NANXIONG AND HAKKA

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Abstract

Although Hakka and Nanxiong differ in their mode of devoicing, the dialect of Nanxiong city has a split treatment of the entire *zhuoshang* category remarkably similar to Hakka in its lexical incidence. This suggests that they share a recent common ancestor, from which the *zhuoshang* split was inherited. It is argued that the set of *zhuoshang* words which have tone 1 in standard Hakka and tone 1 or 2 in Nanxiong had tone 4 in the parent language. It is also argued that that this common ancestor had not yet merged its *quanzhuo* initials with the voiceless aspirated initials. The ancestral tone 4 then merged with tone 1 in Hakka, and with tone 1 or 2 in Nanxiong; and devoicing occurred separately in Nanxiong and Hakka.

The *Language Atlas of China* (Australian Academy of the Humanities and Chinese Academy of Social Sciences, 1987, map B13) characterizes the dialect of Nanxiong 南雄 city in northern Guangdong as part of the so-called "Shaozhou patois" 韶州土話, a set of Chinese dialects awaiting classification. Some investigators now refer to these dialects as "north Guangdong patois" 粵北土話. In this paper, it will be argued that Hakka and Nanxiong are very closely related.

While the city of Nanxiong itself speaks Nanxiong dialect, the countryside around it speaks mostly Hakka. It appears that the city dialect is older in the region than Hakka: expansion of Hakka speakers in the Nanxiong region took place only after late Ming (Leong 1997:58). The Nanxiong dialect was probably already spoken in and around Nanxiong city before Late Ming.

There are two previous descriptions of the sound system of the dialect of Nanxiong city: S. Egerod's article of 1983, in which he concludes that Nanxiong is closely related to Min (a conclusion very different from my own); and a second description by Prof. Xie Zili 謝自立 published in the dialect section of the *Nanxiong Xian Zhi* (Nanxiong Xian Difang Zhi Bianzuan Weiyuanhui 1991: 770-779). These are two outstanding pieces of descriptive work, but there are some differences between them, both in the phonetics and the phonology. One difference concerns tone sandhi. According to Egerod (1983:126) both progressive and regressive sandhi are common in Nanxiong. Xie (2000) disputes this, showing that what Egerod took for tone sandhi represents a kind of diminutive (小稱) morphology of the Standard Cantonese *pin-yam* 變音 type, overlooked by Egerod. I agree with Xie that Nanxiong has diminutive morphology and that Egerod mistook it for tone sandhi. He also mistook some instances of alternations between colloquial and literary forms for instances of tone sandhi, as I will show below. Although true tone sandhi does exist in my data, it is not very spectacular (see below).

I had the good fortune of spending two weeks in Nanxiong city[1] in May-June 1999. There I conducted intensive fieldwork on the city dialect. After familiarizing myself with the sound system, guided by the findings of Egerod and Xie, I recorded about 13 minutes of improvised discourse on various subjects. The data were transcribed into systematic phonetic transcription and the pronunciation of each word checked with the informant. These data were supplemented with a 200-word Swadesh list. In the initial stages of my investigation, I also collected character readings for the characters lists on pages x-xii of the *Fangyan Diaocha Zibiao* 方言調查字表, so as to obtain samples of the main phonological contrasts. These character readings may in some cases correspond to no actual morpheme in the living Nanxiong dialect. The present paper is based on all these materials, words elicited from word-lists or extracted from invited discourse, and character readings.

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[1] I am very grateful to Prof. Lin Lifang 林立芳 of Shaoguan University for his help in arranging my stay in Nanxiong; to the Communist Party cadres and Municipality cadres of Nanxiong city, especially Mr. Li Shiren 李仕仁 and Mr. He Jian 何堅 for their warm welcome and their support during my stay; and to all the personnel of the Nanxiong Municipal Guesthouse 南雄市政府 待所 for making my stay as pleasant as it was fruitful. Last but not least, my thanks go to Mr Xiao Rongjin 肖榮金, my informant. He was then a 60-year old retired schoolteacher. A native of Nanxiong, he could also speak fluent Putonghua and Hakka.

