving rise to v- in the others (Baisha, Yuanmen, Qiandui). However, Heitu and Xifang show r- and ɣ- respectively, suggesting that this proto consonant should contain -r-. With evidence of SĐ d-/dr-, we propose, analogous to \*ɣr- (MPL \*lʒ-), \*ɣrw- for this consonant.

	SĐ	Baoding	Heitu	Qiandui	Xifang
to know	đớɹ	gew <sup>1</sup>	rew <sup>1</sup>	-	ɣew <sup>1</sup>
hundred	đán	gwa:m <sup>1</sup>	ra:m <sup>1</sup>	va:m <sup>4</sup>	ɣa:m <sup>1</sup>
to plant	dra	gwa <sup>1</sup>	ra <sup>1</sup>	va <sup>4</sup>	ɣa <sup>1</sup>
to run	đầu	gou <sup>2</sup>	rou <sup>2</sup>	(vou <sup>5</sup> )*	ɣou <sup>2</sup>
pus	đêu	gwiu <sup>3</sup>	riu <sup>3</sup>	viu <sup>6</sup>	ɣiu <sup>3</sup>

Thus, we have now a set of velar spirant : \*ɣ-, \*ɣr-, and \*ɣrw-, parallel to the imploded dental stop. All these consonants triggered the same pattern of tone splits.

\* This form is from Yuanmen.

At this point we would like to call attention to Xifang /ɣ/. The /ɣ-/ can often be considered equivalent to /r-/, not only in Xifang Hlai but also in many languages of mainland Southeast Asia, including Tai, Kam-Sui, and Miao-Yao. However, we should note that Xifang keeps also /r-/, as the reflex of \**dr-* (MPL \**r-*). Thus, there should be some phonetic conditions why Xifang might preserve the proto\**r-* as /r-/ or /ɣ-/. We speculate that Xifang /ɣ-/ comes from \**rw-*. Xifang /ɣ-/ is the reflex to four of MPL initials: \**vr-*, \**ɣw*, \**fr-*, and \**xw-*. We have already discussed the former two in 2.2 and 2.4 and proposed instead \**drw-* and \**ɣrw-*. For MPL \**fr-*, the fact that Heitu shows /p-/ while the rest show *f-* has already suggested the possibility of a round element and perhaps pointed to \**prw-* (this *-w-*, however, may come secondarily from the influence of a labial /p-/. See following examples.

	Xifang	SĐ	Heitu	Baoding	Qiandui
nine	ɣeu <sup>3</sup>	pòu	peu <sup>3</sup>	fau <sup>3</sup>	fau <sup>3</sup>
ripe, cooked	ɣui <sup>1</sup>	púi	pui <sup>1</sup>	fui <sup>1</sup>	fui <sup>1</sup>

In the case of MPL \**xw-*, the rounding /w-/ has already been addressed but the /r-/ element has just been suggested by our proposal here. In fact, the reflexes of this consonant are similar to \**ɣrw-* (MPL \**ɣw-*), except that most varieties show a glottal stop instead of velar initials. Examples of this proto sound are few on number and our suggestion of *-rw-* cluster must await further support.

	Xifang	SĐ	Heitu	Baoding	Qiandui
bowl, cup	ɣau <sup>1</sup>	áo	?au <sup>1</sup>	?wau <sup>1</sup>	vau <sup>1</sup>
to rise, get up	ɣeu <sup>2</sup>	óu	?eu <sup>2</sup>	?wau <sup>2</sup>	vau <sup>5</sup>

### 3. Central Hlai *tl-*

The most interesting feature from the limited data of Central Hlai is its preservation of the dental cluster *tl-*, not attested elsewhere. CH *tl-* normally corresponds to MPL \**ɬ*.

The reflexes of MPL \**ɬ* are /t-/ in all places except in Heitu, which has /d-/. Matisoff elects not to consider such Heitu evidence of a dental (glottalized) stop, perhaps in order to establish a nice set of MPL voiceless spirants. SĐ agrees with Heitu in showing *d-* and can be regarded reasonably as coming from \**tl-* rather than MPL *-ɬ*. The development from the dental cluster with *-l-* or lateral stop to the imploded dental stop is also well known in many Miao-Yao forms.

	CH	SĐ	Baoding	Heitu	Qiandui
good	tlên	dín	ɬen <sup>1</sup>	din <sup>1</sup>	ɬen <sup>1</sup>
fish	tlá	dá	ɬa <sup>1</sup>	da <sup>1</sup>	ɬa <sup>1</sup>
to give birth	tlâu	(táu)	ɬou <sup>1</sup>	dou <sup>1</sup>	ɬou <sup>1</sup>
umbrella	tlán	dán	-	-	-
fear	tlá	dà	ɬa <sup>3</sup>	da <sup>3</sup>	ɬa <sup>3</sup>
tongue	tlíén	dién	ɬim <sup>3</sup>	din <sup>3</sup>	ɬim <sup>3</sup>
blood	tlət	dət	ɬat <sup>7</sup>	dat <sup>7</sup>	ɬat <sup>7</sup>
deep	tlə	dác	ɬək <sup>7</sup>	dak <sup>7</sup>	ɬək <sup>7</sup>

Also, there are two examples in which CH shows *tr-*, corresponding to MPL *\*t-*:

two	tráu	dàu	ɬau <sup>3</sup>	dou <sup>3</sup>	ɬau <sup>3</sup>
many	trai	đai	ɬoi <sup>1</sup>	dai <sup>1</sup>	ɬai <sup>1</sup>

Whether this CH /*tr-*/ is original or not is difficult to say. We can equally assume that the /*tr-*/ in these words is a remnant of an old contrast or is a recent development form *tl-*. Note the change *tl->tr-* in Saek; the younger speakers often merge *tl-* and *tr-* in favor of the latter while the older speakers still keep the distinction. All in all, the examples are too few to speculate further on this matter.

#### 4. Conclusion

In this note, we have proposed the phonetic reinterpretation of some proto Hlai initials, based on evidences from Savina's Đày and Hlai. Of specially importance is Savina's data of some dental clusters, not attested elsewhere. They also suggest that proto Hlai should possessed some dental and velar clusters with *-r-*, and that the round medial *-w-* can occur with these clusters.\*

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Department of Linguistics  
2337 Dwinelle Hall  
UC. Berkeley, CA 94720  
U.S.A.