

A Note on Paiwan *tj*, *dj*, and *lj*

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The present note aims at drawing the attention on the importance of recording the Formosan languages as correctly as possible by focusing specifically on the Paiwan phonemes /c/, /ɟ/ and /ʎ/, that have been transcribed differently in recent works.

Key words: Formosan languages, Paiwan, phonemic inventory, orthography, discrepancies

1. Introduction

Paiwan, spoken in the south of Taiwan, is part of the Austronesian languages of this island, commonly referred to as the Formosan languages. Paiwan is divided into an uncertain number of dialects and dialectal variants (cf. Ho 1977, 1978, Ferrell 1982). Most scholars conveniently refer to these dialects according to their geographic distribution, thus the distinction made between *Northern*, *Western*, *Southern* and *Eastern Paiwan*. Ho (1978), however, warned against the feasibility of such a classification nearly thirty years ago. He contended that the major distinction in Paiwan is the preservation or non-preservation of the two consonants /c/ *tj* and /ɟ/ *dj* and called for a distinction between the *t*- vs. *tj*- dialects. More explicitly, he showed that the distinction between these two phonemes has been kept in the Paiwan dialects spoken in the southern and eastern parts of Taiwan, but that /c/ and /ɟ/ have merged with /t/ and /d/ respectively in the northern and western areas. He emphasized that due to recent migration of the Paiwan population, however, it is rather difficult to map the phonemic distribution of /c/ and /ɟ/ in geographical terms.

The goal of this paper is to draw attention to the importance of recording the Formosan languages as accurately as possible, by focusing specifically on the Paiwan phonemes /c/, /ɟ/, and /ʎ/, that have been variously transcribed in recent work. Reliable transcriptions will have these effects: (1) orthographic standardization for a given language or dialect; (2) providing foundations for further study; and (3) making analyses by different scholars more easily comparable.

2. The Paiwan phoneme inventory and writing system

Abstracting dialectal variations, Paiwan exhibits a twenty-eight phoneme inventory, including twenty-two consonants /p t k ʔ b d ɖ g ts c ʃ s v z (h) ɰ ɭ r m n ŋ/, two glides /y w/ and four vowels /a ə i u/, as illustrated in Table (1).

In some dialects /q/ is not always preserved and may become a glottal stop; /r/ may be a velar fricative /ɣ/ or a voiced glottal fricative /ɦ/; the palatal liquid /ɰ/ may be pronounced as denti-alveolar /l/; and /h/ is usually considered a loan phoneme.

Table 1: Phonemic inventory of Paiwan

Consonants								
		Labial	Denti-alveolar	Palatal	Retroflex	Velar	Uvular	Glottal
Stop	vl	p	t	c		k	q	ʔ
	vd	b	d	ɟ	ɖ	g		
Affricate			ts					
Nasal		m	n			ŋ		
Fricative	vl		s					(h)
	vd	v	z					
Trill			r					
Liquid				ɰ	ɭ			
Glide		w		y				

Vowels

	Front	Medial	Back
High	i		u
Mid		ə	
Low		a	

Though different orthographies have been devised for Paiwan in recent years, the writing system that has been lately adopted reflects rather faithfully the phonemic inventory given in Table (1). The IPA symbols /ʔ ɖ ɭ c ʃ ɰ ts ŋ ə/ have been replaced respectively by {ʔ dr l tj dj lj c ng e}, following common practice. The whole orthographic inventory therefore consists of {a b c d dj dr e g (h) i k l¹ lj m n ng p q r s t u v w y z ʔ}.

¹ Though there is a merger between /l/ *l* and /ɰ/ *lj*, the Paiwan use *l* instead of *lr* to represent the retroflex /ɰ/, and *lj* to represent /ɰ/ ~ /l/.

3. Orthographic discrepancies in recent studies

Although early recordings of the Paiwan lexicon (Ho 1977, 1978, Ferrell 1982) with fairly good description of its phonemic inventory, recent studies are exhibiting orthographic discrepancies. The studies we are focusing on are Chang (2000), Wu (2004), and Lin (2004) that draw from three geographically close (sub)dialects, spoken respectively in the Sai-chia, San-he (Chang 2000)² and Ta-she (Wu 2004 & Lin 2004) villages, all located in Sandimen township, Pingtung county.

