# Language Variation and Social Identity in Beijing

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# Declaration

I, Hui Zhao, confirm that the research included within this thesis is my own work or that where it has been carried out in collaboration with, or supported by others, that this is duly acknowledged below and my contribution indicated. Previously published material is also acknowledged below.

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# Abstract

This thesis investigates language variation among a group of young adults in Beijing, China, with an aim to advance our understanding of social meaning in a language and a society where the topic is understudied.

In this thesis, I examine the use of Beijing Mandarin among Beijing-born university students in Beijing in relation to social factors including gender, social class, career plan, and future aspiration. Language variation in this context can further our understanding of Chinese culture in a newly-reformed society while exploring important constructs such as gender and aspiration in China, in part by establishing the social meaning of the local vernacular and its role in identity construction among speakers.

The study presents data from both sociolinguistic interviews, conducted with 21 Beijingers who have different class backgrounds, career plans, and future aspiration, and self-recordings, from a subset of 10 Beijingers in conversation with their family and/or friends. I focus on three thus far under-examined linguistic variables – neutral tone, classifier omission, and intensifier *te* – while incorporating an additional variable – *erhua* (word-final rhotacisation) in the discussion of stylistic variation in Beijing Mandarin.

The results first provide an overview of language variation in Beijing Mandarin, as shown in the use of different features and their linguistic and social constraints. We observe familiar patterns often found in sociolinguistic literature for some social factors (e.g. gender), while more complex interactions exist for others (e.g. aspiration and career path). The findings suggest that Beijing Mandarin conveys localness and masculinity which is expected for a vernacular variety. Finer distinctions in the social meanings of these variables are found in sub-groups of Beijingers with different gender, future career path and/or aspiration. Moreover, speakers are seen to utilise these variables and their meanings in the construction of personae.

# Dedication

To my grandmas, my mum, my sister, and all the fearless and ambitious Chinese women.
To Jinxi and Amber, you are my favourite tiny humans.

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# Chapter 1

# Introduction

This thesis investigates language variation observed in Beijing, China's capital city, and addresses the relationship between language use, social meaning, and speakers' identity construction. The city of Beijing is representative of other post-reform urban areas in China where tremendous socio-economic changes have taken place since China's market reform in 1978. I present data collected from a group of young Beijingers who were in their last two years of university education and were about to enter the local job market at the time of fieldwork. The analysis explores the effect of gender, social class, aspiration, and future career on their language production and identity construction. Using both interview and self-recording data, I also offer an analysis on Beijingers' speech style and repertoire in relation to the social meanings of specific linguistic features, as well as the variety of Beijing Mandarin.

In this thesis, I aim to address two key issues in the study of social meaning and language variation. First, I study a wide range of linguistic features with different awareness levels in the same variety in order to shed light on whether and how features differ in their potential social meanings. In addition, the unique socio-economic situation in China makes an experimental ground for concepts such as social class and gender; whilst widely researched in Western societies, these concepts remain understudied in China (Gao, 2017; Xu, 2015). My project fills in this gap in existing literature, by exploring class, mobility, and dialect use in China.

The main research questions I address in this thesis are:

1. How do Beijingers use the local variety, Beijing Mandarin? In particular, how does the use of standard and local variants vary across speakers? What are the linguistic constraints for variation in this under-studied variety?

2. In contemporary communist Chinese society, do class, mobility, and gender pattern similarly to what has been observed in more explicitly stratified Western societies?

3. What social meanings do specific linguistic variables and Beijing Mandarin as a variety have? How are these meanings constructed in Beijingers' language use?

## 1.1 Language Variation and Linguistic Constraints

The first research question above highlights one of the main goals of this thesis: to find out whether and how language use varies in Beijing, and the linguistic constraints behind the variation. This is particularly important in the current project since the variety in question here—Beijing Mandarin—is under-researched in both general linguistics and sociolinguistics, as I will address in detail in the following chapters.

As linguists who are primarily interested in the social side of language use, sociolinguists have also always been curious and cautious about the effects of internal constraints on language variation. The very first variationist sociolinguistic study—Labov's study on the raising of /ay/ and /aw/ in Martha's Vineyard, Massachusetts—looked at internal factors including following segment, preceding segment, and stress, and demonstrated well-defined phonological patterns for the variables, along with ground-breaking findings about various social factors (Labov, 1963, 1972a).

The influence of linguistic factors on language variation is deeply rooted in one of the five problems in the study of language change discussed in Weinreich et al. (1968). The Embedding Problem, as they put it, is mainly concerned with how language (variation and) change is embedded in both the linguistic and social systems, and thus has been an essential part of many variationist studies to date. As pointed out by Tagliamonte (2012), sociolinguists who focus on the embedding of language variation not only assume the effects of various social factors, but also the existence of linguistic factors that conditions speakers' language use.

Linguistic constraints are often classified into different categories according to their nature and the three main types are phonetic/phonological, grammatical (morphology, syntax, discourse), and lexical (Walker, 2010). Within sociolinguistics, most studies limit internal factors to one particular type based on existing research (e.g., Labov, 1972a; Walker, 1995; Wong

and Hall-Lew, 2014) while others have looked at a combination of different types of linguistic factors (e.g., Kirkham, 2015; Drager, 2009; Walker, 2014, 2012). An investigation into the linguistic constraints conditioning language use is often considered an important and essential part of our understanding of language variation (Cheshire and Fox, 2009; Tagliamonte, 2012).

In this thesis, I include a wide range of linguistic factors for all Beijing Mandarin variables. As noted above, this is both to provide a in-depth understanding of features that have not been investigated in Chinese linguistics or sociolinguistics (e.g., classifier omission and intensifier *te*), and to offer a variationist perspective on features that have been studied previously (e.g., neutral tone). The phonetic and morpho-syntactic factors coded and tested for each individual feature are specified in the relevant sections in the following chapters.

## 1.2 Language Variation and Social Meaning

This chapter sets the theoretical foundation for the current project. As this thesis investigates the social meaning of the vernacular variety in Beijing, I first review key literature on the topic of language variation and social meaning, examining notions such as vernacular, style, enregisterment, and indexicality. Special attention is paid to the study of social class and gender in both variationist sociolinguistics and other related fields, since they are closed linked to the understanding of the social and linguistic reality in Beijing.

One of the core issues in sociolinguistics and the study of variation is the relationship between language and its social meaning. While the term 'social meaning' was not used very often in the formative years of the field, linguistic variables' non-referential meaning has always been the focus of sociolinguistic investigations. In Labov's (1972a) pioneering study of Martha's Vineyard, diphthongs /aw/ and /ay/ were found to convey meanings related to localness, which Labov further linked to the residents' local identity and orientation to the changes happening in the community. It is precisely the rich social meanings of variation in language use that enables speakers to express themselves linguistically and drives sociolinguists to study language production. Building on existing theories in variationist sociolinguistics, this thesis explores the social meanings of Beijing Mandarin in Beijing and how Beijingers employ linguistic variables to construct their identities and position themselves in the social world.

### 1.2.1 The search for social meaning

Through the decades following Labov's seminal work at Martha's Vineyard, different types of social meaning have been explored. The rich social meaning and 'social significance' embedded in linguistic variation (Woolard, 1985) enable speakers to express their identity through the use of language, and thus, by studying how language use varies across speakers, sociolinguists can not only understand language itself, but also the speaker and the society at large.

To uncover these meanings packed into variation, sociolinguists start off by investigating the relationship between language production and macrosociological categories such as class, sex, and age. For example, in urban areas in North America and Great Britain (among other places), the use of stigmatised/non-standard language has been studied (Labov, 1966b; Trudgill, 1974; Wolfram, 1969). The results show social class stratification: using a more standard variant of (r) in New York might indicate that the speaker belongs to a higher social class. Similar broad gender stratification was noted in Trudgill's (1974) study of Norwich English, in which women generally used more standard language than men. In these studies, the social meanings associated with language variation are investigated from a relatively macro perspective. While the findings offer us an overall pattern of socioeconomic stratification of linguistic forms and language variation, analysing variation in this way runs the risk of over-generalising the effect of social factors and fails at explaining intra-group and intra-speaker variation in language use since speakers are treated with uniformity and social meanings are seen as rigid categories. Both Guy (1988) and Eckert (2012), for instance, have pointed out that the classification of social class and gender in sociolinguistic studies is often very passive and lacks fine-grained, locally-defined social categories, which in turn seems to hinder the understanding of the social meaning carried by linguistic variables.

In response to this limitation, sociolinguists began to look for more localised meanings of linguistic variation. Milroy and Milroy (1987) investigated non-standard language use in Belfast;s working class communities, and argued for a more emic way of analysing variation that takes other local social factors such as speakers' social network into account. They found that, within a working class community that values group membership, the more tight-knit one's network is, the more vernacular one's language tends to be. Similarly, Cheshire's (1982) study in Reading also sought to examine localised social meanings for non-standard variants. She studied a group

of adolescents in Reading and found that non-standard morpho-syntactic features, such as non-standard forms of 'have' and negative 'ain't', are used by boys to express toughness and masculinity. Community-specific social meanings were also observed in a suburban area in Detroit by Eckert (1988) in her research on phonological variation among high school students. Although jocks and burnouts existed in many schools, participants in her study used vowels involved in the northern city chain shift to indicate their school-orientation or street-smartness, a linguistic practice unique to Belten High where the study took place. The shift from rigid social categories (class, gender, etc.) to social characteristics of speakers' identity (tight network, masculinity, street-smartness, etc.) is seen as a turning point in the study of variation, enabling researchers to view social meanings not only as reflective of pre-determined social and cultural traits, but also of more fluid personal and group identities. However, as Eckert (2012, p.93) points out, these community-of-practice studies still often share the view in which social meanings are 'static' and speakers can only passively 'affiliate' with identities rather than creating their own.

Nonetheless, this shift in focus led to the beginning of a new era for variation studies, referred to as 'third-wave' (Eckert, 2012). Building on previous work on social meaning and drawing on various concepts related to indexicality and enregisterment (Agha, 2005; Eckert, 2008; Ochs, 1992; Silverstein, 1976, 2003), third wave studies consider language variation to be a way of constructing identities and personae through stylistic practice. Furthermore, with a focus on indexicality (Silverstein, 2003), Eckert (2008) builds on previous work by arguing that the potential meanings of variables are in fact a constellation of social meanings. She terms this constellation an 'indexical field' and argues that language variation is essentially a social practice that speakers engage in (Eckert, 2008, p.9). As pointed out by Eckert, the release of /t/ in American English has more than one social meaning: it can index, among other things, nerdiness (Bucholtz, 2001), gayness (Podesva et al., 2002), and Orthodox Jewishness (Benor, 2001). Depending on what they want to convey in their linguistic practice, language users can then choose different meanings in this collection to make ideological moves rather than passively reflecting their positions in the society.

As can be seen, the study of social meaning in variation has come a long way. After several decades' development, the field of variationist sociolinguistics has become increasingly aware of the important role social meaning plays in language variation and change. In the current study, I provide ev-

idence showing that social meaning is also a driving force in Beijingers' linguistic variation, as demonstrated in later analyses and discussions.

### 1.2.2 Vernacular and vernacularity

As noted, the current study investigates the use of the local dialect in Beijing. I have referred to Beijing Mandarin as the 'vernacular', yet I want to highlight some issues with the use of this term in variationist studies, particularly in regard to Beijing Mandarin. The term 'vernacular' is often used to refer to a speaker's most un-self-conscious speech style, and implies a certain degree of non-standardness (Labov, 1972b). This definition is then closely related to the practice in sociolinguistic data collection where conscious attention paid to speech is undesirable (Schilling, 2013) and the goal is to obtain the most natural speech, which often refers to non-standard speech in studies on language change. While I address the style aspect of 'attention-paid-to-speech' in the following sections, here I argue that using the term 'vernacular', which implies a contrast between standard and non-standard, could be less helpful in situations where such a distinction is less clear-cut, as is the case in Beijing. I also define some key notions I will be using in this thesis in order to examine Beijing Mandarin as a vernacular.

