

The influence of Mandarin Chinese on minority languages in rural southwest China: a sociolinguistic study of tones in contact

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Abstract

Language change is often traced to language contact, but the specific sociolinguistic processes are not fully understood. This article reports on our field research of contact between Chinese and two minority languages in rural southwest China: Sui and Qiang. The study shows how lexical tone, an under-represented variable in sociolinguistics, can be valuable as an empirical measure of language contact and change. Furthermore, we find that it is the same Chinese tone, a high tone in Southwest Mandarin, which is affecting the phonologies of both of these disparate minority languages. We use a social constructionist approach to model these changes: the “Structure” of a language is dialectically constructed by individual moments of speech — “Events” — which are in turn influenced by Structure. From this perspective, each individual use of a high-tone Chinese word is constructing and changing Sui and Qiang. Tone therefore provides an audible gauge of cross-cultural contact, reflecting and constructing the rapidly changing sociolinguistic landscape of rural southwest China.

Keywords: Language contact; tone; minority languages; Sui; Qiang.

1. Introduction

The role of language contact is commonly noted in language change, but the social and linguistic complexity of such situations raises many questions about the specific processes involved. Thomason and Kaufman stress the importance of social factors, while also recognizing the secondary role of linguistic factors (1988: 212–213). With a similar sociolinguistic perspective in mind, we investigate contact between Chinese and two minority languages in southwest China. We find that a social constructionist model aids in understanding the pattern of such changes, i.e., “Structure” is dialectically constructed by

individual moments of speech — “Events” — which are in turn influenced by Structure (e.g., Ricoeur 1978: 114–116; Giddens 1979: 24; Berger and Luckmann 1967; Gergen 1994 *inter alia*). Such a perspective is foundational for many contemporary sociolinguistic studies. But what happens when different Structures come into contact? That is, what happens when an individual’s agentive Events are under the competing influence of two different Structures? How exactly do different elements of linguistic Structure change in the context of social contact, and what types of social and linguistic factors are involved?

To answer these questions in a practical way, our study puts the spotlight on one particular element of linguistic structure: lexical tone. In comparison to other variables, tone is significantly underrepresented as a sociolinguistic variable. This is unfortunate since tone plays a crucial structural role in the majority of the world’s languages; perhaps 70% of all languages have lexical tone, according to Yip (2002). A great amount of prior work has focused on tonogenesis and historical/comparative aspects of tone in areal linguistics (e.g., Matisoff 1970; Edmondson and Solnit 1988; Thurgood 2002; Kang 2009; Hyslop 2009 *inter alia*). However, considerably less is known about the social aspects of tones in contact, as sociolinguists have more commonly focused on segmental variation. Previous research has shown the importance of the sociolinguistics of tone in Beijing Chinese dialects (Zhang 2005) and Sui dialects (Stanford 2008a). The present study, then, takes another step into the sociolinguistics of tone by investigating the influence of Chinese tones in contact with minority languages in southwest China. We use an interdisciplinary approach — cross-pollinating phonology with the sociology of language — in order to gain a greater understanding of the social meaning of tones in contact.

Specifically, we report on our fieldwork among two ethnic minorities in rural regions of southwest China: Sui (Shui) speakers of Guizhou province and Mianchi Qiang speakers of Sichuan province. While Chinese speakers have had some influence on the languages of these indigenous minority communities for centuries, the current generation of minority language speakers has come into sharply increased contact with Chinese in recent decades as a result of improving transportation, increases in Han Chinese speakers in minority regions, greater use of Putonghua (Modern Standard Chinese) in education, and migrant labor opportunities in Han Chinese cities.

In our field research we find clear evidence that Chinese is influencing minority languages at multiple levels. Naturally, this influence may be observed in borrowed words among the classic domains of education, government, commerce, technology, medicine and others. However, looking at a deeper level in these languages, we also find structural influence in tone. Furthermore, we find that it is the same Chinese tone, a high tone in Southwest Mandarin (SW Man-

darin), which is affecting the phonology of these two disparate ethnolinguistic groups. For both Sui and Qiang, we find that recent SW Mandarin loanwords containing the high tone feature (H) are having an ever-increasing influence in the indigenous tone systems, even as other Chinese tone features have fewer direct effects. In this way, two minority languages that are genetically, geographically, and typologically far removed from each other are showing similar contact effects with respect to a particular Chinese tone feature.

Therefore, building from a social constructionist viewpoint and the dialectic of Structure and Event, our sociolinguistic tone research provides an empirical linguistic way to show the effects of social contact. Intergroup contact plays a major role in reflecting and constructing languages and cultures, and tone is an empirical sign of these processes. In this paper, we describe and analyze these tone effects in terms of contemporary contact between Han Chinese and minorities in the rapidly changing countryside of southwest China. The paper is organized as follows: Section 2 provides background about our theoretical framework. In Section 3 we describe the sociolinguistic background and current social setting of Sui and Qiang. In Section 4 we explore the specific structural effects of Chinese tonal contact with these two languages. Our analysis and conclusion are provided in Sections 5 and 6.

2. Theoretical background

2.1. A social constructionist framework

This study uses a practice-based, social constructionist framework (e.g., Berger and Luckmann 1967; Gergen 1994; Giddens 1979; Ricoeur 1978; Street 1993 *inter alia*) to investigate the influence of Chinese contact on Sui and Qiang. Drawing from George Herbert Mead's emphasis on social interaction between individuals (e.g., 1974 [1936]), this approach focuses on the way in which the human social world is being dynamically constructed by the agentive acts of individuals (e.g., Berger and Luckmann 1967: 189). In turn, the individuals themselves are being influenced by the world they are constructing. To take an example from a linguistic perspective, when an individual uses language in everyday, moment-to-moment interactions, each such instance of speaking is an "Event". Added together, these momentary Events are continually constructing and maintaining the grammar and lexicon, i.e., the perceived "Structure" of that language, which in turn influences speakers' choices as they use the language in discourse. Structure and Event are therefore in a mutually-influencing, dialectical relationship (Ricoeur 1978; Giddens 1979). From this perspective, language is "neither structure nor event, but the incessant conversion of one into the other in discourse" (Ricoeur 1978: 116).

