VARIATION IN NANCHANG GAN

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Contemporary China is an ideal sociolinguistic setting for investigating the interaction between a national standard language and regional speech varieties. In this study, I focus on a quantitative analysis of phonological variation in Nanchang Gan, a sub-topolect spoken in a provincial capital in Southern China. Three variables included in the discussion are: (1) diglossic alternation between two syllable initials: [w] and [f]; (2) *rusheng* tonal merger: [5] and [2] merging to [5]; (3) loss of historical breathy voice. Results reveal that the three variables I examined differ in their rates/states of change as well as their availability to doing social work: the consonant initials variable ([w] → [f]) has reached a relatively stable stage, indexing an urban-rural division; the checked tonal variable indicates a merger in process (towards the high-pitch variant), the progress of which was best predicted by age and occupation; on the other hand, voice quality does not seem to perform any social work yet, as most of the inter-speaker variation in this variable can by accounted for in terms of sexual dimorphism. In addition, a closer look at individual employment of these three variables successfully captured some subtle information that escaped the examination by institutional social factors. Therefore, I suggest that each speaker has to be treated as an individual linguistic agent; personal history must be carefully and episodically examined along with the quantitative methods. Furthermore, the analysis of the tonal merger variable reveals that older speakers are more advanced in the process of merging than the younger generation. This is probably due to the pressure of socialization in a wider society during one's adulthood.

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1.0 INTRODUCTION

Research on dialect/language standardization has been the central discourse in various aspects of social science. Linguists, among others, have been particularly devoted to the investigation of the tension between national standard languages and regional speech (Milroy, 1999; Agha, 2003). Recently, an emerging body of work has been reporting that regional speech is under irresistible influence from the standard language both ideologically and structurally (Moosmüller and Granser, 2006; Negro, 2006 among others). Specifically, previous literatures have demonstrated that dialectal changes proceed in the direction of the standard language with a considerable degree of variability across social categories (for example, Kochetov, 2006).

Contemporary China as a newborn nation-state provides us an ideal linguistic setting to study this particular interaction. Since the *Vernacular Movement* [1]in the coda of 1910s (c.f. Zhou 2003), Vernacular Mandarin (the predecessor of Putonghua) was thought to have enjoyed its heyday, especially after its codification in the 1950s. As a result of the unprecedentedly effective promulgation, Putonghua has been more tightly associated with education, workplace (Zhang 2005) and accesses to other social resources as well as opportunities to personal success. In the meantime, non-standard regional speech seems to be undergoing continual change, with

[1] The promotion of vernacular speech started in late Qing dynasty (清朝); it was also adopted and carried on by the Republic of China, although Guoyu (国语national speech) instead of common speech is used. The demand for a vernacular national language is thought to have been brought back to China by a cohort of Chinese scholars who received higher education in Japan at that time (Chen 1999)

regional speech varieties converging towards the standard variety. As complex as this change is, it can be mainly attributed to the popularity of Putonghua among topolect[2] speakers in the past decades.

The object of this study differs from that of the majority of Labovian variationist studies, which are mostly monolingual. This study actually deals with two mutually unintelligible but genetically related linguistic entities (see § 1.1.1). In other words, 'standard' here does not refer to a standard 'style' of speech, but a standard language that is legally codified and typologically distinct from other regional speeches.

The tendency for topolects to evolve towards the direction of Standard Mandarin was pointed out in Chao (1976). Previous studies on variation in topolects focused on the variation from lexical and phonological dimensions. Topolect-specific vocabulary were found be out of currency and were replaced by the closest Putonghua equivalents; phonological inventory (both segmental and tonal) of a myriad of topolects were reduced to a great extent. Despite a growing volume of work on Chinese sociolinguistics and contact between Putonghua and topolects, there is, to date, no work published on Gan. This thesis aims to address this void. Variationist quantitative methods are employed as the main analytic tool embedded within a Contact Linguistic framework to investigate phonological variation in Nanchang Gan. I intend to address the following research questions:

(1) What impact does Putonghua have on the development of regional speech?

(2) Linguistically, are all phonological sub-systems (segmental, suprasegmental) equally sensitive to Putonghua's influence?

(3) To what degree are these variables involved or available for doing social work?

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[2] Mair proposes the adoption of Chinese 'topolect' instead of Chinese dialect as an exact and neutral translation of *fangyan* (literally, 'region-lect') (1991:1; see §1.1.2).

In chapter one of this thesis, I provide some essential background on the sociolinguistic ecology of China. I suggest the contact between the standard language and topolects as well as the speech community of Putonghua are largely 'imagined', given the fact that there is little or limited 'embodied' contact. This discussion is followed by a review of theoretical constructs in sound change, from both structural and social perspectives. In chapter two, I introduce the case study, Nanchang Gan, with a brief overview of its regional history and the recent economic development. Three linguistic variables are also established. Details regarding data collection and analytic methods are elaborated in Chapter 3. After that, I then move on to the main body of thesis, Chapter 4, analysis and interpretation. Finally, Chapter 5 summarizes the findings and implications of this study, assesses its limitation, and suggests directions for future research.

1.1 MODERN CHINA AS A SOCIOLINGUISTIC LANDSCAPE

1.1.1 Languages in China and diglossia in Chinese languages

China has a vast diversity of languages. Alongside *Han* Chinese, there are 55 minority groups that command typologically and genetically distinct languages, ranging from Sino-Tibetan, Tai-Kadai, Hmong-Mien, Turkic, Tungusic, Mongolic, Austro-Asiatic, and Austronesian, to Indo-European phyla. Within the Sinitic branch, 1,206.89 million (Xiong and Zhang, 2008)are speakers of non-standard topolects, including *Jin, Wu, Min, Hakka, Cantonese*, *Xiang, Gan, Hui, Pinghua*, *Tuhua*, and regional varieties of Mandarin. Of these, about two-thirds are speakers of Mandarin varieties. Most non-Mandarin varieties are clustered in the southeast quadrant of the

country below the Yangtze River, with limited intergroup intelligibility. In contrast, Mandarin varieties occupy a much broader and wider area in Northern China, however, with greater internal linguistic homogeneity. One thing to point out is that non-Mandarin varieties (including *Nanchang Gan*) spoken in Southern China are considered to be typologically more distinct from Putonghua than the Mandarin varieties (Chappell 2001). Recent statistics shows a noticeable decline in total number of speakers of 'non-standard' regional varieties by nearly 70 million in comparison with the 1987 census (Xiong and Zhang, 2008).

In addition to this diversity, China also has a long history of *Wen-Bai* division, a type of diglossia. The original definition given by Ferguson (1959) entails two aspects of diglossia between what he call a H(igh) and a L(ow) register, that is, linguistic distance and division in social function. Wen is closely associated with Literary Chinese[3] as it is usually employed in a reading genre; Bai refers to the highly localized vernacular that serves the basic communicative purpose in daily life. The former roughly corresponds to Ferguson's 'H' register, the latter being the 'L' register.

Nevertheless, it is necessary to point out that Wen-Bai contrast in Chinese languages is slightly different from the Arabic case cited by Ferguson. In this study, Wen refers to the actual 'H' register in individual topolects that was aimed to resemble the Literary Chinese in syntax, lexicon and phonology, etc. The 'H' register, Wen, is always 'locally realized' and is therefore not a unified, integrated, or stable entity nationwide *per se.* Topolects that bear a Wen-Bai division have their idiosyncratic features (in phonology) that are probably not found in other

[3] Until *the New Culture Movement* 1919, the 'H' language in China was the Classic/Literary Chinese, which had been the written standard used by intellectuals, politics, law, and in civil service examinations (Zhao and Baldauf 2008: 363). The formation of Literary Chinese was roughly at the end of Han dynasty, based on huge corpora of influential philosophical and literature works (Zhou 2003). The success in initialization of vernacularization (or the appeal of abandoning the Literary Chinese) is in large attributed to the ever-growing gulf between the written language and the spoken vernacular (Chen 1999).

Wen registers (of other topolects); the idiosyncrasy essentially comes from the substrate effects of the Bai register.

The relative relationship between Wen and Bai is also a cyclic one. Xu (1991, also 2008) contends that the dual system of Wen and Bai is dynamic and circular, usually following three stages:

> **Stage 1.** *Wen* is weak and *Bai* is strong.
> **Stage 2.** *Wen* and *Bai* reach some point of equilibrium.
> **Stage 3.** *Wen* beats *Bai* and takes over its position, and a new *Wen* emerges.
> *Stages 1*
> … (384)

Generally speaking, Wen would become Bai, with its original place being filled by a new Wen. Although China's context actually[4] does not perfectly match Ferguson's ideal description of diglossia, due to the similarity in function in function and prestige, I will adopt diglossia as a rough umbrella term for Chinese cases.

1.1.2 'Fangyan' or dialect: the nomenclature

After a brief outline of Chinese languages and languages in China, we are in the position of discussing terminologies employed in the thesis, particularly the translation of Chinese compound 'Fangyan' (方言).

For many years, perhaps still up to this moment, students of Sinitic languages (both Western and Chinese) have used 'dialect' as the translational equivalent of Chinese *Fangyan*. In English language, the relationship between *language* and *dialect* is between the super-ordinate and the sub-ordinate, as pointed out in Haugen (1966). However, this hierarchical sense is found

[4] Ferguson (1959) actually breifly mentioned diglossic China in his discussion the discussion is probably led by Chao's introduction (1947).

to be missing in the Chinese compound *Fangyan*. A morpheme-by-morpheme annotation for *Fangyan* ought to be 'region' - 'speech', that is, 'regionlect' or 'regional varieties'. In traditional Chinese philology, this notion is usually used as opposed to *Yayan* (雅言), literally, 'the elegant speech' referring to the language of literacy. Despite the obvious affection of the Yayan, the fundamental distinction between Yayan and Fangyan mainly lies in their prestige. That is, Fangyan is much lower in prestige compared to Yayan.

Mair (1991), in his article *What is a Chinese dialect/topolect*, addresses this particular bewildering issue. He coins the term 'topolect' and endeavors to promote the circulation of this clear and bias-free translation in English literatures for Fangyan. To avoid further misunderstanding that can be caused by abuse of terminology, I here take a neutral stance: In the writing of this thesis, I will follow suit by adopting 'topolect', 'regional variety (-ies)' and using them interchangeably as the English equivalences to *fangyan.* As also pointed out by Mair (1991), that the word choice obviously has its potential "political implications", I maintain that the fussiness in linguistic terminology goes far beyond the forum of academia; rather, it needs to be examined under larger social backdrop.

1.1.3 The spread of the standard: the necessity and cost

"Dialect is usually language that doesn't succeed politically" says Michael Billig in one of his top selling works titled *Banal Nationalism* (1995). He points out that an official language is usually the product of national consciousness. 'Internal cohesion' and 'external distinction' are of the major concerns of every newborn nation-state (Haugen 1966, 1972). That is, on one hand,

the internal differences (including the use of difference) need to be maximally minimized[5]; whilst the 'external distinction' should to the same extent be exaggerated. Therefore, language diversity has been thought to have negative effects on national development. Pool (1972:241) radically asserts:

> Language diversity aggravates political sectionalism; hinders inter-group cooperation, national unity, and regional multinational cooperation; impedes political enculturation, political support for the authorities and the regime, and political participation.

He also accuses language diversity of slowing economic development through braking occupational mobility, decreasing efficiency and preventing the diffusion of innovative techniques.

The strong institutional supports behind the spread of the standard language may jeopardize regional speeches' social territory. Typically, the precursor of a standard language is a dialect, coexisting in *pari declicto* with other regional varieties (Agha, 2003; Berruto, 2005). The solidarity between the later *language-of-power* and its fellow varieties breaks at the very moment when it is elevated to the standard/official language. Milroy (2001) contends that

> The establishment of the idea of a standard variety, the diffusion of knowledge of this variety, its codification in widely used grammar books and dictionaries, and its promotion in a wide range of functions – all lead to the devaluing of other varieties. The standard form becomes the **legitimate** form, and other forms become, in the popular mind, illegitimate. […] Indeed language is commonly seen as part of the identity of that nation state (547).

The official language wields unchallenged power. Gradually, the dialect would assimilate to the standard due to the speakers' language choices (Moosmüller and Granser, 2006; Negro, 2006). Not all varieties are equally vulnerable in this change. Those varieties spoken in

[5] Fasold (1984) states that [Governance requires] communication both within the governing institutions and between government and the people. The need for the language of governance, that of education and national cohesion engendered the desire for a prestigious bias-free, highly efficient official language.

less developed areas are more likely to give away their territory. Speakers of different regional varieties are pressed to become bilinguals in the official language and their native varieties.

The establishment of a nation-state often goes hand-in-hand with imposing a national/official language. The development of *Putonghua*, the national language of China, was not completely a natural evolutionary process, but rather highly favored with sociopolitical orientation. Putonghua is a relatively young social variety. In 1955, an editorial on *Renmin Shibao* (i.e. *The People's Daily*) proposed *Putonghua* as the national language. The editorial was the first to define *Putonghua* as "phonetically based on Beijing Dialect and other Northern Mandarins and as grammatically based on modern literary works in Vernacular Chinese." The name *Putonghua*, literally meaning 'Common Speech', was ultimately adopted with the purpose of avoiding the misinterpretation that Putonghua was 'superior' to other dialects and minority languages. In 1956, the State Council issued the *Promotion of Putonghua*, a language policy that was later codified[6] in the Constitution of the People's Republic of China in 1982. As a result, the use of any regional variety other than Putonghua would only be justifiable under one or more of the following conditions: (a) if it is necessary for government officers who are dealing with public affairs; (b) if its use has been approved by the Provincial Administration of Radio, Film and Television; (c) if it is necessary for the production of certain films, TV shows, or certain traditional arts; and/or (d) if it is necessary for publication, instruction, and/or related to research (Huang and Liao, 1980). In decades following, the *Promotion of Putonghua* policy was strictly implemented. Learning Putonghua suddenly became a fad and a sign of "advancedness" in

[6] "Two years later, in 1958, Premier Zhou Enlai emphasized in a speech on language reform how vital the government considered the implementation of that policy. 'Spreading the use of the Common Language, which takes the Peking Pronunciation as the standard, is an important political task'" (Ramsey 1987:27)

political ideology. Putonghua was, no doubt, endowed with 'symbolic power' (cf. Bourdieu, 1977, 1989).

The recent rapid spread of the national standard has been documented to meddle in the development of various topolects. Xue (2007) studies the evolution of Shanghainese and its historical contact with other varieties. According to Xue, the sound system of Shanghainese has been dramatically simplified compared to the variety documented by a missionary 150 years ago. He then divided the evolution process into four stages. During the first two stages, *Shanghainese* had not become the regional *lingua franca* in Northern Zhejiang province. At that time, it was strongly influenced and leveled by other neighboring dialects, such as *Ningbo* dialect and certain Mandarin varieties spoken in the Northern Zhejiang Province, which directly influenced its loss of some voiced onsets. Then, in the latter two stages, evolutionary influence came mainly from Putonghua, which further reduced the linguistic system of *Shanghainese*. Specifically, the number of *rusheng* (see § 2.3.2) rimes decreased from the original 18 to only five. Furthermore, the total number of contrastive tones decreased from eight to five. Likewise, on the phonological dimension, in Cui's (2000) study of Taiyuan dialect, she also finds phonological reduction in several different levels, such as tonal inventory and tone sandhi rules. She attributes the variation to linguistic internal motivations, articulatory causes (i.e. Martinet's *Principle of Economy*), as well as influence from Putonghua.

The influence from Putonghua was also shown to have operated on levels of linguistic systems other than phonology (i.e. vocabulary etc). Wang (2005:68) found innovative, high frequency words—e.g. television, sofa, jeans, and copy machine — that emerged in the local variety, *Fuyang,* in the 1980s that are incredibly similar to Putonghua. Su et al. (2004, 2005a, 2005b, 2005c and2006) conducted a series of studies on variation in *Xuzhou* dialect. Primarily

focusing on vocabulary, they show that a large number of 'dialect-particular' lexical items are out of circulation and that the phonological system of the dialect has also become significantly simplified. What's worth mentioning is that Su et al.' s studies also highlight some social factors that might be involved in this change. They show the generational gap in the acquisition of Putonghua: younger generations of speakers are commonly more proficient in Putonghua.

Xia (2002) finds that people less than 20 years of age are the leaders of the ongoing variation observed in *Chengdu Mandarin*. He hypothesizes that this is induced by contact between Chengdu dialect and Putonghua. People ranging from age 30 to 39 can usually tolerate youth's speech, while people above 40 find young people's way of talking 'annoying'.

1.1.4 The 'imagined' common language and its speech communities

In light of recent emerging study on contact between Putonghua and regional varieties, I now would like to discuss the following questions: who are the native speakers of Putonghua? Geographically speaking, where are these Putonghua-speaking communities located? How do other non-Putonghua speaking population gain access to Putonghua?

A speech community, according to Hymes (Paulton and Tucker 2006), is

> "[…] a community sharing rules for the conduct and interpretation of speech, and rules for the interpretation of at least one linguistic variety. Both conditions are necessary." (37)

Although the definition of Speech Community is not a settled matter *per se*, the following two aspects are vital: the shared *form* and the shared (social) *norm*.

Hickey (2003) introduces two types of contacts in terms of the manner of interfacing between/among the speech communities:

(a.) Direct contact in which speakers come to interact with speakers of another

(i.e. through invasion, expulsion, emigration, etc.);
(b.) Mediated contact of literature or nowadays television, radio, or the Internet Contact cases involving standard language (i.e. the official language mostly) and non-standard dialects usually fall in the latter category.

