THE CLASSIFICATION OF LONGYAN

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1. INTRODUCTION

This essay considers the classificatory status of the dialect spoken in the county seat of Longyan [Lóngyán] 龍巖 in western Fukien. Superficial inspection of Longyan dialect shows it to be very similar to the dialects of the Miinnan [Mǐnnán] 閩南 or Southern Miin [Mǐn] 閩 group. But when viewed systematically, Longyan suggests a subclassification of Coastal Miin that differs from the usual two-part division. The methods and conclusions of this paper are applicable to dialect field-work and classification in Taiwan and the whole Coastal Miin area.

Longyan county is the center of a prefecture comprising six other counties in western Fukien. It is situated northwest of Amoy [Shiahmen, Xiàmén] 廈門 and northeast of Moiyan [Méixiàn] 梅縣 (in Kwangtung [Guǎngdōng] 廣東 province) and about equally far from them. There were some 124,000 people living in the county seat as of 1992, with a total of some 300,000 native speakers dwelling in greater Longyan county itself or returning there at the lunar New Year. Longyan-speaking communities are reported in Szechuan, Kwangsi, and Kiangsi, and in Taiwan, Indonesia, Singapore, and Malaysia, and there are surely others elsewhere.

In a much longer study I have described and tried to justify my views on

the general methodology of Chinese dialect classification (Branner 1999). Here I shall only repeat my philosophy in a few words. There are many ways of considering the "classification" of a dialect sample. But in order for this work to be truly systematic, it is necessary for a significant portion of the sample to be shown to correspond to a significant portion of other dialect samples. The one intellectual process that, above all others, is fundamental to classification is comparison, which leads to the establishment of rigorously attested correspondence sets. In ordinary circumstances correspondence sets should be made up of words that are in some sense basic to the language. This work can be done with a minimal set of highly diagnostic forms, but far better results come with large corpora and extensive correspondence sets. A correspondence set is never a finished thing; each new dialect that is fitted into it alters its character somewhat.

Longyan belongs formally to Miin, on two important grounds: first, it possesses a large number of distinctively Miin diagnostic lexical items; second, it clearly exhibits the single decisive diagnostic characteristic of Miin, the contrast in words of lower-register tone between two sets of obstruents. Within Miin, Longyan belongs by default to the diagnostically unmarked Coastal group rather than the marked Inland group. Specifically, it fails to exhibit either the characteristic lexicon of Inland Miin or the prime Inland phonological features: the split between initials / l / and / s / for certain words having initial / l / in most of Chinese, and the so-called Series 3 initials. (For more discussion of these diagnostic criteria, see Norman 1973, 1985, 1986; Branner 1999: 55-57 and 85-116.) I will not document Longyan's Coastal Miin affiliation here because Longyan's similarity to Miinnan dialects is evident on inspection. Rather, the central issue is how Longyan differs from other Miinnan varieties. The purpose of this paper is to discuss Longyan's place within Coastal Miin, where it occupies an intermediate position between two better known dialect groups. I first make a general point about method (Section 2), and then discuss Longyan's specific case (Sections 3 and 4).

2. INCOMPATIBLE MERGERS OF CONTRASTIVE FEATURES

Systematic classification of languages may make use of any variety of

linguistic features. It is my view that the most rigorous work is done by considering mergers and distinctions among well-attested phonological features. A merger is significant because under ordinary circumstances it reflects a historical change not easily reversed. As an example, consider the behavior of certain initials in two varieties of Taiwanese Miinnan, shown in Table 1. Initial categories here follow those in traditional Miinnan rimebooks. The two patterns shown in Table 1 are widespread in Taiwan, and correspond roughly to the salient division between Chyuanjou [Quánzhōu] 泉州 and Jangjou [Zhāngzhōu] 漳州 in Miinnan.

Table 1: Initials { l } and { z } in Ilan and Taipei

Initial category		Ilan	Central Taipei
	Occurs before vowels		
{ l }	all	[l]	[l]
{ z }	/ u / and / i / only	[z]	[l]

It would be simple to say that Ilan merely uses a sound [z] not heard in central Taipei. More significantly, it retains a whole phonological category not found there. Someone from the Ilan countryside can learn to pronounce certain words like a Taipei native simply by merging the whole Ilan category / z / into / l /. But someone from central Taipei trying to pass for a native of Ilan is going to have to learn individually which words belong in which category. The Taipei merger is significant because it is not reversible by a simple phonological process.

The less compatible the patterns of mergers in two dialects, the more significant the linguistic difference between them. Consider Wuhfeng 霧峰 in southern Tai-chung county, shown in Table 2.

Table 2: Initials { l }, { z }, and { g } in Ilan and Wuhfeng

Initial category		Ilan	Wuhfeng
	Initial occurs before:		
{ l }	all vowels (including / i /)	[l]	[l]
{ z }	/ u /	[z]	[l]
{ z }	/ i /	[z]	[g]
{ g }	all vowels (including / i /)	[g]	[g]

Like Taipei, Wuhfeng lacks the sound / z / which has been eliminated from its phonemic inventory. Here, too, there is a one-way merger that allows the Ilan speaker to learn Wuhfeng but discourages the Wuhfeng speaker from learning Ilan. Wuhfeng and Taipei have the same inventory of initials and both have eliminated / z / by means of a phonological merger, but they have done so by way of *two different mergers*. There is a structural incompatibility between these different mergers, preventing the categories in these two dialects from ever being completely equivalent, shown in Table 3.

Table 3: Initials { l }, { z }, and { g } in Ilan, Wuhfeng, and Taipei

Initial category		Ilan	Wuhfeng	Central Taipei
	Initial occurs before:			
{ l }	all vowels (including / i /)	[l]	[l]	[l]
{ z }	/ u /	[z]	[l]	[l]
{ z }	**/ i /**	**[z]**	**[g]**	**[l]**
{ g }	all vowels (including / i /)	[g]	[g]	[g]

Taipei and Wuhfeng show different but relatively simple mergers of the three underlying, historical categories retained in Ilan. We can well believe that both Taipei and Wuhfeng developed ultimately from an Ilan-like situation. In relation to each other, however, they have an irresoluble incompatibility: Common Miinnan initial category { z } before vowel / i / (shown in boldface here) merges in one dialect with { g } and in the other with { l }, and so the behavior of the underlying category serves as an insoluble barrier to complete structural congruency in this diasystem. Speakers from either place will have to adopt whole new forms in order to learn the other dialect, and therefore the two dialects are separated by a barrier that, once formed, is not easily erased. Such a barrier makes a particularly good tool for classification.

3. LONGYAN AND THE MAJOR COASTAL MIIN DIAGNOSTIC FEATURES

Coastal Miin comprises two important branches: Miinnan and Miindong 閩東. Miinnan is the popular name for the area dominated by the cities of Teochew

[Chaurjou, Cháozhōu] 潮州 and Amoy [Shiahmen, Xiàmén] 夏門, Miindong is the domain of Foochow [Fwujou, Fúzhōu] 福州. Miinnan has more speakers than Miindong but is somewhat more uniform. Any number of features might be adduced to divide these languages but the most significant barrier appears to be a pair of features, each of which involves certain mergers of underlying categories. These features are discussed below in Sections 3.1 and 3.2.

3.1. The Behavior of Lower-Register Sibilants

    One of these mergers involves the articulation of sibilant initials in lower-register tones. There is a large group of words in common tone categories {2}, {4}, {6}, and {8} that possess a plain / s / initial in Foochow and an affricate / ts / or / tsh / in Amoy. Based on records for other Miinnan dialects such as Teochew, Jangjou, and Chyuanjou, and on much rarer material for Miindong dialects (not shown here) such as Fwuan [Fúān] 福安, Ningder [Níngdé] 寧德, and Luoyuan [Luóyuán] 羅源, it is apparent that this feature corresponds in a general way to the division between Miinnan and Miindong dialects.

    Table 4 and Table 5 illustrate this feature, with Foochow representing Miindong, Amoy representing Miinnan, and Kienyang (Jiannyang, Jiànyáng) 建陽 representing Miinbeei. I have also included a sample of Hakka named "Basel Mission", in which these words form not one correspondence set but two, following distinctions in traditional Chinese formal phonology. Table 4 contains those words in which Basel Mission has / tsh / or / tʃh / and Table 5 those in which Basel Mission has / s / or / ʃ /. In all cases the usual Amoy forms begin with / ts / or / tsh /, and the Kienyang forms either begin with / ts / or / tsh / or else with the Series 3 initial corresponding to / ts / or / tsh / in lower-register tones. Foochow has / s / in the great majority of cases, with somewhat more exceptions in Table 4. Expressed in terms of mergers, Amoy has merged the initials of these words with regular { ts } and { tsh }, and Foochow has merged them with regular { s }.

    Longyan is placed between Basel Mission and Amoy in the table, and clearly matches Amoy in the great majority of cases. With respect to this feature, then, Longyan must be classed with the Amoy half of Coastal Miin, in opposition

to the Foochow half.

Table 4: Lower-register sibilant initials, obstruent in Hakka

{Tone} Gloss	Basel Mission	Longyan	Amoy	Foochow	Kienyang
{2} 'clear (sky)'	tshiaŋ²	tsiẽ²	tsĩ²	saŋ²	tsaŋ²
{2} 'slanted'	tshia²	tshia²	tshia²	sia²	lia⁹
{2} 'front'	tshien²	tsĩ²	tsãi²	seiŋ²	tshieŋ²
{2} '*mochi*'	tshi²	tsi²	tsi²	si²	tsɔi²
{2} 'money'	tshien²	tsĩ²	tsĩ²	(tsieŋ²)	tsieŋ²
{2} 'name Shyu 徐'	tshi²	(si²)	tshi²	sy²	ly⁹
{2} 'pine tree'	tshiuŋ²	(sioŋ²)	tsheŋ²	syŋ²	leŋ⁹
{2} 'spring (water)'	tshan²	tsĩ¹²⁴⁷	(tsuã²)	(tsioŋ²)	tsyeŋ²
{2} 'to slit'	tshai²	—	(tshai²)	(tsøy²)	lui⁹
{2} 'trough'	tshau²	tso²	tso²	so²	tsau²
{2} 'water chestnut'	tshi²	tsi²	tsi²	si²	tsɔi²
{2} 'wood'	tʃhiau²	tsha²	tsha²	(tsha²)	(thau²)
{4} 'guilt'	tshui⁵	tsiɪ⁴	tsue⁶	(tsɔy⁶)	lui⁶
{4} 'to resemble'	tshioŋ⁵	tshõ⁴	tshiũ⁶	(tshioŋ²)	(sioŋ⁵)
{4} 'to sit'	tsho¹	tsiɪ⁴	tse⁶	soi⁶	(tsue?⁸)
{4} 'to suck'	tshion¹	tsĩ⁴	tsŋ⁶	—	lyeŋ⁵
{4} 'Chinese character'	tshɨ⁵	tsi¹	(zi⁶)	(tsɛi⁶)	lɔi⁶
{6} 'many'	—	tsiɪ¹	tsue⁶	sa⁶	lai⁶
{6} 'to spin~whorl'	tshion⁵	tsĩ¹	tsŋ́⁶	—	tsyeŋ⁵
{8} 'cockroach'	tshat⁸	tsua⁴	tsua?⁸	sak⁸	lue?⁸
{8} 'straw mat'	tshiak⁸	tsho⁴	tshio?⁸	(tshio?⁸)	(siɔ?⁸)

Notes on Table 4 follow:

'Slanted'. Lii Rulong et al. (1994: 377) give / tshia² /, but I find no equivalent in Maclay and Baldwin or Leger. Lii Rulong and Chern Jangtay [1991] 1983: 8 show initial / tsh / in Foochow and four other Miindong dialects.

'*Mochi*' (the Japanese name for glutinous rice paste eaten in tender raw lumps, often with sweet filling or rolled in some confection, Mandarin *tsyrba* 餈粑, Taiwanese *môaⁿ-chî* 麻餈). Definitions in missionary sources vary somewhat. Basel Mission: "rice-cakes (soft)". Amoy: "small round soft cakes, esp. of glutinous rice". Foochow: "cakes of glutinous rice, eaten at the winter solstice".

'Money'. In Longyan, this morpheme is more commonly heard in its diminutive form / tsiã³ /, but it is known in certain compounds, *e.g.,* / tua¹ tsĩ² / 'large coin with a hole in it'.