2.2. *Language contact*

We find that this social constructionist approach provides a helpful perspective for language contact. After all, language contact implies dynamism and change, and this is exactly what this approach emphasizes. While it may be useful to idealize a grammar as a static system for certain other analytical contexts, for language contact it is better to view the Structure of a language as being continually produced and reproduced by Events: Individual speakers are using language to accomplish their individual goals in social interaction. As a speaker borrows a word from another language to accomplish an individual goal at a particular moment, each such Event influences Structure. Contact between two language systems is therefore viewed as a matter of individuals agentively using language in individual Events.

From one point of view, language contact involves questions about the degree of “overlap of systems” (Matras 2009: 226), and questions about which components are more or less resistant to change as language systems come into contact. In particular, vocabulary is usually less stable and less resistant to change than phonology, morphology or syntax (van Coetsem 1988, cited in Winford 2007: 26). But from another point of view, each loanword Event contributes toward gradual, accumulating changes in the perceived Structure of a language, including the phonological structure of tone languages. For Sui and Qiang in contact with Chinese tones, we find that this social constructionist perspective provides meaningful insights: the ever-increasing Events of loanwords from Southwest Mandarin are gradually but significantly influencing the tonal Structure of Sui and Qiang. And from a wider perspective, our linguistic observations in this article correspond to large-scale sociocultural shifts, namely, the increasing influence of Han Chinese in minority regions of southwest China. In this way, our tone analysis is a window into the cross-cultural negotiation of language and identity, where “identities emerge in practice, through combined effects of structure and agency” (Bucholtz 1999: 209).

3. **The sociolinguistic setting of Sui and Qiang**

3.1. *Sui*

The Sui language (Chinese: 水 *shuǐ* for the autonym [sui])¹ is spoken by approximately 300,000 people from an overall ethnic population of about 400,000 (Bradley 2007: 179; Lewis 2009). The Sui people are primarily found in southwestern China in the province of Guizhou. The majority of Sui speakers live in Qiannan Prefecture, and the Sui cultural and linguistic center is considered to

be Sandu Sui Autonomous County. Sui is a tonal, largely monosyllabic Tai-Kadai language (Li 1948, 1965; Zhang 1980; Wei and Edmondson 2008; Stanford 2007, 2008a, 2008b, 2009).

The Sui linguistic data and cultural observations in this paper are based on the first author's four years of field experience living in Guizhou, learning the Sui language from Sui people and visiting their villages, and subsequent return trips to Guizhou for research. In rural areas, Sui people maintain distinctive customs, such as the Sui New Year festival *twa*, copper drums, and ceremonies using ritualistic Sui symbols. Sui women typically wear colorful Sui clothing, both in everyday life as well as for festivals and market days. Most rural Sui men wear the clothing of Han Chinese farmers. There is a strong sense of Sui cultural identity in rural villages, and language is viewed as a crucial part of that identity: Sui is the language spoken in villages in the absence of outsiders. Sui-Chinese bilingualism falls along lines of gender and age. Older Sui women are often mostly monolingual in Sui, while men and most younger speakers are bilingual. Besides the limited use of shamanistic Sui symbols, almost all written communication is conducted in Chinese, despite some efforts to promote a Roman alphabet orthography (Zhou 2003: 133–136; Zeng and Yao 1996: 262).

The language continues to be actively transmitted to the younger generation as rural children are raised speaking Sui. Local elementary school teachers speak Sui to children for the first few years, and then shift to Putonghua as a classroom language around fourth grade. Since children continue to learn Sui naturally as they grow up in these village environments, there is a sense in rural areas that the Sui language is robust. However, Sui informants recognize that their language is gradually being lost in families that move to a city for long-term employment, especially in cases of mixed marriage.

Once isolated by mountains and limited transportation and communication, Sui contact with the Chinese language has increased significantly in recent decades, naturally following improvements in transportation, education, and communication, as well as Sui migrant laborers' trips to Chinese-speaking coastal cities. In all of these activities, Chinese is gaining greater and greater sociolinguistic influence in Sui areas.

3.2. *Qiang*

The Qiang language (or group of dialects) is spoken by about 110,000 people out of a population of about 250,000 members of the Qiang (羌 *qiāng*) nationality in Aba Qiang and Tibetan Autonomous Prefecture, Sichuan, as well as by Tibetans in Heishui County. Qiang is a member of the Qiangic branch of the Tibeto-Burman language family. The linguistic and cultural observations

relating to the Qiang people and their language are based on the firsthand observations of the second author, except where noted.

Traditionally, those who share the Qiang language and customs did not consider themselves to comprise a larger group beyond their own village, but referred to the Qiang speakers living upriver as “Tibetan” and those downriver as “Han Chinese”. The development of a Qiang self-identity over recent decades has been documented by Wang (1999). There does not appear to have ever been a native orthography for Qiang. In the 1980s, a Romanized writing system was developed for the Qiang language (Zhou 2003: 145–147), and is being taught to Qiang-speaking schoolteachers. Due to divergence among dialects, these materials are only useful to speakers of the Northern dialects, and do not appear to be in use beyond the first grade. In villages such as Mianchi (a Southern Qiang speaking area in Wenchuan county), primary school is taught in Putonghua or SW Mandarin, with Qiang explanations given when students do not understand. Most villages have electricity and therefore access to Chinese audio-visual media.