The standard-nonstandard continuum of Beijing Mandarin has been discussed in previous work (e.g., Zhang, 2001). According to Zhang, the dichotomy between vernacular and standard prevents an accurate description and interpretation of certain variation observed in natural speech. First, in areas with complex linguistic diversity where more than one standard exists, a binary divide offers little help in describing the variation at hand. Some examples of this include Glasgow, Edinburgh, Liverpool, and Belfast where Received Pronunciation—the 'standard' variety—coexists with the local vernacular dialect and other supra-local varieties (Zhang, 2001). This kind of situation is classified as 'diaglossic' by Auer (2011) and essentially involves a standard (written and spoken) at one end, a traditional dialect at the other, while regional standards and regiolects exist in between the two. In Beijing, *Putonghua* is the standard variety, and traditional vernacular Beijing Mandarin (which is only spoken by older generations) occupies the other end of the spectrum. Beijing Mandarin with different levels of standardness/non-standardness exists in the middle of the two extremes. Therefore, I define **standardness/non-standardness** as the proximity certain Beijing features or Beijing Mandarin as a whole has to the standard language (i.e. *Putonghua*). The closer a feature is to standard Chinese, the

more standard it is, and the sharper the difference is between Beijing Mandarin and *Putonghua* variant, the more non-standard the Beijing variant is.

The dichotomy between vernacular and standard raises the issue of prestige—both overt and covert—in standard and non-standard varieties. The notion of prestige tends to oversimplify the observed variation and attribute the social meaning of linguistic features to a general set of meanings. This issue is particularly relevant to this study. As I will discuss in detail in Chapter 2, Beijing Mandarin is the phonological basis of standard Chinese, and this inevitably makes the distinction between the two varieties extremely subtle. Contrasting the two varieties based on prestige and using terms such as standard and vernacular is not particularly helpful for understanding them. In fact, my own research on Chinese speakers' attitudes towards standard Chinese and Beijing Mandarin (Zhao, 2012) has suggested a lack of distinction in overt prestige across Beijing Mandarin and *Putonghua*. Due to the limitations of the dichotomy between standard and non-standard, in this thesis I use the term **vernacular** to refer to the local variety, without necessarily making explicit contrast regarding non-standardness. As I will discuss in the following chapters, non-standardness is no doubt one of the social meanings associated with certain features in Beijing, though the variety itself does not exactly convey non-standardness. The term **vernacularity**, then, is used to refer to a combination of social meanings linked to Beijing Mandarin as a typical vernacular and the (most) locally-based variety (Eckert, 2012) rather than a speaker's most natural or fundamental language (Labov, 1972a). Closely related to vernacularity, I also use the term **localness** in the following chapters to mean 'stereotypical of Beijing' or a marker of Beijingness. I discuss the specific meanings in the main analysis chapters (Chapter 4 – 7).

### 1.2.3 Register, enregisterment, and indexicality

Beijing Mandarin, as a vernacular variety of the capital city, is believed to be an enregistered variety that involves the 'enregstering and legitimising' of features such as rhotacisation (Zhang, 2008). In this section, I review key literature on enregisterment as it is relevant to the discussion of the status of Beijing Mandarin.

Related to the vernacular and the binary distinction of standard and non-standard is the concept of 'register' as originally proposed by Halliday (1978). Biber and Finegan (1994) define register as 'a language variety

viewed with respect to its context of use', although the term is more commonly used to suggest a style based on specific social situations (e.g., formal register, news register, or scientific register). Building on the situational use of language implied by the notion of register, Agha (2007, p.80) distinguishes registers as 'products (or precipitates) of human activity from the process through which they are formed'. Consequently, language use and variation are not seen as isolated features, but as a set of linguistic features—a repertoire—socially recognised as a unique form of registers (Agha, 2003, p.231).

More relevant to the study of social meaning in sociolinguistics, Agha (2003, 2005) proposes to use what he calls 'enregisterment' to understand the process through which linguistic forms come to acquire social meanings—a development that enables linguistic forms that are part of a socially-recognised register to be used to index social-cultural ideology. He argues that features in the linguistic repertoire need to be assigned certain ideological meanings in order to be able to function as socially meaningful agents in language variation.

The process of enregisterment is thus closely related to both Labov's (1972a) taxonomy of linguistic variables into indicators, markers, and stereotypes based on their social awareness and Silverstein's (1976) acquisition of second order indexical meaning for linguistic forms with first-order indexicality.

According to the former approach, indicators are below speakers' conciousness while markers are more likely to be noticed by listeners and show stylistic and social stratification. Stereotypes have the highest social awareness and are often subject to overt social commentary. As I mention later in Section 1.2.6, these concepts have been proven useful in existing sociolinguistic literature, especially regarding ongoing language changes. Nonetheless, scholars have critiqued this classification, most of which focus on the vague notion of 'awareness' or 'consciousness', claiming it is difficult to find clear-cut boundaries for indicators and markers (e.g., Babel, 2016; Bell, 1984; Kristiansen, 2011; Sharma, 2005). More relevant for the current project and as I will argue in this thesis, this classification overly simplifies the nature of linguistic features and the dynamic contexts they are used in and perceived by different language users (Cheshire, 1997; Levon, 2014a). In this thesis, I use the awareness-based criteria to define indicator: a variable that shows social stratification but no stylistic variation or metalinguistic commentary. Indicators, markers and stereotypes roughly correspond to first-, second-, and third-order indexicality respectively in

Silverstein's (1976) approach.

The second approach, as discussed in Silverstein (1976), builds on Pierce's (1932) distinction between icon, index and symbol and proposes the concept of indexicality and distinguishes indexes (which relies on co-occurrences of signs and objects) from icons (which is based on similarities rather than co-occurrences) and arbitrary symbols (e.g., linguistic forms). In this paper, he further defines indexicality as 'the property of sign vehicle signalling contextual existence of an entity' (Ibid, Silverstein, 1976, p.29) and later proposes the concept of indexical order (Silverstein, 2003). Indexical order is the systematic theorisation of the relationship between social meaning and linguistic features.

According to the theory of indexicality, an n-th order indexicality represents a direct link between a linguistic feature and its semiotic meaning, while an ideological reinterpretation of the n-th order association invokes the n+1-th order. For instance, the monophthongisation of the diphthong /aw/ is often seen as working class (first order) but when speaker avoids it to sound more educated, it takes on an ideological meaning (uneducated) and can thus be considered to have second order of indexicality (Johnstone et al., 2006; Johnstone and Kiesling, 2008). However, different orders of indexicality are more than indicators of salience. In fact, they document the process where social meanings are drawn from local ideology and added to linguistic forms for the purpose of identity building (Johnstone and Kiesling, 2008). For example, Zhang (2005) studied two groups of managers in Beijing—state-owned company managers and yuppies who worked at foreign-owned international companies—and their use of Beijing Mandarin features such as neutral tone. She suggests that neutral tone has been successfully enregistered as a meaningful variable because local speakers (state managers) use it to identify themselves as authentic Beijingers as well as to distinguish themselves from foreign business managers who were perceived as 'yuppies'. In related studies, Zhang (2001, 2005, 2007b, 2008) further suggests that for native Beijing Mandarin speakers, the form is used to index localness and authenticity (i.e. being a real Beijinger).

Another advancement in our understanding of social meaning and indexicality is made by Elinor Ochs. Although she mainly works on the linguistic indexing of gender, the three characteristics of the relation between language and gender she proposes can be extended to the indexing of other social meanings. These characteristics are non-exclusive, constitutive, and temporal transcendent (Ochs, 1992). I will only focus on the first two since they are more relevant in the present study. The notion of non-

exclusivity posits that it is normal for linguistic variants to index gender while having other social meanings such as class and/or age. Constitutive relations refer to the fact that linguistic features can index gender both directly (e.g., referring to someone using 'he' or 'she') and indirectly (e.g., the use of the 'delicate' sentence-final *wa* in Japanese to index femininity). In the latter case, social acts and activities act as the mediator between the linguistic feature and gender, and eventually lead to the linguistic indexing of gender. Constitutive relations are of vital importance to indirect indexicality in third wave studies since research tends to deal with a wider range of meanings including both direct indexes and indirect social acts and activities.

### 1.2.4 Style and the construction of personae

As the current study looks at how social meaning is constructed in Beijingers' speech, I am interested in a wide range of speech styles as well as the specific stylistic practice in Beijingers' use of local variables. In third-wave variationist sociolinguistics, the study of style incorporates both stylistic practice on the linguistic level and beyond (Eckert, 1989a). Investigating style in language variation is nothing new to sociolinguists as stylistic variation has been part of the very first study conducted by Labov at Martha's Vineyard (Labov, 1972a). In this study, he elicited four different styles: casual, emotional, careful, and reading. As mentioned before, Labov's (1972a) model of stylistic variation aims to understand the relationship between attention paid to speech and language use. Following this protocol, the Labovian paradigm primarily tried to understand a wide range of formality-based styles in traditional sociolinguistic interviews (casual, formal, wordlist, etc.). As a result, the interpretation of social correlations between variation and social factors remained on a passive level, often explained by either class or gender struggles, rather than a more agentive identity-building framework (Zhang, 2001).

Unsurprisingly, the stylistic variation model based on attention paid to speech soon became inadequate, unable to explain patterns of variation where working class participants maintain high use of the vernacular features despite increased attention to their speech (e.g., Trudgill, 1972). In an attempt to incorporate a more agentive role of the speaker, Allan Bell proposed a new way of looking at stylistic variation, and instead of focusing on attention, he turned to the audience of the interaction. The new approach, named 'audience design', assumed that 'speakers design their style

for their addressees' (Bell, 1984, p.167). Largely based on the speech accommodation theory (Giles and Powesland, 1975; Giles and Smith, 1979), audience design puts the addressees in any interaction in a vital position. In variationist studies, however, only very few studies have used this framework. One of these studies comes from Rickford and McNair-Knox (1994), where the speech of an African American woman was investigated, focusing particularly on the style-shifting.

Third wave research has brought about new methods and theories to investigate stylistic variation. Moving towards a more nuanced and agentive framework, the field has adopted indexicality theory and begun to focus on persona construction. Referred to as persona management by Coupland (1985), this process of identity building requires sociolinguists to see and analyse style as part of the construction and alignment of persona in interactions. In turn, recognising the possibility of persona construction in speech allows the speaker more agency in the development of their identity. Work that has adopted this perspective have generated findings that challenge the rigid association between social categories and language variation, particularly at the level of the individual (e.g., Moore, 2012; Moore and Podesva, 2009; Podesva, 2007, 2011; Zhang, 2005).

### 1.2.5 Gender

As one of the key social factors investigated in this study, gender is a widely-researched topic in sociolinguistics. Over the past several decades, sociolinguistic studies on the relationship between language variation and gender have greatly improved our understanding of not only biological differences but also the deeper driving force that underpins gender differences—power. Though it is one of the most widely-studied social factors in sociolinguistics, gender used to be seen as merely the contrast of two sexes—male and female. Several classic variationist studies have shown that women use more standard variants while men prefer the local or vernacular, and scholars have long attributed this difference to the fact women are more prestige-conscious and more conservative (Labov, 1966b, 1984; Trudgill, 1972) . While this explanation corresponds to some variation observed in women and men's language use, an essentialised one-to-one correlation between variation and sex is less helpful for many other patterns found in various communities (Mills and Mullany, 2011). For instance, even in both Labov (1984) and Trudgill (1972), men were found to lead some language changes while women lagged behind. These complicated gender patterns

led many scholars to consider that the relation between gender and language is hardly as simple as we have taken it to be, and we need a theory that goes beyond prestige or women's lack of power in society (Eckert, 1989b).

There were two main theories in the beginning: the deficit approach (Lakoff, 2004) and the dominance approach (Coates and Cameron, 1989; Coates, 1998). The deficit approach posited that women are inferior in society and their language use is reflective of the social reality. The dominance approach takes on the topic from a different angle and proposes that women's language is ultimately shaped by the power difference in society. These two approaches are in sharp contrast with the difference model proposed and used by discourse analysts (Maltz and Borker, 1982; Tannen, 1995), where scholars relied heavily on the descriptions of women's speech and explained gender in terms of differences between opposite sexes without explicitly stating a norm. Despite criticism (Coates and Cameron, 1989), the difference model has helped sociolinguists, especially variationists, understand the linguistic strategies employed by women in interactions. For instance, in variation studies, the use of certain variables and/or certain frequencies in using these variables are often seen as a marker of gender identity and male and female speakers show variation based on their gender identity (Eckert and McConnell-Ginet, 1992).