The phonemic inventory tabulated by Chang (2000:41-42) is correct, to some extent; it includes /p t k ʔ b d ɖ ɡ ts c ɟ³ s v z (h) l ɭ r m n ŋ y w a ə i u/. What leads to confusion are her explanations—based on Chen et al. (1986)—regarding the distinction between the palatal fricatives /tʃ/ ~ /dʒ/ and the palatal stops /c/ ~ /ɟ/. In Chang's (2000:38, footnotes 2 & 3) account, the palatal fricatives /tʃ/ ~ /dʒ/ have become /c/ ~ /ɟ/ in the Sai-chia dialect, but have all disappeared in the San-he dialect. Actually, /tʃ/ ~ /dʒ/ were wrongly recorded for Paiwan in Chen et al. (1986), perhaps due to confusion with Chinese, and the explanation given by Chang (2000) cannot stand.

The data recorded by Lin (2004) and Wu (2004) comes from the same (sub)dialect, spoken in Ta-she. While their phonemic inventories follow that of Chang (2000), it differs from it to some extent. Discrepancies are also found in these two studies, leading to a wrong interpretation of the articulatory processes involved. In Lin (2004), /c/ and /ɟ/ are identified correctly, though the IPA symbols are wrongly transcribed as *t̪* and *d̪*. The retroflex /ɭ/ is written as *lj*, and the palatal /ɕ/ is recorded as /l/, leading to a confusion between /ɭ/ (usually represented by *lr*) and /ɕ/ (commonly replaced by *lj*).⁴ In Wu (2004:8), things get even worse, with the palatals being recorded as labialized consonants, e.g., *tʷ*, *dʷ*, and *lʷ*. The retroflex /ɭ/ is also wrongly recorded as an alveolar /l/.

² Chang (2000) draws her data indifferently from Sai-chia and San-he and subsumes these two dialectal variants as “Northern Paiwan”.

³ The IPA symbols for /c/ and /ɟ/ are wrongly represented as *t̪* and *d̪*.

⁴ The same mistake is made in Tseng (2003:8), who transcribes /ɭ/ as *lj*, and /ɕ/ as *l* with mistakes in the transcriptions of the vocabulary. Her data was also collected in Sandimen.

Table 2: Comparison of the three palatal sounds in Paiwan

	Denti-alveolar	Palatal	Retroflex
Chang (2000)		/t̪/ <i>tj</i> /d̪/ <i>dj</i> l	/ɭ/ <i>L</i>
Li (2004)		/t̪/ <i>tj</i> /d̪/ <i>dj</i> l	/ɭ/ <i>lj</i>
Wu (2004)	l	t ^w d ^w l ^w	
IPA		/c/ <i>tj</i> /ɟ/ <i>dj</i>	/ɭ/ <i>lr</i>
	/l/ ~ /ɭ/ <i>lj</i>		

Recent fieldwork by the first co-author in Ta-she shows that the distinction between /c/ and /ɟ/ is usually well preserved among the elders of the village, while the palatal liquid /ɭ/ is now more frequently pronounced as a denti-alveolar sound /l/ in the speech of many, but this sound change is ongoing and not yet generally recognized by the population.

4. Conclusion

Because there are so few records of the Formosan languages, because the few records that do exist will have to serve as the basis for further research, and because the Formosan languages are facing extinction, it is urgently imperative that fieldworkers pay very close attention to accurate transcription, whatever their interest in these languages.

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檢討排灣語的 *tj*, *dj* 和 *lj*

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本篇針對台灣南島語正確記錄的重要性作一點提醒，主要以排灣語的三種音位：*/c/*、*/ɟ/* 和 */ɕ/* 為檢討的主題，原因在於這幾年來這三個音的記錄方式不完全一致而造成混淆。

關鍵詞：台灣南島語，排灣語，語音系統，書寫系統，不一致性