The Qiang language is maintained in Qiang villages that are not within easy walking distance of towns and cities. Even those villages that are more distant demonstrate intense borrowing effects, e.g., SW Mandarin numerals. It appears that close to 100% of Qiang speakers are bilingual in SW Mandarin, with the possible exception of some older women.

The effects of present-day contact with the Chinese language are evident from fieldwork observations in Qiang areas. For example, during fieldwork in one southern Qiang village, some Qiang parents explained that they wanted to raise their children monolingually in Chinese to improve their chances of success in school. Migratory labor is having an effect as well. Villages now tend to be largely empty of young adults, who have found more lucrative work elsewhere. Furthermore, Qiang villages have become much more accessible in recent decades. In the past, villages were often built high on hillside locations that afforded better protection but much less convenience in terms of transportation and communication. In many places, newer villages are now built closer to the valley floor, while higher villages have been abandoned. In some of these villages, a person can simply cross a bridge to reach markets, buses, and other connections to non-Qiang areas.

These social changes and the concomitant increasing amount of Chinese-Qiang language contact apparently began within the last half-century. Graham (1958) claims that, as of the 1940s, there was no Qiang-speaking village accessible by wheeled vehicle. As of 1950, Qiang young men from the Northern Qiang-speaking village of Hongyan were not able to conduct basic market transactions without a translator. There has been some amount of Han Chinese-Qiang contact for at least 1700 years, as a Han Chinese garrison and walled city were constructed in Wenchuan during the Three Kingdoms period

(220–280 CE). However, it is clear that dramatic social changes have been occurring in the past few decades, and we are therefore seeing a new stage of intense and increasing contact between Han Chinese and rural ethnic minorities. Naturally, this increasing social contact is reflected and constructed in language change, and we discuss such changes in the remainder of the paper.

4. The structural effects of contact with Chinese

Despite the starkly different genesis and typology of the two languages, we find that both Sui and Qiang are being influenced by the same high (H) tone feature of SW Mandarin. In the following, we examine the tone systems of Sui and Qiang and investigate the role of this SW Mandarin H tone in each language.

4.1. Sui in contact with Chinese

This study focuses on the Sandong dialect of Sui spoken in central parts of Sandu Sui Autonomous County, Guizhou Province (Zhang 1980). Within this major dialect region, additional variation is observed at the level of township and village, including tone variation. All Sui dialects regularly use a high level tone in recent SW Mandarin Tone 3 loanwords. For example, the first syllable of the Chinese word *lǎoshī* 老师 ‘teacher’ is borrowed into Sui with an H tone, even though many Sui dialects do not have that high level tone. Therefore, as a frequent, integrated part of daily language use, H is arguably changing the tone Structure of those Sui dialects: They now have an H in common daily speech. Daily speech Events are reflecting and constructing Han Chinese-Sui contact through language use.

The native tone system of Sui consists of six tones in unchecked syllables (*Shuiyu Diaocha Baogao* 1956; Zhang 1980; Li 1948; Edmondson et al. 2004). Significant variation is found in Sui tones. In the present study, the main Sandong dialect of Sandu County is divided into three general regions: “North”, “Midland” and “South”. Representative phonemic charts are given in Table 1 and Table 2, using a five-pitch range of auditory differences where 5 = high

Table 1. *Southern tones as found in southern regions of Sandu County, including Sandong township, Jiuqian township and also Libo County**

| Tone 1 | Tone 2 | Tone 3 | Tone 4 | Tone 5 | Tone 6 |
|--------|--------|--------|--------|--------|--------|
| 13 | 31 | 33 | 53 | 35 | 55 |

* From *Shuiyu Diaocha Baogao* 1956: 23; Zeng and Yao 1996: 269; Li 1948.

Table 2. *Northern/Midland tones as found in Shuilong, Zhonghe, Hengfeng township, and other north-central regions of Sandu County**

| Tone 1 | Tone 2 | Tone 3 | Tone 4 | Tone 5 | Tone 6 |
|--------|--------|--------|--------|--------|---------|
| 13 | 31 | 33 | 53 | 35 | 24/55** |

* From *Shuiyu Diaocha Baogao* 1956: 23.

** Tone 6 is 24 in native words and 55 in recent loans of SW Mandarin Tone 3 words.

and 1 = low (Chao 1930). For example, “13” is a low rising tone, while “55” is high level tone.

As Tables 1 and 2 show, Tone 6 shows significant variation across these regions. In Sandong Township and other regions to the south, Tone 6 is 55. However, in many other regions, Tone 6 is a low-rising 24 for native Sui words and 55 for all recent loanwords from local SW Mandarin Tone 3. In addition, as explained below, recent research has found that Tone 1 is a low falling tone in some regions (Stanford 2008a; Edmondson et al. 2004).

Figure 1 shows Stanford’s (2008a) analysis of the tone system in one dialect region: the southern part of Sandu County, centered around Sandong Township.² Notice that this region has a very high Tone 6, i.e., this region has an H in its native tone inventory. Now consider the dialect variation in Tone 6. Figure 2 illustrates the contrast in Tone 6 across different regions. The Midland and North regions have low Tone 6 pitches, while Tone 6 is dramatically higher in the South: an H tone. The Midland and North regions do not have this type of H tone in their native tone inventories.