In recent years, the study of gender and variation has shifted its focus to the understanding of how speakers construct their gender identity—an approach Coates (1998) calls 'the discursive approach'. This new approach views gender as a fluid notion as opposed to the rigid fixed one-to-one connection utilised in first-wave studies. More importantly, in this framework, speakers are considered active participants in constructing identity within a certain community (Eckert and McConnell-Ginet, 1992), and performativity and indexicality are put at the centre of gender studies (Ochs, 1992).

This constructionist approach has inspired the study of gender and gender identity to a new level in the third-wave variationist era. It has already been argued that gender identity is a form of meaning and this meaning is neither direct (Ochs, 1992) nor static. Instead, many studies have shown the fluidity of gender identity and the complex indexicality related to gender for different linguistic features and varieties. Eckert's (1989a) study of adolescents in a community of practice in Detroit showed that female students employed a wide range of linguistic and non-linguistic resources in constructing and performing their gender and class identity.

In this project, the meaning of gender and its interaction with other social factors are essential for the understanding of different Beijing Mandarin variables and the identity of the speakers. Drawing on theories of social meaning, style, indexicality and gender, I investigate Beijing Mandarin speakers' use of vernacular variables and aim to find out what meanings are available in Beijing Mandarin and how they are then used for the construction of identity among a group of young adults.

### 1.2.6 Social class and mobility

As I describe in the next chapter, the unique and under-researched—in sociolinguistics, at least—social class structure in China is also the focus of this thesis. Unlike many Western societies that existing variationist literature on language and class has studied, class stratification is relatively new in Beijing and in China, and an investigation into its relation with language variation is beneficial to our sociolinguistic understanding of class in China and of the effects of social stratification and mobility in general.

Early sociolinguistic studies have demonstrated the meaningful correlation between social class and language variation. In Labov's (1997) department store study in New York City, /r/-fullness was found to be related to speakers' social class. In the UK, Macaulay (1976, 1977), Milroy and Milroy (1978), and Trudgill (1972) all found strong correlation between social class and language variation in different areas.

Within the Labovian paradigm, class is often measured using a scale based on key socio-economic attributes of the speaker and their community. Labov (1966b) has established a class index using the speaker's occupation, education, and income in his study in New York's Lower East Side, while others argue for the use of a single factor in determining class background (e.g., Macaulay, 1977 used occupation alone). Nonetheless, similar results have been found regarding the association between class and variation. For example, standard and prestigious features are used more by higher class speakers and less by lower/working class speakers.

As a defining sociodemographic category for Western societies, social class is also found to be closely related to style and gender. Under the attention-paid-to-speech approach, the social stratification of a linguistic variable and its distribution across different formality-based styles are both essential for the classification of linguistic indicators, markers, and stereotypes as discussed in Section 1.2.3 (Labov, 1972a). Variables that only show class stratification are considered indicators (e.g., /a/ in Norwich),

and those that vary across class and style are markers (e.g., -in/-ing or th-stopping). Stereotypes are features which not only show stylistic shifts and class stratification but also attract overt metalinguistic comments (e.g., /r/-lessness in New York). During the second-wave era, Eckert (1989a) studied the local construction of class among high school students in the Detroit area and unsurprisingly noted that both female and male adolescents also show class-related language variation, which was accompanied by non-linguistic stylistic variation (e.g., clothing, behaviours, etc.).

Perhaps not well-researched as social class, mobility is also important for the understanding of class and social structure. In Labov (1966a), he re-examined the /r/-fullness in his early study in New York City by categorising speakers into three mobility categories—upwardly-mobile, downwardly-mobile, and stable—and looking for connections between social mobility and language use. The results suggested that upwardly-mobile speakers preferred /r/-fullness than the stable speakers. In a more recent study conducted by Dickson and Hall-Lew (2017), the rate of non-prevocalic /r/ is conditioned by Scottish English speakers' socioeconomic status. In particular, newly-established (i.e. mobile) middle class speakers showed a preference towards rhoticity in comparison to established middle class and working class speakers.

In this thesis, I investigate the use of Beijing Mandarin and its potential relationship with social class and mobility, measured by an index based on Chinese class structure and speakers' career aspirations. As mentioned above, the aim is to shed light on the effects of social stratification on language as well as contrasting the findings in China with those in mainstream Western societies.

## 1.3 Organisation of Chapters

This thesis draws on the theories reviewed thus far and employs variationist sociolinguistic methods, with the aim of providing a deeper understanding of Beijing Mandarin. I investigate several phonetic, syntactic, and lexical features in Beijing Mandarin, and draw on theories in sociolinguistics as well as Chinese linguistics to answer the research questions mentioned at the beginning of this chapter. The rest of this thesis is structured in the following way:

Chapter 2 provides the social and linguistic background of this thesis. I describe the influence of market reform on China as a whole and then specifically, Beijing, focusing on two key social issues: class stratification

and gender inequality. With regards to linguistic background, I introduce both the standard and Beijing variety in order to offer a full view of the linguistic landscape of China. A list of Beijing Mandarin features is included at the end of this chapter.

The methodology used in the current project is described in detail in Chapter 3. This chapter covers the fieldwork site, social factors controlled for, participants, and the data collection methods.

In the next three chapters (Chapters 4, 5, and 6), I analyse the three main variables examined in this thesis. Neutral tone is covered in Chapter 4, where I begin with an acoustic profile of this under-researched feature. The methods used in coding neutral tone are introduced in this chapter as well, followed by the quantitative analysis of neutral tone variation which is conditioned by morpho-syntactic, phonetic, and social factors. After presenting neutral tone's stylistic variation, I discuss the potential social meaning of this feature. Chapter 5 and 6 present the analyses on the variation in classifier omission and intensifier *te* respectively, following a structure similar to Chapter 4. After introducing the relevant variable in each chapter, I proceed to the methods and quantitative analysis. A discussion is included at the end of each chapter to summarise the quantitative patterns and discuss that variable's social associations.

Chapter 7 introduces and analyses an additional variable—*erhua*, or word-final rhotacisation, with an aim to build a fuller understanding of the participants' linguistic repertoire. Three individuals representative of three different local personae are presented and discussed in terms of social meaning and identity construction.

Chapter 8 summarises the key findings of the project, concluding the thesis and suggesting directions for future research.

# Chapter 2

# Social and Linguistic Background

This thesis investigates the use of Beijing Mandarin—the local dialect in China's capital city—among young native Beijingers and my main goals are: 1) to describe and comprehend language variation observed in Beijing Mandarin in relation to social meaning and identity; and 2) to advance our understanding of socially-conditioned language use in a culture and language different to those in studies of mainstream Western societies. In this chapter, I first provide details on social and cultural background in China, particularly in Beijing, to give an overview of the social setting of the research. I then discuss the complex linguistic situation in Beijing related to the standardisation of the Chinese language and the co-existence of the local dialect and the standard language in Section 2.3. In the last section of this chapter, I list several Beijing Mandarin features, drawing both on literature and comments from Beijingers, aiming to provide a full picture of this understudied variety.

## 2.1 Reform and Opening-up

> China is a sleeping dragon. Let her sleep, for when she wakes, she will shake the world.
>
> — Napoleon Bonaparte

Authenticity aside, this quote carries a sentiment shared by many in and outside of China. During the late 1970s, China, the giant of the East, shook the world with an unprecedented socio-economic reform that had tremendous impact. The market reform—*gaige kaifang*, literally translated

as 'reform and opening-up'—has brought about changes in all aspects of contemporary Chinese society. From urban centres to remote villages, the transition from a centralised socialist economy to a market economy forever changed the lives of 1.4 billion Chinese people.

In the following sections, I provide the social background for the project, focusing on the changes in social class, upward mobility, and gender relations brought about by the market reform both in China in general and in Beijing where the study was conducted. I also discuss the current situation of university education and labour market as they are closely linked to the overall socio-economic environment and key to the project. In the last part of this section, I cover the development of local Beijinger identities, particularly in relation to social class and gender relations in Beijing.

The 1978 economic reform and opening-up of China is hugely different from the country's previous attempts to invite foreign capital. Before 1978, 'opening-up' was a synonym for being forced into 'trade deals', which often brought wars and suffering, as colonial powers from Europe and Japan were most interested in exploiting the country's resources. This time, however, the new opening-up policies were an essential part of the wider economic reform initiated by Deng Xiaoping and the new leadership group of the Communist Party of China (CPC) after the death of Mao Zedong in 1976. This economic reform happened at a time when reforming and opening up were not only needed but also welcomed, as the newly-founded country had just gone through the 'wasted ten years'—the ten years before Mao's death where the Cultural Revolution (1966 – 1967) took place. This was a decade filled with power struggles within the CPC and ultra-leftist political campaigns across the country and left China economically and politically isolated from the rest of the world (Brown, 2013).

Under these circumstances, in December 1978, the CPC's Third Plenum of the Eleventh Central Committee took place in Beijing and the foundation of the reform was laid by the architect of China's reform, Deng Xiaoping. The meeting marked the beginning of an era where the state loosened its control on various economic and social aspects of the society though tight control over other issues (e.g. political dissent and single-child policy) were maintained (Louie, 2008, p.41). Some of the key aspects in this reform include the de-collectivisation of agriculture, the privatisation of previously state-owned industries, and the opening-up of foreign policy. Gradually, individuals were allowed to start private businesses, foreign investment poured into China, and state control on commodity prices, market competition, and financial regulations also decreased.

On an economic level, the achievements of the reform were, and continue to be, enormous: China achieved an annual GDP (Gross Domestic Product) growth at about 9.5% annually in the two decades after 1978 and was still growing its economy at a 7% growth rate in 2015 (World Bank, 2017). The country has transitioned from a war-torn, agricultural country to the world's second largest economy in 2010 (World Bank and Development Research Center of the State Council, 2013). If China maintains this speed of its development—and there is strong evidence it will—it is likely to overtake US before 2030 to become the largest economy worldwide. For the average Chinese person, the reform meant that over half a billion people were lifted from below the poverty line (consuming less than one dollar per day); between 1981 and 2004, the percentage of population living in poverty fell from 65% to 10%.

In addition, tremendous social changes have taken place in China. Life expectancy has improved while infant morality rates have decreased. A compulsory nine-year (primary and junior secondary) education has been put into practice, and participation in higher education is increasing. The labour market has also transformed to accommodate people's need for greater mobility to compete for new job opportunities in both public and private sectors.

Despite the numerous improvements achieved since the reform, the process of market reform and the urbanisation and industrialisation that came with it have resulted in sharper social and economic stratification among a supposedly classless country. During the Maoist era, China was a country with just over one billion people who were equally underprivileged: (largely) illiterate, uneducated, and living in poverty. The urban-rural division was not as sharp as it is now, and the social structure was relatively simple: there were only two classes—workers and peasants—and one stratum—intellectuals (Lu, 2002). The distinction between them was never based on economic capital due to the poor economic performance of China. From the 1970s onwards, however, the population began to separate into roughly three tiers which differ from each other in terms of their economic and political power: high-level party officials and intellectuals at the top, urban workers and mid-level party members in the middle, and numerous farmers and less-skilled workers at the bottom (Hsu, 1983, p.115). In the twenty-first century, the gaps between different classes have grown even wider. China's Gini coefficient a statistical ratio showing how unequal income distribution is—reached 42.2 in 2012 and is higher than other countries such as the US (41.1 in 2013) and the UK (32.6 in 2012) (Shirk, 2007, p.30).

Another social problem that arrived shortly after the start of the reform was the rise of unemployment. The market economy ended the traditional 'iron rice bowl' employment system where individuals were assigned life-long jobs by the state. The subsequent fierce economic competition caused many state-owned companies and factories to shut down, and millions of workers with minimal education and low-level skills were forced to leave their places of origin and find work wherever they could. The official unemployment rate in China was 4.1% in 2015; however, since it only includes those on unemployment benefit, scholars have estimated much higher rates ranging from 8% to 14% (Giles et al., 2005).

Income-based inequality and unemployment put huge pressure on the younger generation who are yet to step into the labour market, especially those from a lower class background studying in universities and technical colleges (Shirk, 2007, p.29). As I explain in more detail in Chapter 3, the Beijing Mandarin speakers in this study were enrolled at local universities in Beijing at the time of fieldwork, so these issues are my participants' major concerns once they graduate. Since I focus on the effects of social class and future aspiration on language use, I chose students in their final two years of study, so for these students the social and employment pressure is even greater. In the following sections, I elaborate on relevant key social concepts including class, mobility, and gender relations in post-reform China, before returning to discuss how young Beijingers are affected by inequality and unemployment.