Benedict Anderson coined a later widely circulated term in social science, "imagined communities"(1991, reprinted in 2006). He defines nation as "an imagined political community ". He further explains that

> "[…] It is imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion. […] It is imagined as a community, because, regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship. (7)

Region by region, it has repeatedly been found (see § 1.1.3) that the contact between standard language and regional dialects in China has been leading to sound changes in topolects. Putonghua and regional speech in China contact in an indirect way and 'imagined' fashion. As a relatively young and artificial variety, it is unlikely that there are "true" native speakers of Putonghua that form a Putonghua-speaking speech community. At the same time, one might argue that after all these years of promotion since 1950s, younger generations might be natural speakers of the language, especially in Northern China where other typologically closer Mandarin varieties are spoken. However, such might hardly be the case for other parts of China. Native topolect-speakers in Southern China don't have face-to-face contact with native speakers of Putonghua, at least not on daily basis, assuming there actually are any.

Adopting Putonghua as the medium of instruction seemed not to have ensured the sufficient input for topolect-speakers to acquire Putonghua; Media, such as film, radio, and television, only guarantee passive exposure to the standard language (Ramsey 1987). In He's (2006) study on Chengdu Dialect, he notes that, "though children learn Putonghua in classrooms

nationwide, it varies from region to region as to how they use the acquired Putonghua after and beyond school including when they become adults. North – South differences (due to typological distance) and rural-urban divides on the basis of which to define the varieties of Putonghua in general.

Instead, people are thought to speak varieties of Putonghua, that is, an intermediate form (c.f. Trudgill 1986: 62-65) between the local topolect and Putonghua. During my data collection, many informants shared their anecdotes about their teachers—including those who teach Chinese language as a first language—who carried an inaccurate or even "funny" Nanchang accent during instruction. In fact, *Nan-Pu* (i.e. Nanchang Putonghua), a folk acronym for Nanchang style/accented Putonghua, has been widely adopted and quite popular among local residents. Nan-pu refers to the production when local Nanchang residents intend to resemble the standard register (Putonghua), but produce speech with heavy substrate influence from NCG. In actuality, Nan-Pu is the outcome of second language learning. People with a strong NCG accent will usually be said to speak a 'plastic Putonghua'. Nan-pu is not a unique phenomenon to Nanchang; in fact, the Journal of Asian Pacific Communication devoted an issue (vol. 16, 2, 2006) on how the contact between Putonghua and Han varieties produced *varieties of Putonghua*[7].

To answer previously posited questions, in my opinion, it is hard to define a Putonghua - speaking community, as Putonghua itself is an artificial language. Perhaps, only those *trained* announcers on radio/television could be counted as speakers of Putonghua. Even in that sense, they cannot be native speakers. Despite my speculation of the physical existence of native speakers of Putonghua and Putonghua speaking community, I do believe that in Northern China, speakers of Mandarin sub-topolects may relatively be at ease when acquiring Putonghua and

[7] Guo Jun (2006) defines it as "[…] an intermediate variety closer to the original local dialect than to Putonghua on a scale with Putonghua on one extreme and the dialect on the other."

more likely to achieve a higher proficiency. This might both due to the geographical advantage as well as typological distance. All in all, if a Putonghua speaking community exists, I claim it is not geographical-finite *per se*; rather, Putonghua and its speech community are conceptualized among topolect-speakers in an imagined fashion.

1.2 SOUND CHANGE: THE STRUCTURAL PERSPECTIVE

Abundant scholarship has pursued linguistic factors as major motivations of sound change. (Martinet,1955). The tenet of debate has been the regularity of sound change. Neogrammarians have been known as advocators for regularity of sound change. They argue for an exceptionalness across-the-board sound change that is lexically blind. Labov (1994) comments, "[…] with respect to the issue of the regularity of sound change, it seemed clear that, until recently, the Neogrammarians had won the day".

However, the voice from those who deem the slogan "Each word has its own history" did not rest in halcyon. Studies conducted by Wang (1969) and his followers (Wang and Cheng 1977) challenge Neogrammarians' substantive point of view regarding sound change. By examining several cases of historical developments of Chinese dialects, they proposed that there is no phonetically regular but lexically abrupt sound change (Wang 1975:257). Therefore, sound change needs to be studied in two dimensions, that is, sound and lexicon. More recently Kiparsky (1995:641) argued against Wang's model and claimed that lexical diffusion "is not an exceptional type of sound change, nor a new, fourth type of linguistic change, but a well-behaved type of **analogical** change".

In recent decades, students of phonological theory and sound change have shed light on the usage-based model regarding speakers' speech productions (Lindblom et al., 1995), listeners' misperceptions (Ohala, 1981), and storage of phonological representations. *Exemplar Theory* (Pierrehumbert, 2001a, 2001b) and *Cognitive Grammar* (Langacker 1987) are the two important theoretical poles among various usage-based models. Despite differences, both theories assume that the speakers' grammar is shaped through direct experience in speech events. Therefore phonetic details are stored in memory and grouped into different 'exemplars'. This kind of experience-driven model claims that representations in each exemplar are updated by sustained phonetic inputs and, therefore, are emergent rather than constant. Word frequency, as emphasized by Bybee (2000, 2002), is thought to be one of the plausible explanations for the inequality of stored structural representations. However, the accountability of word frequency in sound change is questioned by many other scholars. For example, word frequency fails to surface as a significant factor in both Labov's (2003) study on /uw/ fronting in Philadelphia and Dinkin's investigation of short vowels in Telsur project[8] (2004).

Debates on linguistic factors in sound change are not likely to be solved any time soon. Nor is the current study motivated to settle this debate. However, internal factors will also be considered in the analysis in order to give the readers a full picture. Recently, discourse on sound change has shifted focus towards the social aspects of language change. As individuals are nested in sophisticated social networks and social constructions, languages do not stand in isolation from each other. Language Contact involving different socio-political and/or cultural forces are of great importance for comprehending ever-evolving languages. In the next section, I will review literature in this regard.

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[8] For the Telsur Project, refer to the following website: http://www.ling.upenn.edu/phono_atlas/home.html

1.3 SOUND CHANGE: THE SOCIAL PARAMETERS

As noted by Bloomfield (1965:445), 'every speech community learns from its neighbors', language contact is probably as old as language itself. Moreover, given modern technology (i.e. television, internet, radio, etc.), language contact is no longer restricted to geographically close neighbors. Although contact is now widely accepted as one of the ideal scenarios where language variation and change would take place, historical linguists had once shown reluctance in admitting variability of any linguistic subsystem, let alone accepting the existence of the so-called 'mixed language' that was thought to be a threat to the integrity of the *Family Tree Model* and other 'hallow' principles assumed in *Comparative Methods*. Valentin Kiparsky, a seminal Finnish linguist points out that "a language's receptiveness to borrowing depends on as much on social factors as it does on facts about linguistic structure" (Garrett, 2009). This opens a new avenue of scholarship of pursuing language-external rationales for contact-induced language variation and change.

Weinreich (1953), a seminal scholar in Contact Linguistics, recognizes that extralinguistic data must be considered in order to understand its effects on bilingual individuals or language contact at the community level. He dubbed this outcome of language contact as *interference*, the effect that one linguistic system will have on the system with which it is in contact. Thomason and Kaufman (1988) (see also Thomason, 2001) find it unsatisfactory to examine extralinguistic factors only when the internal factor fails to function. They further distinguish two types of interference: shift-induced (or substratum) interference and borrowing. The crucial difference between shifted-induced interference and borrowing is that imperfect learning plays a role in the former. This idea is inherited from Weinreich's (1953) idea of 'language proficiency'. Showing no breaks with the traditional 'purity' complex in language

development (see Milroy, 2001: 550), Thomason and Kaufman make a distinction between *normal* and *abnormal* (also imperfect) transmission. Cases of the normal transmission fall under the rubric of genetic relationship, whereas abnormal transmission is often involved in abrupt creolization and formation of mixed languages.

Mufwene (2001a) endorses the idea that *language evolution* is a neutral word for *change.* He proposes that *language ecology*[9] is the deciding factor that rolls the dice over the competing languages in contact. Mufwene further breaks the concept into *internal ecology* and *external ecology*. The former is an alternative expression for language itself and its internal structure; whilst the latter refers to social or sociohistorical conditions that undertake the language evolution. Moreover, Mufwene (2002) initiated the idea of 'feature pool'. The basic scenario is as follows: where two or more language are in contact, the input systems are first broken into small features and then enter a boundaryless 'feature pool'. Then there is a 'langagier' that keeps some of the features while removing the others before the features form a new system (i.e. a new language) and exit the pool. However, Mufwene mentions that "[…] the victory of the survivors is only pyrrhic since they still are influenced by the removed features". This notion somewhat coincides with Trudgill's idea of interdialect form. In Trudgill's seminar work, *Dialects in Contact* (1986), he contends that in dialect contact via accommodation, the creation of interdialect forms, that is, forms that emerging in a contact milieu that "originally occurred in neither dialect."

What is shared between Mufwene's idea of feature pool and Trudgill's proposal of interdialect form is that, in contact situations, it is quite possible for intermediate forms or systems to emerge that are not found in either of the source languages. This might explain the

[9] Einar Haugen, an American anthropologist, first introduced in his essay The Ecology of Language (1972).

first linguistic variable I examine in NCG, the diglossic alteration between [w] and [f]. In § 2.2.1, I will show that [f] is the intermediate form lies on a continuum with the local topolect variatnt [w] on one end and the Putonghua target [x] on the other end.

Following Trudgill's pursue of dialect contact, Auer and Hinskins (1996), and Kerswill (1994a, 1994b, 1996) further develop our understanding of dialect contact, particularly on dialectal accommodation and new-dialect formation. Williams and Kerswill (1999:149) define leveling as 'a process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features emerge and are adopted by speakers over a wide geographical area.' Koineization, on the other hand, refers to "the type of language change that takes place when speakers of different, but **mutually intelligible** language varieties come together, and which may lead to new dialect or *koine* formation" (Kerswill and Williams, 2005). *Leveling* is a *reciprocal* process that occurs between or among dialects, where they become more and more similar to each other while retaining their own status of separate dialects. In contrast, Koineization is essentially compromising process between or among mutually intelligible dialects. However, only one *koine* comes out of this process.

Neither Koineization nor leveling is suitable for untangling the tension between Chinese topolects and the standard language given the following rationales: firstly, Koineization usually involves mutually intelligible dialects whilst Chinese case definitely escapes this scope of enquiry. Secondly, interaction between Putonghua and Chinese topolects do not seem to fall the line of leveling either, since leveling assumes bidirectional effects, assuming a comradeship among the language varieties involved. However, if the dialects in contact are not equal in status, say, one superior another inferior. Then the inferior variety usually has to give ground to the superior hence the presumably unary effect. Therefore, the effort stays unilateral.

Thus far, we see the growing theoretical affection in incorporating social/external factors when studying language variation and change. I now summarize highly influential social factors in past case studies and how they operate in diverse socio-historical contexts. I will start with macro level social factors, such as demographic, economic changes, etc, and then move on to the individual level.

Issues such as the degree of magnitude of speech community and geographical mobility are of demographic concerns. Li (1995) argues against the hypothesis that Mandarin derived from a pidgin that was formed during *Medieval China*, when it was governed by Mongol and Manchu minorities. His main argument is that the absolute advantage in population of the *Han* Chinese and their rare contact with people in the ruling class would have precluded the creation of any such pidgin language. Additionally, the case of Hiberno-English (Odlin, 1997) highlights the significance of population mobility in language shift situations. Odlin discovers that the shift from Irish to English was caused by sustained importation of Scottish English by seasonal migrant labors. Schooling, unexpectedly, provides a less convincing explanation.

Demographic factors are often found to intertwine with other social forces, such as economy and culture, as seen in the Hiberno-English case. Brassett and Brassett (2005) studies *Tujia* people and their language in Central South China (West Hunan Province). Among the eight million *Tujia* people, only around 70,000 (less than 1% of the total) still speak the *Tujia* language. The authors propose that the recent rapid decline in the use of the *Tujia* language is likely "a pragmatic response to a complex array of educational, economic and technological influences." (88)

Economic changes and reforms that often come hand-in-hand with modernization, industrialization, and urbanization are also important variables in the description of language

shift. A case in point would be Gal's (1978) phenomenal study of language shift from Hungarian to German. In her study, the peasants in Oberwart originally spoke Hungarian, while German was only used when interacting with outsiders or strangers. However, after World War II, Hungarian language disappeared along with the diminished peasant economy. She notes that the societal reforms impose changes in inter-speaker language use as well (Gal, 1979:3). Rindler-Schjerve's (1981) study on Sardinia echoes Gal's finding. That is, economic change led to a trend to use more Italian among community members, which was associated with modern life and higher standards of living. Fat (2005) examines language ecology in Hong Kong. The study finds that Hakka, the language that once spoken by 15.1% of the population in rural Hong Kong, has been "murdered" by Cantonese and the recent urbanization and globalization of Hong Kong.

Thus far, literatures have substantially illustrated that a macro-level societal transformations (Urbanization, industrialization etc) to a great extent affect peoples' choice and use of linguistic codes. The general pattern is that people's native dialect/language is almost always found to be suppressed somewhat to embrace a better-valued regional or global *lingua franca.* One possible explanation for this shift is that by acquiring the incoming prestige, it opens avenues for people to gain resources and opportunities that may ultimately help them achieve success in a wider society (for example, education). However, to examine what social groups are more sensitive to this macro seems a job better undertaken by researchers in variationist studies.

Sociolinguistic work of the last few decades has been anatomizing language change in microscopes. Speakers are nested into different social categories based on their biophysical characteristics, such as age and sex, as well as their societal and domestic roles, for example, socioeconomic status and occupation. Variationist research has continuously proved the reliability of a range of social factors, such as sex, age, and class, as convincing indices of

language change (Labov, 1963; 1994; 2001 etc.). To date, many sociophonetic studies have examined variations in a variety of different languages across axes of micro social categories, such as sex (Holmes, 1997), age (Eckert, 1999), sociolinguistic class (Labov, 1972; Trudgill, 1974; Kerswill, 2006), and ethnicity (Dubois and Horvath, 1999 and 2003; Kiesling, 2005).

Sex and class's crucial roles in language shift are demonstrated in Gal (1978). Gal discovers that young women tend to be the introducers of German for the small Hungarian town. Li (1982) illustrates that Chinese Americans of lower social classes show higher propensity for shifting away from their mother tongue.

Age is another reliable independent variable in Labovian study of variation and change. In fact, a better way to present this variable might be cohort or generation in that age variable is always clustered into more general category that roughly corresponds to generation. Eckert (1997) encompasses that the comparisons between different age groups are far from straightforward; "Age groups are not necessarily uniform across or between communities as different cultural and material conditions make different life trajectories". Kochetov (2006) studies variation in a Northern Russian dialect in a rural community of Pokcha. By examining two linguistic variables (a vowel merger and a split of a post alveolar fricative, which is a reversal of a merger), he shows that the Pokcha dialect is undergoing a rapid phonological shift due to the influence from Standard Russian. With a focus on social parameters of the change, his analysis shows that "the most conservative speakers were older, less educated subjects raised out of town, and the most progressive speakers were younger, better educated subjects raised in town" (116). However, there are also studies that arrived at a different conclusion: young people are in some sense being more conservative and prone to more localized forms rather than the standard prestige. For example, Trudgill and Chamber's (1980) study on Norweigh dialect

reveals that older speakers use non-standard features due to a loosened social network; whilst middle-aged group are more influence by "mainstream" values, and thus make heavier usage of standard features; young people in the community also use more non-standard features due to *peer pressure* (c.f. Preston 1989). Dubois and Horvath (1999)'s study on Cajun English highlights the importance of the social historical context in examining age/generation as a sociolinguistic variable. Their analysis shows that clear-cut pattern for three generations: (a.) for the older generation, English is acquired as a second language as it became the compulsory language of education. (b.) Middle-aged residents speak more native-like English compared to its previous generation. The authors attribute the outcome to the recent urbanization and industrialization. (c.) Interestingly enough, younger speakers in the community employ Cajun English features with the object of asserting a Cajun identity.

Many cases of language shift could also reflect changes in speakers' attitude towards specific code(s). Appel and Muysken (2006) narrates that "Many speakers of Spanish in South-West of the USA have negative attitudes towards their own variety of Spanish; they view it as only a dialect, or a kind of 'border slang', and not as a real language". They comment, "[…] this kind of feeling of linguistic inferiority is particularly strong in cases of a minority language which is not standardized and/or modernized". (34)

Fishman stresses the importance of domain[10] in studying cases of language shift (cited in Haberland 2005). Fishman (1987) asserts the home domain as the "last line of defense" for language maintenance. In Rindler-Schjerve's (1981) case, there is little hope for Sardinian to

[10] The concept domain was originally suggested by a Demark scholar Gerhard Schmidt-Rohr and later credited and developed by Fishman. In Schmidt-Rohr (1933), he proposed the following domains: The family, the playground and street, the school (with three sub-elements: language of instruction, subject of instruction, language of breaks and conversation), the church, literature, the press, the military, the courts, and governmental administration. (Haberland, 2005: 229)

'survive' shifting, since the home domain has been inch-by-inch and generation-by-generation seized by Italian:

> An 80-year-old grandmother was illiterate and monolingual Sardinian; the 50-year-old mother due to insufficient education had a rather limited proficiency in Italian, the 30-year-old daughter having been to school for eight years spoke Italian well, though not perfectly, and use it when talking to their children, while she used Sardinian with her husband. Her reason for using Italian with her children is to **avoid** their being only discriminated against in school; this, of course result in the 12-year-old school boy's having only limited command of Sardinian, and speaking a rather **monostylistic** and **Sardicized** Italian. (212)

The 'monostylistic and Sardicized Italian in the younger generation might also be attributed to peer pressures (c.f. Preston 1989)

Research in sociolinguistics has recently turned to studies of identity labels, ideology, and their associations with language use. It is believed that identity is both a product of and an impetus for linguistic choice. Many studies have examined how aspects of identity are realized through linguistic behavior, be it phonological, morphological, or discoursal (Labov, 1963; Bailey, 2001; Johnstone et al., 2006). More recently, Johnstone and Kiesling (2008) demonstrated that the common linguistic behavior of a group of residents native to a region (i.e. Pittsburgh) could index their regional identity. Identity is a fluid construct therefore cannot be assumed but only emerges in interaction (Buchholz and Hall 2006), it is always subject to re-creation. Identity is a multifaceted and should always allow for hybridity. Nor is identity a discrete notion; therefore, one cannot make an identity checklist and decide that if one is associated with identity X, then s/he cannot be party to identity Y. Instead, cross-tabulation is more frequent. This is particularly true when dealing with mobility in a society (Samuel 2006). Both geographical movement and the movement on socioeconomic scale are vital and should be factored in to interpret the turbulent complexity of identity.