Figure 3 shows that Tone 1 also has significant regional differences, but they are far more subtle than the differences in Tone 6. In the southern region, Tone 1 is low and rising. In the northern region, Tone 1 is low and mainly falling. In this way, Figures 2 and 3 illustrate why Sui speakers perceive the regional differences in Tone 6 to be salient, whereas Tone 1 differences are much more subtle and below the level of conscious awareness of most speakers.

It is not surprising, then, that Sui speakers often use Tone 6 words when imitating each other’s dialects. In their metalinguistic commentary about dialect differences, Sui respondents do not mention Tone 1 words when discussing tonal differences, even though they frequently mention Tone 6 words. This suggests that Tone 1 should be analyzed as a *first-order indexical* in Silverstein’s schema (Silverstein 2003; cf. Johnstone et al. 2006: 82–84) because speakers are not consciously aware of the dialect distinctions in Tone 1, and they do not agentively use Tone 1 to imitate other speakers or accomplish other creative social goals. In Labov’s terms, Tone 1 is an *indicator* since it has “little evaluative force” (1972: 314). By contrast, Sui speakers are consciously aware of the distinctions in Tone 6 words. Tone 6 words are a topic of overt comment, a salient “sore thumb” dialect feature that is often used in performance speech.

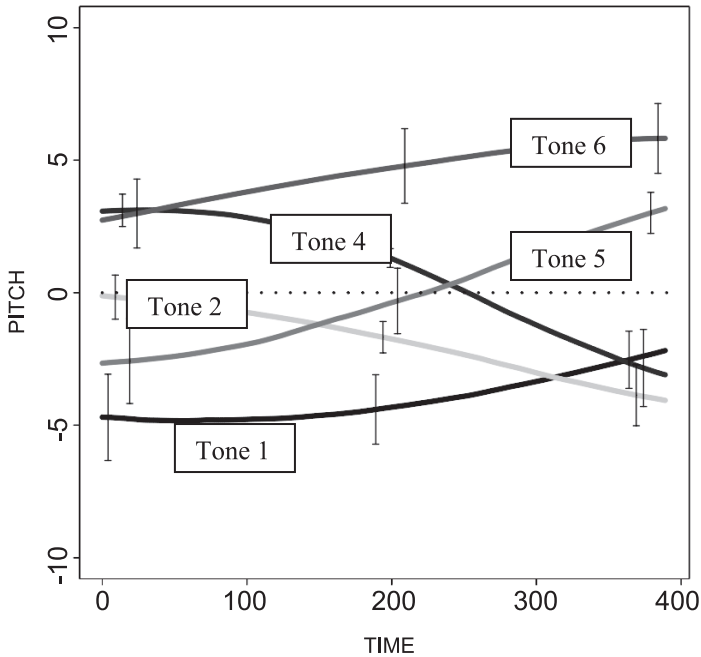


Figure 1. *Tones of Sui speakers in the southern region (from Stanford 2008a). 8 speakers, 765 tokens. Normalized for pitch and time. The pitch tracks represent the mean of all tokens for each tone, plotted in semitones, where level Tone 3 is normalized to 0.0 on the scale (represented by the dotted line).*

For example, since Tone 6 is associated with the Pan-surnamed speakers in the region around the township of Sandong,³ speakers of other dialects imitate the Pan surname region by pronouncing Tone 6 words.

In Example (1), two Sui women discuss each other's dialect features (the conversation is translated from Sui to English). Notice that tone is the dialect feature that they are discussing indirectly through their use of words that bear Tone 6:

- (1) Person A: *Our region says* “*tsau*²⁴ *tsu*²⁴ *tsie*¹ *au*⁴”
 pair chopsticks eat rice
 ‘A pair of chopsticks for eating rice’
 . . . *Her region says* [imitating Person B]
 “*tsau*⁵⁵ *tsu*⁵⁵ *tsie*¹ *au*⁴”
 pair chopsticks eat rice
 Interviewer: [Addressing Person B] *Did she say it right?*
 Person B: *Yes.*

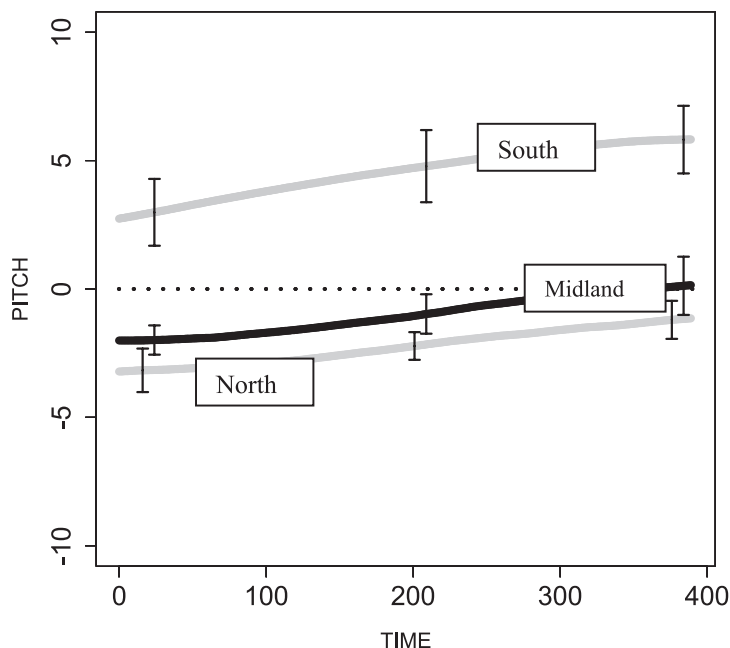


Figure 2. *Tone 6 in three different regions. The pitch tracks represent the mean of all tokens for each region. Normalized for pitch and time. Plotted in semitones. Level Tone 3 is normalized to 0.0 on the scale (22 speakers, 366 tokens).*

Interviewer: *What does her region say?*

Person B: *Her region? Her region says “tsau²⁴ tsu²⁴ tsie¹ au⁴”. Our region says “tsau⁵⁵ tsu⁵⁵ tsie¹ au⁴”.*

Interviewer: [to Person A] *Did she speak your dialect correctly?*

Person A: *Yes <laugh> . . . We know each other’s [speech].*

The following words are most often invoked when asking speakers to freely imitate the southern region: *ja*⁶ (‘like, this’), *nai*⁶ (‘this, here’), and *ju*² (1st Singular). In addition, there is an idiomatic expression *ja*⁶-*ju*² which serves as a stereotype of the south region. Literally, it simply means ‘like this, I’, but there is no referential meaning when used to perform the south region.