### 2.1.1 Class, mobility and labour markets

Under the name of 'socialism with Chinese characteristics', the economic reform has shifted China away from its socialist egalitarianism for the past four decades. To many Chinese people who lived in pre-reform China, socialism is characterised by egalitarianism, a high degree of security, and a strong sense of belonging (Lee and Yang, 2007, p.162). The economic reform gave rise to sharper social stratification and a growing income discrepancy among different social classes in China.

While there is little doubt that an upper class exists in China nowadays and mainly consists of high-level CCP members and private or state-owned business executives (Lu, 2002), the emergence of a Chinese middle class is of special interest here. China's new rich, often termed *xiaozi* ('petite bourgeoisie'), *zhongchan jieji* ('middle-income class') or *zhongchan jieceng* ('middle-income stratum'), are made of people from different walks of life:

business owners, employees from private and joint-owned corporations, rural industrialists, government and party officials, academics and intellectuals. Although the existence of a middle class in China was first noticed in the 1980s, China's middle class only finally came into public view in the early 2000s. Definitions for middle class in China vary, yet they all focus on four sets of criteria: income, occupation, education, and consumption (Li, 2010, p.136). In general, to qualify as middle class, one has to have a certain level of income higher than the general public, and be educated to at least tertiary level, if not postgraduate level. China's new middle class tend to work in highly-skilled managerial or professional positions, and as a result of their earning power, they are also consumers and can afford an above-average lifestyle. The majority of China's middle class are urban residents and the number is increasing rapidly with greater urbanisation. In a way, these characteristics of the new middle class limit the opportunities for those not working in an urban setting.

Nonetheless, being born and/or living in a city does not automatically make an individual middle class, and nowadays much of one's class depends on family wealth and property ownership. For people from working class urban families, there is often little family wealth and it is not uncommon for a whole family including extended family members to share living space due to the lack of property ownership. For those who are not originally from urban areas, China's *hukou* system where individuals are tied to their family's origin on official papers and in every aspect of their social life (e.g. education, employment, property ownership, and even food supplies in the rationing era), is likely to stand in the way of achieving any upward social mobility. The *hukou* system has been maintained to the modern days to limit migration on a national scale. Consequently, people with rural origins are placed at a disadvantage when moving to cities since their access to social welfare and investment are restricted. These migrants, together with urban population from lower class background, find it extremely hard to compete in a free market against more privileged locals, especially in big cities like Beijing or Shanghai.

Since the turn of the century, one of the main ways to move up the social ladder for these people, especially for the younger generation, is education. As property or wealth are often unattainable, education is seen as the only way to gain upward mobility over which an individual has control. To understand the the important role of educational attainment in the new era, it is essential to highlight the disruption of education during the Cultural Revolution (1967 – 1977). The Cultural Revolution was launched

by Mao in 1966 to promote Maoist ideology, and has since been seen as having caused great disruption to Chinese society. Due to the fact that higher education was essentially halted during the Cultural Revolution, most of the population, especially those born between the 1950s and 1980s, did not have the opportunity for a high level of educational achievement. When this generation entered the job market in the 1980s, it was possible for people with lower education levels to become middle class by working as contractors and private business owners, as the competition did not focus on high educational attainment. This is no longer an option for the generation born after the 1980s, since higher education and the entrance exam—*gaokao*—were restored around 1977. Instead, younger generations have had the opportunity and are encouraged, or rather, forced, by society to obtain an education in order to compete in the labour market and thus have some control of their social mobility.

One of the issues caused by this emphasis on educational attainment is the huge number of graduates with a higher education degree among the younger generation. In 2015, 92.5% of high-school graduates continued on to pursue a first degree in comparison to 83.3% in 2010 and 27.3% in 1990 (Ministry of Education of the People's Republic of China, 2016b). According to the Minister of Education (2016a), 26 million undergraduate students were enrolled in regular higher education institutes (HEIs) in 2015. It was also estimated that there would be 7.3 million undergraduate students graduating in 2016 and that this number would continue to increase.

This is problematic, however, in that the growth in job opportunities does not match the speed at which HEIs produce graduates, and in turn young generations wishing to pursue a middle class lifestyle face challenges such as unemployment and high living costs in urban areas (Li, 2010, p.230). The number of unemployed graduates has increased from 50,000 in 1996 to nearly two million in 2010 (Chan and Lu, 2011, p.153), and the graduate unemployment rate can often reach 30% (Li and Zhang, 2010, p.39). The negative effect higher education expansion has on graduate unemployment has attracted scholarly attention from in and outside of China (Bai, 2006; Dian, 2014).

In a market economy where the state has little interference with employment, companies have started to put limitations on the type of employees they want. Graduates with local *hukou* are preferred over those who do not, men are hired over women, and discriminatory age and physical appearance requirements are often seen in Chinese job advertisements (Helleseter

et al., 2016; Gao, 2008; Kuhn and Shen, 2015). Throughout this fierce competition, graduates with certain privileges (higher social class, better parental aid, local *hukou*) are more likely to win against their less-privileged counterparts and over time, this leads to greater social inequality.

All of the participants in the current study were born after the 1980s, and have experienced the changing class structure first-hand. Being native Beijingers, they have also lived through the changes in a fast-developing city, where both the positive and negative aspects of the reform are magnified. As they were all educated university students, it is likely that they will join the new middle class in Beijing after graduating; however, before they achieve that, they must face the difficulties and challenges described in this chapter thus far. As they build their identities as young middle-class professionals and Beijingers, their language use is no doubt influenced. My ultimate goal is to find out how their use of Beijing Mandarin relates to their identity.

### 2.1.2 Gender and gender inequality

As mentioned in Chapter 1, another important social factor I am interested in is gender and the construction of gender identity. In this section, I will situate the current study in the contemporary social environment in China, focusing on the gender relations in the post-reform era.

During the communist era, especially during the Culture Revolution from 1966 to 1967, China was portrayed both as a classless egalitarian society and as a largely genderless culture. In the workplace, women in pre-reform Chinese society were believed and encouraged to take up positions often fulfilled by men, including some physically-demanding jobs in industries involving manual labour such as mining and construction. Unlike the situation in the post-reform market economy, urban employment in the Maoist era was under the control of the state and jobs were assigned by the relevant governing bodies. women were only given the opportunity to work in occupations traditionally dominated by men because there were not enough male labourers at the time. To a certain degree, this promoted gender equality in China and sparked women's interest in equality. Despite this, this approach has been heavily critiqued since it assumes the normality of men and masculinity and the transformation of traditional gender division in labour is merely a means to achieve the mobilisation of people for the wider economic construction (Yang, 1999; Yang and Yan, 2017). In other words, even in the egalitarian 'genderless' pre-reform Chinese soci-

ety, women and men were never equal and the workplace has always been male-centred while women were used by the state to perform relatively hard labour at the expense of their physical health in order to fulfil their duty as a member of the socialist state.

There is further evidence indicating that the erasure of gender in pre-reform China never achieved equality. When reform and commercialisation arrived in China, Chinese society and women in particular rapidly and readily retreated back to the more traditional submissive femininity. The 'new' femininity has a new name—natural femininity—in contrast with the unnatural erasure women experienced in Maoist China (Barlow, 1991; Chen, 2016). Just as before, in modern Chinese society, men are still the dominant power and demand a femininity based on their desire and the ideology of the perfect women—weak, small, submissive, and domestic. However, women who grew up in the genderless era never learned (or had already forgotten) how to express any other form of femininity. As a result, to help these women re-learn their 'natural' femininity, there were even classes and courses that taught women to do things such as putting on make-up, managing aspects of their family life, and speaking in a feminine way (Yang, 1999, p.49). In this way, women's appearance, behaviour, and language have been objectified to represent Chinese modernity, similar to the status of Japanese women's language as argued in Inoue (2002, 2006).

Unsurprisingly, the labour market soon spotted the economic benefits of this new femininity and companies started to hire young and beautiful women to be the face of the firm, fulfilling positions including receptionists, assistants,and secretaries. Middle-aged women were backgrounded or fired outright since they did not possess the new femininity suddenly demanded by the post-reform society (Yang, 1999). Four decades' work ensuring gender equality was slowly and gradually dismissed by the new demands of men in higher social and economic positions. When it comes to production, as well as home and family, Chinese society now demands a passive role of women. In fact, un-feminine women are often frowned upon in Chinese society—*nu qiangren* ('strong woman') and more recently *nu hanzi* ('manly woman', literally 'female man') were terms used to describe women who have made advancements in their career but are considered to have failed at personal and family life due to the fact that they lack femininity. Moreover, with economic development, more and more barriers are set against women: fewer high-level positions are open for women than men, and higher standards for university entry are set for women. When women graduate, many employers openly or implicitly discriminate against

women in order to balance out the gender ratio in certain industries and even when hired, women are offered a less stable and lower wage than their male counterparts (Helleseter et al., 2016; Kuhn and Shen, 2015; Lee, 2007; Pun, 2005; Shaffer et al., 2000; Woodhams et al., 2009; Yang, 1999).

As I have described in this section, for young female graduates in Beijing, the barriers to a high status job and potentially a middle-class lifestyle have always been stronger due to China's history of gender discrimination. Nonetheless, under the pressure of graduation and adulthood, female Beijingers have to use all the resources they have access to—both financial (e.g. parental aids) and symbolic (e.g. language)—to build their identity as competent young professionals and compete with their male counterparts.

## 2.2 Post-reform Beijing

For many people outside of China, Beijing is often seen as the symbol of the country. Since its establishment as capital in the Yuan Dynasty in the thirteenth century, Beijing has witnessed the rise and fall of the nation for more than 700 years. In the past century, Beijing has gone through a transformation from the last imperial capital of the Middle Kingdom, suffering from years of wars with Europeans and Japanese, to the cultural and political centre and major economic hub of modern China. The market reform of 1978 effected all of China, but it left a significant mark on the capital of Beijing and its residents.

### 2.2.1 Influences of the reform

Following the founding of the People's Republic of China in 1949, Beijing was slowly but steadily transformed into a city where every aspect of its political, social, and economic life was centralised under the socialist ideology, much like the rest of the country. The standard of living for the general public was improving in the immediate years after the socialist movement had started in comparison to the Sino-Japanese war era (1931 – 1945) or the Civil War (1945 – 1949). But this stable growth did not last; from 1958 to 1977, the Great Leap and Cultural Revolution cost Beijing and Beijingers tremendously both economically and politically.

It is under these circumstances that the decision for market reform arrived in Beijing, where the population unsurprisingly embraced it wholeheartedly. The positive influence of the reform was phenomenal. According

to official statistics in 2016 published by the Beijing Municipal Bureau of Statistics and National Bureau of Statistics Survey Office in Beijing (henceforth referred to as BMBS), Beijing's GDP grew from just over 10 billion yuan in 1978 to 2.3 trillion yuan in 2015, and the city has maintained an annual growth rate of over 10% in the 2000s and 7% in the past five years (BMBS, 2016). The average per-capita disposable income for permanent residents reached 14,000 yuan per quarter in the first quarter of 2017, showing an increase rate of 8% (BMBS, 2017). Beijing has also expanded physically and now has a population of over 21 million, almost doubled the number of permanent residents in 1990 (10.8 million). Nowadays, Beijing is not only the political and cultural centre of China, but is also one of the most economically-developed cities in the country as well as in all of Asia. In comparison to the national average, Beijingers have enjoyed a higher disposable income every year since 2005 and the capital's lead is getting bigger every year (Zhang, 2016).

In many aspects, the development of Beijing is representative of the whole country in the sense that Beijing has benefited greatly both economically and socially. Nonetheless, as urbanisation and modernisation take over the city, the advancement in economy and society is accompanied by the same issues faced by China as a whole. As I have discussed in the previous section, income-based inequality has become one of the most significant issues in Beijing. Specifically, research and official statistics have identified two forms of inequality: between high- and low-income individuals in general and between urban and rural residents (BMBS, 2017; Zhang, 2016). To illustrate, the official statistics from 2017 (BMBS, 2017) suggest that, although on average Beijing residents enjoy over 14,000 yuan per quarter per person, the difference between the top 20% (30,000 yuan) and bottom 20% of the population (5687 yuan) is more than 20,000 yuan. Moreover, the same statistics show urban residents earning over 15,000 yuan, while residents from rural areas make less than half of their urban fellow Beijingers (7000 yuan).