1. The zhuoshang split in Nanxiong

In Egerod's description of Nanxiong, the *cizhuo shangsheng* category was split between two main sets: tone 4 and tone 3. Similarly, in many Hakka dialects, the *cizhuo shangsheng* category is split between tone 1 and tone 3. Among *cizhuo shangsheng* words, there was a correspondence between Hakka tone 1 and Nanxiong tone 4: 馬 買咬, and between Hakka tone 3 and Nanxiong tone 3: 耳, 兩兩個, 卵, 瓦, 五.

This was suggestive of a good agreement in the split of the *cizhuo shangsheng* category in the two dialects, as silently noted in Sagart (1998). Unfortunately, Egerod's article does not contain enough data to cover the entire *cizhuo shangsheng* category. Moreover, the *quanzhuo shangsheng* category is also split in both dialects: it was necessary to examine whether there is agreement there too. The following are my own observations on Nanxiong, based on the fieldwork conducted there in 1999. I will limit myself to facts bearing on initials and tones.

Unlike in (southern) Gan and Hakka, the MC *quanzhuo* 全濁 (voiced obstruent) initials are devoiced into voiceless unaspirated obstruents in Nanxiong, in all tones. There are six phonemic tones. In isolated syllables, they were perceived as follows:

Tone 1 (*Yinping*, 'upper Level') is long, 44 or 445 in contour. Voice quality is modal overall. Vocal fold vibration ends gradually.
Tone 2 (*Yangping*, 'lowel Level) is 21 in contour. Its voice quality appears to combine elements of creakiness and breathiness.
Tone 3 (*Yinshang*, 'upper Rising') is 35 or 325 in contour. Voice quality is modal.
Tone 5 (*Yinqu*, 'upper Departing') is long, 332 in contour.
Tone 6 (*Yangqu/Yangru*, 'lower Departing/Entering') is shortish, 53 in contour. It is creaky towards the end, and vocal fold vibration ends neatly.
Tone 7 (*Yinru*, 'upper Entering') is short, high 5, and ends in a glottal stop.

In addition there is a 'light tone' (or 'tone 0'), similar to the *qingsheng* of Standard Chinese. In natural speech some syllables are always unstressed, and they are lexically toneless. Many of them are suffixes and grammatical morphemes. They always follow a tonal syllable. The pitch of toneless syllables depends on the tone of the preceding tonal syllable.

The principal instances of contextual tone sandhi occur in close juncture. They are as follows:

- a tone 1 preceding a tone 2 is always slightly rising: 445 instead of 44; this is reminiscent of Hakka (for instance Sung Him Tong Hakka, Sagart 1982);
- the first of two consecutive T2 is level: 22 instead of 21;
- a tone 2 preceding a tone 3 also becomes level, but lower: 11 instead of 21;
- and finally, the first of two consecutive T3 is slightly higher than the second.

There are some differences between my observations and those of previous investigators, as shown in Table 1:

Tone	**Egerod (1983)**	**Xie Zili (1991)**	**Sagart (this paper)**
T1 (Yinping)	55	44	44, 445
T2 (Yangping)	21	11	21

T3 (Yinshang)	24	224	35, 325
T4 (Yangshang)	12	= Yangping	= Yangping
T5 (Yinqu)	11	22	332
T6 (Yangqu)	42	42	53
T7 (Yinru)	55^{h}	$45^{ʔ}$	$5^{ʔ}$
T8 (Yangru)	$22^{ʔ}$	$43^{ʔ}$	=Yangqu

Table 1: tone categories and contours in Nanxiong according to different investigators.

Note that there is no independent tone 4 (*Yangshang*) in my data, unlike in Egerod's. Egerods's tones 2 (low falling [21]) and 4 (low rising [12]) are merged into tone 2 ([21]) in my data. In this, Xie Zili and I agree.

Table 2 presents the correspondences between Middle Chinese and Nanxiong that can be extracted from my own data.

MC initial	平 A	上 B			去 C	入 D
清 p	p-1	p-3			p-5	p-7
次清 ph	ph-1	ph-3			ph-5	ph-7
全濁 b	p-2	p-2	p-1	p-6	p-6	p-6
次濁 m	m-2	m-2	(m-1)	m-3	m-6	m-6

Table 2: development of initials and tones in Nanxiong city.