2.0 REGIONAL BACKGROUND: THE CASE STUDY

2.1 NANCHANG: THE REVOLUSION CITY[11]

As the capital city of Jiangxi, a province in South-Central China, Nanchang has a history expanding of over 2,200 years. Its foundation is traced back to 201 BC (JXSQHY, 1983), when it was first named *Guanyin Town*, and later *Yuzhang*, to *Hongdu*, and *Longxing*. However, "Nanchang is largely remembered in modern Chinese history for the Communist-led uprising of August 1,1927" (Lee 2005: 330). The movement also emblematized the official establishment of the People's Liberation Army (Kau 1973). The rest of China then crowned it *"The City of Heroes*" (Summary of world broadcasts, 1976) and the place "where the military flag rose".

Jiangxi is known as *the Red Earth* or the *Traditional Revolutionary Base* because of several enormous revolutionary events that occurred on this territory. Unfortunately, this glorious revolutionary tradition did not economically benefit Nanchang City and Jiangxi Province. Once reputed as "the hometown of fish and rice" insomuch as its abundant natural resources and mountainous topography, Jiangxi not only sheltered and supported the *Red Army* during the war years, but also made itself the largest casualty. Incessant years of warfare heavily damaged its infrastructure, agricultural economy, and education system, not to mention the tremendous sacrifice of labor force. The economy of this region worsened even further during

[11] See Lee (2005), page 329

the *Cultural Revolution* that lasted from 1966 to 1976, during which time the education system fatally collapsed.

The *Reform and Opening-up Policy*, proclaimed in the late 1970s, not only demolished *The Planned Economy*, but effectively sparked the development of coastal provinces, such as Zhejiang and Jiangsu. These two provinces together compose the *Yangtze River Delta*, while the *Pearl River Delta* mainly consists of the Fujian and Guangdong Provinces. Due to an obvious geographical preference and political inclination, the series of reforms did not substantially favor Jiangxi, as it is situated in the central part of country. Its geographical 'shortcoming' brought Jiangxi out of focus even for the *Great Western Development Strategy,* a policy issued in 2000 that aimed to promote the least developed regions of Western China. In spite of its long history of setbacks, the *Central Subsidence* did not receive any political attention from the central government until fairly recently. Of all the ailing economies within the *Central Subsidence,* Jiangxi Province is at the nadir of the financial downfall (Zhou et al 2003).

The assembly of the *Jiangxi Provincial Congress of Party Representatives* in 2001 was a pivotal moment in Jiangxi's economic development. It was during this meeting that a series of substantial measures were drafted to bring Jiangxi's socioeconomic stagnation to a close (Xu and Liu, 2004). In 2006, the State Council of China officially publicized *The Rise of Central China Plan*. This was a long-term plan adopted to facilitate the economic development of relatively underdeveloped provinces in central China, including Jiangxi Province. In recent years, under the influence of *The Rise of Central China Plan*, urbanization and industrialization processes have greatly accelerated in Nanchang City.

In 2002, Jiangxi officially stepped into the era of double-digit Gross Domestic Product growth (10.5%). In 2003, economic acceleration in Jiangxi surpassed the growth rates of the five

other Central provinces. The total population of Nanchang City also went from 3.29 million in 1983 to a current 4.85 million, while the urban population jumped from 1.06 million to a current 2.25 million (32.8% ~ 46.3% increase). Taking full advantage of its human resources, Nanchang has been making considerable strides in developing its manufacturing industry. Nanchang further enjoys the advantages of being the butt joint of the *Yangtze River*, *Pearl River*, and *Southern Min Deltas*, since it bridges the three largest economic zones of China (Tan and Huang, 2007). Meanwhile, it has also been active in seeking domestic and foreign capitals and investments. In 2006, *Newsweek* selected Nanchang as one of the "Ten Most Dynamic Cities" out of 150 second-tier cities worldwide:

> Known as the birthplace of Chinese communism because the revolutionaries staged one of their first major uprisings here in 1927, Nanchang today sees itself as the future of Chinese capitalism. (*Newsweek*, Jul-3-2006)

Contemporary Nanchang is no longer a hamlet but instead has one of the most promising, growing economies in China. However, it has yet to compare with other Chinese metropolises, such as Beijing and Shanghai. Nowadays, younger people in rural areas willing relocate to urban areas in order to access urban resources. Meanwhile, urban residents are concurrently moving to larger urban centers that have relatively more opportunities for employment and personal success. Social mobility is primarily realized through academic achievement.

Some of my older informants, who grew up during the *Cultural Revolution*, consistently reported that they were not given equal access to education. Education was no more than a daydream for their generation in that the educational system was heavily corrupted and educational attainment diminished greatly as a result (Giles et al., 2003). In particular, admission to higher education was not granted based on students' academic performance, but rather their family position, sociopolitical background (i.e. peasant, landlord, capitalist, etc.), and

occupational industry (e.g. farm workers). In fact, those who had attended middle school were identified as intellectuals and were usually sent to remote areas. The particular generation is also known as the *Rusticated Youth.* This situation did not improve until the college entrance examination was back into normal in 1978. As Peterson (1997) reveals that: " For ten years, education came to a halt and people were relocated. This has led to almost an entire generation of inadequately educated individuals"

Some of my middle-aged informants suggested that, for their generation, "hard work" and rich social experience were the keys to achieving success. Nowadays, they also believe that one must be well educated. Therefore, the burden of attending a decent college has been placed on the younger generation. In urban areas, most parents see annual college entrance examinations as not only college admittance but also opportunities for pursuing well-off life in big(ger) cities. Therefore, institutions located in metropolitan centers, such as Beijing, Shanghai are on the top of their list, including also some provincial capitals, such as Hangzhou, Nanjing, Shenyang so on and so forth. For younger residents of Nanchang, life in a larger city has become associated with success and prosperity, contributing to the already strong social pressure towards urbanization. Geographical movement, therefore, is to a great extent associated with a move on the scale of social class.

2.2 NANCHANG GAN: THE LINGUISTIC BACKGROUND

Nanchang Gan is a Southern Chinese dialect spoken by a population of approximately five million people in Nanchang city and several other neighboring counties and villages. NCG is typically taken as the representative of Gan, although disfavored by some scholars (for example

Xu, 1991); they argue that Putonghua would easily influence NCG, since Nanchang City is the cultural, political, and economic center of the Jiangxi Province.

Gan (also the literary name of Jiangxi Province), one of the ten recognized dialect groups of Chinese, is spoken primarily in Northern Jiangxi Province and also spreads to other adjacent provinces, such as Eastern Hunan Province. It accounts for approximately 2.4 per cent of the total population of China. (Chappell 2001: 11). Gan had been grouped with another Chinese variety, Hakka (Luo, 1940 and Luo, 1975), and was not treated as independent dialect until Chao and Li's classification of Chinese dialects in 1948 (cited in Wang 1999). In fact, *Gan* is also included in the 'nine main groups' Chao's (1943) in his introductory essay, *Language and Dialects in China*. Instead, a vast stretch of Northern Jiangxi was shadowed labeled 'Southern Mandarin' (66). Some scholars (He, 1988: 94) argue that Gan lacks any distinguishing features compared to other Chinese topolects. However, a simple blending of Gan-Hakka dialect would certainly result in the inappropriate classification of Chinese dialects. Sun (2007:30-31) points out, "according to the current main criteria for dialect classification—i.e. how reflexes of Middle Chinese full voiced onsets are being realized in Modern Chinese dialects—there is no doubt that Gan and Hakka could be just one dialect. However, if we did group them together, barely relying on this principle, other Chinese dialects, such as *Hui*, would also join the Gan-Hakka family.

Although the classification of Gan remains a controversial issue to date, past literature seems to agree that the population of both Gan and Hakka speakers has historically consisted of immigrants from Northern China (Liu and Tian, 2003). If the assumption holds, it would lend credence to Ao's (1991) claim that Gan descended from Proto-Northern Chinese.

2.2.1 Diglossic alternation

Diglossic pairs Wen (i.e. literary) and Bai (i.e. collouqial) are fairly common in Chinese varieties, however, vary in terms of richness (see §1.1.1). To my best knowledge, Xiong (1985) is the only study that discusses Wen and Bai pronunciations in Nanchang Gan. His finding predicts that if (a.) the initial consonant of lexical items derives from the Xia group, and (b.) the rime of lexical items belongs to the first and second *divisions* of *medial groups*[12], then the lexical items will be begin with [*w*] and [*f*] for *Bai* and *Wen* speech, respectively (209). Examples are presented in Table 3-1. Xiong also briefly mentions that the coexistence of [*w*] and [*f*] is probably the result of increasing urban-bound migration and the policy of *Promotion of Putonghua*.

Table 2-1: Instances of [*w*] and [*f*] alternation

	Wen	*Bai*	*Putonghua*
yellow	[fɔŋ35]	[wɔŋ35]	[x^{w}aŋ24]
slippery	[faʔ5]	[waʔ2]	[x^{w}a24]
live	[fɔʔ5]	[wɔʔ2]	[x^{w}ɔ24]

Appealingly, the change from [*w*] to [*f*] seems to have its phonetic basis. As shown in Table 3-1, "yellow" in Putonghua has a velar voiceless fricative [x], which resulted from a historical devoicing process from [ɣ]. [xw] > [f] change is a kind of fusion that is not rare

[12] Medial (also *Jieyin,* 介音) is a terminology from traditional Chinese philology (音韵学). Medial refers to a group of pre-nuclear glides, such [j], [ɥ] (something written as combination of -j- and –w-) etc, however treated as vowels in Chinese phonology historically. Baxter (1992) describes, " […] 2. *There was no medial *-w- in Old Chinese: Middle Chinese -w- reflects either (1) an Old Chinese labiovelar or labiolaryngeal initial of the type *K*^{w}*-or (2) an Old Chinese rounded main vowel which became a diphthong.* " (235). He also refers to *Jaxontov* for " rounded-vowel hypothesis" (1960b). The concept of 'division' (also 'deng', 等) is based on medial. According to different quality of pre-nuclear glides/vowel (usually associated with their openness and roundness), Chinese phonologists had historically established four categories of final classifications in Middle Chinese; each of the four categories is called a 'division'.

crosslinguistically[13] or historically (Matisoff, 2000[14]), as /f/ retains the manner of articulation from the fricative /x/, and the labial place of articulation from /w/. It is possible for people to adopt the new form [*f*] by importing manner features from Putonghua while preserving the feature for place. In other words, [*f*] can be an *interdialect* form (c.f. Trudgill 1986), a form lies between NCG and Putonghua resulting from contact.

I expect my data to show that the most active Putonghua users and those who are more intensively immersed in Putonghua-speaking environments use [*f*]. These people are presumably young urban residents who are more educated and/or hold professional occupations.

2.2.2 Rusheng tonal merger

Rusheng in Chinese historical philology refers to closed syllables that bear obstruent endings, namely, [-p], [-t], [-k] or [-ʔ]. It is in contrast with open syllables or syllables closed with sonorant endings (i.e. [-m], [-n], [-ŋ]). Rusheng has segmental and autosegmental representations that are due to the unreleased stops in coda position. There are a restricted number of tones, usually two, which can be associated with this type of syllable. These tones are known as *rusheng tones*. These rusheng tones can be either identical or different from other non-rusheng tones in the same variety. When the pitch of rusheng are identical with other non-rusheng tone(s), rusheng functions as the rime (characterized by its stop ending), since the pitch of rusheng in this case cannot contrast meaning. As for the evolution of coda stops, merging into a

[13] In many loan words from Mandarin into Hmong, [x] often appear as [f]. For example, Hmong [faŋti] < Mandarin [xwaŋti] ('empire'); [fuə] < Mandarin [xwa] ('flower'); (p.c., David Mortensen)

[14] In Matisoff (2000) mentions development of Proto-Lolo-Burmese (PLB) */ʔw hw/ > Lahu f when discussing *fortition* (40).

glottal stop (i.e. debuccalization) seems to be the canonical trajectory (Wang, 1999). For cases in which coda stops disappear entirely, the duration of both tone and syllable is usually lengthened to that of other syllable structures. Those rusheng that do not differ in pitch would be more likely to merge with its non-rusheng tonal categories. For example, in Chen's (2006) study of rusheng in Zunyi Mandarin, he discovers a recent split in rusheng tone. The reallocation/distribution of rusheng tones in Zunyi Mandarin is becoming increasingly similar to that of Putonghua. Chen attributes the change to Putonghua influence.

Liu (2000) summarizes rusheng development in Gan and Hakka dialects. He divided subdialects of Gan and Hakka into three major categories according to their current rusheng distributions: (a.) sub-topolects that have both rusheng tone and rusheng rime; (b.) sub-topolects that have only rusheng tone; and (c.) sub-topolects that have entirely lost the *ru* tonal category, usually reorganizing into the other three tonal categories, namely, *ping*, *shang*, and *qu*. These categories are based on voicing, aerodynamics, and sometimes rime classification. Liu also contends that, in a Chinese topolect, if the rusheng tone disappears, then rusheng category should also disappear not only as a tonal category, but also as a rime classification. Additionally, if only one rusheng tone survives (scenario a.), it must be the one with relatively higher pitch (Liu, 2000:102).

In NCG, there are two rusheng tones, *yinru* [5] and *yangru* [2] and two stop endings, [-ʔ] and [-t] (Xiong, 1985, 1985,1995). The lower rusheng tone is absent in Zhan (1992)'s phonological inventory of NCG without any further explanation. Chen and Wei (1998) together with Zhang (2007) briefly mention that all lexical items originally bearing a [2] can be pronounced as [5], but not vice versa. For example, *study* (as a verb) in NCG can be pronounced with either [xɔ2] or [xɔ5]. However, for the number *eight*, which originally carries *yinru* [5], the

low register [2] is inapplicable. Despite an obvious awareness of this trend of merging in ru tonal category, most scholars are either skeptical of such a merger or take its existence for granted. Nevertheless, there lacks of solid and well-established argumentation for this particular merger.

Rusheng, as either a tonal or rime category, was thought to have disappeared from most Mandarin varieties in Medieval Chinese[15]. In Modern Standard Mandarin, the tones of these words were unpredictably distributed across the other four tones. NCG speakers who have more exposure to Putonghua are expected to appear more advanced in the direction of merging.

2.2.3 Historical breathy voice

The third variable of this study is historical breathy voice. Despite the vast body of sociophonetics literature, the research objective has been highly skewed and limited to segmental variation, presumably on English vowels. Variation at super- and sub-segmental levels has rarely been addressed (Gordon and Heath, 1998; Foulkes and Docherty, 2006). Thus, the choice of this phonation variable may contribute to a growing forum in this regard.

Breathy voice, as defined by Laver (1980), is a phonation type that is typically signaled by noise in higher frequencies of segments and is introduced by the incomplete adduction of speakers' vocal folds. It has also been known as a type of speech disorder caused by smoking (Braun and Rietveld, 1995). Nevertheless, as noted by Ladefoged (1983:35), "one person's voice disorder is another person's phoneme." Other than being a clinical issue, phonation type (e.g. breathy voice) is phonologically contrastive in many world languages. These languages include,

[15] One of the most important references is Zhōngyuán Yīnyùn (中原音韵), a rime book written in the early 14th century. To date it is controversial that whether rusheng existed in Medieval Chinese. Li Xinkei is the main advocator for its existence; whilst Wang Li, among other scholar claim that rusheng was entirely lost (c.f. Song 2008).

but are not limited to, Indo-Aryan languages, such as Gujarati (Fischer-Jørgensen, 1967); Southeast Asian languages, such as Hmong (Huffman, 1987; Audruski and Ratliff, 2000), Khmer (Wayland and Jongman, 2005), Wa, and Burmese (Watkin, 1997); East Asian languages, such as Korean (Cho et al., 2002); and Khoisan languages, such as ǃXóõ (Trail, 1981). Most of the aforementioned languages have three-way phonation contrasts, namely, breathy, modal, and creaky. Thein Tun's (1982: 94-95) study of Burmese tones discovered that the historical breathy voiced vowel tends to be "higher" and "more backed", while the creaky-voiced register tends to be "lower" and "more fronted". This finding also applies for binary phonation contrast.

Previous acoustic investigations on voice quality have shown consistent sex patterns, that is, female speakers being more enthusiastic users of breathy voice. For example, Klatt and Klatt (1990) and Trittin and Santos y Lleó (1995) examined breathy voice of American and Spanish speakers, respectively. Both studies confirmed a *gender bias* in the employment of breathy voice: women showed significantly stronger tendency in a series of acoustic correlates of breathiness, including F_0, amount of aspiration in F_3, and spectral moments, etc., although the latter shows less significant results than the former. Similar observations are found in Hefferman's (2004) cross-linguistic investigation of Japanese and English speakers.