The vast difference in income is merely one aspect of inequality in Beijing; many other issues brought about by mass urbanisation also indicate the social polarisation of Beijing. For instance, Gu and Shen (2003) note spatial segregation in the city where struggling migrant workers congregate in the fringe of urban areas where local conflicts and other social problems often exist. Local Beijingers, who are relatively well-off, tend to live in the inner city or in established residential areas in the urban districts. Figure 2.1 shows the different districts in Beijing and the proximity to the city

centre (inner city) is strongly linked to the residents' economic status.

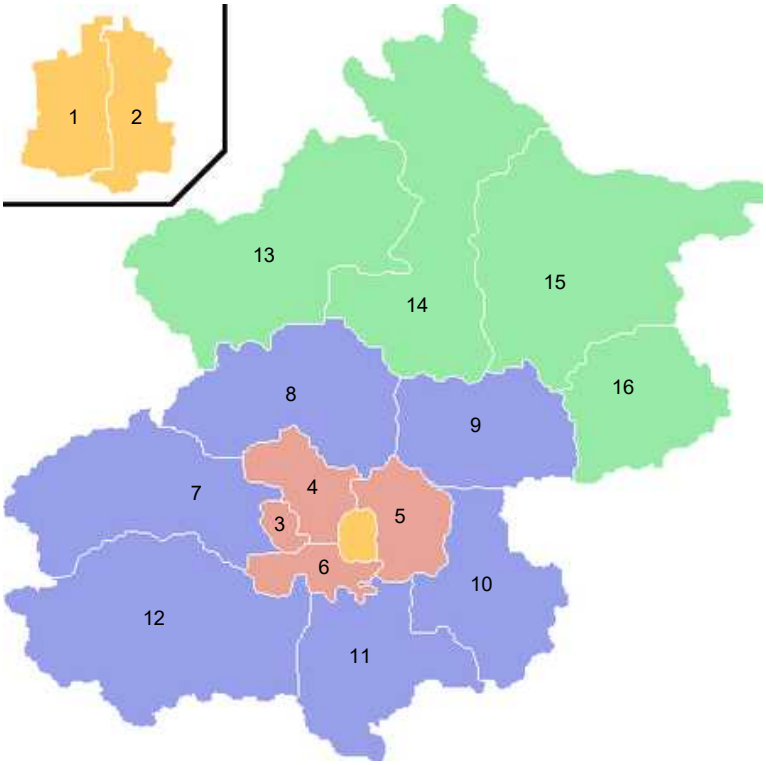


Figure 2.1: Map of the city of Beijing

Note: 1 – 16 refer to Xicheng, Dongcheng, Shijingshan, Haidian, Chaoyang, Fengtai, Mentougou, Changping, Shunyi, Tongzhou, Daxing, Fangshan, Yanqing, Huairou, Miyun, and Pinggu. Colours from inside to outside distinguish the inner city (yellow), urban (red), inner suburban (purple), and outer suburban (green) areas. (Wikipedia, 2018)

As noted, gender inequality in Beijing, especially in the form of discrimination towards women in the labour market, is obvious and severe. In a case study conducted by Zhou (2014) where she followed and filmed a female postgraduate student's job-hunting process in Beijing, she observed many aspects of gender discrimination. From university professors to company recruiters, the discrimination towards ordinary female graduates is often implicit but can also be explicit. For example, some companies explicitly advise female students not to apply for certain positions. One of the consequences of gender inequality is the pay gap between men and women. In Wang's (2005) study based on wage data from five urban centres in China, she found that discrimination in different sectors is the primary cause of pay differences between genders. Focusing on young adults working in white-collar jobs in Beijing, Sun (2014) noted the same pattern: young women were discriminated against by employers in different industries, in addition to the pay gap, there were other forms of discrimination in hiring

and promotion processes.

These examples demonstrate that post-reform Beijing mirrors the whole country in many aspects, but particularly in class difference and gender discrimination. The current study is situated in the broader social environment I have described. Much like young adults all over the country, young Beijingers face many challenges older generations did not have to face. However, they also possess resources their parents' generation did not have, such as the economic and social capital of the 'Beijinger' label. Vital for this study is the notion of localness; in the next section I present how this emerged in a post-reform Beijing.

### 2.2.2 Localness in Beijing

In Beijing, localness has emerged primarily in contrast to non-localness. One of the consequences of the economic reform in Beijing has been the increase in migration and migrant workers, the primary source of non-localness until the advancement of internet and media influence from outside of the city. Prior to the 1978 reform, Beijingers, together with most other Chinese people, were bound to where their parents were from and/or where they were born because of the *hukou* system and their rationing quota as a rationing system was in place. Although migration has always existed, on a national scale it only reached its peak after the beginning of the reform when the commercialisation of properties and other living necessities such as food and consumer goods became possible. Migration in China is largely unidirectional from rural areas to urban centres, and from less economically-developed cities to richer metropolitan areas. Unsurprisingly, Beijing has been a popular destination for many internal migrants, especially since the privatisation of housing gave workers the opportunity to buy property and settle in the capital in pursuit of, for instance, better job prospects (Li et al., 2008, p.248). By 2015, over 35% of the total population of Beijing—more than 82 million—were migrants without a Beijing *hukou* in comparison to merely 2% of non-local permanent residents back in 1978 (BMBS, 2016).

The increasing diversity of population has brought many social benefits and problems. While acknowledging the economic contribution migrants have made to the capital, public discourse tends to focus on the negative aspects. As mentioned above, conflicts in areas occupied by migrants are frequently portrayed on television in a negative light. On the whole, migrant workers are seen as a group of people who are uneducated, poor,

hostile, and do not integrate into the local culture, however, studies have suggested this is not necessarily the case and the cause of poverty is likely their lack of economic and social rights in Beijing as migrants (Jing, 2016; Shi, 2014).

Culturally, incoming migrants have made Beijingers increasingly aware of their identity as local residents who not only have a Beijing *hukou* but also possess the good qualities of traditional Beijing culture. Nowadays, a sharp contrast exists between *beijingren*/Beijingers (literally 'Beijing-person') and *waidiren* ('foreign-locality-person', meaning non-locals). In a satirical piece entitled 'A Guide to *Racism* in Beijing', the author forewarns people of the discrimination towards non-locals in Beijing (Yikuaiqian, 2017). From accents to clothing and eating habits, from personality to cultural heritage, from pass-time activities to economic development, anything non-local is bound to fail to compete with Beijing and will eventually becomes the topic of mockery for Beijingers.

Initially, only newly-arrived migrants from all over China are categorised outside of the local category. However, after decades of migration and mobility, even local residents are being divided into two categories: those who are the first-generation in their family to be born locally (new Beijinger, or *xin beijingren*), and those who have locally-born parents and grandparents (old Beijinger, or *lao beijingren*). The distinction and the emphasis on whether one is local or not often manifest when Beijingers enter more diverse environments such as university and the job market. Rachel, one of my participants commented on this in her interview: 'Do you know there is a difference between old and new Beijingers? I did not know such a thing existed until I started university and found out some of my classmates are children of migrants.' Not surprisingly, Rachel is a *laobeijing* who was born and raised and still lives in the urban area of Beijing.

In the face of mass migration, the contrast between old and new Beijingers is less noticeable than the contrast between migrants and Beijingers. This is especially the case since it is now nearly impossible to obtain a Beijing *hukou* (General Office of Beijing Municipal People's Government, 2016). As a result, having a local register not only represents sentimental cultural values but also brings concrete economic privileges. Consequently, non-local students in Beijing face greater difficulties in the job market due to *hukou*-based employment discrimination (Han, 2007; Zeng, 2004). Although it is possible for non-locals to find employment in the public sector and state-owned companies, as suggested by Guo and Iredale (2004), many occupations such as teaching in public schools are still reserved for Bei-

jingers with a local *hukou*.Even for native Beijingers, as the competition in getting jobs in state sector and collective enterprises increases, more and more graduates are working in the private sector or foreign companies.

For an average Beijinger, local identity involves many aspects of city life as well as the traditions passed down for generations. For example, Beijingers are proud of their smoothness—they show maximum respect for others, try to avoid unnecessary conflicts and trouble at all times, and are willing to lend a hand whenever needed (Chen, 1992). This popular persona, known as *jingyouzi* (oily Beijinger), is translated as 'smooth operator' in Zhang's (2005) study on Beijing business managers. In the contemporary context, the use of this term has declined, though the fundamental qualities of this traditional Beijinger are preserved. For many of my participants, the smoothness is shown in being acceptable of changes in the city (including migrants), being polite and considerate in public, and being an obedient child for their parents.

Another culturally specific image of a typical Beijinger is the 'alley saunterer', or *hutong chuanzi* in Chinese. Also studied by Zhang (2005), this persona has a negative connotation to it. An alley saunterer is someone who is jobless, has a very minimal education, and loiters around the alleyways (*hutong*) looking for trouble (Yang, 1994). As described by Zhang (2001, 2005, 2008), the characteristics of such an icon are used to describe a stereotypical male Beijinger who lacks motivation and behaves recklessly or violently.

More recently, there seems to be a new cultural icon in the making. Many of my participants, young adults who grew up in a relatively comfortable environment, mentioned their lack of motivation in career and life in general but this is often not described in a negative way. *Guo xiaorizi*, as some of them say, means 'living a simple life' and describes the younger generation's struggle in a competitive society. The key criteria for such a lifestyle include a stable job that pays the bills but also allows for leisure activities such as travelling, a partner who also works so that the economic burden is not too high for one individual (especially for men), the prospect of having children and starting their own family, and maybe as a minimal requirement for living in the capital city, a car and a house (which are most likely bought or co-owned by their parents). As can be seen, this lifestyle incorporates both of the above cultural icons: it is non-confrontational just as a smooth operator, whilst conveying a lack of motivation like an alley saunterer.

The existence of these cultural icons first shows the importance of a

local identity for young Beijingers, especially for those growing up experiencing the city's transition from a relatively non-mobile city to one that relies heavily on its migrant population while at the same time deals with migration-related issues. As I argued in Chapter 1, one of the fundamental functions of an enregistered variety or a register is to differentiate it from other forms of speaking, be it language, dialect, or in this case, the use of linguistic features. As I will show in the following analyses, Beijingers not only are aware of these specific personae, but also use a combination of different linguistic features to construct a persona that fits their gender and level of aspiration.

## 2.3 Linguistic Background

This section introduces the language situation in China, particularly in the capital city Beijing. A description of variables in Beijing Mandarin is also provided, followed by more details on the target variables in the present study.

### 2.3.1 The Chinese language family

The term 'Chinese' is used by both non-linguists and linguists to refer to languages and language varieties spoken in and outside of China, but it requires some clarification. Scholars often regard 'Chinese' as a language family which is one branch of the bigger Sino-Tibetan language family, since many varieties within this collection of languages/language varieties are mutually unintelligible (Chao, 1968; Chao and Dil, 1976; Chen, 1999; Li and Thompson, 1981). Nonetheless, others have noted that to emphasise the differences among varieties of 'Chinese' might neglect the complex and unique situation in China where all the speakers are held in a single 'political entity', and extralinguistic factors, be they religious, economic or political, have to some extent failed to challenge this unity (DeFrancis, 1984, p.56). In the present study, 'Chinese' corresponds to *hanyu*, literally translated as 'language of the Han people (the majority of the Chinese population)', and refers to the aforementioned language family.

Although the differences between any two varieties of the Chinese language family might be significant enough to lead to mutual unintelligibility, these varieties are generally treated as dialects rather than languages in China (DeFrancis, 1984). Chao (1968) compares the differences between Beijing Mandarin dialect and Southwest Mandarin dialect to those between

British and American English while suggesting Cantonese dialect is as significantly different from Mandarin dialect as English is from Dutch. In this study, the term 'dialect' is both loosely used to refer to languages within the Chinese language family and strictly used for dialects within a single language variety of the family. To clarify, Mandarin is a variety of Chinese, and Beijing Mandarin is a dialect of the Mandarin variety. In Figure 2.2 (Consortium for Language Teaching and Learning, 2017), Beijing Mandarin is spoken in Beijing where the variety of Northern Mandarin is used.