The treatment of the *zhuo shang* category in Nanxiong invites particular attention:

- One set of words (henceforth: 'set 1A') has tone 2 in my data and in Xie's, and tone 4 in Egerod's. This is regardless of initial type: the MC initials are sonorants (*cizhuo*) and voiced obstruents (*quanzhuo*). These words are all colloquial. See Table 3.
- A second set of words ('set 1B') has tone 1 in my data and in Xie's. In Egerod's article these words also have tone 1 phonetically, but Egerod treats them as tone 6 underlyingly. This set is very limited numerically but the forms are very basic and colloquial. See Table 4.
- A last set of words ('set 2') has modern reflexes conditioned by initial type: tone 6 with Middle Chinese obstruents, and tone 3 with Middle Chinese sonorants in all recorded varieties of Nanxiong. Some of these words are colloquial and others literary. See Table 5.

The data presented in Xie's description correspond closely with Egerod's and mine[2].

2. comparison with Hakka

We now compare the development of the entire *zhuoshang* category in Nanxiong and Hakka. Our Hakka data are drawn from McIver's dictionary (McIver 1926). To conserve space I will only list

[2] Although in his description of 1991 (Nanxiong Xian Difang Zhi Bianzuan Weiyuanhui 1991: 774) Xie only recognized tones 3 and 6 as the regular reflexes of the *cizhuo* category, he did explicitly recognize the existence of a tone-2 reflex in a later paper (Xie 2000).

Egerod's data and mine in the tables below (Nanxiong forms elicited as character readings are in plain type; forms elicited through a word-list or extracted from discourse are in bold type).

	Nanxiong (Egerod 1983)	Nanxiong (Sagart)	Hakka (McIver 1926)
淡		tõã$_2$	tham$_1$
坐		**tso$_2$**	tsho$_1$
柱		tsu$_2$	chhu$_1$
重 heavy	tseɯŋ$_4$	**tsəŋ$_2$**	chhung$_1$
近	tɕjɯŋ$_4$	**tɕjɯŋ$_2$**	khiun$_1$
倚		**tɕi$_2$**	khi$_1$
下 屁下		**ha$_2$**	kha$_1$, ha$_1$
買	**moa$_4$**	**mwɑ$_2$**	mai$_1$
馬	**ma$_4$**		ma$_1$
暖		**nuŋ$_2$**	non$_1$
奶 milk		**nai$_2$**	nai$_1$
懶		**lõã$_2$**	lan$_1$
冷		**laŋ$_2$**	lang$_1$
鯉 carp		**li$_2$**	li$_1$
有 have	**io$_4$**	**jo$_2$**	yu$_1$
野	ia$_4$	jɑ$_2$	ya$_1$
養 raise (cattle)		**jɔŋ$_2$**	yong$_1$
咬	**ŋau$_4$**	**ŋɑw$_2$**	ngau$_1$

Table 3: *zhuoshang* words from set 1A in Nanxiong and Hakka

	Nanxiong (Egerod 1983)	Nanxiong (Sagart)	Hakka (McIver 1926)
上	**souŋ$_{6>1}$**	**sɔŋ$_1$** (~晝 'lunch')	song$_1$
下	**ha$_{6>1}$**	**ha$_1$** (迭~來 'fall')	ha$_1$
社~官		**sa$_1$**	sha$_1$
厚		**hɐi$_1$**	heu$_5$
婦~嬤 'wife'	**fu$_{6>1}$**	**fu$_1$**	fu$_5$
尾		**mɯ$_1$** (~巴 'tail')	mui$_1$, mi$_1$