'Spring (water)'. In Longyan this form known only in the place-name / tsĩ¹²⁴⁷ tsiu¹ / 'Chyuanjou 泉州'.

'Water chestnut'. Basel Mission calls this "water-nut peeled and eaten raw".

'To spin~whorl'. Basel Mission: alternate tone /3/ reading. Maciver's gloss: "The spiral or circular patches of hair on an animal's body. A whorl." Amoy; "the place on the head from which the hair radiates; sometimes it is double".

Table 5: Lower-register sibilant initials, plain fricative in Hakka

{Tone} Gloss	Basel Mission	Longyan	Amoy	Foochow	Kienyang
{2} 'boat'	ʃon²	tsun²	tsun²	suŋ²	yeŋ⁹
{2} 'city'	ʃaŋ²	(sã²)	(siã²)	siaŋ²	(siŋ²)
{2} 'evenly mixed'	—	tsiau²	tsiau²	seu²	—
{2} 'mud'	—	tsiõ²	tsiũ²	—	—
{2} 'one tenth'	ʃaŋ²	(sã²)	(siã²)	siaŋ²	iaŋ⁹
{2} 'snake'	ʃa²	tsua²	tsua²	sie²	(ye²)
{2} 'spoon'~'key'	ʃi²	(si²)	(si²)	sie²	tsie²
{2} 'thorough'	ʃaŋ²	tshã²	tshiã²	siaŋ²	—

{2} 'to become'	ʃaŋ²	tsã²	tsiã²	siaŋ²	—
{2} 'to taste'	ʃoŋ²	tsõ²	(sioŋ²)	sioŋ²	ioŋ⁹
{2} 'tuber, sweet potato'	ʃu²	tsi²	tsu²	sy²	tsy²
{4} 'eel'	ʃen¹	(sian²⁴)	tshuã⁶	tshiăŋ⁶	(syeŋ⁵)
{4} 'market'	ʃi⁵	tshi⁴	tshi⁶	(tshεi⁶)	tshi⁶
{4} 'to cause to appear'	ʃoŋ¹	tshõ⁴	tsiũ⁶	sioŋ³	—
{4} 'to go up'	ʃoŋ¹	tsoŋ⁴	tsiũ⁶	sioŋ⁶	ioŋ⁵
{6} 'above, on top'	ʃoŋ⁵	tsõ¹	tsiũ⁶	sioŋ⁶	tsioŋ⁶
{6} 'tree'	ʃu⁵	tshiu⁵	tshiu⁶	tshěu⁵	tshiu⁶
{8} 'stone'	ʃak⁸	tso⁴	tsioʔ⁸	sioʔ⁸	tsiɔʔ⁸
{8} 'ten'	ʃip⁸	tsiap⁸	tsap⁸	seik⁸	(siʔ⁸)
{8} 'tongue'	ʃet⁸	tsi⁴	tsiʔ⁸	siek⁸	lyeʔ⁸

Notes on Table 5 follow:

'City'. Another Kienyang source (Norman 1996: 34) has / liaŋ⁹ /, with a series 6 initial, appearing only in the placename Puucherng 蒲城. In the materials used here no such form is attested.

'One tenth'. Basel Mission does not give this meaning explicitly, but / ʃaŋ² / is clearly the colloquial value of 成, which normally represents this morpheme.

'To taste'. Amoy: This is a character reading from Campbell [1913] 1965: 632; native words for 'to taste' include / tshi⁵ / and / tam¹ / and / bai⁶ / (Douglas [1899] 1970: 72, 472, 9).

'To go up'. Kienyang: apparently this is the Common Miinbeei initial { ts₂ }.

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The data in Table 4 and Table 5 is summarized in Table 6, below. The two rows both represent Common Miin initials { ts } and { tsh }, but are divided in order to accomodate the distinction made in Basel Mission, which, interestingly,

appears to be reflected in Series 3 initials in Kienyang.

Table 6: Lower register sibilant initial behavior

Common Miin	*Basel Mission*	*Longyan*	*Amoy*	*Foochow*		*Kienyang*	
{ ts }~{ tsh }	tsh	tʂ/tʂh	ts/tsh	(ts)	s	tʂ/tʂh	l
(same)	ʃ	tʂ/tʂh	ts/tsh		s	tʂ/tʂh	ø

It must be significant that a number of words in upper-register tones (comparative Miin {1}, {3}, {5}, and {7}) also exhibit affricate initials where Chinese generally has { s }. These words are shown in Table 7 and Table 8, again divided into those where Basel Mission has / tsh / or / tʃh / (Table 7) versus / s / or / ʃ / (Table 8).

Table 7: Upper-register sibilant initials, obstruent in Hakka

{Tone} Gloss	*Basel Mission*	*Longyan*	*Amoy*	*Foochow*	*Kienyang*
{1} 'deep'	tʃhim¹	tshium¹	tshim¹	tshiŋ¹	tshiŋ¹
{1} 'to sift'	tshe¹	(thai¹)	(thai¹)	(thai¹)	(sai¹)
{1} 'to stretch out'	tʃhun¹	tshin¹	tshun¹	(siŋ¹)	(syeŋ¹)
{3} 'rat'~'mouse'	tʃhu³	tshi³	tshu³	tshy³	tshy?³
{3} 'ringworm'	tshien³	*tshuã³?	tshuã³	tshiaŋ³	(sieŋ?³)
{5} 'to try'	tʃhi⁵	—	tshi⁵	tshe⁵	tshi⁵

Notes follow for Table 7.

'To stretch out'. Amoy has another reading / tshŋ̍¹ /.

'Ringworm'. Longyan: The form given here is a guess; the actual attested compound is / taŋ¹²⁴⁷ si¹²⁴⁷ tshõ²⁴+a / 'a kind of ringworm that appears on the temple' which appears to have an underlying form in either tone / 2 / or tone / 4 / (phonetically [33] before the particle / a³/, [tshõ₃₃ ã₃₂]), but which I am interpreting as a largo form of */ tsuã³/ [tshuã₃₂] and so comparable to the Amoy form. In the compound / taŋ¹²⁴⁷ si¹²⁴⁷

tshõ²⁴+a /, the first two morphemes mean 'outhouse', and the ostensible morpheme / tshõ²⁴ / could of course be understood as / tshõ⁴ / 'to grow (white powder on the surface, said of old melons)' or possibly / tshõ² / 'bed'. There is also a learnèd form / sian³ /, used in the ordinary expression / siẽ¹ sian³ / 'to get ringworm'.

Table 8: Upper-register sibilant initials, plain fricative in Hakka

{Tone} Gloss	*Basel Mission*	*Longyan*	*Amoy*	*Foochow*	*Kienyang*
{1} 'book'	ʃu¹	tsi¹	tsu¹	tsy¹	sy¹
{1} 'corpse'	ʃi¹	(si¹)	(si¹)	(si¹)	tshi¹
{1} 'fresh'	sien¹	tshĩ¹²⁴⁷	tshĩ¹	tshieŋ¹	syeŋ¹
{1} 'to burn'	ʃau¹	tshio¹	tshio¹	(sieu¹)	tshio¹
{3} 'father's younger brother's wife'	ʃim³	(sium³⁵)	tsim³	(siŋ³)	siŋʔ³
{3} 'few'	ʃau³	tso³	tsio³	tsieu³	sioʔ³
{3} 'hand'	ʃiu³	tshiu³	tshiu³	tshiu³	siuʔ³
{3} 'marrow'	sioi³	tshiɹ³	tshe³	tshɔy³	syeʔ³
{3} 'to guard'	ʃiu³	tsiu³	tsiu³	tsiu³	siuʔ³
{3} 'water'	ʃui³	tsui³	tsui³	tsui³	syʔ³
{5} 'to laugh'	siau⁵	tsho⁵	tshio⁵	tshieu⁵	sio⁵
{7} 'uncle: father's younger brother'	ʃuk⁷	tsok⁷	tsek⁷	tsøyk⁷	sy⁷
{7} 'wet'	ʃip⁷	—	tship⁷	(sek⁷)	tshie⁷

Notes on Table 8 follow:

'Fresh'. Longyan: in / tshĩ¹²⁴⁷ sian¹ / 'fresh'.

'To burn'. Longyan and Amoy: 'to go into heat (said of a male chicken)'.

'Father's younger brother's wife'. Longyan: This morpheme, which appears to

be of learnèd origin, occurs in a single compound: / sium³⁵ po² / 'wife of father's (or mother's) father's third younger brother'. Longyan is strange in having a number of highly irregular forms for the wives of male relatives: / pua³ / 'father's (or mother's) father's eldest younger brother's wife' (a fusion of / po² / and the diminutive particle / a³ /); / m³+a³ / 'father's younger brother's wife' and also 'term of address for father's junior wife by a child of the primary wife'.

'To guard'. This form is common in Western Fukien expressions meaning 'to remain a widow', usually comparable to Mandarin *shoougoa* 守寡.

'Wet'. The Amoy form given here may not be truly comparable. It occurs in the phrase / tship⁷ tship⁷-a³ tsui³ / "a very small quantity of water" (Douglas [1899] 1970: 84). The ordinary Amoy words for 'wet' are / sip⁷ / (p. 442) and more commonly / tam² / (p. 472).

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So affricates for expected sibilants are by no means absent from Hakka.

The data in Table 4 and Table 5 is summarized in Table 9, below. The main point of Table 9 is to show that Foochow has a single category / s / where Miinnan and Miinbeei have both / s / and / ts / ~ / tsh /. Foochow has merged categories { ts }~{ tsh } with { s }.

Table 9: Overview of lower register sibilant initial behavior

Common Miin	Basel Mission		Longyan	Amoy	Foochow	Kienyang	
{ts}~{tsh}	tsh	ʃ	ts/tsh	ts/tsh	s	ts/tsh	l/ø
{s}	s	ʃ	s	s	s	s	

This merger, partially evident in Hakka, is within Miin a characteristically Miindong feature. It is found in all attested Miindong dialects, as well as the Hinghwa (Shinghuah, Xīnghuà 興化 region east of Chyuanjou (also known as Pwu-Shian, Pú-Xiān 蒲仙). Longyan, however, is clearly outside of the Miindong sphere with regard to this feature, as are the two counties immediately to Longyan's east,

Jangpyng (Zhāngpíng) 漳平, and Dahtyan (Dàtián) 大田. Some Miinnan dialects, such as Fukien Jangpuu 漳埔 county and Taiwan Guanmiaw 關廟 (Ch'en Shu-chüan 1995, 1996), merge { tsh } into { s }. However, that is clearly a late development, and has nothing to do with the Foochow behavior described here. Within Miin this is a distinctively Miindong merger, and the other Miin dialects shown are exhibiting a more conservative distinction.

(It is interesting, however, that true Common Miin initial { s } is a trivially small category apart from words of learnèd origin, and we might argue that the words in Table 4 and Table 5 embody not incompatible mergers of three underlying Common Miin categories ({ ts }~{ tsh } with { s }), but rather the merger of two Common Miin categories { ts } and { tsh } and their articulation as / s /. I shall defer discussion of this question, however, pending more data.)

3.2. Series 2 Initials in Tone {6}

The other important feature in the subclassification of Coastal Miin is the tonal behavior of words in Common Tone {6} beginning with aspirated obstruents and certain sonorants. In Miindong the words exhibiting these initials are found not in the expected tone /6/ but in tone /5/, while in Southern Miinnan they appear in tone /6/. Norman (1991) treats these sonorant initials as the reflexes of earlier voiceless sonorants to account for their tonal behavior, and I have tentatively named them "series 2" sonorants (1999:113).

Table 10 shows the behavior of the series 2 sonorants. Amoy and Kienyang exhibit these words in tone /6/. In Table 10 and Table 11, I have substituted the dialect of Shanqharng Guanjuang 上杭官莊, a Hakka or pseudo-Hakka dialect of Western Fukien, for the Basel Mission materials, because Basel Mission merges tones {5} and {6} and so would be useless for showing the distinction. Guanjuang reflects Common Chinese tone {5} as /5/ and {6} as /3/. Most of the forms in Table 10 appear in tone /5/ in Guanjuang instead of tone /3/, which is to say that Guanjuang (and more generally Hakka) shows the same tonal behavior as Foochow.

Longyan data is placed between Guanjuang and Amoy. Longyan also exhibits the Foochow and Guanjuang pattern.