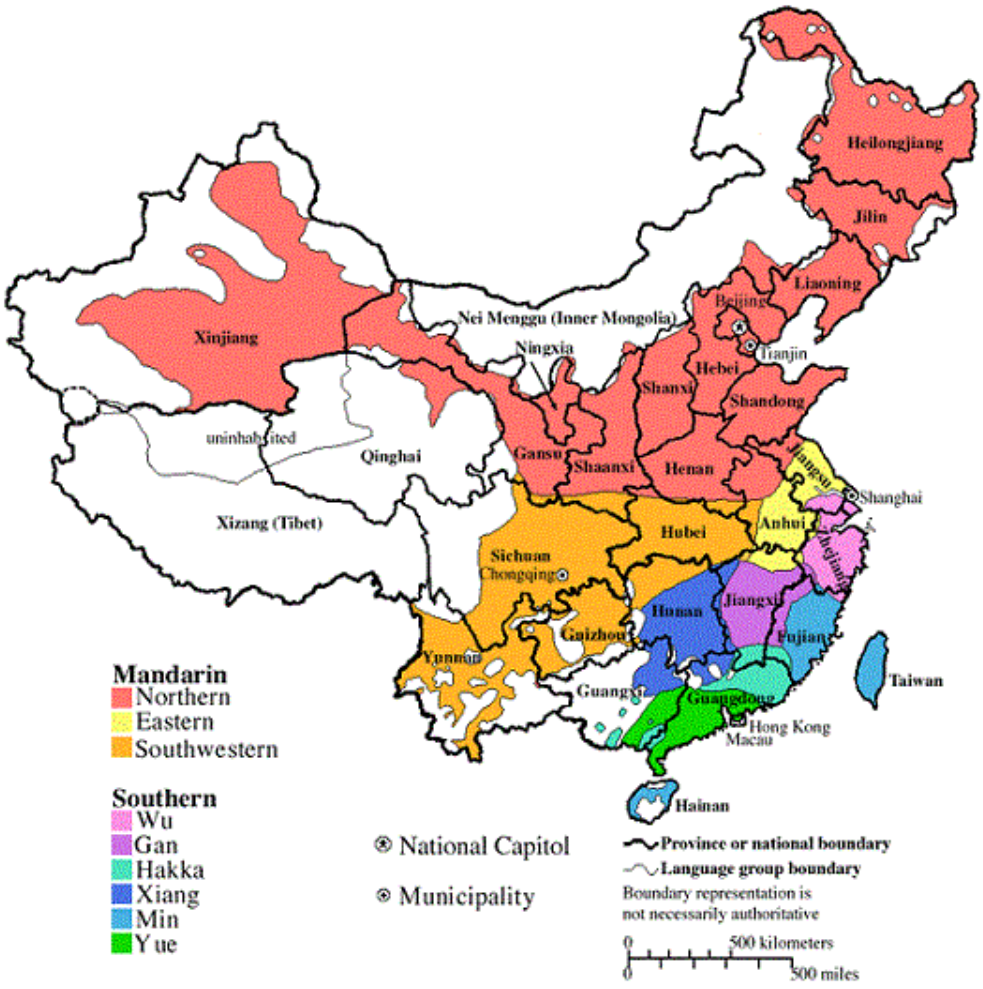


Figure 2.2: Mandarin dialects and Southern Chinese varieties in China (Consortium for Language Teaching and Learning, nd)

There are also ongoing debates about the classification of various dialects. According to Li and Thompson (1981) and Norman (1988), Chinese consists of seven main varieties: Mandarin (*Beifanghua*/*Guanhua*), Wu, Xiang, Gan, Cantonese (*Yue*), Hakka (*Kejia*), and Min. Others have further divided one or more of the above categories, for example, Wurm et al. (1988) separates *Jin* dialect from the rest of Mandarin dialect while DeFrancis (1984) treats Northern and Southern Min as two dialects. What

the literature does agree on is that the Mandarin dialect has by far the most speakers in China: it is spoken by over 70% of the population in China as their mother tongue (Li and Thompson, 1981) and the approximate number was 889 million in 2013 (Lewis et al., 2016). Chinese speakers who live in North, Northeast, Northwest, and Southwest China speak Mandarin dialects which are mutually intelligible to a large extent (Norman, 1988), while those who speak non-Mandarin dialects are mostly from South and Southeast China (Wurm et al., 1988). Figure 2.2 shows the main dialect areas in China.

### 2.3.2 Beijing Mandarin dialect

Beijing, is located in Northern China and has a local Mandarin dialect named Beijing Mandarin (BM). The dialect in Beijing has a history of more than 1100 years, dating back to the Tang Dynasty (618–907 AD) when the local Han people started to interact with ethnic minorities who spoke mainly Altaic languages (Lin, 2000). By the time the Manchu-speaking Qing Dynasty took over Beijing as its capital city in the 1640s, the Beijing dialect had been influenced for more than 600 years by both non-Chinese languages and other Mandarin and non-Mandarin dialects. During the next 300 years or so, Beijing dialect gradually developed into what is now called Modern Beijing Mandarin (as opposed to the Beijing dialect before the Qing Dynasty), and it is this dialect that is the focus of the current study. Although Beijing Mandarin can be heard in and around the city of Beijing today, little is known about its use in different social settings since very few studies have investigated the sociolinguistics of Beijing Mandarin.

### 2.3.3 *Putonghua*

China, as a country and a state, is no stranger to language standardisation. The first documented standardisation took place in 221 BC when the Qin Emperor unified written Chinese scripts in the country through the destruction of works written in other scripts (Zhou and Ross, 2004). The current standard language—Modern Standard Chinese (MSC)—was standardised and made the official language of People's Republic of China in the 1950s (China, 2000). Most people in mainland China know it as *Putonghua*, literally translated as 'Common Speech', while *Guoyu* ('National Language') and *Huayu* ('Chinese Language') are used in Taiwan and Singapore respectively (Chen, 1999, p.3).

As pointed out by Guo (2004), the standardisation of Chinese and the

promotion of *Putonghua* is both linguistic and highly political. For example, the mutual unintelligibility among different dialects in the country was believed to have posed barriers for the new government to carry out its socialist construction and modernisation. Nonetheless, having a standard language with a romanisation system—*Pinyin*—across regions helped improve the level of literacy within a large illiterate population in the 1950s (Peterson, 1994). It is also believed that apart from its function in facilitating communication, an official language also provides the linguistic basis for a shared identity among Chinese people and promotes the Communist national ideology. The name *Putonghua* ('Common Speech') indicates the language is 'common' to all Chinese including various minority and non-Mandarin Han dialect communities, and is thus preferred over *Hanyu* ('language of the Han people') (Chen, 1999, p.25).

In 1955, the Symposium on the Standardisation of Modern Chinese came up with the definition of *Putonghua* which was used as the fundamental guidance for the standardisation of Chinese: *Putonghua* is phonologically based on Beijing Mandarin with a vocabulary drawn from northern, central and south-western Mandarin Chinese and grammars standardised to 20th century written vernacular Chinese (Rohsenow, 2004). This meeting and the subsequent standardisation of *Putonghua* essentially completed the selection and codification process mentioned by Haugen (1966). Although not made explicit, the assumption that all dialects will eventually be replaced by *Putonghua*, the standardised variety, in every domain of social life existed for many years until the 1980s (Guo, 2004, p.50). After nearly two decades' reconsideration, the Chinese government passed a law in which *Putonghua* was to be promoted as the standard language in formal and public settings, while dialects are essential forms of communication and should be protected rather than eliminated (Guo, 2004, p.51).

### 2.3.4 Languages in Beijing

With this historical context in mind, nowadays the local Mandarin dialect coexists with the standard language in Beijing. Before introducing the structural similarities and differences between the two varieties, I will discuss the current situation in which these languages coexist..

To date, there has been very little research on the situation in Beijing. This is possibly due to the fact that *Putonghua* and Beijing Mandarin are very similar, as this makes it difficult to study their variable use and social dynamics. Nevertheless, studies done in other cities in China can shed

some light on this matter. Sun et al. (2007) conducted a language survey on Shanghai students aged 10 to 19 on their reported use and attitude towards *Putonghua* and the local dialect, Shanghainese. The results showed that although the use of Shanghainese was mainly limited to informal settings such as interactions with family, about 30% of the participants tended to mix *Putonghua* and Shanghainese both in formal and informal situations, including talking to teachers at school or university. Age-grading was also noted in the data: as students aged, their use of dialect increased at home, and this was accompanied by a decrease in the use of *Putonghua*. Consequently, the authors suggest that Shanghainese might be used to build a distinct local style rather than simply being the non-standard local variety.

Similar findings have been suggested by Huang (2011) who conducted a language choice survey in markets and shopping centres in Fuzhou, Fujian Province where the local dialect—Fuzhou dialect—is also a non-Mandarin dialect. By comparing language choices between *Putonghua* and Fuzhou dialect from both customers and salespeople, the author concludes that among young speakers aged 7 to 25, adolescents (13 – 18) were most likely to use Fuzhou dialect while young children and older adolescents/young adults use *Putonghua* more. The use of *Putonghua* also increase with the status of the shop—people preferred using *Putonghua* when shopping at big shopping malls with more non-local customers (66.3% use only *Putonghua*), and switch to the local dialect when buying groceries from the local market (70.8% use only dialect).

Finally, a study carried out in Changsha examines language attitudes of secondary school students born after the 1900s, using the matched-guise technique and a language survey (Li, 2008). Results confirm the findings of the other literature discussed here, that dialect use is restricted in less formal and public communication and *Putonghua* is preferred in formal settings.

Since the standard language takes Beijing Mandarin phonology as its baseline from the very beginning, differences in phonetics and phonology between these two varieties appear to be more complex. For example, Xu (1979) lists several phonetic features unique to Beijing dialect: the inter-dental variants [θ], [tθ], [tθ$^{h}$] of dental sibilants /s/, /ts/, /ts$^{h}$/, the labiodental [v] variant of the bilabial approximant /w/. Zhou (2002) further points out that both the rules of the rhotacisation of place names and the distribution of the two variants — /tʂɤ/ and /tʂei/ for demonstrative *zhe* (this) and /na/ and /nei/ for *na* (that) — are different across the two varieties. Apart from differences in phonetics and phonology, Beijing

Mandarin also differs from *Putonghua* in lexicon, morphology, syntax, and even at a discourse/pragmatics level. Based on previous research, some distinct features are identified and discussed below.

## 2.4 Beijing Mandarin Features

As part of the process to determine the target variables studied in this thesis, I consulted native Beijingers on the various linguistic features that previous literature suggests to be local to Beijing. In this section, I list some of these Beijing Mandarin features, with the aim of providing more information on this under-studied variety. The target variables of this project—neutral tone, classifier omission and intensifier *te*—are discussed in more detail in Chapters 4 – 6.

Below, I list these Beijing Mandarin variables based on their localness/Beijingness—that is, how stereotypical of Beijing and Beijing Mandarin each individual feature is. The criteria used to determine the localness of features were mainly drawn from previous literature in both Chinese linguistics and sociolinguistics. Additionally, a group of native Beijing Mandarin speakers were recruited as consultants to verify the observations from previous literature. The main goal was to confirm whether Beijing Mandarin speakers share a common understanding of the enregisterment progress for each of these features.

All consultants were university students and their basic information can be found in Table 2.1.

| Gender | Age | Education | Number of Beijing-born parents |
|---|---|---|---|
| Male | 20 | Undergraduate | 1 |
| Male | 25 | Postgraduate | 1 |
| Female | 21 | Postgraduate | 1 |
| Female | 26 | Postgraduate | 1 |
| Female | 22 | Postgraduate | 2 |
| Female | 22 | Postgraduate | 2 |

Table 2.1: Social and linguistic background for all consultants

All consultants were born during or after the 1980s—30 years after the language standardisation in China—and speak both Beijing Mandarin and *Putonghua*. I distinguish their parents' language background in order to understand their access to Beijing Mandarin, since Zhou (2002) suggests that parents' language background tends to influence the children. Students with one parent born outside of Beijing potentially have more language

contact with *Putonghua* and other dialects (Zhou, 2002), though I will not elaborate on this topic as it is not relevant to the goal of obtaining a list of features.