In variationist studies, prestigious voice quality has been proved to be ideologically gender-specific. In his study of Australian and American speakers' perceptions of voice quality, Pittam (1987) discovers that tense voice marks prestige for males, while breathiness does the same social work for females. Moreover, breathy voice portrayed a sexy quality when employed by British women, if not universally (Crystal, 1975:85; Daniloff et al., 1980:175). As one of the few studies examining males' exploit of breathy voice, Ito (2003) reveals that breathiness is an expression of politeness for Japanese men. Moreover, breathiness also indicates ethnic

differences. Purnell et al's, (1999) study shows significant differences in HNR[16] measurements between African American English and Standard American English.

What noteworthy is that NCG has been labeled as a 'harsh-sounding' language by both native speakers and outsiders. This negative attitude toward the local speech among community members is unequivocally not surprising especially in a language shift context. However, what's particularly interesting is to find out what are the exact linguistic feature(s) that give rise to people's perception of 'harshness'. In my pure speculation, breathiness in NCG is among the candidates indexing the inferiority. Another possibility that cannot be completely ruled out is that people would probably treat non-standard speeches as equally inferior. All in all, this discussion centering linguistic attitude and locating the linguistic features that afford the "harshness" in NCG is a study on its own right, therefore, is apart of the current thesis.

Breathy voice in Chinese varieties has been considered as a medial stage of historical devoicing of Middle Chinese voiced initials (Wang, L., 1986; Wang, F. T., 2005). Chao (1956) first notes a three-way consonant contrast in Wu dialect. He described breathy voice in Wu as *QingYin Zhuo Liu*, literally, "clear utterance, voiced (air-) flow". Voiced stops and affricates in onset position in Middle Chinese became voiceless and aspirated in NCG. However, descriptions of NCG phonological system are not specific about its phonetic detail i.e. breathiness, but treated as a kind of aspiration. This may be due to the fact that breathy voice does not contrast meaning.

Theoretically, Standard Mandarin only preserves aspirated-unaspirated contrast. I expect that speakers who are more attracted to Putonghua will show even less distinctiveness in breathy and plain voiceless, aspirated tokens. In this sense, these speakers are expected to be less salient in producing the breathy feature or even lose it completely.

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[16] Harmonic-to-Noise Ratio, refers to ratio of noise relative to the harmonic structure of a wave (27)

3.0 DATA AND METHODOLOGY

3.1 DATA COLLECTION

Data for this project was collected during my fieldwork in Nanchang, Jiangxi Province, China. 18 female speakers and 22 male speakers, who were born and raised in Nanchang or one of the adjacent counties, participated in this study. Each participant completed a brief survey (APPENDIX A) consisting of questions regarding personal, social, and language background, followed by a wordlist elicitation (APPENDIX B.1), during which tokens for attested linguistic variables were gathered. Both measures were orally administered. Stimuli on the wordlist for diglossic alternation and rusheng merger variable are items that were originally pronounced with the conservative variant [w] (for diglossic variables) and [2] (for tonal merger), respectively. Forty-four randomized, monosyllabic lexical items were provided, including 14 distracters, followed by an ancient Chinese poem, *Zaomeishi* (APPENDIX B.2), which provided additional stimuli for the breathy voice variable. All participants read the materials three times.

3.2 CODING

3.2.1 Linguistic variables

Due to the limited lexical inventories, only 120 (3 tokens × 40 speakers) and 360 (9 tokens × 40 speakers) instances for diglossic alternation and rusheng merger variables were collected and coded. A total of 2290 tokens (59 on average) were distilled from the recordings for the breathy voice variable.

Using Praat, tokens for both diglossic alternation and rusheng merger were coded through inspection by spectrograms for individual tokens: [f] was identified by aperiodic noise word-initially, and [w] was, in turn, assumed to exhibit a noticeable formant transmission. As for tonal variables, tokens with a relative higher pitch approximating the upper limit of each speaker's pitch range will be identified as H(igh) which corresponds to the *yinru* tone [5]. Tokens with an relative lower pitch, which approximates the lower limit of one's pitch range, were in turn coded as L(ow) which corresponds to the *yangru* tone [2].

Voice quality differences are generally better observed in vowels (Klate and Klate 1999). A vowel following the consonant initials is coded as cue of breathiness. Both vowel formants and spectral indicators were coded. Raw formant (F_1 and F_2) information was extracted using Praat Scripts and was later normalized by *Lobanov's* z-score transformation in order to avoid pure biological difference. Lobanov's z-score transformation was the top-ranked normalization method in Adank's (2003) study of 12 different vowel normalization methods. It is also one of the few methods that have been successfully applied to non - (American) English vowels. The equation is listed in Equation 4-1. Furthermore, spectral tilt (H_1-H_2) was chosen as the major indicator of breathiness (Fischer-Jørgensen, 1967) and was extracted from the middle 1/5 of each

breathy vowel using Pratt Scripts. Spectral tilt measurements were later transformed into categorical factors from raw numeral scores, where positive values indicate it is more breathy while scores equal or below zero were coded as less breathy.

Equation 3-1: Lobanov's z-score transformation (Adank, 2003)

$$D_i^{lobanov} = \frac{F_i - \mu_i}{\sigma_i}$$

Preceding consonant and rime type of each breathy vowel token was also coded as the linguistic predicators of breathiness as listed below:

1. Preceding consonant: [p^h-], [t^h-], [k^h-],[ts^h-], and [$tʃ^h$-], which are subject to collapse into two larger categories: stops and affricates.
2. Final (rime) type: monophthong, diphthong, nasal ending, stop ending.

3.2.2 Social factors

Social factors coded in the study include speakers' age, gender, education, locale (i.e. birthplace and place of upbringing), and occupation. All information was initially recorded according to speakers' descriptions and then collapsed into narrower categories. Milroy and Milroy (1997) note that "Social class is determined by means of a composite measure that takes account of income, level of education, and occupation." Due to their correlations to social class, education and occupation were collapsed into one single variable, SES. The variables were merged because a better statistical model resulted. All tokens of the three linguistic variables are nested in the following six social categories:

I. Age: middle age (> 33) and young (18 ~ 33).
II. Sex/Gender: female and male

III. Locale: urban (referring to two inner-city districts), rural (rural counties), and suburban (in between urban and rural areas)
IV. Education: basic, secondary (including vocational education), and higher education
V. Occupation: manual worker (including unemployed and retired), foreman, skilled workers (including small business manager), and professionals
VI. Socioeconomic status (SES): lower working class (LWC), middle working class (MWC), and upper working class (UWC).

Qualitative data, such as language use of individual speakers, will be selectively discussed in § 4.4 of this thesis.

3.3 STATISTICAL ANALYSES AND PREDICTIONS

3.3.1 Statistical model

Different statistical models were chosen in order to best suit the data on the three attested variables. Given the homogeneity in the number of tokens for diglossic alternation and rusheng merger variables, logistic regression (Generalized Linear Model) was employed. As for the breathy voice variable, not all speakers contributed the same number of tokens due to quality issues with certain recordings. Logistic mixed effects regression (LMER) was adopted to account for the random effect (i.e. speaker). Gender-specific, *post hoc* analyses were also performed.

All three variables were run with social factors, including age, sex, locale, education, and occupation. For breathy vowels, linguistic environment, such as preceding consonants and rime structure, was also included and ran separately from social factors. The *p*-values under 0.05 were considered significant. In addition, *p*-values less than or equal to 0.06 are to be reported as non-significant trends (*ns trend*) in order to make note of some tendencies that might otherwise be neglected due to data manipulation.

3.3.2 Hypotheses

As introduced in previous sections, there are two variants for each of the three variables: one advanced (i.e. innovative) and the other conservative (i.e. a more "authentic" version of NCG). This information is summarized in Table 3-1 below:

Table 3-1: Summary of variants

	Diglossic alternation	*Rusheng merger*	*Breathy Voice*
Innovative variant	[f]	[5]	Non-breathy
Conservative variant	[w]	[2]	Breathy

Generally, the expected outcome of this study is that people who have had more contact with Putonghua would tend to reorganize their dialect systems by adopting the advanced variants for the attested variables either below or above the level of awareness. I consider people who were born and raised in urban areas with better educational and occupational backgrounds to be more intensively exposed to Putonghua. Specific hypotheses are listed below:

- **Hypothesis 1:** [f] will be more frequently employed by people who have more intensive contact with Putonghua
- **Hypothesis 2:** [5] will be more frequently employed by people who have more intensive contact with Putonghua
- **Hypothesis 3:** Breathy voice will be less frequently employed by people who have more intensive contact with Putonghua

In the following section, these hypotheses will be discussed in light of the research results.

4.0 RESULTS AND INTERPRETATION

This section presents results of the statistical analyses for the linguistic variables and plausible interpretations thereof. The hypotheses did not entirely hold, and the three variables will be further discussed. Some innovative phonetic forms of attested variables were associated with urbanicity, that is, being better educated; a locally born urban resident; holding a professional position; or the combination of the above. To gain a better understanding of the results, a glimpse at the distribution of our informants and data might be a good starting point before delving into major statistical findings.

Our data has 18 older speakers and 22 younger speakers, among which 15 are from the urban area, 13 from the suburbs, and 12 are from rural areas in terms of locale. As for educational background, 15 of my informants received higher education, 10 of them were vocationally educated, and the remaining 15 were reported to have attended school for no more than eight years, most of them dropping out during the first or second year of middle school. With regard to occupation, 16 speakers hold a professional position, such as software engineering, financial administrator, doctor etc.; 12 are skilled workers such as nurses, electricians, and also suburban small business owners; and the other 12 participants are retired, unemployed, or part-time employers, working as janitors, security guards. For necessary occasions, educational and occupational background may be collapsed to one single category, SES. Despite the differences in education and occupation, there does not seem to be an

extremely great disparity in terms of income and wealth. All participants were thought to belong to the working class, where the majority consisted of MWC (18 out of 40), and UWC (i.e. 10), and LWC (i.e.12).

Regarding linguistic variables, 53% of the total tokens were realized as [*f*] for the diglossic alternation variable; 48% of rusheng merger tokens were produced with the high register [5]; approximately 60% of historical breathy voice tokens were not pronounced with a breathy voice.

Speaker occupation was found to directly correlate with people's diglossic variant choice ($p < .05$), phonation type ($p < .05$) and also to affect the distribution the tonal merger, of which SES is one of the significant predictors ($p < .05$). Education is an also an important predictor of diglossic alternation ($p < .05$), however, less salient for the historical breathy voice given a suspicious *p*-value, .049. Education is also absent as a predictor in the best model for the tonal merger.

The significance of locale, education, and occupation seems to indicate that a better-educated person, who also holds a professional position in an urban area, will have a higher chance of using the innovative variants. However, this is not the whole story. More detailed results and interpretations are presented in the following sections.

4.1 DIGLOSSIC ALTERNATION

The results of the diglossic alternation variable reveal that it is predicted by locale ($p < .001$), educational background ($p < .05$) and occupational background ($p < .05$), among which the most significant indicator is locale. This information is shown in Table 4-1 below:

Table 4-1: Significant social factors for diglossic variable

	Df	*Deviance*	*Resid.Df*	*Resid.Dev*	*P (>|Chi|)*
NULL			119	164.216	
Sex	1	0.410	118	163.806	0.522
Age	1	0.021	117	163.785	0.886
Locale	2	20.182	115	143.603	**4.145e-05**
Occupation	2	6.088	113	137.515	**0.048**
Education	2	7.940	111	129.575	**0.019**

Table 4-2: Comparison and contrast for diglossic alternation

	Estimate	*Std. Error*	*Z value*	*Pr (>|z|)*
(Intercept)	1.1655	0.6146	1.896	0.057928
Sex: male	0.8856	0.7034	1.259	0.208034
Age: young	-0.3186	0.6015	-0.530	0.596367
Locale: suburban	-0.6991	0.5731	-1.220	0.222552
Locale: urban	-2.0146	0.5873	-3.430	**0.000603**
Occupation: professional	14.3461	1385.3784	0.010	0.991738
Occupation: vocational	-1.3922	0.8022	-1.735	0.082674
Education: high	-16.1809	1385.3789	-0.012	0.990681
Education: vocational	1.0545	0.9376	1.125	0.260731

The regression shows that sex and age are both insignificant for the diglossic alternation variable. This disagrees with some principle findings in previous variationist studies.

4.1.1 Insignificance of sex and age

Both sex and age have been considered the most stable and representative social parameters in language variation and change. As a matter of fact, variationist studies have appointed the sex distinction as one of the most powerful sociolinguistic indicators. The well–known Labovian (1990) gender paradox suggests that, in contexts of language change, women either lead in the spread of prestige variants (change from above) or the innovation of new variants (change from below). This finding was replicated in Labov's studies of Northern City Shift, in which women were found to be the leaders of the /æh/ raising. Gordon (2000) also finds that women lead men

in the use of advanced variants. As for age, adolescents are found to follow adults' linguistic behavior. Ito and Preston (1998) discovered that the most advanced speakers are teenage girls. Gal (1978) found that women are leaders in the shift from Hungarian to German in the larger backdrop of industrialization and urbanization. German is aligned to working class and urban life as opposed to Hungarian, which is associated with peasant practices.

All of the works above find age, sex, and/or the interaction of both as indicators of variation. In our data, however, older and younger people of both sexes seem to pattern together without significant variability in their choices of variants. This could probably be attributed to the history of this variable. This variable was documented in Xiong's work around the late 1970s and early 1980s. He claimed that the data he used could faithfully represent the NCG during the 1930s — 1940s (Xiong, 1985). Perhaps for speakers in my study, the diglossic alternation variable has reached stable or complete distribution, so that factors, such as sex and age, which are featured predictors for *change-in-progress*, may not apply in this case.

As shown in Table 3, although sex and age do not significantly correlate with diglossic alternation, other factors such as locale, educational and occupational background, are significant. The following section examines these factors in detail.

4.1.2 Significant factors for diglossic alternation

4.1.2.1 Education

Recall that we divided speakers into three groups regarding their educational backgrounds: speakers who received basic or no education, speakers who received secondary education or the equivalent (including vocational training), and those who attended college and/or graduate school. Analysis shows education as a significant factor. That is, the more educated one is, the

more likely that he/she would tend to use [f] and to the less likely he/she would use [w]. This finding tallies with the general *Wen* (i.e. literary or educated) and *Bai* (i.e. vernacular) division.

While Putonghua was endorsed in the educational system and is the only licit language for school settings, regional speech is accordingly marginalized and deliberately kept away from the students as far as school affairs are concerned. Students are intensively[2] and intentionally imbued with Putonghua starting as early as kindergarten and usually continuing throughout their school years. Additionally, contemporary instructors—teachers of Chinese (as a first language), in particular—have usually attained higher levels of education. Professional training exposes them to the standard variety to a greater extent and from more perspectives. Consequently, they pass on the standard feature to their students as part of their teaching obligation. At the same time, parents are also found to play a secondary role by consciously avoiding dialect usage when interacting with their children, especially preadolescents or pre-college youth (see § 4.4). Thus, it is not at all surprising to find that education plays a role in enforcing the standard variant.

4.1.2.2 Occupation

The second significant selector of [w] and [f] alternation is occupation. Occupation has been thought to be pertinent to socioeconomic class. In his study of **-in** and **-ing** alternation, Reid (1978) shows a correlation between variants and occupations held by the fathers of preadolescent boys. He found the boys' employment of *-in* to increase as the prestige of their father's occupation decreased, suggesting that a major language resource for young children is their parents. Romaine (1999) also argues that household occupation, usually the position of the male, determines the family's social class. Nichols' (1983) analysis of features employed in *Gullah*

[2] In basic education, students usually spend 6-8 hours in school during weekdays, not to mention the fairly common extracurricular sections for some major subjects, such as Chinese (as a first language), Mathematics, etc.

Creole shows that older women use most Creole features, while younger speakers for both sexes were found to approach a more standard version of English. Nichols attributes this generational distinction to occupation in that younger people tended to work in environments (i.e. service and white-collar position, etc.) where they had more contact with speakers of Standard English.

The occupation of speakers in this study ranges from unemployed, low-wage casual laborers to contract workers, small business managers, nurses, and doctors. Thus, on one hand, it is foreseeable that the higher one's occupational position on this occupational scale, the more likely s/he is to employ supra-local features, while avoiding more stigmatized dialect marks. On other hand, it is also noticeable that the *p*-value for occupation just barely makes the bottom line for statistical significance, with a dubious score close to .05 ($p = .048$). Its slighter saliency might result from the stability of this long established consonant alternation, given a ready-drawn borderline between urban and rural, the intricacies of which are elaborated below.

4.1.2.3 Locale

The last and most significant factor for this diglossic alternation is locale ($p < .001$). Apparently, birthplace and place of upbringing are extremely reliable factors in predicting the distribution of [w] and [f]. Regardless of age and sex, urban residents use significantly less [w] variants than the non-urban population, including both suburban and rural inhabitants (Figure 4-1). Participants are collapsed into three categories according to the place they were born and raised[17]: *urban area*, i.e. the inner city, is also known as "*old town*" to the local people, comprising only two districts (*East Lake District* and *West Lake District*); *rural area* includes all counties in close

[17] It is often found to be different from their current residences.

proximity to the city; and *suburban area* is what I refer to as the strip between the abovementioned two.