Table 10: Miin Tone {6} Series 2 Sonorant Initials

Gloss	Guanjuang	Longyan	Amoy	Foochow	Kienyang
'dream'	(məŋ^3)	baŋ^5	baŋ^6	moŋ^5	moŋ^6
'younger sister'	muɔ^5	(muĩ^{35})	(be^6)	(muoi^5)	mui^6
'face'	miẽ^5	bin^5	bin^6	meiŋ^5	mieŋ^6
'grave, tomb'	məŋ^5	mõ^5	boŋ^6	muo^5	mo^6
'to ask'	məŋ^5	muĩ^5	mŋ^6	muɔŋ^5	muŋ^6
'dew'	—	lu^5	lu^6	lou^5	so^6
'segment (citrus fruit)'	—	(tiam^5)	liam^6	leŋ^5	—
'low hill'	—	lun^5	lun^6	lauŋ^5	—
'rapids'	—	lua^5	lua^6	lai^5	—
'spring pullet'	luɔ̃^{5}	nuã^5	nuã^6	—	—
'mugwort'	ŋəi^5	*ŋyã^5	hiã^6	ŋie^5	ŋye^6
'soggy'	—	lun^5	lun^6	nouŋ^5	—
'to yell at'	mɒ^5	miẽ^5	mẽ^6	ma^5	ma^6
'to bite (of bug)'	—	lua^5	lua^6	lai^5 (?)	—
'to defer to'	(ɲioŋ^3)	ŋiõ^5	niũ^6	(nioŋ^6)	ioŋ^6

Notes on Table 10 follow:

'Younger sister'. The rimes in these three forms all appear to be incompatible, but the tones and initials match. It is probable that the inconsistences among the rimes are due to disruption because of an original voiceless nasal initial (a phenomenon attested elsewhere in Miin).

'Grave, tomb'. Guanjuang: The nasal ending is reminiscent of the Amoy and other Miin forms. Kienyang: apparently a character reading only; native form is / teŋʔ^3/, which is characteristic of Miinbeei.

'Dew'. Amoy: a form in tone /5/ is widely reported in Taiwan and elsewhere.

'Segment of citrus fruit'. Guanjuang uses a form / khu^2/.

'Mugwort'. The starred Longyan form is believed to underly an attested diminitive.

'To bite (said of a bug)'. Foochow: / lai⁵ kwo⁵ / 'to graze, to rub or scrape past or over'.

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The behavior of aspirated obstruents (including { h }) in Common tone {6} is shown in Table 11. Guanjuang material is unfortunately rather sparse, in part because many of the pertinent words ("to feed", "to pile up", "to poison", "to set upright", "to sew on") are not regularly found in Hakka. However, all the attested Guanjuang forms are found in tone /3/, corresponding to Common tone {6}. Guanjuang thus does not show the behavior found in Miindong. To my knowledge, indeed, this distinction is not found outside of coastal Miin, and the fact that many of the missing forms are verbs unique to Miin suggests that they may be relics of a local morphological process that is no longer productive.

Longyan, again, exhibits the Foochow pattern.

Table 11: Miin Tone {6} Series 2 Obstruent Initials

Gloss	Guanjuang	Longyan	Amoy	Foochow	Kienyang
'alley'	—	haŋ⁵	haŋ⁶	hɔyŋ⁵	xoŋ⁶
'amaranth'	—	hĩ³⁵	heŋ⁶	haiŋ⁵	xaiŋ⁶
'barnyard grass'	phɒ³	phiɹ⁵	phue⁶	pha⁵	phai⁶
'to boil over'	(phu¹)	(phu⁴)	phu⁶	phou⁵	(ɣ⁹)
'a crack'	phəŋ³	phaŋ⁵	phaŋ⁶	phouŋ⁵	phoŋ⁶
'craftsman'	—	tshiõ⁵	tshiũ⁶	tshioŋ⁵	(tsiɔŋ⁶)
'to feed'	—	tshi⁵	tshi⁶	tshei⁵	(si⁶)
'nose'	phi³	phi⁵	(phĩ⁶)	phei⁵	phɔi⁶
'to pile up, fill in'	—	thun⁵	thun⁶	thaiŋ⁵	—
'to poison'	—	thau⁵	thau⁶	thau⁵	—
'jellyfish'	—	—	the⁶	tha⁵	tha⁵
'to set upright'	—	khya⁵	khia⁶	khie⁵	—

| 'to sew on (buttons)' | — | thĩ⁵ | thĩ⁶ | thieŋ⁵ | — |

| 'to sew on (buttons)' | — | thĩ^5 | thĩ^6 | thieŋ^5 | — |
| 'tree' | ʃu^3 | tshiu^5 | tshiu^6 | tshieu^5 | tshiu^6 |

Notes on Table 11 follow:

'Amaranth' (*Amaranthus mangostanus L.*). The name of a vegetable whose green leaf has a red or purple center. Longyan: I have recorded both / hĩ^{35} / and / hĩ^1 / for this morpheme, and the principal informant seems to vacillate between the two.

'Barnyard grass'. The common weed of the rice paddy, scientific name: *Echinochloa* .

'To boil over'. Foochow: 'jutting above the surface, protuberant, convex, bulging out'.

'To feed'. Guanjuang uses a form / tɕiuŋ^5 /, characteristic of Hakka and Gann.

'To poison'. Guanjuang uses a form / thəuʔ^8 /, not distinguishing the noun from the verb.

'To set upright'. This is part of a group of three closely related words, the other two of which are 'steep' and 'to stand'.

'To sew on (buttons)'. Guanjuang: The word for 'to sew', / tiẽ^2 / is not related; it is comparable to Common Chinese *lian* 連.

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Table 12 summarizes Table 10 and Table 11 and includes in addition the tone {6} reflexes for unaspirated obstruents (not discussed here), which are the "normal" case for this tone.

Table 12: Overview of tone {6} behavior

Tone & Initial	*Guanjuang*	*Longyan*	*Amoy*	*Foochow*	*Kienyang*
"voiceless" sonorants	5	5	6	5	6
aspirated obstruents	3	5	6	5	6
unasp. obstruents	3	1	6	6	6

Amoy and Kienyang merge the tonal manifestation of {6} (with all three initial types) into a single tonal category. Hakka distinguishes the "voiceless" sonorants, and Longyan and Foochow distinguish both the "voiceless" sonorants and the aspirated obstruents as a single type. Longyan matches Miindong and not Miinnan with respect to this feature.

There are a number of ways to conceive of this feature. Synchronically speaking, Common Miin tone {6} is a single category, and those words with voiceless sonorants and aspirated obstruents appear to have migrated to tone {5}. In that case, the behavior of Longyan and Foochow may be considered a merger. But we believe that Common tones {5} and {6} were originally a single tone category, congruent to the *chiuhsheng* 去聲 of Common Chinese, which split in two. And so it may be that, by placing into tone /5/ those expected tone {6} words whose initials are voiceless sonorants or aspirated obstruents, Longyan and Foochow are actually exhibiting incomplete separation of the two halves of an earlier *chiuhsheng* category. In that case, it is difficult to apply the names merger and distinction to this feature; Longyan and Foochow have kept these words merged with the rest of tone {5}, while Amoy and Kienyang have merged them with tone {6}.

I choose to view the tonal pattern exhibited in Longyan and Foochow as fundamentally more conservative than that of Amoy and Kienyang. As discussed in connection with Table 9, above, Longyan is also conservative in retaining the conservative distinction between initials { ts } and { tsh } on one hand and { s } on the other, which Foochow merges and which Amoy and Kienyang distinguish.

Longyan is thus more conservative than either of the two better known varieties of Coastal Miin. I have summarized the features in question in Table 13.

Table 13: Summary of Table 9 and Table 12

Innovation	*Longyan*	*Amoy*	*Foochow*	*Kienyang*
relation, tones {5} & {6}	conservative	innovative	conservative	innovative
merger, {ts}~{tsh} & {s}	conservative	conservative	innovative	conservative

Rural sites in most of Longyan, apart from Wann'an (Wàn'ān) 萬安 township, all share the affiliation described here for the county seat (according to

my surveys between 1992 and 1995; see Branner 1999). And Longyan is not alone in displaying this conservative face. The two counties immediately to Longyan's east, Jangpyng (Zhāngpíng) 漳平, and Dahtyan (Dàtián) 大田, behave exactly the same way: they keep Common Miin initials { ts } and { tsh } distinct from { s }, and they place in tone /5/ those Common Miin tone {6} words with voiceless sonorants or aspirated obstruent initials. (I have personally surveyed sites in northern Jangpyng, and for the south there is a major series of reports by Jang Jennshing [Zhāng Zhènxīng] 張振興 on the township of Yeongfwu [Yǒngfú] 永福. The only accounts I have seen of Dahtyan are a somewhat sketchy report by Orisikise Akira 折敷瀬興 and Chern Jangtay [Chén Zhāngtài] 陳章泰 (1985) and something similar by Chern Jangtay alone (1991).) It is my view that the attested dialects of these three counties, because they share the two conservative features discussed above, constitute a subgroup within Coastal Miin, apart from either Miinnan or Miindong proper and in a sense intermediate between the two better known varieties. I call this subgroup "Northern Miinnan" or "Inland Miinnan".

Longyan, Jangpyng, and Dahtyan share another feature that serves to bind them as a single classificatory group. It is striking that Longyan has no tone /6/ at all; "normal" Miin tone {6} appears in Longyan tone /1/ (although some tone {6} words of learnèd origin appear in tone /4/). In fact, the same is true of most of the rural sites in Longyan county (again excepting Wann'an), as well as Jangpyng and Dahtyan. Certain other Miin dialects, for instance some of those spoken in eastern Haenan (Hǎinán) 海南, also merge Common Miin tone {6} into tone /1/, so this feature is not unique to the subgroup I am describing here. However, it is universal in the dialect samples I have seen that belong to the "Northern Miinnan" group described here, and I consider it a third diagnostic feature of this subgroup. The merger of {6} with {1} may have occurred while the original *chiuhsheng* was splitting, preventing it from splitting completely; this is speculation, however.

Note that the entire Miinjong linguistic region, comprising the dialects of Yeongan [Yǒngān] 永安 and several other counties, does not distinguish tones {5} and {6} at all. Miinjong may thus preserve an early Miin tonal pattern still more conservatively than Northern Miinnan.

4   LIKENESS TO JANGJOU 漳州 DIALECT

A full presentation of the distinctive characteristics of Longyan dialect from a systematic perspective would run to several hundred pages. Here, as I am constrained by space, I will describe only a few of the features that relate Longyan to better known Miinnan dialects.

It has been usual for Fukien Miinnan to be divided into three basic types: Amoy, Jangjou, and Chyuanjou. Within this framework, Longyan is most easily treated as a variety of Jangjou dialect. Carstairs Douglas may have been the first to express this thought, in 1873: "The Chow department of *Lung-yen* or *Lêng-nâ^n* uses to a large extent the dialect of Chang-chew [...]" (Douglas 1899[1873]: 609). However, the reason for this is an artefact of the division of Miinnan into three representative types. In the greater context of Miin as a whole, it is not so much that Longyan uses any subvariety of Jangjou dialect as that it fails to make certain local mergers characteristic of Amoy or Chyuanjou.

Longyan displays a number of typically Jangjou phonological and phonetic patterns. For instance, Longyan's merger of Common Miinnan { y } with { i } is characteristic of Jangjou, in contrast to the merger with { u } (as in Amoy) and articulation as / ɯ / (as in Chyuanjou). Longyan's merger of Common Miinnan { yn } with { in } is characteristic of Jangjou, in contrast to the merger with { un } as in Amoy and Chyuanjou. Longyan uses [iõ] (or [õ]) where Jangjou has [iõ] but Amoy and Chyuanjou have [iũ]. These are highly salient features in Miinnan. There are, to be sure, important differences between Longyan and Jangjou: Longyan preserves Common Miin tone {4}, like Chyuanjou and Teochew, and unlike Jangjou and Amoy; Longyan's tone sandhi patterns (schematized in the "Sources of Dialect Data" section at the end of this paper) feature the merger of most tone categories into mainly level contours, rather than exhbiting the complex "tone chains" or "tone cycles" associated with the Amoy region. But on the whole, Longyan shows the greatest systematic likeness to Jangjou. I shall illustrate this by considering two important sets of rime mergers that have great classificatory value in the Miinnan region. These are treated in Sections 4.1 and 4.2, below.

In my analysis of Common Miin rimes, I have taken Norman's work

(1969, 1981) as my starting point. Norman's work was developed using Tung (1960) as a foundation.