During the informal consultations, each consultant was given a list of Beijing Mandarin features obtained from existing linguistic studies and asked to evaluate them in terms of: 1) frequency of usage; 2) whether it is used in formal or informal situations; and 3) salience as a marker of localness. The list of Beijing Mandarin features is provided in Table 2.2, in descending order of localness. Here, I label them as stereotypes, markers and indicators using the definitions from Section 1.2.3 in Chapter 1, focusing on whether the use of local variants shows 1) stylistic variation and 2) social stratification (i.e. regional difference). More specifically, stereotypical features are salient local features that are avoided in formal speech and commented on by Beijing and/or non-Beijing speakers, markers are also associated with Beijing and informal speech but are not often commented on, and finally, indicators are features that have been found in Beijing Mandarin, yet speakers are not aware of its tie to localness or its stylistic variation.

My main aim in providing this list of Beijing Mandarin features is to show how different features vary in their localness, as seen in the third column in the table. In Table 2.2, the three main variables examined in this thesis are in boldface. We can see that they differ in their localness—neutral tone is considered stereotypical while classifier omission, and intensifier *te* are less associated with Beijing (marker/indicator). More details on these features are presented in the relevant sections in Chapters 4–6.

| Feature | References | Example | Localness |
|---|---|---|---|
| *erhua* | Hu (1986a,b) | 'Sika deer'<br>*Putonghua*: méihuā lù<br>Beijing Mandarin: méihuār lù | stereotype |
| **Neutral tone** | Chen (1999)<br>Zhang (2005) | 'Fresh'<br>*Putonghua*: xīnxiān<br>Beijing Mandarin: xīnxian | stereotype/marker |
| Monosyllabic verb<br>+ monosyllabic suffix<br>*ba*[1] | Zhou (1998) | *feizhi zhijie si-ba si-ba diu le.*<br>used paper immediately tear-BA tear-BA drop LE<br>'Just tear up the used paper and throw it away.' | marker |
| *nin*<br>Honorific 2nd-person pronoun | Chen (1986) | *nin qing zuo.*<br>you-2SG please sit<br>'Please be seated.' | marker |
| *ya*<br>pron.<br>'he/she/it (derogatory) | Zhou (1998) | *ya you chidao le.*<br>he again late PTCL<br>'He is late again.' | marker |
| *ai/gen*<br>prep.<br>'at; on' | Zhou (1998)<br>Zhou (2002) | *ta ai/gen menkour zhanzhe ne.*<br>he at door standing PTCL<br>'He is standing at the door.' | marker |

Table 2.2: Beijing Mandarin features
(Continued on next page)

| Feature | References | Example | Localness |
|---|---|---|---|
| *mei zher* | Hu (1986b) | *zheme zuo shi mei zher le.* | |
| adv. | Hu (1987) | This do is no solution PTCL | marker/indicator |
| 'no other solutions' | Zhou (1998) | 'This is the only way to do (it).' | |
| *beng* | Hu (1986b) | *beng gen wo shuo zheige.* | |
| adv. | Hu (1987) | do not to me talk this | marker/indicator |
| 'do not' | Zhou (1998) | 'Don't talk about this with me.' | |
| *cheng* | Hu (1986b) | *ni kan zheyang cheng ma?* | |
| adj./adv. | Hu (1987) | you think this fine PTCL | marker/indicator |
| 'able; fine' | Zhou (1998) | 'Do you think this is fine?' | |
| ***te*** | Hao (2012) | *ta gen ta muqin te qin.* | |
| *adv.* | Qi (2012) | He and his mother very close | marker/indicator |
| *'very'* | | 'He is very close to his mother.' | |
| | | *ta shi wo yi (ge) pengyou.* | |
| **Classifier omission** | Tao (2006) | He is my one (CL) friend | marker/indicator |
| | | 'He is a friend of mine.' | |
| *ganqing* | Hu (1986b) | *ni yao neng lai, na ganqing hao.* | |
| adv. | Hu (1987) | you if able come that indeed good | marker/indicator |
| 'so; indeed' | Zhou (1998) | 'It would be good if you could come.' | |
| *nixiang* | | *nixiang wo jia zhu zai shiqu.* | |
| Discourse marker | Yue (2010) | Yue (2010) 2SG+like my family live at city | indicator |
| | | 'My family lives in the city.' | |

Table 2.2: Beijing Mandarin features (continued)

# Chapter 3

# Methodology

## 3.1 Overview

In the previous two chapters, I have reviewed the social and linguistic background that motivated this research. I now move on to the specific methods employed in the study.

The present research addresses questions concerning the potential social meanings of Beijing Mandarin among young Chinese adults and the association between variation in Beijing Mandarin and social factors such as gender, class and aspiration. I aim to study how local and standard features are used in production by Beijing speakers transitioning from higher education to employment in order to understand whether and how social meanings are conveyed in their speech.

A mixed-methods approach was adopted in the data collection for this project: I conducted semi-ethnographic fieldwork and collected production data from sociolinguistic interviews and self-recordings in different contexts. In this chapter, I focus on the various aspects of data collection and analysis. I offer justification and description of the fieldwork sites, and methods used in participant recruitment and data collection.

## 3.2 Semi-ethnographic Fieldwork

As mentioned above, in the current study, I chose to adopt a semi-ethnographic approach that combined both ethnography and interview-only approach in sociolinguistics (Hall-Lew, 2009). Specifically, as I explain in Section 3.5, I used a moderate amount of participant observation with other data collection methods including interviews and self-recordings. Although the use of intensive linguistic ethnography is valuable in sociolin-

guistics (Baran, 2007; Drager, 2009; Eckert, 1989a), a semi-ethnographic method provides researchers with both the advantages of ethnography and those of an interview-only approach (Hall-Lew, 2009). First, this approach offers an understanding of the community at hand through the researcher's involvement in the community, and therefore is helpful in gaining access to participants and developing locally-defined social categories. Moreover, it is more efficient in the sense that one can potentially collect a large quantity of speech data in a shorter amount of time.

My decision to conduct a semi-ethnography was made after careful considerations of the unique characteristics of the community and language variation I was interested in, as well as my role as a fieldworker in Beijing and I explain these in detail here before introducing the fieldwork site and methods. First and foremost, in order to study an under-researched language variety such as Beijing Mandarin, a detailed emic perspective is needed and ethnographic fieldwork would enable me to achieve this. Ethnography, as a means to describe and understand a community and its culture, can not only help me recognise linguistic and non-linguistic practices native to Beijingers, but also aid in the establishment of useful sociolinguistic categories such as social class (see Section 3.4.4).

Secondly, since I am interested in several social factors (e.g. gender, class, career plan, aspiration) among a student population, it is essential to consider the practicality of a traditional ethnography. More specifically, when the community members are not confined to one fixed physical location, as was the case with my participants who were students from different institutions and programmes, a semi-ethnography helps to ensure that a large amount of speech data can be collected.

One of the key issues with ethnographic research concerns the role of the fieldworker (Hymes, 2003). More specifically, Rampton et al. (2015) have suggested that the participation and reflectivity of the researcher are vital to the interpreting of data obtained through ethnography. In the current project, there is no doubt that subjectivity is inevitably introduced into the research (e.g. my age, gender, accent) despite the aim to achieve objectivity in the sociolinguistic research. As argued by Rampton et al. (2015), researchers should bear the subjectivity brought in by themselves in mind when interpreting fieldwork data, which I will discuss in later chapters where the results are presented. In the remainder of this section, I provide some essential information on my role as a researcher in the field as it is necessary for the understanding of data interpretation.

Regarding my language background, although familiar with Beijing

Mandarin as a linguist, I am not a native Beijinger. I was born and raised in a city named Zhengzhou in the central part of China and my mother tongue is the local Mandarin dialect. Putonghua was introduced to me in my formal education, starting from age 5 and therefore, I am also a speaker the standard variety. My exposure to Beijing Mandarin is mainly from media, although I have visited the capital several times as a tourist prior to my fieldwork. I am therefore not a speaker of Beijing Mandarin, which was communicated to all my participants from the beginning. Another difference between me and my participants is our age. At the time of my fieldwork, I had graduated from university for four years so I was at least five years older than the average university student in Beijing. Moreover, the fact that I am a graduate student also separates me from my potential participants, who are yet to finish their first degree.

Because of all these differences, I did not put any emphasis on being an authentic member of the young student population. The purpose of the semi-ethnography was to gather data that represents natural speech when the young Beijingers were interacting with other average people—me as a student researcher in this case—and not for me to become or pose as an insider within the community. Additionally, I was not born in Beijing, nor was I familiar with the city at the beginning of my fieldwork; therefore, I could hardly pose as a native Beijinger linguistically or socially. Moreover, although I was not significantly older than my participants, I could not convincingly pose as their peer with my student-researcher status and all the materials I brought to the meetings (e.g. recorders, microphones, information sheets and consent forms). Instead, I decided to position myself as a non-Beijing student who wanted to know about student life in Beijing as well as someone who shared their concerns about the uncertainty of adulthood and the difficulties in job-hunting. It was this positioning that allowed me to talk to and record my participants, maintain a relationship with them during and after my fieldwork, share and hear stories concerning university graduates, and eventually gain a better and fuller understanding of the student population and the social environment they lived in.

## 3.3 Fieldwork Sites

I arrived in Beijing at the beginning of November 2014 and stayed until March 2015 in a flat near the third Ring Road, experiencing the life in the city of Beijing as much as I could. This not only enabled me to know what my participants and other Beijingers experience on a daily basis, but also

allowed me to establish locally-defined social categories (e.g. social class) among my participants, which is thought to be vital in sociolinguistic research (Eckert, 2012; Milroy and Milroy, 1987). To capture the relationship between the standard variety and the local dialect in Beijing and how young speakers of Beijing Mandarin use both standard and local features to negotiate their identities, it is crucial to ensure the existence of both sets of features in my fieldwork sites. Fortunately, Beijing has many educational institutions that could provide such an environment. Traditionally and at least on paper, these institutions have a stronger preference for standard languages than the wider society, and this is demonstrated by institutions' overt rules and regulations regarding the use of the standard language, as is shown in the following extract from the Law on the Standard Spoken and Written Chinese Language (China, 2000):

> Article 10 – Putonghua and the standardized Chinese characters shall be used as the basic language in education and teaching in schools and other institutions of education, except where otherwise provided for in laws.

Moreover, schools and universities are often used to promote the standard language. For example, banners like the one in Figure 3.1 can be seen in many Chinese schools.


Figure 3.1: Standard language promotion in a Chinese education institution
Banner showing 'Establishing awareness towards standard language, promoting national cultural education' in a Beijing secondary school (Tongzhou No. 4 Middle School, 2012)

Among these institutions, I chose to conduct my fieldwork in universities, focusing on students who were in their last two years of study, as I am interested in a group called the 'emerging adults'. First proposed by Arnett (2000), this group is believed to be undergoing the transition process

from adolescence to the 'real' adulthood. These young adults were typically born after the 1970s, aged from 18 to 25, and are likely to be pursuing post-secondary education. Despite the fact that the emerging adulthood theory was based on the social structure of mainstream Western societies, young generations born in post-reform China share similar traits (Nelson et al., 2004). To illustrate, emerging adults enjoy a greater degree of freedom in terms of social obligations as they are no longer under the tight control of their parents, but have yet to take on the responsibilities of adulthood such as marriage and permanent employment (Arnett, 2007). These unique characteristics of the emerging adults give these individuals the opportunity to be socially and geographically mobile, which in turn helps them to further explore their identity using different resources including linguistic resources (Bigham, 2012). This is crucial for the current project, as I aim to study how Beijing Mandarin speakers use linguistic variables which are potentially socially-meaningful to construct identity. For this reason, I did not conduct my research among adolescents in secondary schools like many other sociolinguists (e.g. Cheshire, 1982; Eckert, 1989b, 2003; Rampton, 1996); instead, I investigated university students who were emerging adults going through the transition from education to employment and were likely to be building their new identities as professionals in society. Although little is known in the context of Chinese universities, existing studies suggest that speakers (re-)negotiate their identities using linguistic resources (Baran, 2014; Bucholtz, 2004; Knee and Van Herk, 2013). Therefore, it is possible that the different industries university students would later enter might have different linguistic preferences instead of treating the standard as the norm, and this required young adults to re-negotiate their linguistic identity.

In choosing the specific universities to locate these young Beijingers, I mainly considered the following two factors. First and foremost, I needed to ensure the presence of variation in the use of local features at the field-work site, and the most reliable way to do this was to make sure that native Beijing Mandarin speakers were present at such universities. Although there are numerous universities in Beijing, some tend to accept more local students than the others, and the difference in the number of local students can be quite significant. For example, one of the top universities—Peking University—admitted around 5% Beijing high school graduates in 2014 (Peking University Admission Office, 2014a,b), while a local university—Capital University of Economics and Business—had an intake of 2339 students, of which approximately 70% (1926) were from the

Beijing area (Yi, 2014).