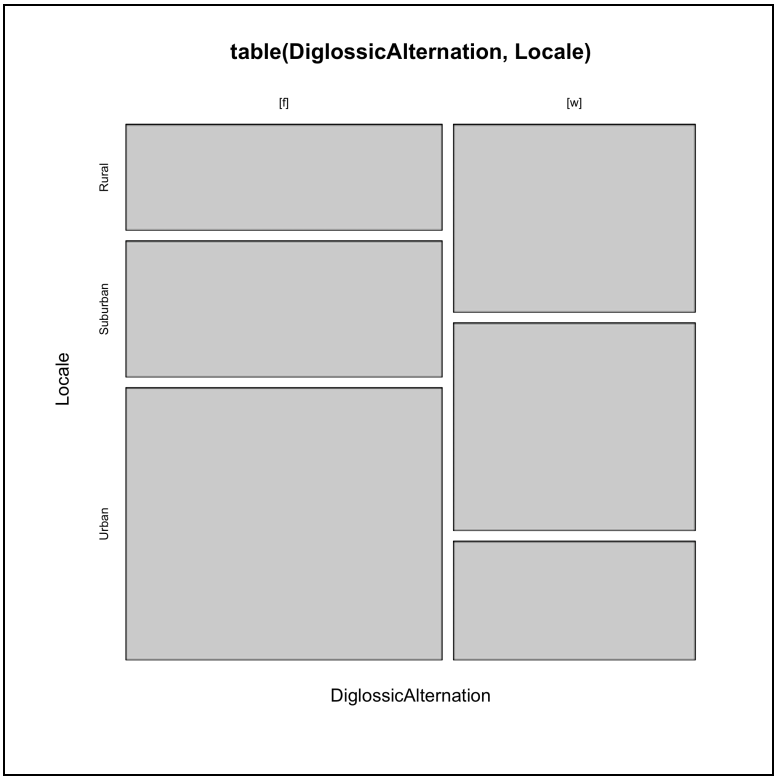

Figure 4-1: Proportion table of *diglossic alternation* by locale

Despite a trivial lead in number of speakers, urban participants nevertheless produced fewer tokens of [w]. This fact defines [f] as an urban variant, which is consistent with our prediction in some way.

A possibility is that this could be a phonetic variation directly induced by contact with Putonghua. As introduced in § 2.3.1, the Putonghua correspondent, velar fricative [x], shares manner of articulation with our Bai variant [f] in NCG, which affords a departure for the shift. Standard languages are expected to be more popular and more often used in urban areas, because this is where the greatest degree of population mobility is usually found. Urban population does not merely consist of local residents but also immigrants from other regions, including

immigrants from rural areas of Nanchang and those from other parts of Jiangxi Province, or other parts of China. These "outsiders" usually speak another variety of Chinese topolect. *Putonghua* serves as the vehicle of communication among the abovementioned population and, therefore, becomes the preferred language for intergroup communication. Additionally, the urban area is better equipped educationally and offers more professional opportunities. It is more demanding for the urban population to practice Putonghua horizontally across social domains and vertically through her/his life span.

4.2 RUSHENG TONAL MERGER

Regarding the rusheng tonal merger, a slightly different procedure was performed to obtain a better statistical model. Educational and occupational backgrounds were collapsed into a single variable, SES. The model was refined, as it showed a better (i.e. lower) AIC score compared to the alternative models.

In my final model, different from the diglossic alternation variable, age was found to be an important indicator ($p < .05$), along with locale and SES ($p < .001$). As far as interaction effects are concerned, SES × Sex ($p < .05$) and Age × SES ($p < .05$) are found to be significant in cross-tabulation. The details are successively displayed in Table 4-3 and 4-4, below:

Table 4-3: Significant social factors for *rusheng* tonal merger

	Df	*Deviance*	*Df*	*Resid. Dev*	*P (> |Chi|)*
NULL			358	497.05	
Age	1	9.36	357	487.69	**0.0022169**
Locale	1	4.28	356	483.41	**0.04**
SES	2	14.71	354	468.70	**0.0006393**
SES: Sex	3	10.63	351	458.07	**0.01**
Age: SES	2	11.45	349	446.62	**0.0032568**

Table 4-4: Comparison and contrast for *rusheng* tonal merger

	Estimate	*Std. Error*	*z value*	*Pr (>|z|)*
(Intercept)	0.02653	0.36182	0.073	0.9416
Age: young	-0.87300	0.44945	-1.942	0.0521
Locale: urban	-0.08230	0.28140	-0.292	0.7699
SES: UWC	1.00539	0.68206	1.474	0.1405
SES: MWC	0.68769	0.45076	1.526	0.1271
SES: LWC × Sex: male	-0.98091	0.46676	-2.102	**0.0356**
SES: MWC × Sex: male	2.59983	1.05324	2.468	**0.0136**
SES: UWC × Sex: male	-1.09109	0.62183	-1.755	0.0793
Age: Young × SES: UWC	0.72270	0.65970	1.096	0.2733
Age: Young × SES: MWC	-2.38090	1.14471	-2.080	**0.0375**

Recall that the rusheng tonal merger is part of a regular historical change. Therefore, a change-in-progress feature, such as age, is expected to display significance. However, it shows up in an unexpected direction: younger speakers, in general, favor the less merged form [5], although the significance did not retain in further comparison, p = .0521 (*ns. trend*). This outcome runs contrary to the expectation that younger speakers should correlate with more innovative linguistic forms. This outcome might be skewed by the fact that, given the same number of urban speakers (Older: 9; Younger: 9) and almost equal numbers of rural speakers (Old: 6; Young: 5), young speakers from the suburban area outnumber old speakers from the same region (Older: 4; Younger: 9). In the next section, I show that suburban speakers are the group that favors the conservative variant [2] the most, but are equally less likely to employ the merged variant [5].

4.2.1 Locale

Locale, consistent with the diglossic alternation variable, significantly correlate with rusheng merger variable, p = .04. Urban speakers are, as expected, more advanced in proceeding *Rusheng* tonal merger, while the original low tonal register [2] seem to be less accessible to them.

Although social networks (cf Milroy 1980) were not directly examined in this study, they may play a role in producing this pattern. Generally speaking, urban speakers are expected to have more open network due to their accessibility to miscellaneous lifestyle and people. Meanwhile, unexpectedly, suburbia, rather than rural speakers should be credited as contributing most significantly to the frequency of the lower pitch [2] (Figure 4-2).

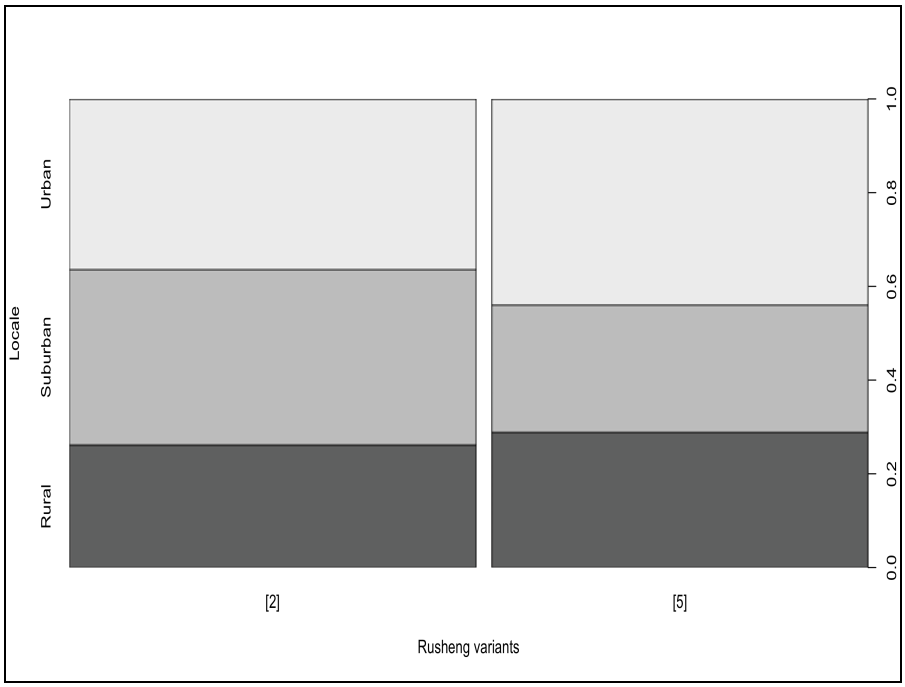

Figure 4-2: *Rusheng* tonal merger by locale

Recall that locale variable is used to indicate the place where people were born and raised, which might actually differ from their residences and where their major social practices are conducted. In actuality, along with the recent accelerated process of urbanization, the mobility of population has also been increased, however, usually unidirectional (i.e. rural to urban). The flood of immigration from rural region to some extent restructured the socioeconomic stratification in urban region.

In SES, for instance, all 13 suburban speakers belong to LWC and MWC, while rural speakers show higher degree of social mobility. Among the 11 rural speakers, three are LWC,

another three are MWC, and the remaining five are UWC. In total, there are five rural UWCs, which is the same number of UWCs for the urban area, while the suburban population barely consists of LWC and MWC speakers. Despite their rural origins, most of these rural UWCs spent their adolescent years in urban areas for educational purposes, initially, and then finally settled there for a decent job. Years of schooling and urban social lives could detach them from their rural identities, and also integrate and associate them with new urban networks. Language ideally symbolizes this social-psychological shift at the individual level. Details regarding importance of SES are introduced sequentially in the next section.

4.2.2 Socioeconomic class (SES) and the interactions

As illustrated in Table 4-4, the center of discussion for the rusheng merger variable is SES, given that not only is it a significant indicator itself, but also actively interacts with other factors, namely age and sex. To depart from SES (Figure 4-3), MWC speakers occupy significantly larger proportions of [5] tokens and smaller proportions of [2]. LWC speakers, in contrast, exhibit more conservative tokens and favor the original, lower register [2]. As for UWC, it is considerably lower, which might result from the relatively small number of UWC speakers.

One Labovian generalization (c.f. Labov 2001) for SES in change-from-above situations is that ones with the most mobility (i.e. lower middle class women) tend to more actively adopt the advanced variant, while disavowing the stigmatized stereotypes. He attributes this fact to 'linguistic insecurity', the tendency of using 'correct' forms that is usually accompanied by "hypercorrection". In our case, the employment of [5] does not necessarily imply "standardness" or "prestige", as most Labovian studies on SES would assume, since the majority of them examined intralinguistic variation in mutually intelligible dialects. The merging of rusheng

toneme cannot possibly be directly resulted from contact with Standard Mandarin, since there lacks a tonal correspondence thereabouts. However, it stands to reason that speakers whose social networks are constructed such that they are more likely to communicate with others in Mandarin also have less access to prescriptive knowledge about rusheng tone, i.e. which items have a low tone, which others have a high tone. The merger would result from information impoverishment, and not from convergence to a prestige variant.

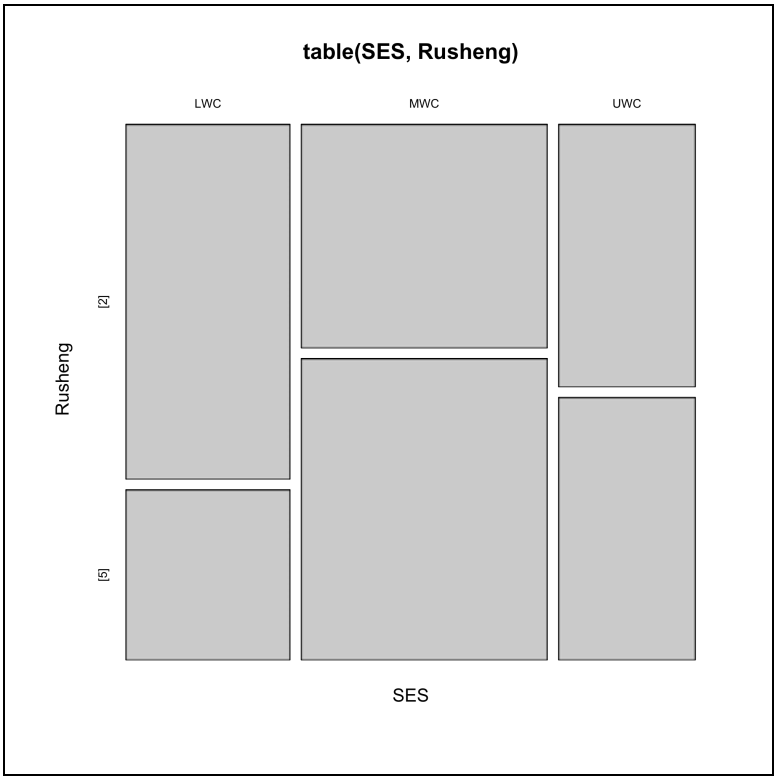

Figure 4-3: *Rusheng* tonal merger by SES

Regarding the interaction between SES and sex, the leap from LWC to MWC was maintained. The pattern is particularly significant for male speakers ($p < .05$). That is, male MWC speakers use significantly more [5] than LWC speakers. Additionally, although female MWC speakers employ [5] at the highest rate, the jump from LWC to MWC is not as significant

as it is within male speakers. This might also be explained by speakers' educational background. Within both female and male LWC speakers, all of them received basic (female: 6; male: 4) or vocational education (female: 1; male: 1). However, in the MWC group, while female speakers are still restricted to the same educational category (*basic: 5*; vocational: 4; *high: 0*), male speakers attained higher levels of education (*basic: 0*; vocational: 2; *high: 7*). The relatively large educational gap between LWC and MWC males may widen, as female speakers are more uniformly less educated across these two categories.

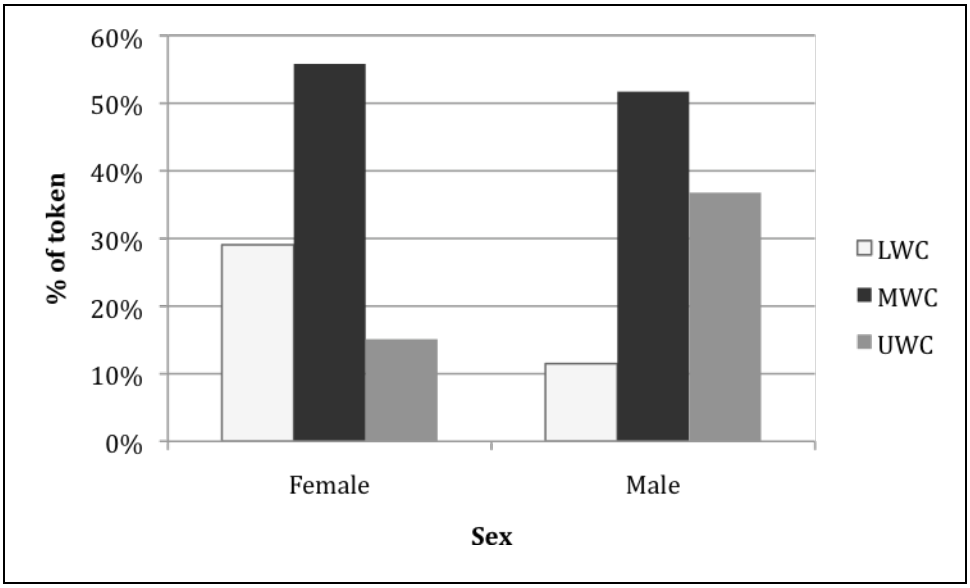

Figure 4-4: Rusheng tonal [5] (novel variant) by SES group and sex

As for age and SES interaction, younger speakers of MWC are less advanced in employing [5] compared to older speakers ($p < .05$). One explanation is that within the MWC category, more old speakers are from the urban area (rural: 1; suburban: 2; urban 6), whereas more than half of younger speakers have non-urban origins (rural: 2; suburban: 3; urban: 3). Although not statistically significant, it is also noticeable that LWC speakers are more active users of the innovative tonal variant [5] than younger LWC speakers.

Wodak (1996: 119), in her study of discoural variation, found class effects to be statistically significant, but sex and age effects as insignificant. She attributes middle class speakers' years of socialization, through schooling, with producing 'over sophisticated', fact-orientated summaries, rather than the more 'natural' modes of telling narratives, which were used by working class respondents. In most modern industrial societies, the system of social stratification is rather fluid and dynamic. People usually experience certain degrees of social mobility over generations or perhaps nowadays within their own life spans, moving up or down the social scale. This is particularly true given the tremendous economic transformation that China is experiencing.

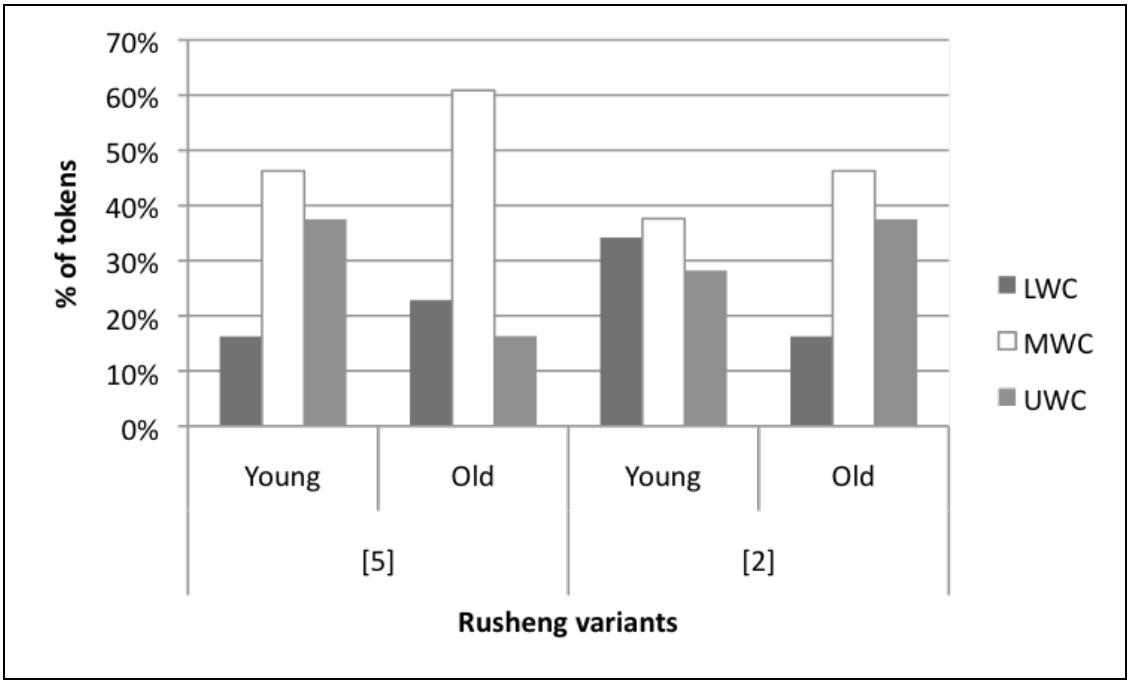

Figure 4-5: *Rusheng* tonal variants by SES group and age

Recent urbanization and industrialization have dramatically impacted individuals' mobility, on both geographical and social scales. Rural populations are migrating to urban areas while people from less developed, urban regions are moving to larger metropolitans in search of better opportunities for their careers. Language is changing along with its surrounding social

environment. When people start their careers from early adulthood, building career as a *tabula rasa*, they are also thrown into a linguistic market (Bourdieu 1977) or a linguistic 'feature pool' (Mufwene 2002), where people constantly exchange linguistic currency; the legitimized variety is usually higher valued than others, therefore, is more promising capital in the market. The symbolic capital is likely to further go on attracting more users. As social experiences accumulate, one's language also becomes sophisticated. After all, a standard *lingua franca* is often preferred vehicle of communication in the process of social integration. Unfortunately, it is often a "trade-off" case being a party to a wider and more complex society may cause a loosen connection to one's native tongue. The pattern observed in this study reflects this movement. Older speakers with much richer social experiences seem to be more disconnected from their dialects. Younger speakers, who are at incipient stages of their careers, appear to be more attached to their mother dialect having despite greater access to education.