4.1   The Significance of Longyan's / uĩ / Rime

It is a highly salient fact that Jangjou uses two finals / uĩ / and / ŋ / where Amoy and Chyuanjou have only / ŋ /. Within Miinnan generally this division appears to be characteristic of Jangjou. However, inspection of Table 14, Table 16, Table 18 and Table 20 show that Jangjou in fact simply preserves a distinction made elsewhere in Miin and lost in Amoy and Chyuanjou. It is not really correct to call this a characteristically Jangjou rime split; it is actually the *absence of the characteristically Chyuanjou merger of rimes*. Longyan, too, preserves the Miin distinction, as do sites in Kwangtung Leijou [Léizhōu] 雷州 and Haenan (not shown here).

It is useful to realize that, within Miinnan itself, there appear to be only two rimes in question: those represented by Jangjou / uĩ / and / ŋ /. In Common Miin, however, there are actually four rimes involved. I have named them, after the traditional Chinese practice, by exemplars: "Cooked rice", "To return", "Bright", and "Long". It is characteristic of *all* Miinnan dialects to merge "Cooked rice", "To return", and "Bright"; note also that Foochow partially merges these rimes, but only where they have velar-laryngeal initials. I document these four rimes first, below, and then offer a schematic overview of their mergers and distinctions in the six representative dialects, in Table 22, below.

Table 14: Rime "Cooked rice"

gloss	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
'cooked rice'	puĩ[1]	puĩ[6]	pŋ[6]	pŋ[5]	pwoŋ[6]	puŋ[6]
'door'	muĩ[2]	muĩ[2]	mŋ[2]	mŋ[2]	mwoŋ[2]	muŋ[2]
'to ask'	muĩ[5]	muĩ[6]	mŋ[6]	mŋ[5]	mwoŋ[5]	muŋ[6]
'broken off'	tĩ[4]	tuĩ[6]	tŋ[6]	tŋ[4]	tauŋ[6]	tuŋ[5]
[measure for meals]	tĩ[5]	tuĩ[5]	tŋ[5]	tŋ[5]	tauŋ[5]	—

'to take off (clothing)'	—	thuĩ⁵	thŋ⁵	thŋ⁵	thauŋ⁵	huŋ⁵

'to take off (clothing)' — thuĩ⁵ thŋ⁵ thŋ⁵ thauŋ⁵ huŋ⁵

'egg' nĩ⁴ nuĩ⁶ nŋ⁶ nŋ⁴ lauŋ⁶ suŋ⁵

'to crawl through nĩ⁵ nuĩ⁵ nŋ⁵ nŋ⁵ nauŋ⁵ (?) —

    (hole)'

'to drill' tsĩ⁵ tsuĩ⁵ tsŋ⁵ tsŋ⁵ tsauŋ⁵ tsuŋ⁵

'village' tshĩ¹ tshuĩ¹ tshŋ¹ tshŋ¹ tshoŋ¹ thuŋ¹

'sour' sĩ¹ suĩ¹ sŋ¹ sŋ¹ soŋ¹ suŋ¹

'tube, pipe' kuĩ³ kuĩ³ kŋ³ — kwoŋ³ kuŋ³

Note that the Foochow situation is complicated by the familiar allophonic variation endemic to Miindong, illustrated in Table 15. Longyan also shows some allophonic variation. Miindong allophony is conditioned by initial and tone, and differs from rime to rime in the Common Miin system, so that it may be of some use in studying the earlier history of Miin phonology. Longyan allophony, however, usually has more immediately synchronic distribution. In rime "Cooked rice", for instance, Foochow has / woŋ / with labial and velar-laryngeal initials, but / oŋ / ~ / auŋ / (conditioned by tone) with dental and sibilant initials. This Foochow behavior only occurs in the "Cooked rice" rime; in "To return" (Table 16, below), the same finals appear with labial and velar-laryngeal initials but / ioŋ / appears with dentals and sibilants. However, Longyan exhibits a simpler form of variation: / uĩ / appears with labial and velar-laryngeal initials and / ĩ / with dentals and sibilants, but there is no difference between the two rimes "Cooked rice" and "To return". The Longyan variation can be adequately described in synchronic terms, whereas the Foochow variation requires us to take account of more fundamental Common Miin phonology.

Table 15: Summary of finals in rime "Cooked rice"

initial-type	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
labials:	uĩ	uĩ	ŋ	ŋ	woŋ	uŋ
dentals/sibilants:	ĩ	uĩ	ŋ	ŋ	oŋ¹²³/auŋ⁵⁶	uŋ
velar-laryngeals:	uĩ	uĩ	ŋ	ŋ	woŋ	uŋ

Notes on individual forms in Table 14 follow:

‘Broken off’. Chyuanjou: p. 241.

‘To crawl through (hole)’. Longyan: also ‘to plant (new seedlings) among older rice plants (as a kind of intermediate crop between the first and the second)’. Chyuanjou: evidently ‘to penetrate’; glossed as “鑽也”. Foochow: this word is glossed ‘interlocked’, and may be related. Its more common senses are “disorderly” and “to wander”.

‘Village’. Longyan: / hiõ¹ tshĩ¹+a / and in certain place-names.

‘Tube, pipe’. Longyan: also perhaps in / tsha¹ kuĩ³ / ‘train tracks, railroad tracks’. This last example may be an example of rogue nasalization (*i.e.*, of */ kui³ / 軌), a known Miinnan phenomenon.

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Rime “To return” is shown in Table 16. Kienyang distinguishes it from rime “Cooked rice” with all initials, and Foochow distinguishes the rimes with dental and siblant initials.

Table 16: Rime “To return”

gloss	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
‘late’	muĩ³⁵	muĩ³	mŋ³	mŋ³	mwoŋ³	yeŋʔ³
‘to turn’-‘to return’	tĩ³	tuĩ³	tŋ³	tŋ³	tioŋ³	lyeŋ³
‘soft’	nĩ³	nuĩ³	nŋ³	nŋ³	nioŋ³	(nueŋ³)
‘brick’	tsĩ¹	tsuĩ¹	tsŋ¹	tsŋ¹	tsioŋ¹	tsyeŋ¹
‘to suck’	tsĩ⁴	tsuĩ⁶	tsŋ⁶	tsŋ⁴	—	lyeŋ⁵
‘swirl’~’whorl’	tsĩ¹	tsuĩ⁶	tsŋ⁶	—	—	tsyeŋ⁶
‘hole, orifice’	tshĩ¹	tshuĩ¹	tshŋ¹	tshŋ¹	tshioŋ¹	tshyeŋ¹
‘to pierce w/ (needle), skewer’	tshĩ¹	tshuĩ¹	tshŋ¹	tshŋ¹	tshioŋ¹	tshyeŋ¹
‘to stretch’	tshĩ¹	—	tshŋ¹	tshŋ¹	tshioŋ¹	syeŋ¹

'to suck in the mouth'	—	tshuĩ³	tshŋ³	tshŋ³	—	—
'to count, calculate'	sĩ⁵	suĩ⁵	sŋ⁵	sŋ⁵	sauŋ⁵	(sueŋ⁵)
'to tie very tight'	—	suĩ⁵	sŋ⁵	—	sauŋ⁵	—
'to roll up'	kuĩ³	kuĩ³	kŋ³	kŋ³	kwoŋ³	kyeŋʔ³
'sleeve'	(huĩ³)	uĩ³	ŋ³	ŋ³	woŋ³	yeŋ⁹
'to bore a hole in a cow's nose'	kuĩ⁵	kuĩ⁵	kŋ⁵	—	kwoŋ⁵	—
'to admonish'	(khian⁵)	—	khŋ⁵	khŋ⁵	khwoŋ⁵	khyeŋ⁵
'garden, dry field'	huĩ²	huĩ²	hŋ²	hŋ²	hwoŋ²	xyeŋ²
'far'	huĩ⁴	huĩ⁶	hŋ⁶	hŋ⁴	hwoŋ⁶	(yeŋʔ³)

Both Foochow and Longyan again show allophonic variation conditioned by initial, as summarized in Table 17. The Longyan situation is the same as in Table 15. Kienyang seems to have two different correspondents with velar-laryngeal initials, a fact whose significance is unclear.

Table 17: Summary of finals in rime "To return"

initial-type	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
labials:	uĩ	uĩ	ŋ	ŋ	woŋ	yeŋ
dentals/sibilants:	ĩ	uĩ	ŋ	ŋ	ioŋ	yeŋ
velar-laryngeals:	uĩ	uĩ	ŋ	ŋ	woŋ	yeŋ

Note for Table 16 follow:

'Late'. Longyan: / muĩ³⁵+a / 'late rice crop'. Amoy: 'late, either as to day, or year, or proper time'.

'To tie very tight'. Foochow: 'to strangle with a cord'.

'To bore a hole in a cow's nose'. Longyan: 'to pass (something) through the hole in a cow's nose'; 'to spear with a knife or other sharp object'; 'to poke a hole in'.

'Far'. Kienyang: character reading; the colloquial word is / lau⁵ /.

There is a smaller set of words that appear to belong to rime "To return" in Coastal Miin, but which are kept separate in Miinbeei, as shown in Table 18.

Table 18: Rime "Bright"

gloss	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
'sunlight'; 'bright'	kuĩ[1]	kuĩ[1]	kŋ[1]	kŋ[1]	kwoŋ[1]	kuɔŋ[1]
'yellow'	ŋuĩ[2]	uĩ[2]	ŋ[2]	ŋ[2]	woŋ[2]	uɔŋ[2]
[surname: Hwang 黃]	ŋuĩ[2]	uĩ[2]	ŋ[2]	—	—	uɔŋ[2]
'barren, fallow'	huĩ[1]	huĩ[1]	hŋ[1]	hŋ[1]	hwoŋ[1]	xuɔŋ[1]

The finals of rime "Bright" are summarized in Table 19. Coastal Miin dialects do not distinguish this rime from "To return" and "Cooked rice", but Kienyang does.

Table 19: Summary of finals in rime "Bright"

initial-type	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
velar-laryngeals:	uĩ	uĩ	ŋ	ŋ	woŋ	uɔŋ

Notes on Table 18 follow:

'Sunlight'; 'bright'. This morpheme is also used as a verb suffix of result, meaning "gone, done away with". Longyan: / tshiɹ[7] kuĩ[1] / 'to drink (a glass of liquid) to the bottom'.

Table 20 shows the "Long" rime, which is abundantly represented. It is unfortunate that Douglas does not ordinarily provide data for Jangjou except when it differs from the usual Amoy form; for this reason, there are very few Jangjou forms in Table 20. Nevertheless, it is known from sporadic evidence in Douglas and from modern materials that Jangjou regularly uses / ŋ / for the "Long" rime. Note that Longyan's use of / ɵ̄ / here is phonetically reminiscent of the Foochow

and Kienyang forms.

Note also that, on the level of Common Miin, this rime is not attested with labial initials. Longyan does have one form / $p\tilde{o}^2$ / that looks as if it should belong here, but I have been unable to find correspondents in other dialects. (It means 'to place within (an outer bag or covering)' and 'to put a new outer layer or patch on (a quilt)'; it appears in a compound / $p\tilde{o}^2$ $ni\tilde{o}^2$ / 'to lay up rice into storage against famine'.) For Jangjou, Douglas lists no forms */ $p\eta$ /, */ $ph\eta$ /, or */ $m\eta$ / in any tone, which would have fallen into this rime.