Table 4: *zhuoshang* words from set 1B in Nanxiong and Hakka

It is necessary to discuss briefly Egerod's treatment of the forms in Table 4. Egerod regards 上, 下 and 婦 as lexically tone-6 forms, changed to tone 1 through tone sandhi. However, neither Xie nor I could observe this sandhi in Nanxiong. The existence of this sandhi is very problematic. First, tone-6 forms coming from Middle Chinese *qusheng* syllables are never affected by it. Second, the conditioning factor for the sandhi is not clearly statable: Egerod cited examples of T6 > T1 occurring before a T0 (ha$_{6>1}$ po$_0$ i$_2$ 'has come down', souŋ$_{6>1}$ po$_0$ lɯ$_2$ 'has come up': p.141); before a T1 (souŋ$_{6>1}$ tɕiɯ$_1$ 'forenoon meal'); before a T2 (fu$_{6>1}$ ȵioŋ$_2$ 'woman', ha$_{6>1}$ m$_2$ 'afternoon'); but there are many cases in his data where the same T6 does *not* change to T1 in the same environments. A preferable analysis is that there is no T6 > T1 sandhi in Nanxiong and that the forms in Table 4 are lexically in tone 1. It is true that both 上 and 下 have tone-6 variants in Nanxiong but they invariably occur in words of northern origin, such as 上午 'morning', 晚上 'evening'. Thus all forms showing the alleged T6>T1 sandhi in Egerod's data are in fact lexically T1 words.

The last two forms in Table 4 have tone 5 in McIver's dictionary. However, they have tone 1 in certain other Hakka dialects (Li and Zhang 1992). Concerning 一, Hakka dialects generally show tone 5: fu$_5$ in 婦人 'woman', but tone 1: pu$_1$ or fu$_1$ in 婦孺 (see Li and Zhang 1992: 325). In this, Nanxiong agrees perfectly with Hakka.

	Nanxiong (Egerod 1983)	Nanxiong (Sagart)	Hakka (McIver 1926)
倍		pɯ$_6$	phui$_5$
一		**fu$_6$** (in 父母)	fu$_5$
兆兆頭		**tsɑw$_6$**	chhau$_5$
件		tɕjɛ̃$_6$	khen$_5$
米	mi$_3$	**mi$_3$**	mi$_3$
網		mɔŋ$_3$	miong$_3$
五	**m$_3$**	**m$_3$**	ng$_3$
老	lau$_3$	**lɑw$_3$**	lau$_3$
佬person	**lau$_4$**	**lɑw$_3$**	lau$_3$
嶺mountain		**ljaŋ$_3$**	liang$_1$, liang$_3$

卵 male genitals		**luŋ$_3$** (~to$_6$)	lon$_3$
兩 兩個人	løouŋ$_3$	**ljoŋ$_3$**	liong$_3$
腦		nɑw$_3$	nau$_3$
雨	y$_3$	jy$_3$	yi$_3$
女	n$_3$	ny$_3$	nyi$_3$
耳	ȵi$_3$	**ȵi$_3$** (~to$_1$)	nyi$_3$
繞		ȵɑw$_3$	nyau$_3$
遠	ioŋ$_3$	**juŋ$_3$**	yen$_3$

Table 5: *zhuoshang* words from set 2 in Nanxiong and Hakka

Finally we list in Table 6 those words other ('irregular') tone correspondences.

	Nanxiong (Egerod 1983)	Nanxiong (Sagart)	Hakka (McIver 1926)
抱		pɑw$_2$	phau$_5$
動		**tŋ$_6$** (in 動物)	thung$_1$
母		**mei$_3$** (in 父母)	me$_1$, mi$_1$
猛 fierce	maŋ$_3$	**maŋ$_3$**	mang$_1$
每		**mɯ$_3$**	mui$_1$
以		**ji$_3$** (in 以前)	yi$_1$
眼 eye[3]	**ŋoa$_3$**	**ŋõɑ̃$_2$**	ngan$_3$

Table 6: *zhuoshang* words with irregular correspondences

The T5 reading for 抱 in McIver is exceptional in Hakka. All the Hakka dialects listed in Li and Zhang (1992:358) show tone 1, corresponding regularly with Nanxiong T2. It may be that McIver is listing a literary reading, as the colloquial word for 'to carry in one's arms' in Meixian in nam$_3$. The T6 reading for 動 in Nanxiong is evidently part of a modern literary word ('animal'), while 動 in Hakka is a verb meaning 'to move'. They are in effect different words. 每 and 以 are grammatical morphemes present in classical Chinese, it may be that the tone-3 readings for these words in Nanxiong are literary. The clearest ad most serious divergences between Nanxiong and Hakka are in the words for 'mother', 'fierce' and 'eye'.