Overall, these analyses deliver a clear metamessage that despite disparities in social patterns that have been uncovered for the diglossic alternation and rusheng merger variables. Both variables are, to a greater or lesser extent, associated with urbanicity and the urban area seems to be the source of the variable. For the diglossic alternation variable, not only are urban speakers tightly tied to the [*f*] variant, but a clear-cut borderline has also been drawn geographically. The significance continues in further comparison. As for the rusheng merger variable, both geographical movement (rural to urban) and social movement (on an SES scale) through one's lifespan can result in changes in one's language conventions.

4.3 HISTORICAL BREATHY VOICE

4.3.1 Linguistic factors for breathy voice

Previous literature predicts that in a scenario with a binary phonation contrast, usually creaky-modal or modal-breathy, lax vowels tend to be higher on the F_1 plane and lower on the F_2 plane. That is, in our case, breathy (lax) vowels are presumably higher and more back compared to their non-breathy (tense) counterparts. This observation generally pertains to our data. Figure 4-6 presents a contrast between A_1 and A_2 breathy and non-breathy vowels for the three cardinal vowels [-i], [-a], and [-u]. All formant information was normalized using Lobanov's z-transformation (Adank, 2003).

F_1 and all three vowels are higher for breathy vowels. Also, the backing assumption holds for [-a] and [-u], as the breathy [-i] seems more advanced on the F_2 plane than its tense counterpart. This might be skewed by insufficiency in modal [-i] data (see Table 4-5): there are only 94 tokens for modal [-i] compared to an average of over 400 tokens for the other five categories. Therefore, a larger sample size will be needed in order for [-i] to clarify this outlier.

Table 4-5: Normalized vowel formants

Vowel	*Phonation*	#	*F1 (z score)*	*F1 (Hz scaled)*	*F2 (z score)*	*F2 (Hz scaled)*
[i]	Non-breathy	419	-0.860	343.193	1.192	1737.423
	Breathy	94	-0.771	349.652	1.139	1724.985
[a]	Non-breathy	423	0.992	477.876	-0.297	1383.147
	Breathy	393	1.093	485.265	-0.214	1402.97
[u]	Non-breathy	432	-0.492	369.946	-0.517	1330.793
	Breathy	461	-0.443	373.545	-0.376	1364.512

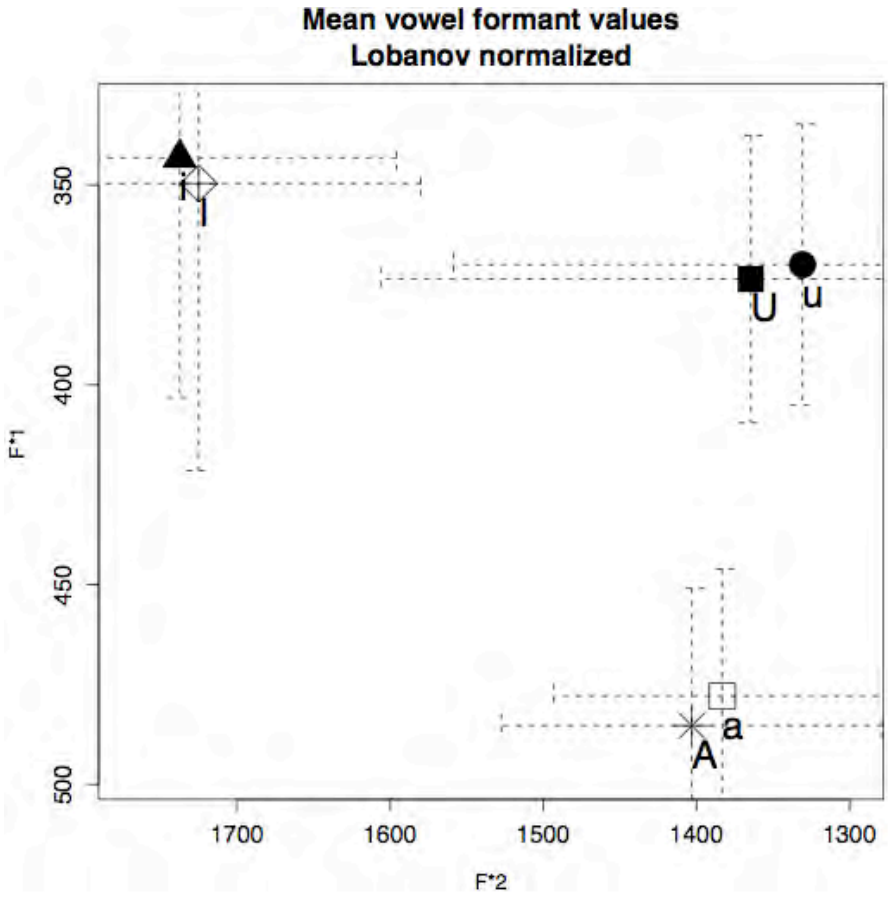

Figure 4-6[18]: Vowel Raising and backing of [i], [a], and [u]
*Notes: Upper case = Non-breathy; Lower case = breathy

In our statistical analyses, the spectral tilt (H1-H2) was chosen as the response variable predicted by language internal factors and social variables, separately. A linear mixed effects model (LMER) was employed to control for the random effect, i.e. speaker. The internal factors considered for breathy vowels were preceding consonant and rime type. Both factors are momentous in predicting breathiness (Table 4-6). Preceding consonants were initially collapsed into larger categories, such as stop and affricates according to their manner of articulation; however, the natural consonant class division attained a better model. The results reveals that a.) Vowels preceded by the velar stop [**k**$^{\mathbf{h}}$-] ($p = 0.032$, $p < .05$) were scored the highest compared to

[18] The normalized vowel measurements were then re-scaled in Hz and visualized, as in Figure 5-6.

other stops in spectral tilt measurement, only follows the most the affricate [tʃ^{h}-] ($p < 0.0001$). As for rime type, monophthongal rime was significantly scored higher than other rime categories ($p = .019$).

Table 4-6: Linguistic factors for breathy voice

	Estimate	*Std. Error*	*Z value*	*Pr (> |z|)*
(Intercept)	-1.14094	0.36974	-3.086	0.00203
Consonant: [-k^{h}]	0.45093	0.20979	2.149	**0.03160**
Consonant: [-p^{h}]	-0.02019	0.14951	-0.135	0.89258
Consonant: [-tʃ^{h}]	0.94940	0.20901	4.542	**5.56e-06**
Consonant: [-t^{h}]	-0.23671	0.14415	-1.642	0.10056
Rime: stop ending	0.43395	0.28754	1.509	0.13126
Rime: monophthong	0.59780	0.25404	2.353	**0.01861**
Rime: nasal ending	-0.08615	0.28232	-0.305	0.7636

4.3.2 Extralinguistic factors

The extralinguistic variables considered were sex, age, occupation, locale, and education. Three crucial parameters, sex, occupation, and education, emerged from the final statistical model. This specific significance is shown in Table 4-7.

Table 4-7: Social factors for breathy voice

	Estimate	*Std. Error*	*z value*	*Pr (> |z|)*
(Intercept)	0.7187	0.5235	1.373	0.16980
Age: young	-0.1552	0.4827	-0.322	0.74783
Sex: male	-1.8983	0.5779	-3.285	**0.00102**
Occupation: professional	-3.1037	1.4865	-2.088	**0.03681**
Occupation: vocational	-0.2149	0.6439	-0.334	0.73859
Education: high	3.3762	1.7576	1.921	0.05474
Education: vocational	0.4577	0.6633	0.690	0.49017
Locale: suburban	-0.4852	0.5171	-0.938	0.34812
Locale: urban	-0.4646	0.4785	-0.971	0.33163

4.3.2.1 Sex

For our case, the breathy variant for historical breathy voice variable was considered to be a conservative variable, as it is in the medial stage of a historical devoicing process. According to our results, shown in Figure 4-7, male speakers significantly disfavor breathy vowels, moving instead towards to unmarked phonation, $p = 0.001$. A straightforward interpretation based on this assumption is that women appear to lag in this trend, while men lead in this trend. Although it seems to violate the Labovian gender paradox - women are better "learners" of both prestige features, as stable social settings as well as new forms emerge in a dynamics of linguistic change- it needs further empirical support.

Figure 4-7: Proportion table for breathy tokens by sex

In fact, this finding is consistent with the gender pattern found in previous investigations of breathy voice, in which women appeared to be more likely to use breathy voice. The

distinction between men and women becomes perplexing in this case. If we use *sex* to indicate *biophysical difference*, then *gender* would be viewed as a *social construct* and "the means by which society jointly accomplishes the differentiation that constitutes the gender order" (Eckert and McConnell-Ginent, 2003:14). Hefferman's (2007:15-16) meta-study defined variation that involved gender-biased variables, such as vowel formants and voice quality, as "engendered variation". Hefferman considers the following to be characteristics of engendered variation:

- It stems from anatomical differences in the vocal tracts of men and women (e.g. men have thicker vocal folds)
- It is reflected in our speech in the form of tendencies (e.g. men tend to voice /h/)
- It is consistent cross-linguistically because anatomical sex differences in the vocal tract are universal
- It is gradient by its phonetic nature
- It is adjusted (amplified, reduced, or even reversed) by social factors.

Previous investigations have struggled to find social differences in spite of the innateness of such variation. Stuart-Smith et al.'s (2003) study of sex and gender differences in Glaswegian /s/ discovered that, despite a general sex pattern (i.e. women tend to more breathy than men), gender and other social components were not completely undermined in that younger working-class women were grouped with male speakers in their values for mean and peak spectral frequencies, p = 0. 000. Hefferman (2004) also studies the production of /s/, through crosslinguistic comparisons of English and Japanese speakers. He concludes that despite an average petite stature of Japanese speakers, they did not show a significantly higher group mean in spectral analyses compared to English speakers. This physical difference might be counterbalanced by certain social differences. As reviewed in § 2.3.3, breathiness also marks females' prestige while creaky or tense voice was considered to perceptually mark prestige for males (i.e. simple masculinity). In order to decode the sex and gender, I performed sex-specific

runs. That was to find out within the same sex, whether a social group was significantly more or less breathy than the others.

4.3.2.2 Occupation

Unlike the rusheng merger variable, combining occupation and education factor groups seemed to be of little assistance in refining our statistical model. Therefore, I left them separate. The results determined that career professionals tend to be less breathy, $p = 0.03681$. At first glance, we seem to be inspired by the occupation variable because professionals are expected to utilize and have more exposure to the standard variety, Putonghua. They are, therefore, expected to appear advanced in their loss of breathiness. The significance of occupation may be no more than an artifact, for men consist the main body of this sample, with a ratio of 15 males to one female.

Therefore, at this point, no solid evidence supports the claim that social factors have an effect on people's production of breathy voice tokens. Breathiness remained a feminine feature. In order to test whether our data supported the claim for the existence of a social component for breathy voice, sex-specific analyses became necessary.

Data were then split into male-only and female-only subsets and converted into continuous variables on a percentage scale[19]. Four-way ANOVAs were performed for ratio of breathy tokens as functions of four social factors, including age, locale, occupation, and education for the male and female subsets, respectively. However, as displayed in Table 4-8, again none of the social categories showed any statistical significance.

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[19] The percentage was calculated for each speaker in such way that the number of positively scored tokens in spectral tilt measurement was divided by total number of tokens measured. The higher this breathy ratio is, the more likely that particular speaker is to employ the breathy phonation in her/his production.

Table 4-8: Sex specific analyses

Sex	*Factors*	*Df*	*Sum Sq*	*F value*	*Pr (>F)*
Female	Age	1	0.04986	1.5659	0.23929
	Locale	1	0.00216	0.0679	0.79974
	Education	1	0.00114	0.0359	0.85346
	Occupation	2	0.01749	0.5492	0.47568
Male	Age	1	0.01781	0.3408	0.5693
	Locale	1	0.01086	0.2079	0.6560
	Education	1	0.00865	0.1655	0.6908
	Occupation	2	0.05104	0.4884	0.6245

4.3.2.3 Individual speakers

Individual breathy token ratios show intra-/intergroup variation within each sex: Some female speakers are less breathy than some male speakers (Figure 4-8); while some men are even more breathy than the female speakers who lay toward the right tail of the proportional chart (Figure 4-9).

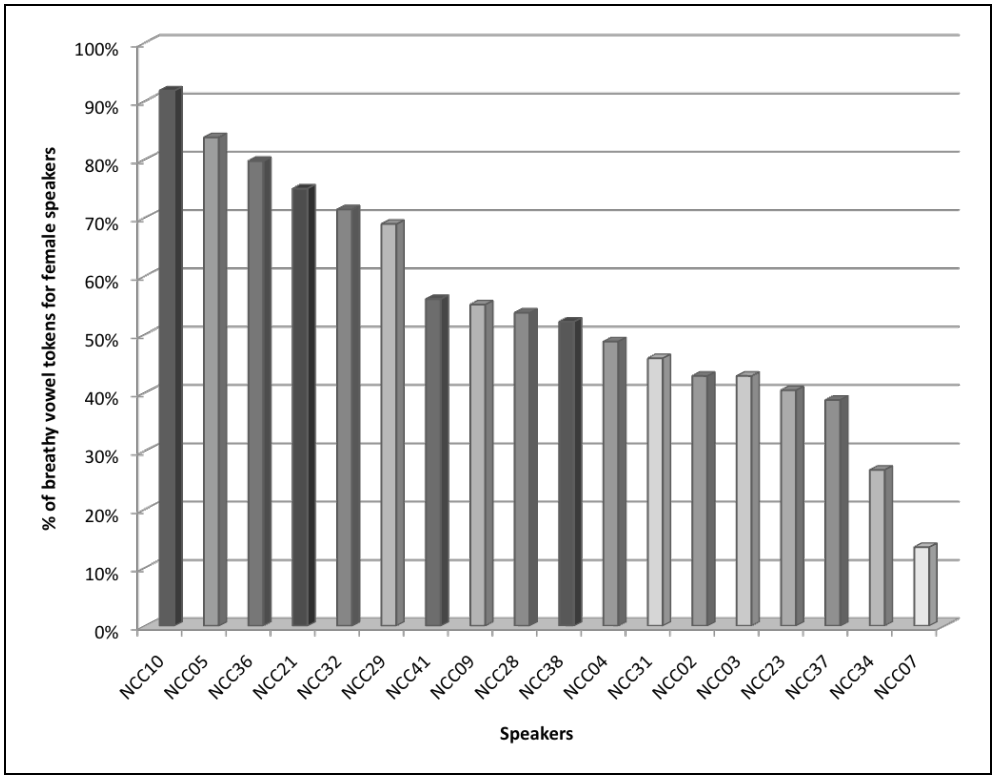

Figure 4-8: Proportion of breathy tokens for each *female* speaker

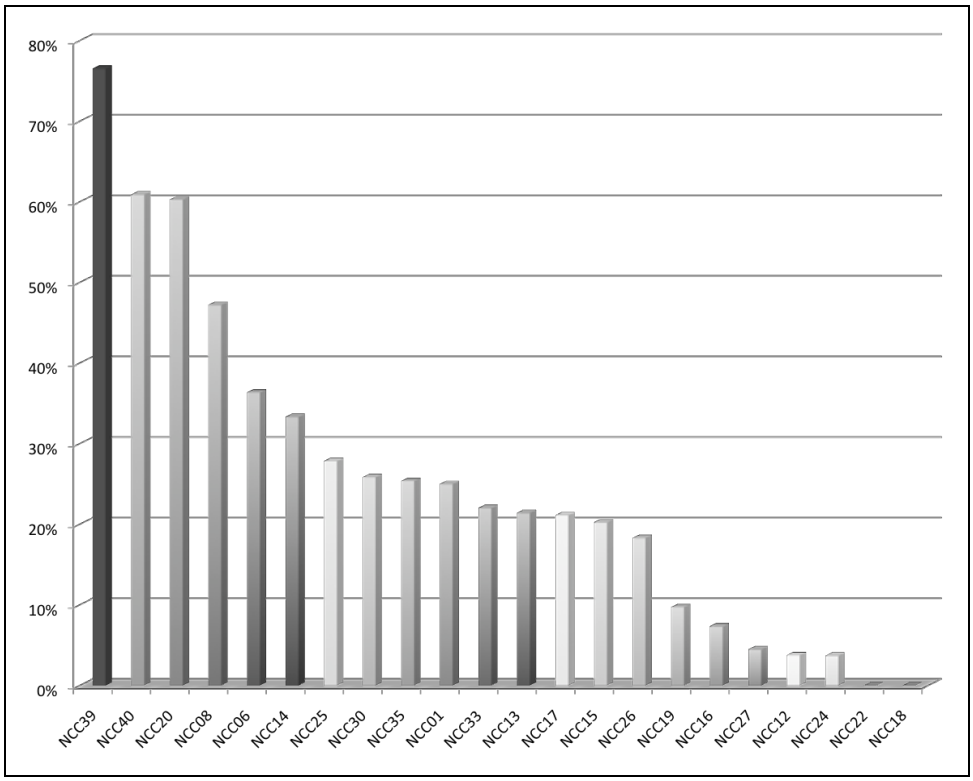

Figure 4-9: Proportion of breathy tokens for each *male* speaker

Although almost half of the female speakers showed a breathy production ratio of over 50%, certain outliers are noticeable. NC07, a female speaker in her fifties who works at a well-known local hospital has the lowest breathy token ratio. This might be due to the fact that she is the only professional employee among all of the female speakers in this study. This patterns with male professionals, our previous statistical results reveal. Occupation loses its predictability when it comes to NC34 (the second least breathy female speaker), a 30-year-old who was born in a rural area of Nanchang and received a secondary education. She worked at a small restaurant in a suburban area when the recording was made. Given this information, we would have expected a high ratio of productivity of breathy tokens, which did not show. Although almost all of the male participants had lower ratios than females for the breathy variant, it is noticeable that three

males distinguish themselves from other members in the male cohort, forming a small cluster on the left end of the charts. Interestingly, each of them seems to have a different story.