Therefore, although speakers do not express conscious awareness of the tone system, they frequently choose Tone 6 words when imitating each other’s dialect. Tone 6 has clearly moved beyond a first-order indexical. It is “socially marked, prominently labeled by society” Labov (1972: 314). Sui speakers are able to agentively use the socially stereotyped Tone 6 to accomplish creative social work. They perform Tone 6 in the same way that American English speakers imitate Southerners by performing the distinctive Southern

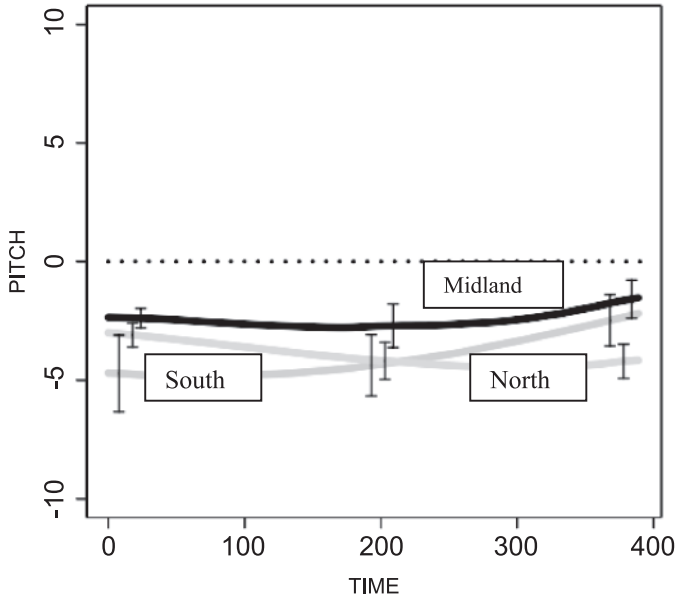


Figure 3. *Tone 1 for three different regions. The pitch tracks represent the mean of all tokens for each region. Normalized for pitch and time. Plotted in semitones, where level Tone 3 is normalized to 0.0 on the scale (22 speakers, 497 tokens).*

Vowel Shift or stereotyped lexical items like *y'all*. Sui speakers in northern and midland areas often invoke the high Tone 6 when playfully imitating speakers of the southern region, yet the non-southern speakers actually also have this H in their own Sui dialects as a result of Chinese loans, as discussed below.

4.1.1. *The role of Tone 6 in Sui-Chinese contact.* In contact with SW Mandarin, the H tone is the only tone that causes a significant “disruption” to the Sui tone system, as seen in our fieldwork as well as the tone charts in *Shuiyu Diaocha Baogao* (1956), Zhang (1980) *inter alia*. In loanwords, all other SW Mandarin tones are naturally integrated into the native Sui system. Examples showing the correspondence between SW Mandarin tones and the tones of Sui are given in Table 3. Of course, since the contact is occurring between Sui and local Chinese, the loanwords match the tone system of the local SW Mandarin dialect. (More examples are shown here for Tone 3 than the other tones since it is the main tone that affects Sui.)

Among the correspondences in Table 3, we note that only the Putonghua Tone 3 is inconsistent with any native Sui tones; it is borrowed from local SW Mandarin into Sui as a high 55 tone. Recall Table 2, which shows that native

Table 3. *Tone correspondences between Putonghua, Sui and SW Mandarin as spoken in Sandu Sui Autonomous County (southeastern Guizhou Province)*

| Putonghua (using Chinese characters and standard Romanized notation with contour tones) | Sui and the SW Mandarin dialect in Sandu Sui County (using the standard superscripted Sui tone numbers of Table 1 and Table 2) |
|---|---|
| Tone 1: 医院 <i>yīyuàn</i> ‘hospital’ | [ji ³ wiən ¹] |
| Tone 2: 银行 <i>yínháng</i> ‘bank’ | [jin ⁴ ha:ŋ ⁴] |
| Tone 3: 考试 <i>kǎoshì</i> ‘test’ | [k ^h a:u ⁶ su ³] (55 value for Tone 6) |
| 水库 <i>shuǐkù</i> ‘reservoir’ | [sui ⁶ k ^h u ¹] (55 value for Tone 6) |
| 电筒 <i>diàntǒng</i> ‘flashlight’ | [tiən ¹ t ^h oŋ ⁶] (55 value for Tone 6) |
| 老师 <i>lǎoshī</i> ‘teacher’ | [la:u ⁶ su ³] (55 value for Tone 6) |
| Tone 4: 电话 <i>diànhuà</i> ‘telephone’ | [tiən ¹ fa ¹] |

Tone 6 words in northern and midland Sui dialects have a value of 24. There is no native 55 tone (H) in those dialects.