Table 20: The "Long" rime

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'to put into container'	$t\tilde{o}^1$	—	—	—	$to\eta^1$	$to\eta^1$
'pond'	$t\tilde{o}^2$	—	$t\eta^2$	—	$to\eta^2$	$lo\eta^9$
'long'	$t\tilde{o}^2$	—	$t\eta^2$	$t\eta^2$	$to\eta^2$	$lo\eta^9$
'gut, intestine'	$t\tilde{o}^2$	—	$t\eta^2$	$t\eta^2$	$to\eta^2$	$to\eta^2$
'building'	$t\tilde{o}^2$	—	$t\eta^2$	$t\eta^2$	$to\eta^2$	$lo\eta^2$
[M: ten "feet" length]	$t\tilde{o}^4$	—	$t\eta^6$	$t\eta^4$	$tau\eta^6$	($tio\eta^5$)
'to rinse'	$t\tilde{o}^4$	$t\eta^6$	$t\eta^6$	$t\eta^4$	$tau\eta^6$	—
'to pawn'	$t\tilde{o}^5$	—	$t\eta^5$	$t\eta^5$	$tau\eta^5$	$to\eta^5$
'soup, hot water'	$th\tilde{o}^1$	—	$th\eta^1$	$th\eta^1$	$tho\eta^1$	$ho\eta^1$
'sugar'	$th\tilde{o}^2$	($tho\eta^2$)	$th\eta^2$	$th\eta^2$	$tho\eta^2$	$ho\eta^2$
'to scald, blanch'	$th\tilde{o}^5$	—	$th\eta^5$	$th\eta^5$	$thau\eta^5$	$ho\eta^5$
'young man'	$n\tilde{o}^2$	—	$n\eta^2$	$n\eta^2$	$lo\eta^2$	$so\eta^2$
'kind of tuber-dye'	$n\tilde{o}^2$	—	$n\eta^2$	—	—	—
'two'	$n\tilde{o}^4$	($n\tilde{o}^6$)	$n\eta^6$	$n\eta^4$	($la\eta^6$)	$so\eta^5$
'to adorn'	$ts\tilde{o}^1$	—	$ts\eta^1$	$ts\eta^1$	$tso\eta^1$	$tso\eta^1$
'to taste'	$ts\tilde{o}^2$	—	($sio\eta^2$)	$ts\eta^2$	($sio\eta^2$)	($io\eta^9$)
'granary, warehouse'	$tsh\tilde{o}^1$	—	$tsh\eta^1$	$tsh\eta^1$	$tsho\eta^1$	$tho\eta^1$

'bed'	tshõ^2	tshŋ^2	tshŋ^2	tshŋ^2	tshoŋ^2	thɔŋ^2
'frost'	sõ^1	—	sŋ^1	sŋ^1	soŋ^1	sɔŋ^1
'mourning'	sõ^{1247}	—	sŋ^1	sŋ^1	soŋ^1	sɔŋ^1
'mulberry'	sõ^1	sŋ^1	sŋ^1	sŋ^1	soŋ^1	sɔŋ^1
'rice seedling'	õ^1	—	ŋ^1	ŋ^1	oŋ^1	(iɔŋ^1)
'row'	õ^2	—	—	—	oŋ^2	(xɔŋ^2)
'shadow'	õ^3	—	ŋ^3	ŋ^3	oŋ^3	(iɔŋʔ^3)
'to watch'	õ^5	—	ŋ^5	ŋ^5	auŋ^5	(iaŋ^5)
'pole'	õ^1	—	—	—	auŋ^6	—
'to carry on a pole between two people'	kõ^1	kŋ^1	kŋ^1	kŋ^1	koŋ^1	kɔŋ^1
'large-mouthed earthen jar'	kõ^1	kŋ^1	kŋ^1	kŋ^1	koŋ^1	ɔŋ^9
'to say, to speak'	kõ^3	—	(koŋ^3)	(kaŋ^3)	koŋ^3	kɔŋʔ^3
'pole'	kõ^{35}	—	kŋ^5	kŋ^5	kauŋ^5	—
'steel'	kõ^5	—	kŋ^5	kŋ^5	kauŋ^5	kɔŋ^5
in 'Shuangjianq 霜降'	kõ^5	—	(kaŋ^5)	—	kauŋ^5	—
'chaff'	khõ^1	khŋ^1	khŋ^1	khŋ^1	khoŋ^1	khɔŋ^1
'to store, hide, put away'	khõ^5	—	khŋ^5	khŋ^5	khauŋ^5	khɔŋ^5

Foochow alternates / oŋ / with / auŋ /, depending on the tone, as summarized in Table 21. This is the same alternation as in the dental and sibilant initials of rime "Cooked rice" (Table 14) and elsewhere.

Table 21: Summary of finals in rime "Long"

initial-type	*Longyan*	*Jangjou*	*Amoy*	*Chyuanjou*	*Foochow*	*Kienyang*
(all)	õ	ŋ	ŋ	ŋ	oŋ^{123}/auŋ^{56}	ɔŋ

Notes follow on Table 20.

'To put in a container'. Foochow: 'to sweep into, take up in; to trap, entrap'. Kienyang: 'to fill (a vessel)'.

'Building'. Longyan: / o⁴ tõ² / school'. Kienyang: [character reading: *tarng* 堂].

M: ten "feet" length. Amoy: a more colloquial form is / tiũ⁶ /.

'To rent'. Longyan: 'to rent (land) for a fixed period of time'; 'to pay (rent money) to'. Kienyang: character reading *shuey* 税, exact sense unknown.

'To scald, blanch'. Longyan: this also the verb for cooking noodles.

'Young man'. In various compounds, commonly in 'son-in-law' or 'bridegroom'.

'Kind of tuber dye'. Longyan: / tsi²⁴ nõ² / 'kind of tuberous mountain plant whose black or blue tuber is used for dyeing'. Amoy: / tsu² ŋ² / 'a wood which dyes reddish brown; also used medicinally'. The first syllable of both forms is presumably "tuber".

'Two'. Ordinarily used in counting but not as the name of the numeral.

'To adorn'. Longyan: 'to pretend'; 'garb, things worn on the body'; 'to pack (goods) onto a vehicle'; 'to apply (makeup)'.

'To taste'. Amoy: This is a character reading from Campbell [1913] 1965: 632; native words for 'to taste' include / tshi⁵ / and / tam¹ / and / bai⁶ / (Douglas [1899] 1970: 72, 472, 9). Chyuanjou: 'to land on (said of a fly)'.

'Pole'. (Distinguish the synonymous form below.) Longyan: [M: polefuls of drying clothes]; / tiok⁷ õ¹ / 'horizontal bamboo pole laid across two vertical poles'.

'Row'. Longyan: [M: rows of things, for "vertical" columns of planted seedlings]. Kienyang: a form / oŋ⁹ / is used in the sense "business, profession".

'Shadow'. Amoy: a form / iã³ / is said to be more colloquial.

'To watch'. Longyan: 'to look at'; 'to be examined by a doctor'; 'to stare at'. Amoy: 'to face towards; to have a desire towards; to expect; to watch or tend, as animals'. Chyuanjou: 'to hope'. Foochow: 'to watch, to herd, to guard, to look after, to care for'. Kienyang: / iaŋ⁵ tshiɔ⁵ / 'to house-sit'.

'To say, to speak'. Chyuanjou: the Northern-looking form / sə⁷ / {説} is used.

'Pole'. (Distinguish the synonymous form above.) Longyan: / kõ^{35}+a / 'wooden pole used for carrying stones between two people'. Amoy: 'a large round

pole, used for carrying heavy things between two or more bearers; the poles of a sedan; classifier of large heavy packages carried by two bearers'.

In 'Shuangjianq 霜降' (name of one of the 24 "seasons" of the solar year). Longyan: / sõ^1 kõ^5 /. Foochow: / soŋ^1 kauŋ^5 /.

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We can summarize the mergers and distinctions among these four Miin rime categories as shown in Table 22., below.

Table 22: Overview of Longyan-Jangjou rimes / uĩ / and / ŋ / in Common Miin

rime	Longyan	Jangjou	Amoy	Chyuanjou	Foochow		Kienyang
"Long"	õ	ŋ	ŋ	ŋ		oŋ/auŋ	ɔŋ
"Cooked rice"	uĩ/ĩ	uĩ	ŋ	ŋ	woŋ	oŋ/auŋ	uŋ
"To return"	uĩ/ĩ	uĩ	ŋ	ŋ	woŋ	ioŋ	yeŋ
"Bright"	uĩ	uĩ	ŋ	ŋ	woŋ		uoŋ

Kienyang keeps these four rimes distinct, as does most of Miinbeei. Amoy and Chyuanjou merge them into a single category. In this context, what is special about Longyan and Jangjou is that keep they both distinguish "Long". Other than that, they merge the remaining three rimes, just as the rest of Miinnan does. Foochow appears to show traces of a pattern similar to Miinnan: it merges "Cooked rice", "To return", and "Bright", but only after labial and velar-laryngeal initials; after dental and sibilant initials it distinguishes "To return" from "Cooked rice". This merger may prove typical of Coastal Miin generally; more data from rural sites would be welcome. The Foochow merger of "Long" and "Cooked rice" after dental and sibilant initials is unique in the present sample of data, and may prove to be distinctive of Miindong as a whole.

Incidentally, there is still another rime that is related to this set. Table 23

shows a very small correspondence set that in Longyan and Kienyang merges with rime "To return".

Table 23: Rime "Tall"

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'tall'	kuĩ^2	kuan^2	kuãi^2	kuĩ^2	keŋ^2	—
'accustomed'	—	kuan^5	kuãi^5	kuĩ^5	kaiŋ^5	kyeŋ^5
'county'	kuĩ^1	kuan^6	kuãi^6	kuĩ^5	kaiŋ^6	yeŋ^6
'horizontal'	(ɦuɛ̃^{2})	(ɦuã^2)	ɦuãi^2	ɦuĩ^2	(ɦwaŋ^2)	(xuaŋ^2)

For the rest of Coastal Miin, however, there is no such merger. Notes on some of these words follow:

'Accustomed'. Longyan: note the comparable form associated with a related graph: / tiok^7 kuĩ^5 / '[placename: Wann'an Jwuguann 竹貫]'.

'County'. Longyan: / sõ^{1247} õ^{1247} kuĩ^1 / [placename: Shanqharng (county) 上杭] (usually referred to by this name rather than / sõ^1 õ^1 / to distinguish it from the village / sõ^1 õ^1 /, Chwanshianq 船巷). Kienyang: also / kyeŋ^6 /.

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4.2   The Significance of the / e / and / ue / Rimes

Another highly salient difference between dialect types within Miinnan, both in the Amoy region and in Taiwan, pertains to rimes ending in / e / and / ue /. It has seemed to some observers that Jangjou has / e / wherever Amoy has / ue /, and vice versa, and a concept called "flip-flop" has been promoted to describe the relationship. In fact, when viewed across more dialects than merely Jangjou and Amoy, the situation (in terms of mergers and distinctions of phonological categories) is fairly complex (as pointed out by Ang5 1995). "Flip-flop" does not appear to be a viable explanation of the rimes in question. But it remains true that Longyan falls together with Jangjou in the pattern of mergers and distinctions.

Seven rimes are involved. I list them below one after another, each followed

by a summary of the finals and a list of notes. The rimes are:

> "To crawl" (Table 24, summarized in Table 25))
> "To fly" (Table 26, summarized in Table 27);
> "Back" (Table 28, summarized in Table 29);
> "Speech" (Table 30, summarized in Table 31);
> "Cheek" (Table 32, summarized in Table 33);
> "Ramie" (Table 34, summarized in Table 35);
> "To shave" (Table 36, summarized in Table 37).

An overview of the mergers and splits among the various finals is presented in Table 38.

Table 24. Rime "To crawl"

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'to crawl'	pie^2	$p\varepsilon^2$	pe^2	pe^2	pa^2	pa^2
'to rake, harrow'	pie^2	$p\varepsilon^2$	pe^2	pe^2	pa^2	(pha^2)
'handful'	pie^3	$p\varepsilon^3$	pe^3	pe^3	pa^3	$pa\text{?}^3$
'father'	(pu^4)	$p\varepsilon^6$	pe^6	pe^4	—	—
'to rake, harrow'	—	$p\varepsilon^6$	pe^6	—	pa^6	(pa^5)
'piece of cloth'	$phie^5$	$p\varepsilon^5$	phe^5	phe^5	pha^5	pha^5
'horse'	bie^3	$b\varepsilon^3$	be^3	be^3	ma^3	$ma\text{?}^3$
'to scold'	$mi\tilde{e}^5$	—	$m\tilde{\varepsilon}^6$	$(m\tilde{a}^5)$	ma^5	ma^6
'tea'	tie^2	$t\varepsilon^2$	te^2	te^2	ta^2	ta^2
'jellyfish'	—	$th\varepsilon^6$	the^6	the^5	tha^5	tha^5
'sediment'	(tsa^1)	$ts\varepsilon^1$	tse^1	tse^1	tsa^1	tsa^1
'gauze, fine thread'	sie^1	$s\varepsilon^1$	se^1	se^1	sa^1	sa^1
'mute'	ie^{35}	ε^3	e^3	e^3	a^3	$a\text{?}^3$
'below'	ie^4	ε^6	e^6	e^4	a^6	ha^5
in 'Amoy'	ie^{24}	ε^6	e^6	e^4	a^6	ha^6

'household'	kie¹	kɛ¹	ke¹	ke¹	ka¹	ka¹
'to add'	kie¹	kɛ¹	ke¹	ke¹	ka¹	ka¹
'cangue'	(gie²⁴)	kɛ²	ke²	ke²	(kia²)	(ka¹)
'false', 'to feign'	kie³	kɛ³	ke³	ke³	ka³	kaʔ³
'low (said of a building)'	kie⁴	kɛ⁶	ke¹	ke⁴	—	—
'to marry (said of a woman)'	kie⁵	kɛ⁵	ke⁵	ke⁵	ka⁵	(kaʔ³)
'frame'	kie⁵	kɛ⁵	ke⁵	ke⁵	ka⁵	ka⁵
'price'	kie⁵	kɛ⁵	ke⁵	ke⁵	ka⁵	ka⁵
'vacation'	kie⁵	kɛ⁵	ke⁵	ke⁵	ka⁵	ka⁵
'shrimp'	hie²	hɛ²	he²	he²	ha²	xa²
'red clouds at sunset'	hie²	hɛ²	he²	he²	ha²	xa²
'summer'	hie¹	hɛ⁶	he⁶	he⁵	ha⁶	ha⁶
'sprout'	gie²	gɛ²	ge²	ge²	ŋa²	ŋa²
'tusk, ivory'	gie²	gɛ²	ge²	ge²	ŋa²	ŋa²

Table 25: Summary of finals in rime "To crawl"

initial types	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
all	ie	ɛ	e	e	a	a

Notes on rime "To crawl" follow:

'To rake, harrow'. Kienyang: / pha² / is a verb only; / pa⁵ / is a noun only.