Previously, we reported that professionals tend to be less breathy. However, unexpectedly, the highest and second highest breathy ratio belonged to two doctors, NC39 and NC40. For NC39, one possible explanation is that he was born and raised in a rural area and, accordingly, tends to be more conservative. However, this argument does not account for his colleague NC40, who was an urban resident. NC20, an older speaker who lived in rural area for almost all of his life, shows an anticipated high ratio for breathy tokens. However, according to my interaction with this speaker, he seemed to be a fairly heavy smoker, which might suggest that his breathiness is attributable to a clinical issue rather than simply indexing linguistic conservativeness.

In sum, I suggest that despite multiple significances (Table 4-7), the only reliable predicator would be the disparity between male and female, which would merely refer to their biophysical differences. Ergo, yet no empirical evidence supports that the historical breathy voice variable has a social component.

4.4 "I DON'T WANT 'MY DAUGHTER' TO END UP SPEAKING PLASTIC PUTONGHUA": THE LINGUISTIC 'NIMBYISM'

Many scholars have been subscribed to discourse-based approaches to the analysis of language attitudes (Giles and Coupland 1991 among others) in addition at quantitative methods. They argue for "a perspective in which language attitudes are assumed to be inferred by means of *constructive, interpretive* processes drawing upon social actors' reservoirs of contextual and

textual knowledge"(Gile and Billings 2006: 200). In order to provide a full picture of the analysis, I also consider the qualitative data. I start by summarizing patterns of language choice for individual speakers in 11 social settings (cf. Gal, 1978). All information was drawn from the orally administered survey.

Table 4-9: Language choice pattern of all speakers

#	*Age*	*Social Settings*										
		1	2	3	4	5	6	7	8	9	10	11
NC02	44	N	N	P	N	N	N	P	—	P	NP	N
NC03	33	N	N	P	N	N	N	P	—	P	NP	N
NC04	48	N	N	P	PN	N	N	PN	—	P	NP	N
NC05	32	N	N	P	N	N	N	P	—	P	NP	N
NC07	54	N	N	P	PN	N	N	PN	P	P	NP	N
NC09	45	N	N	—	N	N	N	N	—	—	—	N
NC10	22	X	NX	P	P	N	—	—	—	P	PN	N
NC21	23	N	N	P	P	N	P	P	—	P	P	N
NC23	21	N	N	P	P	N	P	P	—	P	NP	N
NC28	43	N	N	P	PN	N	N	P	—	P	NP	N
NC29	40	N	N	P	PN	N	N	P	—	P	NP	N
NC31	45	N	N	P	PN	N	N	N	—	P	N	N
NC32	40	N	N	P	P	—	N	N	P	P	N	N
NC34	30	N	N	P	P	N	N	—	—	N	N	N
NC36	40	N	N	P	N	—	N	—	—	NP	—	N
NC37	56	—	N	P	N	N	N	N	P	—	—	N
NC38	51	—	N	P	PN	N	N	P	P	NP	—	N
NC41	26	N	N	P	NP	N	P	—	—	P	PN	N
											Number of female speaker = 18	
NC01	37	—	N	P	NP	NP	PN	P	—	PN	NP	—
NC06	36	P	P	P	P	PN	P	P	—	P	P	N
NC08	31	N	N	P	NP	N	N	P	—	PN	N	—
NC12	23	N	N	P	P	N	—	P	—	—	P	—
NC13	30	N	N	P	P	P	P	P	—	—	P	—
NC14	29	N	N	P	P	P	—	P	—	—	P	—
NC15	30	N	N	P	P	P	—	—	—	—	P	—
NC16	24	N	N	P	P	P	—	—	—	—	P	—
NC17	28	N	N	P	P	P	—	—	—	—	P	—
NC18	23	N	N	P	P	PN	—	—	—	—	P	—
NC19	33	N	—	P	P	P	P	—	—	—	P	—
NC20	53	—	N	P	NP	N	N	N	—	P	N	—
NC22	46	N	N	P	—	N	N	N	—	N	N	—
NC24	24	N	N	P	P	NP	—	—	—	P	N	—
NC25	23	N	N	P	P	N	—	—	—	—	—	—
NC26	25	N	N	P	P	N	—	—	—	—	P	—
NC27	23	N	N	P	P	P	—	—	—	P	N	—
NC30	45	N	N	P	P	P	P	—	—	P	N	—
NC33	31	N	N	P	P	P	—	—	—	P	N	N
NC35	22	N	N	P	P	P	—	—	—	—	N	—
NC39	32	—	N	P	PN	P	P	P	—	P	N	—
NC40	32	N	N	P	P	P	PN	P	—	P	N	—
											Number of male speaker = 22	

*Nanchang Dialect =N; Putonghua = P; Other Chinese dialects = X
In sequence of language code, the one on the left is preferred, although both are used.

1. Grandparents and their generation
2. Parents and their generation
3. School setting (e.g. teacher, schoolmate etc.)
4. Personal business (e.g. bank etc.)
5. Age-mate siblings and friends
6. Spouse
7. Children and their generation
8. Grandchildren and their generation
9. Workplace with clients
10. Workplace with co-workers
11. Marketplace (Farmer's market)

In Table 4-9, Individual language choice is displayed in rows, cross-tabulating different interlocutors/social settings. Note that not all questions are equally applicable for every informant, hence the void cells. Horizontally, all bilingual speakers employ N and P in their daily life, sometimes combined: i.e. NP or PN. Generally, the code choice varies according to situation and the interlocutors. On the vertical axis, in certain social settings, speakers show a considerable degree of homogeneity, which might be attributed to communal norms, which is the focus of the following discussion.

Almost uniformly, language adopted in communication with senior speakers (i.e. *social setting 1 and 2*) is **N**, probably due to their limited productivity in **P**, although **NC10**, **NC06** and **NC19** seem out of this line. It is not an issue and can be easily comprehended given their family language background. For three of them, their parents or grandparents command different regional varieties from their spouses pair-wise or both speaking another dialect **X** other than **N**. However, as their offspring are natively born **N** speakers, the family language is usually chosen to accommodate parental language or by introducing a third party, **P**. Other than that, **N** is a widely recognized family language.

As for speakers who are parents or grandparents themselves, **P** is the overwhelmingly preferred language over N when conversing with their next generations. A more clear-cut pattern is observed between grandparents and grandchildren (i.e. *social setting 8*). Several exceptions need to be further contextualized. **NC09, NC22, NC20, NC31** and **NC32** are all rural residents, who had received less than five years of education. They are neither confident nor competent speakers of Putonghua. Unless it is absolutely necessary, they tend to be reluctant to use Putonghua and are more comfortable with NCG. In this sense, it is not surprising for them to not willingly use Putonghua, an obvious out-group language to family members.

Urban speakers **NC04, NC07 and NC37** all reported using **P** with their children during their school years. However, recently the family language has been switched to **N,** the reason for which is specified in the following conversation excerpt between speaker **NC04** and the investigator. Discoursal repairs and clarification for ambiguous expressions are made locally in square brackets '[]' when necessary.

Translated conversation excerpt:

PI: Have you ever talked to your daughter using NCG?
NC04: Recently, yes, but not when she was in her early school years. She spoke NCG before she went to kindergarten. We were concerned with her reading ability [in Putonghua] therefore stopped speaking NCG to her. She is already a grown-up now. Therefore, we do not think it is a big deal [to speak NCG].
(…)
If we speak too much NCG with her, she would have problems learning Pīnyīn script, which would then *directly lead to her poor performance in the exam*.
(…)
You know that we lived in a sìhéyuàn[Chinese style quadrangle], where she used to hang out and play with other kids. And they speak NCG exclusively. In this case, if we also spoke NCG to her at home, it would be an impediment to her schoolwork, especially Putonghua acquisition. We were afraid that she would end up speaking '**Plastic Putonghua'**. That would be an extremely undesirable situation. However, she's all grown up now. So we think it is more tolerable to speak a bit of NCG to her.
PI: So, you meant you did not speak NCG frequently to her until her early adulthood.
NC04: That's right, only the recent two years.

What I hope to have shown from this mother's narrative is that (a.) she was well aware that Putonghua as a basic but important language skill for her daughter's schooling. (b.) She also considers the dialect to be an obstacle that may keep her daughter from acquiring 'standard' Putonghua. Given the fact that the family has a dense dialect network (their neighbor speaks NCG; NCG is also employed among adult family members), she was concerned with her daughter's school performance. (c.) Keeping these facts in mind, NC04 (probably also other

family members) decided to deliberately speak Putonghua exclusively in order to provide her daughter a better language learning environment. After all, "plastic Putonghua" is not desired under any circumstances. (d.) This mother also acknowledged that she began to speak Nanchang dialect to her child recently. The reason, according to her, is that, "she is all grown up now", therefore a dialect is tolerable.

Despite the family language 'segregation' policy, children (i.e. the second generation specifically) will find a way to pick up the dialect even during their school years, perhaps by playing with their peers. In any case, the 'Putonghua family policy' seems to apply only for one's school years. As NC04's narrative also delivers, she began to communicate with her daughter in NCG fairly recently. It implies that her daughter must be able to and, more importantly, is willing to reciprocate. Thus, from this discoursal evidence, we see that acquisition of Putonghua is very much an education or schooling language, a finding that is also supported by the statistical investigation of linguistic variables.

As for the third generation, according to the only four grandmothers, Putonghua is consistently preferred. Almost all of them also report that Putonghua is the only language employed to speak to their grandchildren. Meanwhile, they also admit that their limited knowledge allows them only an accented Putonghua. This fact more or less mirrors the case of the second generation.

Many of my informants reported that the dialect they speak is no longer as authentic as that of the older generation. Both NC04 and **NC06** pointed out during our discussion that the most characteristic part of NCG is its richness in color expressions (i.e. each color is attached with a correspondent intensitive prefix when indicating a darker shade.). Nowadays, fewer people know and make use of it. Therefore, if we assume a continuum of authenticity of dialect

(AD) and accuracy of Putonghua (AP), from the first to the third generation, AD is dropping while the AP is expected to increase considerably, specifically given the recent success in *Promotion of Putonghua*. In this sense, the language 'ecology' for the third generation is more 'standardized' than it was for their parents' generation, since most people in the second generation speak a much more standard Putonghua compared to that of their own parents. Recalling Rindler-Schjerve's (1981) Sardinian case, forces from both family and school resulted in a 12-year-old-school boy's limited command of Sardinian, a monostylistic and Sardicized Italian. This scenario may also be compatible with NCG.

While many of them realized and complained about the loss of authenticity in NCG, Putonghua is almost exclusively used as a medium of communication to their offspring. Particularly, during my discussion with speaker NC04, she recalled that her mother could still perform a wedding lament (with some obscure expressions/language use in its lyrics) in NCG. Speaker NC04 said that this kind of tradition might have already died out in her generation. Nevertheless, in order to help her daughter to achieve a better performance at school as well as avoid acquiring "plastic Putonghua", she chose to speak Putonghua exclusively at home. Speaker NC04 is not an exception, but rather a representative of a group of people that perform, what I would like to call *linguistic nimbyism* among NCG speakers. Two types of emotions or behaviors are at competition: commiserating the lost of authenticity of the native tongue, however "stripping" it from the children in the mean time. However, whether this kind of ambivalent 'nimby' attitude is going to accelerate the process of standardization (i.e. shift toward Putonghua) remains to be observed.

4.5 DISCUSSION

Many recent studies (Labov, 1972, 1994, 2001; Kiesling, 2005, Johnstone and Kiesling 2008; Kochetov, 2006) have shown that a closer look at linguistic behavior of particular individuals may provide important insights into the nature of variation. I will now turn your attention to speakers who deviate from the general pattern of others, a discussion through which I will also generalize linguistic and social patterns that have emerged in this study.

4.5.1 Intra-/Interspeaker variability

The first outlier is ***Penny*** (NC10), a 22-year-old salesperson. She stands out from all forty speakers of this project in that she is the only one who produced tokens of all three attested variables in their conservative forms (i.e. all 3 stimuli for diglossic alternation, 9 for rusheng merger). Moreover, she also leads all female speakers in exploiting the breathy feature (91.8%) as shown in Figure 4-8. Regarding family background, both her parents were migrants who had moved from another small town in Jiangxi Province to Nanchang decades ago. Both parents speak *Boyang Gan.* That has been passed on to ***Penny*** as the family language, used together with NCG. The adoption of both Boyang Gan and Nanchang Gan in home setting is an interesting phenomenon for the migrant community, particularly when utilized by the second generation. NCG sometimes serves as a discousal "mask" by the youths to distance themselves from their older generation or sometimes mitigating certain kind of parent – children wise conflict (Wei, 2005; Williams, 2005). Meanwhile, it also displays their gestures of gradual moving-away from their parental identity while burgeoning of a new identity given the new location. Well-designed

ethnographic fieldwork will be required to investigate matters in this regard, which is beyond the scope of this thesis.

Clearly, being young and a descendent of "newcomers" did not, in any observable respect, bar ***Penny***'s possibility from adopting the authentic local features. Her localness is inseparable from her personal network during her school years. Penny attended primary and middle school (equivalent to approximately 8th grade) in suburban area of Nanchang. She relocated with her family once, and then went to high school, afterwards to a vocational school where she specialized in industrial design. She claims these to have been her "wildest years" as she spent most of the time "hanging out" with friends rather than actually concentrating on her schoolwork. According to *Penny*, her best "school-buddies", with whom she still remains close friends, are almost all local boys who speak NCG almost exclusively. Considering all every-day based school and extracurricular activity, the innumerable inputs from the peer group obviously had made NCG more accessible to her. It is interesting, if not at all surprising that having parents that speak a different variety (Boyang Gan) other than NCG did not seem to have a significant effect on her acquisition of NCG.

Putonghua for *Penny* is an education language, and perhaps nothing more than that. Despite the fact that she was moderately educated, her effort in Putonghua seemed to have only been restricted to school matters (study, exams). NCG occupied most of her other availability. Recently, however, along with *Penny*'s entering into the job market, Putonghua has become a frequently used business language for her.

The second outlier is ***Sam*** (NC30), a 45-year-old male foreign enterprises employee. Unlike Penny, Sam spent almost all his life in urban Nanchang. Regarding linguistic behavior, he was found to employ innovative variants, [*f*] and [5] for diglossic alternation and tonal merger

respectively, for tokens of diglossic alternation and rusheng merger variables, while showing a moderate (25.9%) degree of breathiness in men's cohort (Figure 4-9). His detachment, as supported by our statistical analyses, is probably largely due to his urban origin and much more open network than *Penny*. Also important is his much richer social experience that he has obtained throughout his life in contact with different types of people.

Zhang (2005) studies the employment of retroflex initials among native Beijingers. She looks at two occupational groups: employees in state-owned companies and employees in foreign corporations. The results show that those who are employed by foreign corporations tend to use a kind of mixed code, or supralocal features that differ from those employees in state-owned companies, who are fonder of using more localized retroflex features. In light of this study, Sam's occupational identity as a foreign company employee may in part result in his complete abandonment of the localized variants and his exclusive employment of novel forms for all three attested variables.

Last but not the least, I will look at ***Shin*** (NC39) a young professional (i.e. doctor). However, consistency in code choice, as seen in *Penny* and *Sam*'s production does not show in *Shin*'s production. In all three stimuli for the diglossic alternation variable, he used the *conservative* variant [w]; for the rusheng merger, he used exclusively the *innovative* variable [5]. However, he was also the leading user of breathy voice (76.6%). This inconsistency mirrors an ongoing intra-speaker variation. As a well-educated young professional and new urban migrant, he shows a certain degree of detachment to language conventions. However, his "rural roots" might be indexed by the retention of [*w*] and a considerably high degree of breathiness. Greater mobility and the loss of dense "rural" networks lead to new, less localized identities a concomitant dialect (accent) *supralocalization* (Milroy, 2002).