Historical/comparative evidence is inconclusive about whether 55 or 24 is earlier (Li 1965; Edmondson and Solnit 1988), but the 55/24 tonological split in Tone 6 must have occurred before the recent period of contact: The 1956 fieldwork of *Shuiyu Diaocha Baogao* shows the same 55/24 regional split in Tone 6, with 55 in the northern region being limited to Chinese loans in 1956, just as it is now. Recalling the model of Event and Structure, it is clear that the H tone’s influence on the structure of these Sui dialects is increasing in conjunction with the dramatic increase in Han Chinese-Sui contact in recent decades. More and more H tone Events are occurring, both in terms of type and tokens.

4.1.2. *Structure or mixing?* As Fasold (1984) points out, it is not always a simple matter to determine whether a speaker has mixed in a foreign word or whether that word should be considered a fully integrated part of the native language. As we have seen, Sui speakers frequently use H for Chinese words like 老师 *lǎoshī* ‘teacher’, even in the northern and midland Sui dialects that do not have native H. Can that behavior be simply regarded as momentary code-mixing which doesn’t affect the overall structure of the language? We suggest that such an analysis would lead to a false dichotomy of “pure” native-language structure versus code-mixing. After all, every Event is a part of language. When a speaker uses a “foreign” word, that individual Event is a part of the Structure-Event dialectic, regardless of the word’s origin. Therefore, these multiple Events of common borrowings like *lǎoshī* are influencing the Sui Structure. The H tone has become a part of the language in practice. In this way, Structure is being influenced by Event, and the specific aspect of Structure being influenced is tone. While a strict dichotomy of loan versus mixing

may be theoretically valuable elsewhere, in our case where one language community is socio-politically dominant and the other language community is undergoing extensive domain invasion, a practice-based perspective is more descriptively accurate.

The dichotomous perspective, i.e., “linguistic isolationism” as Bucholtz calls it (2003), proves unrealistic in the case of minority languages in contact with a majority language like Chinese. Such an approach would require that the researcher assume that “the most authentic speaker belongs to a well-defined, static, and relatively homogeneous social grouping that is closed to the outside” (Bucholtz 2003: 404). Clearly, this is not the case for Sui and Qiang. Instead, following Bucholtz’s notion of “authentication”, we find that those Sui dialects which do not have native H (such as Midland and North, as described above), are nonetheless gaining an H through practice: SW Mandarin loanwords. As Bucholtz describes it, authentication is “the outcome of constantly negotiated social practices” (2003: 408). For these northern and midland Sui dialects, the practice-based perspective foregrounds the fact that Structure is indeed being affected: H is being used for all Chinese Tone 3 loans in the ever-increasing domains of education, government, technology, modern commerce, and others.

4.2. *Mianchi Qiang in contact with Chinese*

We now turn to Sichuan Province to see how the SW Mandarin H tone behaves as Chinese comes into contact with Qiang.

4.2.1. *Qiang dialects.* The Qiang language is generally divided into two groups of dialects, Northern and Southern Qiang (henceforth NQ, SQ). The principal typological division between NQ and SQ is that of the presence of lexical tone in SQ, and its absence in NQ (Sun 1981). Grouping/division along morphological lines also validates this north/south division (Evans 2004). The present study focuses on the effect of SW Mandarin on the Mianchi dialect of Southern Qiang, although similar effects may be observed in other SQ varieties, such as Taoping and Longxi. SQ native lexical items developed tone under the influence of Chinese. By contrast, NQ dialects, which are generally more phonologically conservative than SQ, lack lexical tone contrasts, with the possible exception of a few pairs of words in certain dialects (Qugu dialect: Huang and Zhou 2006; Hongyan dialect: Evans 2006). It is suspected that in the few documented cases, NQ pitch changes are secondary to vowel length or some other segmental effect.

SQ dialects, in which lexical tones are present, have more lexical borrowings from Chinese than are found in NQ (Liu 1998). In other phonological

aspects SQ also resembles Chinese more than does NQ. For example, while NQ dialects tend to contain about 70 initial consonant clusters, SQ varieties tend to have only two to three. The principal lexical tones of Mianchi Qiang are the H tone, characterized here with an acute accent (á), and the L tone, characterized with a grave accent (à). The language also has a low-rising tone (ǎ).⁴ In the lexicon, L tones occur about twice as often as H. In NQ, all sounds that can occur as initial consonants can also occur in word-final position, while in SQ, there are only nasal finals, as in SW Mandarin. In addition, some SQ varieties lack a phonological distinction between velar and uvular consonants, while this distinction is maintained across NQ, unlike SW Mandarin.

Tone in SQ is an innovation, but it predates the 20th century, as the earliest detailed descriptions of SQ indicate the presence of tone across SQ dialects in the 1930s and 40s (Wen 1943, 1945, 1950; Wen and Fu 1943). It appears that the development of tone in SQ happened in rough stages. First, contact with the local Chinese language led to a reinterpretation of lexical stress (still present across NQ varieties) as an H tone that occurred no more than one time in a word, just as there is not more than one syllable with maximum stress in a word. In Mianchi Qiang, the limit of one H per phonological word is still in place on native words; e.g., /tí/ ‘bear’ + /χuá/ ‘thin’ > [tí-χuà] ‘thin bear’. Finally, subsequent to the development of H and L as lexical tones in SQ, contour tones developed from initial sonorant clusters (see Evans 2001).

4.2.2. *Contact-induced violations of the “one-H-per-word” rule in Qiang* In modern Mianchi Qiang, we observe that continued contact with Chinese is leading to an erosion of the one-H-per-word limit, and this contact-induced development plays an important role in our sociolinguistic analysis. This change happens as local SW Mandarin words with more than one H are borrowed into Qiang. According to Yang (1984) and Chao (1968), the Middle Chinese tone categories are reflected in Putonghua and the local SW Mandarin (Wenchuan County SW Mandarin). See Table 4.