'Handful'. Longyan: 'to grab with the hand and pull toward one'; 'to row (a boat, as on the fifth day of the fifth lunar month)'; 'to "guard" (a position, in chess or gambling)'.

'Father'. Longyan: 'father's elder brother' (term of direct or indirect address); also in / lo³ pu⁴ / 'old man (term of direct address)'.

'Piece of cloth'. Also often 'to carry in a fold of cloth'.

'Jellyfish'. Longyan: only a learnèd form / hai³ tsiat⁷ / is attested.

'Mute'. Longyan: this morpheme is attested only in compounds, as / ie³⁵ kau³ / 'to be mute' and / ie³⁵ kau³+a / 'mute person'. The second syllable appears to be "dog" (though it may well be something else), and if so this compound is evidently in origin a term of abuse.

In 'Amoy'. Longyan: this morpheme is attested only in a sandhi form: / ie²⁴ muĩ² /.

'To add'. Longyan: also 'to have remaining' (*shenqshiah* 剩下).

'Low (said of a building)'. Longyan: glossed only as 'recessed (as of a *tianjiing* 天井, the open-air courtyard in a traditional house, relative to the surrounding walkway)'.

'Red clouds at sunset'. Longyan: / aŋ² hie² /. Amoy: / aŋ² he² /. Foochow: /øŋ² ha² /.

Table 26: Rime 'To fly'

gloss	Longyan	Jangjou	Amoy	Cbyuanjou	Foochow	Kienyang
'to fly'	pue¹	pue¹	pe¹	pə¹	pwí¹	ye⁹
'to recompense'	pue²	pue²	pe²	pə²	puí²	pui²
'unfinished piece of craftsmanship'	phue¹	phue¹	phe¹	phə¹	phwi¹	—
'skin, bark'	phue²	phue²	phe²	phə²	phuí²	hui²
'quilt'	phue⁴	phue⁶	—	phə⁴	pwoí⁶	phui⁵
'chips, fine slices'	phue⁵	phue⁵	phe⁵	phə⁵	phwoí⁵	—
'tail, end'	bue³	bue³	be³	bə³	mwí³	mui?³
'not yet'	—	bue⁶	be⁶	bə⁵	mwoí⁶	—
'younger sister'	(muĩ³⁵)	(muãi⁶)	be⁶	bə⁵	mwoí⁵	mui⁶
'to blow (said of wind)'	tshiɹ¹	tshue¹	tshe¹	tshə¹	tshwí¹	tshye¹

'to steam'	tshir^1	tshue^1	tshe^1	tshə^1	tshwí^1	—
'thin stick'	—	tshue^2	tshe^2	tshə^2	tshuí^2	—
'marrow'	tshir^3	tshue^3	tshe^3	tshə^3	(tshoi^3)	sye?^{3}
'crisp'	tshir^5	—	tshe^5	tshə^5	tshwoí^5	—
'to look for'	(tshĩ^5)	tshue^6	tshe^6	tshə^5	—	—
'to wrap (*tzonqtz*)'	kue^3	—	—	kə^3	kwí^3	(khuɔ?^{3})
'lime (the mineral)'	hue^1	hue^1	he^1	hə^1	hwí^1	xui^1
in 'monk, bonze'	hue^{1247}	hue^2	he^2	hə^2 ?	(hu^2)	—
'partner', in 'together'	hue^3	hue^3	he^3	hə^3	hwí^3	—
'year of age'	hue^5	hue^5	he^5	hə^5	hwoí^5	xye^5

The dialect reflexes of the rime "To fly" are summarized in Table 27. Note that Longyan, Foochow, and Kienyang again exhibit allophony. Kienyang uses / ui / after labial initials and / ye / elsewhere. Foochow uses / wí / in tones 1 and 3, / uí / in tone 2, and / woí / in tones 5 and 6. (Maclay and Baldwin use an extravagantly close transcription for Foochow.) Longyan uses / ue / for labial and velar-laryngeal initials and / ir / for dentals and sibilants.

Table 27: Summary of finals in rime "To fly"

initial types	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
labials	ue	ue	e	ə	wí^{13}/uí^2/woí^{56}	ui
dentals, sibilants	ir	ue	e	ə	wí^{13}/uí^2/woí^{56}	ye
velar-laryngeals	ue	ue	e	ə	wí^{13}/uí^2/woí^{56}	ye ?

Notes on Table 26 follow:

'Unifinished piece of craftsmanship.' Longyan: 'a piece of pottery or brick not yet fired'.

'Chips, fine slices'. Longyan; this morpheme also appears to be the one used to mean 'shell of the large native clam called / tshan^2 to^1+a /; used as a

scraper to get up the last bits of sweet potato flour or rice flour after milling'. Foochow: listed under 配, Maclay and Baldwin 1870:728.

'Thin stick'. Longyan: the only form I have identified is / siɪ¹ /, which matches in neither initial nor tone.

'To wrap (*tzonqtz* 粽子, a kind of leaf-wrapped dumpling)'. Foochow: / kwǐ³ tsaøŋ⁵ / 'to make three-cornered dumplings by wrapping in leaves'.

'Monk, bonze'. Teochew: / hue² siõ⁶ /. Longyan: / hue¹²⁴⁷ sõ¹ /. Amoy: / he² siũ⁶ /. Foochow: / hu² sioŋ⁶ /. Kienyang uses a different form: / tiɔŋʔ³ lauʔ³ /, equivalent to Mandarin *jaanglao* 長老.

'Partner', in 'together'. Longyan: / tso⁵ hue³ / 'together', which also has fusion form / tsue⁴ /; / lo₁₁ hue₁₁+a / 'old man' (impolite); 'husband' (impolite word used by elderly wives). Jangjou: / tso⁵ hue³ / 'to eat or do anything together'. Amoy: evidently a bound form, 'partner'.

Table 28: Rime "Back"

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'to brush away, grope for'	pue³	pue³	pe³	pə³	pwǐ³	—
[M: number of times more]	pue⁴	pue⁶	pe⁶	pə⁴	pwoǐ⁶	—
'to carry on the back'	pue⁴	pue⁶	pe⁶	pə⁵	pwoǐ⁶	(pui⁵)
'to recite from memory'	pue⁴	pue⁶	pe⁶	(pə⁵)	pwoǐ⁶	(pui⁵)
'back (part of body)'	pue⁵	pue⁵	pe⁵	(pə⁵)	pwoǐ⁵	pui⁵
'to roast'	pue¹	—	pe⁶	pə⁵	pwoǐ⁶	pui⁶
'to use as a condiment'	phue⁵	phue⁵	phe⁵	phə⁵	phwoǐ⁵	—
'short (in length)'	tiɪ³	—	te³	tə³	toi³	tuiʔ³

[measure for pieces]	tiɹ⁵	—	te⁵	tə⁵	tói⁵	—
'generation'	(tai⁴)	—	te⁶	tə⁵	tói⁶	—
'bag'	tiɹ¹	—	te⁶	tə⁵	tói⁶	—
'to decline (an offer)'	thiɹ¹	—	the¹	thə¹	thoi¹	—
'to retire, retreat'	thiɹ⁵	the⁵	the⁵	thə⁵	thói⁶	—
'snail'	liɹ²	le²	le²	lə²	loi²	sui²
'to sit'	tsiɹ⁴	tse⁶	tse⁶	tsə⁴	sói⁶	(tsueʔ⁸)
'small earthen pot'	gue¹	ue¹	e¹	ə¹	—	—
'fruit'	(ko³)	kue³	ke³	kə³	kwí³	—
'rice cake'	kue³	kue³	ke³	kə³	kwí³	—
'coiffure'- 'cockscomb'	kue⁵	kue⁵	ke⁵	kə⁵	kwoí⁵	—
'to cross'	kue⁵	kue⁵	ke⁵	kə⁵	(kwo⁵)	(kuɔ⁵)
'fire'	hue³	hue³	he³	hə³	hwí³	(khuiʔ³)

Table 29: Summary of finals in rime "Back"

initial types	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
'back (part of body)'	ue	ue	e	ə	woí	ui
'snail'	iɹ	e	e	ə	oi¹²³/ói⁵⁶	ui
'fire'	ue	ue	e	ə	wí	ui

Notes on Table 28 follow:

'To carry on the back'. Miinnan dialects generally have a great variety of verbs for "to carry on the back". Longyan: / pue⁴ / means, specifically, 'to carry (an object) slung over the shoulder'; "to carry (a child) on the back" is / piɹ¹ /, which would be assigned to rimes "Cheek" or "To shave".

'To roast'. Longyan: 'to dry by fire (said of tea, clothes, newly made paper)'; 'to crisp (a soggy biscuit)'; also in / pue¹+a / 'large basket designed for roasting peanuts'.

‘To sit’. Longyan: also ‘to let drip dry (said of starches from potato, fern root, etc.)’, which may however be a different morpheme.

‘To brush away, grope for’. Foochow: ‘to dig for, to rake or scratch open’.

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Table 30: Rime “Speech”

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
‘speech, what is said’	$guɛ^1$	(ua^6)	ue^6	ue^5	wa^6	ua^6
‘to draw’	$guɛ^1$	(ue^6)	(ui^6)	ue^5	wa^6	ua^5
‘melon’	$kuɛ^1$	(kua^1)	kue^1	kue^1	kwa^1	kua^1
[surname: Ke 柯]	$kuɛ^1$	—	(kua^1)	(kua^1)	$(khó)$	$(khɔ^1)$
‘*Pausania*: kind of tree’	$kuɛ^{24}$	—	(kua^2)	(kua^2)	—	—
in ‘to live unmarried’	$kuɛ^3$	—	(kua^3)	(kua^3)	kua^3	$kua?^3$
‘trigram’	$kuɛ^5$	$kuɛ^5$	(kua^5)	(kua^5)	kwa^5	kua^5
‘a lid for a pot’	$kuɛ^5$	—	(kua^5)	(kua^5)	(kai^5)	(kue^5)
‘to suspend, hang’	$kuɛ^5$	—	(kui^5)	(kua^5)	kwa^5	kua^5
‘rooftile’	$guɛ^4$	(hia^6)	(hia^6)	(hia^4)	$ngwa^6$	ua^5
‘flower’	$huɛ^1$	(hua^1)	hue^1	hue^1	hwa^1	xua^1
[character reading: *huah* 化]	$huɛ^5$	$huɛ^5$	(hua^5)	(hua^5)	hua^5	xua

It is striking that Amoy and Chyuanjou have forms ending in / ua / for most of these items. Forms in / ua / could be supplied for all the others, as well. However, such forms are generally of educated origin, even if they have colloquial usages. Instead of admitting these words, I treat the / ue / forms as the legitimate members of the correspondence set, even though they are in the minority.

Table 31: Summary of finals in rime "Speech"

initial types	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
velar-laryngeals	uɛ	uɛ	ue	ue	wa	ua

Notes on rime "Speech" follow:

'Speech, what is said'. In Kienyang, this word is generally the verb "to say".