From the data presented above, we can see that, with a small number of exceptions, the correspondences between Hakka and Nanxiong are very regular: those words which are in sets 1A and 1B in Nanxiong are in tone 1 in McIver's Hakka; and those words which are in set 2 in Nanxiong have tones 3 (sonorant initials) and 5 (obstruent initials) in Hakka:

[3] Xie gives tone 2 for this word: ŋoan$_2$. He and I are in agreement against Egerod.

		Nanxiong (Egerod)	Nanxiong (Sagart, Xie)	Hakka (McIver)
set 1A		tone 4	tone 2	tone 1
set 1B		tone 1	tone 1	tone 1
set 2	son.	tone 3	tone 3	tone 3
	obst.	tone 6	tone 6	tone 5

Table 7: correspondences of *zhuoshang* words in Nanxiong and Hakka

3. discussion

The first point to examine is whether there is any condition for the split treatment of the *zhuo shang* category in Nanxiong.

Looking at tables 3 and 4, we observe that the *quanzhuo* words in set 1A are mostly stops and affricates, while those in set 1B are all fricatives. Note that Nanxiong 下 ha_2 (in 屋下 'home') can theoretically have developed out of an earlier *kha, since kh- sporadically changes to h- in Nanxiong. If so, we can make the generalization that in set 1, Middle Chinese *quanzhuo shangsheng* words go to Nanxiong tone 2 after stops and affricates, and to tone 1 after fricatives. Unfortunately we cannot be certain that Nanxiong 下 ha_2 really comes from an earlier *kha. Moreover we can find not phonetic explanation for the presence of a *cizhuo* word: 尾 'tail' in set 1B.

The distinction between sets 1 and 2 is less simple. In some cases etymological doublets exist: the indigenous/colloquial form is then invariably in set 1, and the northern/literary form in set 2. Examples:

	Nanxiong (coll.)	Nanxiong (lit.)
有	jo_2 'to have'	$jiɯ_3$ (in 所有 'all')
養	$jɔŋ_2$ 'to feed' (animals)	$jɔŋ_3$ (in 培養 'to foster, to train')
社	sa_2 (in 社官 'god of the domestic altars')	sa_6 (in 社會 'society')[4]

Table 8: doublets in sets 1 and 2 in Nanxiong

While all words in set 1 (1A and 1B) are colloquial, not all words in set 2 are literary. Especially with sonorant initials, set 2 includes very colloquial words which are certainly not northern loanwords, like Nanxiong 佬 law_3 'person', 卵 $luŋ_3$ 'male genitals', a taboo word. The tone-3 reflex in these words cannot be predicted on the basis of any observable phonological feature. It has been proposed (O'Connor 1976, Norman 1986), that in Hakka these words once had voiceless sonorant initials *hm-, *hn-, *hŋ-, *hl-, *hj- etc.: according to these authors, this caused them to behave tonally like the *qing* (voiceless) initials, and explains why they have the upper-series tone 3. In support of this idea, note that Standard Tai has *ha* < *hŋa for 'five' (an early loan from Chinese), corresponding to Nanxiong and Hakka m_3 'five' (set 2).

[4] This word is extracted from Xie's article of 1991.

To summarize, the distribution of *zhuoshang* forms between sets 1 and 2 in Nanxiong and Hakka appears due to (a) borrowing from Northern Chinese, plus (b) another factor, perhaps phonological: voiceless sonorant initials or (as proposed in Sagart 1999) voiceless prefixes.

4. Nanxiong and Hakka share a common ancestor

Nanxiong is not a Hakka dialect: its speakers regard themselves as non-Hakka; its *quanzhuo* initials are not aspirated; it does not use a cognate of Hakka *mak*$_7$ *kai*$_5$ for 'what'; does not use a cognate of *oi*$_1$ for 'mother'; etc.; and yet, it behaves exactly like a Hakka dialect from the point of view of the *zhuoshang* split. The split itself, as we have seen, is complex: it results from borrowing and phonological conditioning. The detailed correspondence between Hakka and Nanxiong cannot be explained as a coincidence: neither can it be explained as the result of contact and borrowing between Hakka and Nanxiong. It is in theory conceivable that Nanxiong and Hakka could have arrived at similar results by borrowing separately from northern Chinese: but as we have seen, this would not account for the very colloquial words in set 2 in both Nanxiong and Hakka. And, overall, the correspondence is too good and too detailed. The only plausible explanation is genetic: Nanxiong and Hakka share a common ancestor, which already distinguished between sets 1 and 2.