Table 4. *Corresponding tones in Middle Chinese, Wenchuan County SW Mandarin, and Putonghua**

| Middle Chinese tones | Wenchuan County SW Mandarin tone values | Putonghua tone values | Putonghua tone numbers |
|----------------------|---|---|---|
| Yinping 阴平 | 55 (H) | 55 | 1 |
| Yangping 阳平 | 31 | 35 | 2 |
| Shang 上 | 42 (H) | 214 | 3 |
| Qu 去 | 13 | 51 | 4 |
| Ru 入 | 44 (H) | Occurs as 55, 35 or 214 in different words | Occurs as 2, 3 or 4 in different words |

* “H” indicates that words with this tone are borrowed into Mianchi Qiang as H.

Table 5. Examples of words that break the native Qiang “one-H-per-word” rule

| Qiang and local SW Mandarin | Putonghua | Gloss |
|-----------------------------|-----------------|-------------|
| tsú cén zèn | zǔ xiān rén 祖先人 | ‘ancestor’ |
| kóu kóu | gōu 钩 | ‘hook’ |
| tǐj tǐj mé- | qīng tīng 蜻蜓 | ‘dragonfly’ |
| ŋǐj kē- | yīng gē 鹦哥 | ‘parrot’ |

From Table 4, it can be seen that a number of Wenchuan SW Mandarin tones have a high component (tone value 4 or 5). As a result, it is not only words that correspond to Putonghua Tone 3 (*Shang* 上) that are borrowed with H. *Yinping* 阴平 (Tone 1) words surface with H tone in both Wenchuan SW Mandarin and Putonghua.

Table 5 shows examples of Putonghua Tone 3 and Tone 1 words that have been borrowed from Wenchuan SW Mandarin into Mianchi Qiang with two H tones, thus violating the “one-H-per-word” rule of native Qiang.

Moreover, in some cases, native vocabulary is being replaced directly by words with two H tones, and this process sometimes goes beyond the correspondences of Table 4. For example, *te^hwei te^hwei* ‘hammer’ is pronounced both in Wenchuan SW Mandarin and in Mianchi Qiang with two H tones, although it is a Putonghua Tone 2 word and therefore not a member of the main class of H correspondences in Table 4. Borrowing of this word has replaced the native Qiang *tuà liù*, which only one speaker was able to recall without prompting. This replacement of a native form with a borrowed one indicates that speakers are losing a sense of the “foreign-ness” of words with more than one H. In fact, given the pervasive nature of SW Mandarin, there does not appear to be any stigma in using such borrowed lexical items. The historical lack of a strong Qiang ethnic identity (Wang 1999), the increasing influence of Han Chinese culture, and perhaps the lack of a Qiang written tradition may underlie this apparent ease in accepting Chinese loans.

5. Analysis

5.1. Increasing non-native Events and their effect on Structure

Thomason and Kaufman point out that language shift “is a social fact with linguistic implications. Linguistic factors do influence the linguistic outcome of a contact situation, but only secondarily. . . . No case of contact-induced language change . . . can be adequately explained without attention to

sociolinguistic context” (1988: 212–213). Likewise, in this study we find that both social and linguistic factors are crucial. The amount of Han Chinese contact in rural southwestern minority areas like Sui and Qiang has increased in recent decades, and tone is clearly a locus of change. Furthermore, we note that these changes have led to an increase in complexity; the H tone is being used in ways that complicate the native systems (cf. Thomason and Kaufman 1988: 29).

However, going beyond such classic observations of language contact, we take the additional step of viewing this Chinese context from a social constructionist perspective. For both Sui and Qiang, H tones from Chinese loans have been affecting the native tonology for generations; the Chinese H tone began producing a “crack” in the wall of the native tone system long ago. However, the effects of that crack have dramatically increased in recent decades due to sharp shifts in society, namely, increasing cross-cultural contact between Chinese speakers and minorities in rural areas. The tone changes began long ago historically, but now in recent decades these “intrusions” are suddenly increasing in daily speech.

For Sui, the pattern of using high Tone 6 (value 55) for borrowed words with the SW Mandarin H tone has been in place for generations. However, the effects on Structure have been increasing dramatically in recent decades as the number of loanwords and their domains of usage have increased in this modern era of Han Chinese contact. For example, the Chinese phrase 上网 *shàng wǎng* ‘to use the Internet’ obviously did not exist until recently. Yet when modern Sui speakers pronounce this word as [sjaŋ¹ waŋ⁶] with high Tone 6, i.e., when they borrow the local SW Mandarin version of that word with its high-level tone on *wang* (recall the Tone 6 words in Table 3), all such individual Events of speech are affecting the Structure of Sui at an ever-increasing rate and intensity. As we have seen, northern and midland Sui dialects do not have a native high-level tone. Therefore, for each token of that high Tone 6, the Structure is affected. Of course, such Events influence the lexicon, but we suggest that the phonological Structure is also being influenced: The tone Structure is being affected by each loanword Event, and this in turn reflects and constructs the ongoing cultural change of increasing Han Chinese-Sui contact.

Likewise, the individual Events of using modern loanwords in Mianchi Qiang are increasing in number and domains. Recent loans include Chinese *gōngsī* 公司 being borrowed into Qiang as /kónsǐ-qà/ ‘large store/supermarket’ (*qà* is a native Qiang locative). As discussed above, such a borrowing has two H tones and therefore breaks the native Qiang rule that requires only one H per word. This borrowing is clearly quite recent, following the advent of supermarkets in the area. As more and more such words are used in daily practice, these increasing Events are influencing Qiang Structure.