[surname: Ke 柯]. The aspirated Foochow and Kienyang forms are probably influenced by Mandarin. The usual rime-book entries prescribe an unaspirated initial, as in the Miinnan data.

'*Pausania*: kind of tree'. Longyan: / kuɛ²⁴ lian³ / 'seed of the *muhheh* 木荷 tree, used as a toy top'. Amoy: 'a large tree with very showy and beautiful white flowers'; associated in Campbell ([1913] 1965: 347) with a regional character æ, read / ho² /. Could the Longyan/Amoy form in fact be a conservative value for the character 荷, as in *muhheh*?

In 'to live unmarried' (said of a widow). Longyan: / tsiu³ kuɛ³ /.

'Trigram'. Longyan: / pat⁷ kuɛ⁵ / 'the eight trigrams'.

'To suspend, hang'. Amoy: also / kua⁵ /.

'Rooftile'. Most of the Miinnan forms belong to a different rime, although this may be a side-effect of the voiceless nasal initial.

'To pick at, poke'. This form, belonging to the *ruhsheng*, should really not be included in the present rime. Longyan: 'to pick out (a splinter) with a needle, to pick (the teeth) with a toothpick'; 'to poke open (a blister) with a needle' (*kou*); 'to fish out with a stick, pick up on the end of a stick (as a dead snake)'.

Character reading: *huah* 化. Longyan: in some place-names: / lin¹²⁴⁷ huɛ⁵ / 'Ninghuah (county) 寧化'; / tiok⁷ huɛ⁵ / 'Derhuah (county) 德化'.

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Table 32: Rime "Cheek"

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'cheek'-'buttocks'	phiɹ^3?	phe^3	phue^3	phue^3	phá^3	phaiʔ^3
'tares, darnell'	phiɹ^5	phe^6	phue^6	phe^6	phá^5	phai^6
'to buy'	biɹ^3	be^3	bue^3	bue^3	má^3	maiʔ^3
'unable to'	biɹ^4	be^6	bue^6	bue^4	má^6	mai^5
'to sell'	biɹ^1	be^6	bue^6	bue^5	má^6	mai^6
'hoof'	tiɹ^2	te^2	tue^2	tue^2	tá^2	tai^2
'to transmit, pass along'	—	te^6	tue^3	tue^3	tá^3	taiʔ^3
'bottom'-'inside'	tiɹ^3	te^3	tue^6	—	tá^6	—
'appearance, form'	thiɹ^3	the^3	thue^3	thue^3	thá^3	(hɔiʔ^3)
'in place of'	thiɹ^5	the^5	thue^5	thue^5	thá^5	hai^5
'plow, to plow'	liɹ^2	le^2	lue^2	lue^2	lá^2	lai^2
'rite, ceremony'	liɹ^3	le^3	lue^3	—	lá^3	—
'mother'	—	le^3	lue^3	—	ná^3	naiʔ^3
'even'	tsiɹ^2	tse^2	tsue^2	tsue^2	tsá^2	lai^9
'many'	tsiɹ^1	tse^6	tsue^6	tsue^5	sá^6	lai^6
'dough, cakes'	—	tse^1	tsue^1	—	tsá^1	—
'rice flour or dough'	tshiɹ^5	—	tshue^5	tshue^5	tshá^5	—
'bamboo branch'	siɹ^1	se^1	sue^1	—	—	—
'to rent'	siɹ^5	se^5	sue^5	sə^5	(swoí^5)	(sye^5)
'west'	siɹ^1	(sai^1)	(sai^1)	(sai^1)	sá^1	sai^1
'to wash'	siɹ^3	se^3	sue^3	sue^3	sá^3	saiʔ^3
'millet'	siɹ^3	se^3	sue^3	sue^3	(sø^3)	—
'thin, fine, small'	siɹ^5	se^5	sue^5	sue^5	sá^5	sai^5
'to turn a handmill'	iɹ^1	e^1	ue^1	ue^1	á^1	—

	Longyan	Jangjou	Amoy	Cbyuanjou	Foochow	Kienyang
'shoe'	(ie^2)	e^2	ue^2	ue^2	á^2	ai^9
'short (in height)'	iɹ^3	e^3	ue^3	ue^3	á^3	ai?^3
'can, may, able to'	iɹ^4	e^6	ue^6	(e^4)	á^6	ai^5
'street'	(khiɹ^1)	ke^1	kue^1	kue^1	ká^1	kai^1
'to unloose, untie'	kiɹ^3	ke^3	kue^3	kue^3	ká^3	—
'to correct, alter'	kiɹ^3	ke^3	kue^3	kue^3	—	kai?^3
'scabies, itch'	kiɹ^5	ke^5	kue^5	kue^5	ká^5	kai^5
'river'	khiɹ^1	khe^1	khue^1	khue^1	khá^1	khai^1
'to gnaw'	khiɹ^5	khe^5	khue^5	khue^5	khá^3	—
'crab'	hiɹ^4	he^6	hue^6	hue^4	há^6	xai^5

Table 33: Summary of finals in rime "Cheek"

initial types	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
all	iɹ	e	ue	ue	á	ai

Notes on rime "Cheek" follow:

'Cheek'-'buttocks'. The Longyan form is the measure for small bunches of bananas. What does this have to do with cheeks and buttocks? I blush to propose that one / phiɹ^3 / of bananas forms a small object, rounded on one side, like a single buttock.

'Appearance, form'. Longyan: only as a bound form in / $\text{sɨ}^1\text{thiɹ}^3$ / 'corpse'. Kienyang: recorded in field notes only as a character reading: *tii* 體.

'Rite, ceremony'. Longyan: bound form only.

'Millet'. Longyan: / siɹ^3+a / 'sorghum (has a hooked ear)'; / $\text{tsin}^1 \text{tsi}^1 \text{siɹ}^3$ / 'maize, Indian corn'. Also appears in rime "Ramie", below.

'To turn a handmill'. Longyan: this is the only word for 'to push'.

'Street'. Longyan: the expected form would be / kiɹ^1 /, which is not attested. The present form / khiɹ^1 / appears to be the word for "river". It appears in the compound / $\text{lu}^1\text{khiɹ}^1$ / 'street'.

'To unloose, untie'. Longyan: this form appears only in the learnèd expression

/ kiɹ³ sium¹ i⁵ /, 'to relieve one's conscience by making repayment or amends for some small matter.'.

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For rime "Ramie" in Table 34, I have insufficient Kienyang evidence, but have added Teochew, whose value here is strikingly different from the rest of Miinnan.

Table 34: Rime "Ramie"

gloss	Teochew	Longyan	Jangjou	Amoy	Chyuanjou	Foochow
'ramie'	tiu⁴	tui⁴	te⁶	tue⁶	tue⁴	taø⁶
'to prod, push against'	liu²	—	le²	lue²	—	—
'to dig a hole'	liu³	lui³	le³	(lue²)	—	(lø²)
'to scold'	—	—	le³	lue³	lue³	(lø²)
'a file; to file'	—	—	(le⁶)	lue⁵	—	laø⁵
'first (of the month)'	tshiu¹	tshui¹	tshe¹	tshue¹		tshø¹
'to scrub'	—	(tshi⁵)	tshe⁵	tshue⁵		tshaø⁵
'to comb'	siu¹	sui¹	se¹	sue¹	sue¹	sø¹
'wide apart' ~'distantly related'	(so¹)	sui¹	se¹	sue¹	sue¹	sø¹
'millet'	(su³)	(siɹ³)	se³	sue³	sue³	sø³

Table 35: Summary of finals in rime "Ramie"

initials	Teochew	Longyan	Jangjou	Amoy	Chyuanjou	Foochow
dental/sibilants	iu	ui	e	ue	ue	ø

Notes on rime "Ramie" follow:

   'To prod, push against'. Teochew: 'to nudge with the muzzle (said of an animal). Jangjou, Amoy: 'to come into collision with'. Foochow: 'to project, to extend,

to put forth'.

'To dig a hole'. Longyan: 'to root out, pry up (roots)'.

'Millet'. Also appears in rime "Cheek", above.

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Table 36: Rime "To shave"

gloss	Longyan	Jangjou	Amoy	Chyuanjou	Foochow	Kienyang
'letter in an envelope'	phiɪ¹	phe¹	phue¹	phue¹	phié¹	—
'to pare'	(phiɪ²)	phe¹	phue¹	(thue¹)	phié¹	—
'earth, the ground'	ti¹	—	ti⁶	ti⁵	tié⁶	tie⁶
'to weep'-'to crow'	thi²	—	thi²	—	thié²	hie²
'to shave'	thi⁵	—	thi⁵	—	thié⁵	hie⁵
'to leave'	li¹	—	li⁶	(li²)	lié⁶	—
'thorn'	tshi⁵	—	tshi⁵	—	tshié⁵	—
'spoon'-'lock, key'	si²	—	si²	si²	sié²	(tsie²)
'steps'	—	ke¹	kue¹	—	kié¹	(kui¹)
'chicken'	kiɪ¹	ke¹	kue⁶	—	—	kai¹
'to bind'	kiɪ¹	ke¹	kue¹	kue¹	kié¹	kai¹
'salted fish'	kiɪ²⁴	ke²	kue¹	—	kié¹	ai⁹
'easy'	—	ke⁶	kue²	kue²	kié²	ai⁹
'contract, deed'	khiɪ⁵	khe⁵	khue⁵	khue⁵	khié⁵	—

Table 37: Summary of finals in rime "To shave"

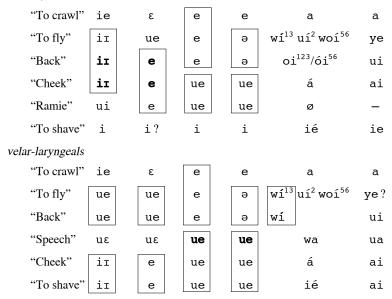| initial types	Longyan	Jangjou	Amoy	Cbyuanjou	Foochow	Kienyang
labials	iɪ	e	ue	ue	ié	?
dentals/sibilants	i	i ?	i	i	ié	ie
velar-laryngeals	iɪ	e	ue	ue	ié	ai

Notes on rime "To shave" follow:

'Letter in an envelope'. Longyan: 'to allot, apportion (land for building)'. The ordinary word for a letter is / sin^5 /.

'To pare'. Longyan: in / nĩ^4 sai^3 phiɹ^2 / 'earwax-scraper'. The regular word for "to pare" is / pie^2 /, which is not comparable to the form in question and may simply be the word "harrow".

'Earth, the ground'. Kienyang: 'piece of land'. In the meaning "the ground", Kienyang has a special form / tia^5 /, which may be a fusion of "ground" and "under"; similar forms are widespread in Miinbeei. Two competing forms are found in Miinnan: in addition to the forms shown, consider Jangjou / te^6 /, Amoy / tue^6 /, Chyuanjou / tue^5 /. Recall that across Chinese more broadly this morpheme is found in both *jyysheh* 止攝 (as in the *Goangyunn*) and *shiehsheh* 蟹攝 (as in the *Jyiyunn*).

'To weep'-'to crow'. Longyan: 'to cry (said of a child), cluck (said of a hen)'.

'To bind'. Teochew (not shown): 'to catch (fish) in a net'. Longyan: 'to tie up (a box, the mouth of a bag) with string'.

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Below, Table 38 summarizes the behavior of these seven rimes. Because of allophonic variation, the table is divided into three sections, by initial.

Table 38: Overview of Jangjou rimes / ue / and / e / in Common Miin

initial & rime	*Longyan*	*Jangjou*	*Amoy*	*Cbyuanjou*	*Foochow*	*Kienyang*
labials						
"To crawl"	ie	ε	e	e	a	a
"To fly"	ue	ue	e	ə	wí^{13} uí^2 woí^{56}	ui
"Back"	ue	ue	e	ə	woí	ui
"Cheek"	iɹ	e	ue	ue	á	ai
"To shave"	iɹ	e	ue	ue	ié	?

dentals, sibilants

"To crawl"	ie	ε	e	e	a	a
"To fly"	iɪ	ue	e	ə	wí^{13} uí^{2} woi^{56}	ye
"Back"	**iɪ**	**e**	e	ə	oi^{123}/ói^{56}	ui
"Cheek"	**iɪ**	**e**	ue	ue	á	ai
"Ramie"	ui	e	ue	ue	ø	—
"To shave"	i	i?	i	i	ié	ie

velar-laryngeals

"To crawl"	ie	ε	e	e	a	a
"To fly"	ue	ue	e	ə	wí^{13} uí^{2} woi^{56}	ye?
"Back"	ue	ue	e	ə	wí	ui
"Speech"	uε	uε	**ue**	**ue**	wa	ua
"Cheek"	iɪ	e	ue	ue	á	ai
"To shave"	iɪ	e	ue	ue	ié	ai

Longyan and Jangjou show phonetic similarities across most of these values, but in terms of pure diagnostic mergers and splits, they share two features not found in the other dialects shown. The first is that rimes "Back" and "Cheek" are not distinguished after dental and sibilant initials (in boldface here). This merger is made possible by the fact that Longyan and Jangjou exhibit allophonic variation conditioned by initial. The merger only occurs after dental and sibilant initials; after labials and velar-laryngeals, "Back" and "Cheek" are distinguished as in Amoy.