5. A historical account in the form of a narrative

We have already discussed the origin of the distinction between sets 1 and 2. These questions now remain to be answered:

- why does set 1 go to tones 1 and 2 in Nanxiong but to tone 1 in Hakka ?
- why do the Middle Chinese voiced stops and affricates become aspirated in Hakka but unaspirated in Nanxiong ?

To answer these questions, we present here a historical explanation in the form of a narrative, in terms of the hypothesis presented in the last section: the distinction between sets 1 and 2 in Nanxiong and Hakka is inherited from a common ancestor.

Some centuries ago, an early form of Hakka was spoken in south Jiangxi. That early form of Hakka had:

- three contrasting rows of stops and affricates, the same as Middle Chinese: plain voiceless, voiceless aspirated, and a third series which was (probably) voiceless with breathy release pɦ tɦ kɦ tsɦ tʃɦ tɕɦ, and:
- an independent tone 4 (Yangshang) which received some —but not all— Middle Chinese *shangsheng* words with voiced initials (sonorants, voiced stops, voiced affricates and voiced fricatives). Set 1 in Nanxiong and Hakka has its origin in the tone 4 of this early Hakka language[5].

[5] The idea that an earlier tone 4 is the origin of set 1 in Hakka was proposed in Sagart (1993:178).

Other *shangsheng* words with voiced initials occurred in tones 3 and 6. They consisted of (a) indigenous words with sonorant initials in tone 3, (b) northern borrowings with sonorant initials in tone 3, and (c) northern borrowings with obstruent initials in tone 6.

A sound change turning tone 4 into tone 1 in words with voiced fricative initials then occurred in this early Hakka. After this change had occurred, a group of people speaking a variety of this early Hakka migrated, presumably though the 梅嶺 pass, to the Nanxiong area, bringing with them the language. Their migration protected the language from further changes that were taking place in Hakka of south Jiangxi: after the migration of the Nanxiong people, Hakka continued changing tone 4 to tone 1, expanding the scope of the change to include all remaining initial types: sonorants, voiced stops and voiced affricates. This change did not occur in Nanxiong[6], which kept a separate tone 4 until very recently. Note that at least one Hakka dialect of south-western Jiangxi: Shangyou 上猶, maintains an independent tone 4 (Yan 1986)[7].

A second major change occurred in Hakka after the Nanxiong migration: the third series of stops and affricates (voiceless with breathy release) merged with the corresponding voiceless aspirates. This change is very general in Hakka and is considered a very basic characteristic of the dialect. Certain authors believe that it is very old and that it occurred in Northern China, even before the ancestors of the Hakkas migrated to south China. However, I have shown in a recent paper (Sagart, in press) that Hakka must have merged its old voiced initials with the voiceless aspirates at a much later date, while its speakers were in contact with the speakers of She 畲, a Miao-Yao language of the East Jiangxi - West Fujian - North Guangdong area. This is because She is alone among Miao-Yao languages in showing the Hakka type of devoicing: evidently devoicing could not have spread to She if it was not taking place in Hakka. In other words, the Middle Chinese voiced stops and affricates became voiceless aspirated in Hakka when the Hakkas were in contact with the She, that is, when they were already in southern Jiangxi and Western Fujian.

Eventually, the third series of stops and affricates (voiceless with breathy release) were also lost in Nanxiong: but in Nanxiong they merged with the corresponding voiceless unaspirated stops and affricates, a common pattern in Northern Guangdong. Between 1550 and 1850 Hakka migrants from Meixian established themselves in the country around Nanxiong. Finally, in the course of the 20th century, tone 4 merged with tone 2 in Nanxiong.

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[6] The Nanxiong migration may have occurred when this change was in its early stages, since 尾 belongs to set 1 in Nanxiong.

[7] Also some southern Gan dialects: Anfu 安福, Lianhua 蓮花 and Suichuan 遂川.

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