5.2. Field observations of loanwords

While a quantitative corpus analysis of loanword frequencies goes beyond the scope of this study, we can report that Chinese borrowings are manifestly evident in daily conversation. In our fieldwork experiences of Sui and Qiang, we find extensive Chinese lexical borrowing in the conversational domains of education, government, transportation and technology, as well as modern commerce, industry, and other domains. Other work also supports these observations: Zeng lists 106 recent loans from Chinese to Sui (2004: 292), including *cadre, crime, patriotism, technology, economics, report, policy, army, education*, and so on. Zeng and Yao (1996) and Burusphat et al. (2003) report many similar loans. Likewise, Sun (2002 [1988]) observes the ever-increasing influence of Chinese on Qiang. Examples of Chinese loanwords that we commonly observe in our Sui and Qiang fieldwork include *teacher, school, classmate, high school, middle school, elementary school, administration, meeting, company, doctor, flashlight, telephone, cell phone, television, vehicle, seat (on a bus), motorcycle*, and many more. Naturally, some conversational domains like family life and local farming have fewer Chinese loanwords than others, and interlocutors' relative Chinese-speaking abilities should be factored in as well. Nonetheless, the presence of recent Chinese loans is very apparent in daily conversations in both Sui and Qiang whenever interlocutors are engaging in a range of topics.

5.3. What makes H special?

In this section, we address the phonological question of H itself. Why is it that the H feature, rather than other tones of SW Mandarin, is having this effect on both Sui and Qiang? As shown above, this SW Mandarin H causes a new tone value to be added to an already well-populated tonal space in northern and midland dialects of Sui. And, in Mianchi Qiang, this H tone “breaks the rules” by overstepping the normal native limit of only one high tone per word.

While a full analysis of H in each language would require a study of theoretical phonology outside the focus of the present paper, we note here that H appears to have “special” properties across numerous languages. H is often dominant over other tones. For example, in most Bantu languages the surface opposition is between categories of H and L, yet H is often dominant; L tones are “filled in” by default when no H is specified. In fact, it is rare to find a language where only L is specified, rather than H (Hyman 2001). English language contact situations provide another example of the dominant nature of H. In such contact situations, English stress often gets interpreted as H tone, as has been shown for Cantonese (Yip 2006) and Thai (Gandour

1979; Kenstowicz and Suchato 2006). Finally, we note that the raising of pitch requires more articulatory effort than lowering pitch (Zhang 2002). From this perspective, H tends to have more prominence than neighboring pitches, both in terms of perception and production. Not surprisingly, then, we find H to be a socially salient, stereotyped tone in Sui society, and we find H to be involved in significant contact-induced structural changes in both Sui and Qiang.

6. Conclusion

Our study shows that large-scale social change and cultural contact are being reflected and constructed when minority language speakers in southwest China progressively and agentively use loanwords with the SW Mandarin H tone. For northern and midland Sui dialects, a new tone (H) is being reinforced in the tone system through daily use of SW Mandarin loanwords, even though those dialects lack H in their native tone systems and even though H is a salient stereotyped tone in Sui sociolinguistics. In the case of Mianchi Qiang, Chinese loanwords are being allowed to have “double H” combinations that would otherwise not be possible. As each such individual Event of using a Chinese loanword is performed for socially meaningful reasons embedded in a particular discourse context, these discourses are (re)producing language change in the context of cross-cultural contact between Han Chinese and minorities.

We can now return to the questions posed at the beginning of the paper: What happens when two different Structures come into contact? What changes? What are the roles of individual Events? And what types of social and linguistic factors are involved? In the case of Sui and Qiang (specifically, the northern and midland Sui dialect regions and the southern Mianchi Qiang dialect), we find that earlier “cracks” in tone structure are now progressively widening as more and more Events of non-native H tone have been occurring in recent decades. In the dialectic of Structure and Event, Event continually influences Structure as individuals use language in everyday life. For Sui and Qiang, recent decades have seen an increase in individual Events of the H tone as loanwords have increased along with Han Chinese contact. The resulting changes in Structure are socially supported as these rural minority communities continue to place an increasingly positive value on the transportation, education, and commerce resulting from Chinese contact. After all, both the Sui and the Qiang people could create their own “language commissions” to carefully expand the lexicon using native forms rather than Chinese borrowings, to reduce domain invasion, and to conduct other corpus and status planning activities. But they haven’t taken such steps to any significant degree. Instead, through individual speech Events in everyday communication, they are (consciously or

unconsciously) allowing non-native H tones to influence the tone Structure in an increasing manner.

In all of these findings, our study demonstrates the usefulness of cross-pollinating social constructionist approaches, phonology, and the sociology of language: individuals' choices to use non-native tone patterns are both products of and producers of cross-cultural contact (Berger and Luckmann 1967: 189; Bybee 2001).

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Notes

1. Following standard research practices for Chinese, Sui and Qiang, we represent the four tones of Modern Standard Chinese (Putonghua) in their codified contour notation: (ā), (á), (ǎ), (à). Sui tones are represented by a standard set of superscripted numbers (1–6) whose pitch values are explained in Section 4. Qiang tones are represented by (á) for High and (à) for Low. On the segmental level, we write Chinese words in Romanized *Pinyin* and Chinese characters, while Qiang and Sui are represented with IPA phonetic symbols.
2. See Stanford (2008a) for details about the “socio-tonetic” methods used to produce such figures.
3. This H tone is also found farther south in Libo County. The present study focuses on Sandu County.
4. A high-falling tone (â) is part of the causative morphology, and a mid-rising tone comes from coalescence of syllables and is rare; only four syllables appear with this tone in a lexicon of about 3,000 forms.

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