The other significant feature is that, in Longyan and Jangjou, rime "Speech" is not merged with rime "Cheek" after velar-laryngeal initials (in boldface here); that merger appears to be special to Amoy and Chyuanjou. In many Taiwan dialects of the gross Jangjou type, rime "Speech" is merged with "Back" and "To fly", effectively creating a structural barrier (like that diagrammed in Table 3, above) to the adoption of the Amoy-Chyuanjou merger of "Speech" with "Cheek" and "To shave".

5. CONCLUSION AND FUTURE PROSPECTS

This paper illustrates the use of strict comparative methodology in systematic Chinese dialect classification. In general the only correspondence sets selected as classificatory features are those that embody mergers between categories kept distinct in the common phonological system.

My primary conclusion is that Longyan dialect belongs to neither the Miinnan nor the Miindong varieties of Coastal Miin, but to a third group that is intermediate between the two. This "Northern Miinnan" or "Inland Miinnan" group, as I have named it, includes attested dialects in neighboring Jangpyng and Dahtyan counties, and is characterized by conservative mergers and distinctions with respect to two important features: first, sibilant initials in lower-register words and, second, the relationship between Common Miin tones {5} and {6}. It may be that Northern Miinnan reflects a stage of the development of Coastal Miin before Miinnan and Miindong were as distinct as they are now. In this one respect we may see it as intermediate between Miinjong and Coastal Miin.

Section 4 of this paper describes some of the ways in which, in comparison with Miinnan proper, Longyan resembles Jangjou rather than Amoy or Chyuanjou. In some cases Longyan exhibits characteristically Jangjou mergers, while in others Longyan and Jangjou are alike mainly in failing to exhibit phonological mergers characteristic of Amoy and Chyuanjou.

The presentation I have employed here is designed to encourage more field-study of related dialects. Each classificatory feature is represented by one or more correspondence sets, documented by the largest possible number of attesting forms. Field-workers surveying the greater Miinnan region of Fukien or the Miinnan-speaking areas of Taiwan can use the tables in this paper directly in elicitation. It is my hope that the boundaries of the Northern Miinnan group, as well as of Miinnan and Miindong proper, will soon be fixed with far greater precision by field-workers using this material. Although detailed tables such as I have assembled here may give the impression of completeness, comparative-historical Chinese dialectology is in fact in its infancy, and rich discoveries await every field-worker who ventures into the countryside.

<div align="center">SYMBOLS USED</div>

/ /   Phonemic forms from this dialect are written between slashes.

[ ]   Phonetic forms from this dialect are written between square brackets.

{ }   Common Chinese, Miin, or Hakka forms, along with likely *beentzyh* when appropriate, are written between curly brackets. The sense of the curly brackets is something like "within the diasystem", whereas square brackets and slashes mean "within the dialect".

( )   Partially comparable forms in a correspondence set are placed in parentheses.

' '   Glosses are ordinarily written between single quotes.

=   When an equals sign connects two syllables, it means that the second one is relatively unstressed: san^1=le^1 'grandson: son's son' '孫子'.

        For syllables that are fully unstressed and whose tone category cannot be distinguished, however, I use a superscript zero.

*   Unattested form. An unattested form may be expected but different from what is in fact observed, or it may be hypothesized without evidence that it does in fact exist.

Tones. Phonetic tone contours are written between square brackets ([53]) or subscript after the syllable (tsa_{53}). Phonemic tone categories are written between virgules (/4/) or curly brackets ({4}), or in superscript after the syllable (tsa^4); the eight common Chinese tone categories are numbered here as follows:

[upper register, or "Yin"]   [lower register, or "Yang"]

inpyng 陰平 {1}   *yangpyng* 陽平 {2}

inshaang 陰上 {3}   *yangshaang* 陽上 {4}

inchiuh 陰去 {5}   *yangchiuh* 陽去 {6}

inruh 陰入 {7}   *yangruh* 陽入 {8}.

        In the case of merger I follow Jerry Norman's practice (first described in 1969: 28) of assigning the lowest number of the common tone categories taking part in the merger — so if, in a given dialect, categories {3} and {6} are merged, for instance, I will call the merged category tone /3/, not

/6/. In the case of distinct tone categories that have become indistinguishable because of tone sandhi or other morphological processes, I use all the common tone category numbers that could possibly correspond to the sandhi form in question; I do not guess at the underlying tone category, which would be tampering with the evidence. So for example in Longyan dialect, in the first syllable of a three-syllable phrase, the underlying tone categories /1/, /2/, /4/, and /7/ cannot be distinguished — they all sound as [33] — and I will write such a syllable phonemically as having the tone /1247/.

SOURCES OF DIALECT DATA

It is my conviction that to cite dialect data without giving precise information on its provenance is tantamount to plagiarizing the research of other field-workers and lexicographers. Below I list the sources for each dialect I have cited in the present paper.

Amoy (Shiahmen, Xiàmén) 廈門. Important city in southern Fukien. Its dialect is most often cited as the representative of the Miinnan 閩南 ("Southern Miin") group, and it is certainly the best described of this group. My primary source for Amoy is Douglas (1899). I have adapted Douglas' romanization system to IPA, using mainly the phonetic values described in Tung (1960: 737-791). Two exceptions are Douglas' "eng" and "ek", which I have retained as / eŋ / and / ek /; Tung writes / iŋ / and / ik /.

Basel Mission. This is the placename I have chosen to represent the great *Chinese-English Dictionary, Hakka Dialect* of Donald MacIver and M. C. Mackenzie ([1905] 1926). It was compiled and continuously revised by many missionaries associated with the Basel Missionary Society, over a period of some 60 years, though its greatest contributers seem to have been Rudolph Lechler (1824-1908) and Phang Kin-kau 彭景高, a native associate of MacIver's. Although an extremely useful source, it is not a record of the dialect of a single time and place. Yet it is too valuable a document to discard entirely because of its uncertain provenance. MacIver

says in his 1905 preface that it the original Basel manuscript "gives Hakka as spoken in the [southwest] corner of the chief Hakka field" but adds that his book represents "in the main the language of the [northeast] part of the field. This geographical fact will explain many of the variations." It makes distinctions that are not heard in Moiyan, and its later editor, M. C. Mackenzie, is said to have lived among Hakka people in Fukien and to have traveled for a long period among Kwangsi Hakkas (MacIver's original preface, second unnumbered page). I have transcribed the spelling system to IPA as conservatively as possible, making only the following changes from letter-for-letter transcription:

"ch":	[tʃ]	"ts":	[ts]
"chh":	[tʃh]	"tsh":	[tsh]
"sh":	[ʃ]	"s":	[s]
"ng":	[ŋ]	"ʉ":	[ɨ]

The tones are described correctly but illustrated incorrectly in Mackenzie's preface — he has most of the symbols misassigned. Here are the correct assignments:

Shòng-phîn (no tone mark):   /1/

    (includes most of comparative {4})

Hà-phîn (circumflex "â" "ô"):   /2/

Shòng-shang (acute "á" "ó"):   /3/

Khì-shang (grave "à" "ò"):   /5/

    (includes comparative {6})

Shòng-nyip (final stop, no tone mark)   /7/

Hà-nyip (vertical stroke "a̍" "o̍"):   /8/.

These are the same symbols used in Douglas' Amoy romanization.

Chyuanjou [Quánzhōu] 泉州. An important city northeast of Amoy. Data used here is from Lin Liangtong (1993).

Foochow [Fwujou, Fúzhōu] 福鼎 City. The data here is from Maclay and Baldwin (1870) is the main dictionary of this language. I have adjusted the initials and final "ng" to symbols of the International Phonetic Alphabet, but all

vowels are reproduced, with diacritics, exactly as in Maclay and Baldwin.

"ch":	[ts]	"ë"	[ø]
"ch' ":	[tsh]	"ü"	[y]
"ng":	[ŋ]		

Guanjuang. Shanqharng Guanjuang (Shànghàng Guānzhuāng) 上杭官莊, western Fukien. Principal informant: Mr. Lin Huannjen 林煥珍, born 1943. Data collected between 1992 and 1995.

Ilan (Yilan, Yílán) 宜蘭. County in north-eastern Taiwan, Juanqwei township 宜蘭壯圍. Principal informant: Ms. Yeo Shujen 游淑眞, b. 1960. Data collected between 1986 and 1995, in Ilan, New York, and Seattle.

Jangjou [Zhāngzhōu] 漳州. An important city west of Amoy. Data used here is from Douglas (1899), adapted as described in the entry for Amoy, above.

Kienyang. Jiannyang [Jiànyáng] 建陽. Village of Howshan in Jeukoou Township, Jiannyang County 建陽莒口後山, northern Fukien. Informant: Mr. Shyu Hannbo 徐瀚波, who was in his late sixties at the time of the first sesssions of fieldwork, 1965-1967. Survey by Jerry Norman, 1965-1971. A small portion of this material was published in Norman's 1969 dissertation, including a dictionary on pp. 79-141. The great bulk of Norman's material from this dialect survey remains in manuscript form. Norman changed his system of transcription twice during this survey, and the system I have used in the present essay is somewhat different from what appears in Norman 1969.

Longyan [Lóngyán] 龍岩. City in western Fukien, whose dialect belongs to the northern variety of Miinnan. Principal site: Shibei Tyauwei [Xībǐ Tiáowéi] 西陂條圍, a village near the city limits, whose speech is essentially that of the city proper. Principal informant: Mr. Chern Ijyh [Chén Yízhì] 陳一致, 78? *suey* in 1992, village intellectual. Survey by myself with Yeo Shujen, 1992-5. Note that there is another region called Longyan, written using the same characters as this Longyan, which has been the subject of a linguistic study in English (a Ph.D. dissertation by Iovanna Delano Condax in 1973). That site is a township in northeastern Kiangsi Province,

in the county of Gueyshi 貴溪, and no relation to the Longyan referred to in the present essay. Condax's fieldwork was done in Taiwan.

The tone sandhi of Fukien Longyan is as follows:

(1) in detail, for two-syllable units

	second syllable:						
first syllable:	*7*	*1*	*4~8*		*5*	*2*	*3*
	long short		long short				
7 short	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˥˩	˥˩
7 long	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˥˩	˥˩
1	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˥˩	˥˩
2	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˨˩	˨˩
4 long	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˨˩	˨˩
8 short	˧˥ ˧˥	˧˧	˧˩ ˧˩		˧˨	˨˩	˨˩
3	˨˥ ˨˥	˨˧	˨˩ ˨˩		˨˨	˩˩	˩˩
5	˨˥ ˨˥	˨˧	˨˩ ˨˩		˨˨	˩˩	˩˩

(2) in outline, for two-syllable units

sandhi value of:	before:	7, 1, 4~8, 5	2, 3
7		˧	˥ (=7)
1			˧˥ (~1)
2, 4~8		˧ (~2)	
3, 5		˨	˨ (=5)

In sandhi units of three or more syllables, syllables that are antepenultimate or earlier may have only the values ˧ (underlying tones /1/, /2/, /4/~/8/, /7/) and ˨ (underlying tones /3/ and /5/).

Taipei [Tairbeei, Táiběi] 台北. Capital city of Taiwan. Informant: the nun Jen-lang 仁朗, from the city center. Data collected by me in 1988-89, in Seattle.

Teochew [Chaurjou, Cháozhōu] 潮州. The most important Miin-speaking city outside of Fukien and Taiwan.. Data is from Choy 1991.

Wuhfeng 霧峰. Village in Taichung (Tairjong, Táizhōng) 臺中 county. Principal informant: Mr. Su Jui-long 蘇瑞隆, b. 1962. Data collected by me between 1988 and 1991 in Seattle.

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