By examining three distinct cases, we see that mobility-both on social scale (i.e. personal career, SES etc) and in the geographical sense-and language-inputs particularly before one's early adulthood-are pivotal in acquiring or discarding certain linguistic features. "Children's social identities develop rapidly from infancy to post-adolescence as they pass through the 'life course' " (Kerswill and William, 2000:68). School age children are mostly parent-/school-centered, having limited social space given their limited participation in social practice. Geographical mobility that usually occurs during one's post-adolescent years may expand one's contacts with different type of people and therefore rapidly densifies one's social network. This socio-psychological change occurs on individuals may be well observed in people's speech. As seen in ***Shin***'s data, the exceptionalness employment of [5] for rusheng merger variable show his loosened connection to his mother tongue which might have resulted from his early relocation from a rural area to an urban area initially for educational purpose. His rural identity is illustrated by the retention of [*w*] for diglossic alternation. Moreover, the historical breathy voice may more likely be a gap for most rural migrants in the progress of urbanization and socialization due to its not so transparent linguistic property. In other words, one can show a consistent pattern in adopting advanced features for diglossic alternation and rusheng merger variables, but may fail to "hide" their rural identity due to their breathy voice or other features that are less straightforward and accessible. The variable-oriented discussion will be continued in the next section.

Next let us move to older speakers with richer working experience and social experience, particularly those who have received less education in Putonghua (due to limited quality and quantity of teaching resource). Their upward move on the social scale may also reflect variation in their speech. After all, current marketplace is Putonghua–centered in most social domains and

industries. To integrate themselves to this environment, older speakers may also make greater efforts in acquiring Putonghua, however, deteriorated language-learning aptitudes may require them to simultaneously discard some features that are less prior or important in their linguistic storage, for example, simplifying the inventory of one's native topolect.

4.5.2 Inter-variable variability

4.5.2.1 Three linguistic variables

As shown in sections 5.1 through 5.3, the adaptation of three attested linguistic variables seems to be paced synchronously. Diglossic alternation and the rusheng merger show various degrees of social components while historical breathy voice variable seems to be subject only to biophysical variation. One plausible explanation is that three variables are associated with different degree of linguistic accessibility.

Due to the long establishment of the [w]-[f] variable (as late as the 1940s) (Xiong, 1989), age, a faithful indicator of change-in-progress fails to surface in the analyses. The distribution of this variable seems to have reached a stable state. Instead, the variation is best predicted by speakers' locale, secondarily by the amount of education they have received, while occupation plays a less salient role. Additionally, being the only segmental variable, diglossic alternation is also supposed to be the most accessible to speakers due to its relative linguistic transparency.

Unlike [w]-[f] alternation, rusheng merger occurs on suprasegmental level and in its nature a merger, which means the complexity of the linguistic system is reduced. A split is usually acquired later than a merger, as Trudgill (1986: 22) asserts. I believe it also stands vice versa. That is, a merger in sound change permeates more rapidly and usually takes less effort, compared to split to acquire. In our case of NCG, the rusheng merger occurs when speakers lose

access to the information that would allow them to distinguish historical yinru and yangru. Speakers who have the underlying distinction may fail to make it in practice a considerable percentage of the time. In addition, from an articulatory point of view, the stop ending in ru category may also bias productions towards higher pitch (i.e. [5]). In this sense, the high – low distinction would be at risk even without intervened by contact with Standard Mandarin. Limited exposure to NCG, or exposure to NCG primarily through other speakers who are also with limited exposure to NCG will make it less likely that a speaker will maintain the original distinction in her/his own speech.

Lastly, the invariability of the historical breathy voice variable may in be due to its minimal linguistic salience, even among NCG linguists. It is quite possible that the breathy feature was simply confused with aspiration, since it does not contribute to phonological contrast in correspondent consonants. However, in order to claim one feature is more salient than others, it must be empirically tested, often through perception experiments. This may be a direction for further investigation, however, at this point, it stays a pure speculation.

4.5.2.2 Sex revisited

Another problem that remained unsettled regards male speakers acting more advanced compared to female speakers in some cases, which does not match the Labovian gender paradox. For the rusheng merger and historical breathy voice variables, male speakers seem to be the more active adopters of innovative features, which is a serious violation of Labovian gender paradox. Recall that MWC male speakers seem to be more aggressive in merging the two tonal registers to the higher one. Although, as stated in 5.2.2, this tendency might by skewed by educational background of the data informants, as male MWC speakers are on average better educated compared to female speakers. We tentatively concluded that it might not yet have a social

component due to people's unawareness of the difference. However, both for rusheng and voice quality variable, there might be an alternative explanation.

In his dissertation work, Hefferman (2007) proposes that, some of the contradictory Labovian generalizations regarding leader of changes were resulted from the confusion of "engendered variation" and "non-engendered variation". He also proposes a gender-specific and phonetically concrete model for predicting sound change based on examinations of North American vowels:

- Men tend to lead in mergers
- Women tend to produce more dispersed vowels
- For both sexes, speakers with less dispersed vowel spaces tend to lead in mergers.

The first two generalizations might be rephrased, as men are less attentive to linguistic distinctions and therefore also are less likely to disperse the linguistic distinction; while women favor maintaining or even channeling linguistic distinctiveness. Following this logic, if we consider tones as having their own space similar to vowels, then the rusheng merger is deflating the tonal space of NCG. Similarly discarding the historical breathy voice also means narrowing the gap between breathy and modal (in Putonghua) voice quality. To recap, both variables are a "merger"-like variation. Therefore, according to Hefferman's generalization, it is possible to predict that males might be the active "gap-fillers" as they are typically astute learners of linguistic distinctions.

5.0 CONCLUSION

5.1 SUMMARY OF FINDING

In spite of popularity and well establishmed quantitative methods in studies of variation, rarely has it been applied to Chinese languages. No previous study has addressed the variation in Nanchang Gan. This study also contributes to a line of research that has recently come to the forefront of sociolinguistic work: the contact between regional varieties of national standard language.

To achieve these goals, in this paper, variationist methods were integrated into a contact framework to analyze the social factors effecting on sound changes in NCG, the capital city of a Southern underdeveloped province in China. The sample comes from 40 local residents in Nanchang City, who differ in age, sex, education levels, and occupation categories but were born and raised in different neighborhoods (i.e. urban, suburban, and rural area). Three chosen variables in this study including diglossic alternation, rusheng tonal merger, and historical breathy voice across segmental and supersegmental levels, tellingly distinguish this work from the majority of past variationist literature that mainly focused on vowels. Acoustic analyses were performed to extract related information of all three variables respectively.

Hypotheses posited in §3.3.2 regarding each individual variable were not all or fully supported the data either. For diglossic variables ([w] and [f]), the most promising predicator is

locale, that is the novel variant is used presumably by the urban population, while [w] is preserved by rural residents. Unlike diglossic variable, which shows a clear-cut boundary, breathy voice variable does not seem to be available for any social work yet, although more refined measurements are needed to confirm the finding. Examination of the rusheng merger variable turned out to be the most fruitful one. MWC speakers (the group with the highest degree of mobility) lead the merger of the *ru tonemes*, which matches Labov's general prediction of social class. My sample also shows that younger speakers seem to be better preservers of the tonal distinction than the older speakers. It is probably due to a strong peer pressure that younger generations receive. It is also possible that the merging of the ru tonemes take place along with people's socialization (Ochs 1990, 1996), which is a life long process. Additionally, male speakers are more advanced compared to female speakers in merging. This does not accord with Labov's gender paradox, although it is possible that the result is skewed by unevenly distributed data (see §5.2). Despite varying analyses and interpretations in statistical results, diglossic alternation and rusheng mergers are attributed to the outcomes of recent urbanization and individual movement in the society, not only geographically from rural to urban but also on social scale. The recent thriving economy of China has resulted in a more mobile population.

In term of language choice and language use in social domains, the picture we see from the Nanchang case is that the local speech is gradually marginalized and education is an important medium for the process. Inter-generationally, parents nowadays are usually found to keep their children out of NCG-speaking environment and endeavor to provide them a pure linguistic environment in the domestic setting. However, it is worth mentioning that parents' concerns go no further than solely educational ones. Of course, one thing that cannot be overlooked is the fact that there is always a socioeconomic lever behind education. Due to peer

pressure, regardless of their parents' discouragement, children and adolescent youths are, in practice, never "kept away" from the local speech; they would always have their means to pick up NCG. In short, NCG appears to have not been completely deprived of its social space.

I now would like to answer the research questions previously posited. **(1) How does Putonghua impact on the development of regional speech?** Putonghua impacts on the development of NCG stays a correlational or indirect rather than a causal one. In other words, contact does not result in the change *per se*. This is because, on one hand, contact between the standard variety and regional speech in China is not tangible but relies substantially on people' imagination of the correspondent communities (c.f. Montgomery 2008); on the other hand, in lieu of direct influence from the standard language, it should be people's continuously loosened ties to the local speech that foundationally cause the change in NCG. This was demonstrated in both diglossic pair ([w] and [f]) and the rusheng merger variable, as both changes may occur without factoring any social parameters. However, the efforts from the standard language remain eminent: social indexes associating with the Putonghua lead to people's overly enthusiastic practice in this standard language, which trades off the their equal opportunity of communicating local speech. Therefore, my proposal is that contact may accelerate and encourage the change. **(2) Linguistically, are all phonological sub-systems (segmental, suprasegmental) equally sensitive to Putonghua's influence?** So far there seems to be a lack of underpinning empirical support to assert what kinds of features are more sensitive to change. Lastly, **(3) To what degree are these variables involved or available for doing social work?** Socially meaningful information was shown in the analyses of both diglossic alternation and the rusheng merger, however, the breathiness variable seems not to participate in doing social work.

5.2 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Several limitations of this study must be pointed out. Regarding data collection, male speakers are, in general, younger, better educated and hold a more professional occupational position compared to female speakers. Young speakers were largely recruited from non-urban areas (i.e. suburban and rural), while older speakers consist of more urban residents. These uneven distributions in data might skew our statistical results. Furthermore, no speakers over sixty-years-old were recruited. In respect to the data analysis, particularly, for the breathy voice variable, more acoustic correlates need to be measured in order to unveil the nature of the breathy feature. Ideally, intra-speaker comparison between syllables with aspirated initials and unaspirated initials should be performed in further analysis.

The results of this study open several avenues for future research, both theoretically and language-specifically. Although the breathy voice variable does not seem to be informative compared to the other variables, its phonetic property need to be further examined. I only used one acoustic cue (spectral tilt A1-A2) in this study, which is far from sufficient to give a reliable description of the breathy feature in NCG. In further study, I shall firstly recruit more speakers as well as a longer list in order to obtain more tokens. More acoustic correlates (HNR, shimmer, jitter etc.) are to be included in the acoustic analysis.

Johnstone and Kiesling (2008) conduct both production and perception tests, in their inquiry of the social meaning of monophthongization in Pittsburghese. They discover that people who are less sensitive to the difference between the localized variant and mainstream variant are more likely to produce the Pittsburghese (i.e. monophthongized) variant in their own speech. In future investigation, perception experiments are desired to test the saliency hypothesis among the

three tested variables: whether particular features are more noticeable to the native speakers and therefore transferable compared to others; what order of indexicality could certain features be located. This may also contribute to the relative small corpus of study on super/sub-laryngeal variability.

Moreover, although not supported by present data, a new perspective on "engendered variation" that emerged from analyses of breathy phonation may also worth pursuing. It may further sharpen and integrate our current knowledge of sex and gender and their roles in language variation and change and untangling Labov's gender paradox.

Regarding language attitude, it is often reported that NCG sounds "harsh" and "cantankerous" in general. However, to fully understand and pin down the so-called "harshness", a future study focusing on speakers' identities and language attitudes (e.g. a match-guise experiment) towards the local speech and Putonghua would be ideal. Additionally, case study (i.e. ethnographic) might be employed in the future to observe the personal history and the possible trajectory.

Another insight emerged from the analysis is the general issue of mobility and identity construction. "Get out to get on. Move out to move up." The social mobility is particularly salient for the middle class in China as it is thought to be on its way to emerging (He 2006). People relocate from rural and suburban areas to urban areas to obtain better opportunities for their personal development (i.e. education, employment opportunities etc). Putonghua is not only seen as the threshold to these goals, but it is also indexing a detachment from one's earlier life style or social status. This is preliminarily demonstrated in the case study of Shin, a MWC speaker with rural roots, who was found to have abandoned the rural feature ([w]), while keeping others. Mobility could also be considered as a course identity construction through one's life or

the social transformation, a subject that remains untouched in this study. What increases the complexity is that the ever-shifting trait of identity, as it is constantly produced and reproduced in a fluid fashion and only emerge in particular interactions or social settings.

On top of these specific research constructs, however, is the overall body of research on the NCG and Gan languages. The amount of research on Gan, in general, is relatively small, and sociolinguistic research in NCG is almost virtually nonexistent. Even from a purely descriptive perspective, NCG or Gan languages are not well studied.

APPENDIX A

INTERVIEW QUESTIONS

The following questions were rephrased and asked during individual preliminary interviews by the investigator in either NCG or Putonghua, whichever the participant was comfortable with. Some questions may not be suitable for every participant partially because of the non-existence of certain kinships (e.g. 8g). Others may be due to socio-cultural norms (e.g. 8h).

I. Age

II. Sex

III. Occupation

IV. Education

V. Locale

VI. Language background

i. Do you speak NCG or any sub-dialects spoken in neighboring counties)? [20]

a. If yes, do you think you speak it 'authentically'?

b. If not, how did you learn to speak NCG?

c. Do you also speak other Chinese dialect (s)? Which one(s)?

ii. Do your parents speak NCG as well?

a. If no, what are their respective native dialects respectively?

b. If yes, do they speak any additional languages or dialects?

VII. Medium of instruction

[20]Data from participants who fail to identify themselves as native speakers of NCG will be excluded from further analysis.

i. What was the language employed by your teachers in the classroom?
(i.e. elementary school, secondary school, and college)?

ii. If Putonghua was/is used, did/do the teacher sound ‘standard’?
Please describe their accent in detail.

VIII. Language choice

i. Do you think you speak different varieties to different people?

ii. Did you use NCG to talk to your teachers when you were/are in school
(i.e. in elementary school, secondary school, and college)?

iii. Which variety did/do you use when speaking to your classmates
(i.e. elementary school, secondary school, and college)?

iv. Which variety did/do you use when talking to your parents and grandparents?
Do they use the same variety to talk to you?

v. Which variety do you use to talk to your co-workers?

vi. Which variety do you use when talking to your child (-ren)?

vii. Which variety do you use to talk to your grandchildren?
Do you use the same variety to talk to your own children? Why or why not?

viii. Which variety do you use when shopping at the marketplace? Why?

APPENDIX B

STIMULI

IPA Transcriptions of stimuli based on *Dictionary of Nanchang Dialect* (Xiong, 1994)

B.1 WORDLIST

Chinese Character	IPA	Gloss	Chinese Character	IPA	Gloss	Variable
王	[wɔŋ24]	'king'	活$_1$	[wɔʔ2]	'to live'	**Diglossic Alternation**
黄	[wɔŋ24]	'yellow'	滑$_1$	[wɔʔ2]	'be slippery'	
晃	[fɔŋ213]	'swing'				
怕	[pʱa213]	'be afraid of'	铺	[pʱu213]	'to make bed'	**Breathy Voice**
凭	[pʱiaŋ24]	'depend on'	披	[pʱi42]	'to wrap around'	
批	[pʱi42]	batch	他	[tʱa42]	'3rd singular Pronoun'	
停	[tʱiaŋ35]	'to stop'	弟	[tʱi213]	'younger brother'	
地	[tʱi213]	'ground'	土	[tʱu213]	'earth'	
掐	[kʱa42]	'to clutch'	哭	[kʰuʔ5]	'to cry'	
亲	[tʱin42]	'be close'	近	[tɕʱin213]	'be near'	
妻	[tɕʱi42]	'wife'	车	[tsʱa42]	'car'	
醋	[tsʱu213]	'vinegar'	粗	[tsʱu42]	'thick and wide'	
八	[pʱaʔ5]	'eight'	力	[liʔ5]	'cry'	**Rùshēng tonal Merger**
[taʔ^2]~$_{\text{(bound morpheme)}}$		'very'	读	[tʱuʔ2]	'to read'	
活$_2$	[uɔʔ2]	'to live'	滑$_2$	[uaʔ2]	'slippery'	
辣	[laʔ2]	'spicy'	别	[pʱieʔ2]	'other'	
十	[ɕiʔ2]	'ten'	石	[saʔ2]	'stone'	
白	[pʱaʔ2]	'white'				
把	[pa213]	'take'	杯	[pi42]	'cup'	**Fillers**
打	[ta213]	'to beat'	赌	[tu213]	'to gamble'	
水	[ɕy213]	'water'	渣	[tsa42]	'dregs'	
租	[tsu42]	'to rent'	做	[tsu24]	'to do'	
家	[ka42]	'home'	姑	[ku42]	'aunt'	
鸡	[tɕi42]	'chicken'	今	[tɕin42]	'today'	
林	[lin24]	'forest'	良	[ljɔŋ35]	'good'	

B.2 SUPPLEMENTARY STIMULUS: *ZAO MEI SHI*

早　梅　诗

zau^{213} mi^{35} si^{42}

东　风　破　早　梅，

tɔŋ42 fuŋ42 pʱɔ213 zau213 mi35

向　暖　一　枝　开。

tɕʱiɔŋ35 luan213 itʔ5 tsi42 kai42

冰　雪　无　人　见，

pin42 ɕyot5 mau213 ɳin24 tɕian24

春　从　天　上　来。

tsʱən42 tsʱɔŋ24 tʱian42 sɔŋ213 lai35

Translation:

Poem of Early Plum Blossom

Eastern wind brings forward the blossom of plum flowers;
They open to the warmth.
The ice thawed without being noticed;
And there comes the spring!

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