Secondly, it was important to ensure some degree of homogeneity among the student body in terms of social class background since I was interested in the 'interior group'—the centrally located social group, mostly like to be upper working class or lower middle class—who are normally seen as being more sensitive to language change (Labov, 2001). My main purpose was to conduct an in-depth investigation of the language use of a particular social group, that is, emerging adults with a (lower) middle class background. To be more precise, I wanted to understand how they demonstrated their upward mobility and negotiated their professional (middle-class) identity using symbolic capital including linguistic resources since their access to material capital was limited due to their social background (Bigham, 2012). To achieve this, I did not follow previous research which looked into speakers from a wide range of different social classes (e.g. upper, middle and lower class) to compare their speech (e.g. Labov, 1966b, 1972a; Trudgill, 1972). Instead, I targeted institutions that have more students with a middle class background in the first place by selecting state-owned universities. In comparison to private institutions, these universities charge students lower tuition fees (Wang, 2004) and are generally preferred by working class and lower middle class families in China (Wang, 2007).

Taking the above factors into consideration, I decided to avoid top-ranking universities and private institutions. I selected two second-tier universities—one with a wider range of programmes and more local students and the other with more specialised courses and a more diverse student population—as my main research sites. I will refer to them using the pseudonyms Beijing Capital University (BCU) and Beijing Metropolitan University (BMU) respectively. Both BCU and BMU fit the general criteria: they are both teaching-intensive public universities located in urban Beijing, and they both maintain an relatively big intake of local students each year. However, there are also various differences between them. For instance, BMU is ranked higher and considered more prestigious than BCU. Perhaps related to this, BMU also has a much lower number of local students—around 5 – 10% in recent years—than BCU, for which 67% of the 2014 intake were from Beijing (although the figure varied from department to department). Additionally, BMU is more research-oriented in comparison to BCU which focuses on the future employability of its students by offering practical trainings to students of all years. At the time of this study, BCU had more than 20,000 undergraduate students enrolled on programmes across several campuses while BMU had just over 9,000 un-

dergraduate students. I will discuss more of these details in the following chapters when they become relevant.

Finally, to further ensure that the participants share a linguistic repertoire of Beijing Mandarin as well as a middle class background, I collected their parents' demographic and socioeconomic information including age, place of birth, occupation, education, and only recruited students who fit the criteria (I discuss these in Section 3.4).

## 3.4 Participant Recruitment

In China, the duration of an undergraduate programme is usually four years, with the exception of medical degrees which require at least five years. Out of the 30,000 undergraduate students at BCU and BMU, I was particularly interested in those who were in their last two years of study. These students would have already settled in at the university after the initial two years, and would have formed their own networks in and outside of the university. Their next step in life was to finish university and subsequently find their way in the job market. Studying at a second-tier university, these students had rather limited choices, especially for those in BCU since it is not as prestigious as BMU. One of their options is postgraduate education; however, postgraduate admission in China depends almost solely on entrance exam results with a national admission rate of less than 30%, most of the students taking the exams would find themselves in the job market along with the other graduates immediately after graduation with little or no time to adjust. It is thus crucial for students to make the transition within the last one to two years in university and prepare themselves for employment. At this stage, most of them would have had some working experience, either through a part-time job or an internship, and have developed some understanding of the world beyond the university. The biggest challenge these students face is finding their places in a complex society as young professionals rather than as students.

Apart from the year they were in, I also controlled the participants' academic disciplines, as I was interested in potential inter-discipline differences. To be more specific, I aim to find out if students from similar social and linguistic backgrounds would develop distinct linguistic practices suitable for their respective careers after having been trained for different jobs in different programmes. Similar findings have been reported in Taiwan, where Baran (2014) investigated the use of two Taiwan Mandarin features—de-retroflection of /ʂ/ and glide deletion—among Taiwanese high

school students. In the high school Baran studied, students who shared similar future aspirations formed tight subgroups within their classes, and used features from Standard Mandarin and Taiwan Mandarin to construct specific identities. Students aiming for university education employed more standard features while those who lacked an interest in higher education used more Taiwan Mandarin features, affiliating with the local culture. Similar patterns have also been noted by Knee and Van Herk (2013) in a rural community in Newfoundland, Canada. In New-Wes-Valley, teenagers' educational and local aspirations seemed to provide a better explanation for the observed language variation. Specifically, they showed that speakers who wanted traditional employment within the community retained the local feature—interdental (th-)stopping—while others who aspired to seek jobs elsewhere used the more standard pronunciation. It is then possible that Beijing students with different career plans might similarly begin to shape their professional identities through the use of local features in Beijing Mandarin.

Due to the limitations of time and resources, I chose to recruit students from the following four programmes: business/management, Chinese literature, journalism, and foreign languages. The reasons why I decided on these four specific programmes are multifaceted. First, they represent four major programmes in humanities and social sciences, and allow me to investigate a wide range of students without over-complicating the analysis by involving many vastly-different disciplines which could make the comparison infeasible.

Secondly, I was interested in the potential differences in the use of standard language between different sectors where graduates of these disciplines would be working. In general, students with a business/management degree are more likely to work in the business sector while language (Chinese and foreign languages) and journalism graduates would work in the education/media sector. The corporate business world does not overtly require the use of the standard language. In contrast, the media sector is often associated with the appropriate, if not standard, way of using languages, especially in official broadcasting. For language—related jobs, the situation is more complex. One one hand, language teaching requires standard language skills, yet one the other hand, as I have argued before, many teaching jobs are reserved for local students who might prefer the local variety.

Recent studies have suggested that Beijing Mandarin might be gaining prestige, which makes the across-discipline contrast more interesting. Zhang (2001, 2005, 2007b) found that Beijing business managers make use

of local features such as /ʂ/ lenition and the interdental realisation of (ts), and argued that the local variety has an increasing prestige in the business industry. Furthermore, my MA project (Zhao, 2012) showed that Beijing Mandarin was gaining prestige among university students and graduates in China. These results potentially indicate that the use of local features in Beijing Mandarin has certain prestige in both the business sector and the education/media sector. Examining whether different groups of students develop different linguistic strategies upon entering the workforce, and how they negotiate between local and standard varieties will then offer an opportunity to understand the prestige associated with Beijing Mandarin, and the life of these young middle-class adults, both linguistically and socially. Ultimately, it can also illuminate the changing socioeconomic dynamics in China.

Lastly, this decision was also a practical one. As mentioned before, BCU has multiple campuses in Beijing and each campus houses several academic departments. As a result, recruiting all four disciplines at BCU would involve a large amount of travelling, and thus extremely limit the ethnographic fieldwork I could have done. Therefore, I recruited students from three disciplines at BCU: business/management (located on the Business campus which houses departments in the social sciences), Chinese literature and journalism (both located on the Arts campus where arts and humanities departments are). As for BMU, which offers more specialised programmes in foreign languages and journalism, I recruited students from these two disciplines there.

I started my fieldwork and data collection at BCU in early November 2014, two months after the autumn semester began, and around the time when students were busy preparing for mid-term exams. I first reached out to my personal contacts in BCU using the 'friend-of-a-friend' method (otherwise known as the 'snowball' method). Following Milroy (1987) and Milroy and Gordon (2003), I first managed to find a few participants who fit the criteria through the initial referral of my contacts, and then recruited more participants by asking the first group of participants to introduce their friends at BCU. My first contact at the Business campus was a student on a sports team who introduced me to his teammates, and I then got to know their classmates, roommates, and friends, who later became my participants.

The situation at the Arts campus was slightly different as I contacted one of the staff members in the department in the beginning. Regarding the use of officials or community leaders as points of contact, it has been

argued that their status in the community might influence participants' language use and lead to increased employment of standard speech or the prestigious variety as well as limiting access to the full range of community members (Milroy and Gordon, 2003; Schilling, 2013). However, using these 'brokers' does not always compromise the quality of the data collected. In my case, it was necessary to involve this 'broker' since he, as the secretary, oversees the administration of the entire school where BCU's Chinese and journalism departments are. As a result, he had contact with a wide range of students regardless of their academic performance, programme, student group membership, etc., and was probably the best person to ask in order to get access to the student population that I needed. Nonetheless, to minimise any potential influence caused by his semi-official status, I insisted on contacting the students and setting up interviews myself after he had provided me with several students' contact information. I also emphasised my student status to all the participants in an effort to reduce any power differences between us. After having interviewed the first two participants introduced by this secretary, I mainly relied on these two students to get access to the others and avoided having to use community/official leaders for further recruitment.

My fieldwork at BMU started a few months later when I had already collected most of the data from BCU. The main reason for this was practicality: these two universities are located in different parts of the city and a one-way trip from BCU's Arts campus to BMU takes about 1.5 hours on the subway. I separated the data collection process so that I could spend more time on doing more ethnography of the two universities (see Section 3.5 for details of the fieldwork). At the beginning of the spring semester, I got in contact with a student from BMU who, at that time, was doing an internship under a personal friend of mine in Beijing. He then became my first participant at BMU and introduced me to all the other participants.

During participant recruitment, I sampled male and female students aged 20 to 24 who were enrolled at BCU and BMU. The age of the participants was controlled to ensure that they had balanced competence in using local and standard features, since speakers born after the 1990s—40 years after the standardisation of *Putonghua*—are more likely to have fully acquired the standard language and would be able to use features from the local and standard varieties with ease. This is important as it has been argued that sociolinguists should ideally establish access and ability—my participants' competence in Beijing Mandarin—before assenting identity functions for variation (Le Page and Tabouret-Keller, 1985). All participants

were studying one of the four chosen programmes: business/management, literature, journalism or foreign language and were in the last two years of study (either third-years or final-years), as mentioned above.

I recruited nine participants (five men and four women) from the Business campus, six (three men and three women) from the Arts campus at BCU, and six (three men and three women) from BMU. The 21 students were all born and raised in Beijing, and had at least one parent born in Beijing as well. This was to make sure that they had access to local features. I gathered information on their parents' demographic and socioeconomic status as discussed before to control the students' social background since I was interested in their (upward) mobility[1]. Moreover, all participants were native Beijing Mandarin and *Putonghua* speakers who self-reported to have learned both from birth and had never spent more than six months in places other than Beijing or learned to speak any other Chinese dialect.

In the following subsections, I describe my participants and their social attributes in detail. I provide justifications and descriptions for all the social factors I am interested in and how they were coded in the current study, drawing from existing literature in and outside of China. I also include a profile for all participants at the end of this section, before moving on to discuss the specifics of data collection.

As I have mentioned, all of the participants in this study were university students, so their age and education level were well-controlled; therefore, these factors are not included in the list of social factors I will be testing in the upcoming analyses. The social factors I have coded include gender, university, programme, social class, and aspiration. Some of the information discussed below were obtained from a language and social background questionnaire included in C.

### 3.4.1 Gender

Gender was coded as either female or male according to each participant's response in the survey. No participant expressed discomfort towards the choices in the survey.

### 3.4.2 University

Since my participants are from two different universities, I coded each participant's university (i.e. BCU or BMU). The aim in doing so is to investi-

[1]This was achieved by using both questionnaires and information available in self-recordings—which I return to in the following sections

gate if university has an effect on the students' use of Beijing features. It is true that university choice itself—which essentially boils down to their test scores in the nationwide university entrance exam three or four years ago—might have little to do with language use directly. Nonetheless, the university each student was in correlates with many other social factors, which might influence their language use. These factors include students' academic ability (university entry requirement), social-economic background (tuition fees) and network type (more local vs. more diverse); therefore, including university allows us to learn more about the potential effects of these factors.

### 3.4.3 Programme

As discussed above, participants are from four programmes: business and/or management, Chinese literature, journalism/media, and foreign languages. Including these different programmes gives me an opportunity to study the possible effects of standard language ideology in the education context. To be more exact, students who have been trained in programmes whose 'designated' careers emphasise standard language use (language teaching and broadcasting) might have different use of local/non-standard features from those whose future jobs rely less on language standardness (business and management). To account for the similarities between programmes which are more likely to lead to teaching (e.g. Chinese and foreign languages), I coded participants' programme which originally consisted of four levels (Chinese, foreign languages, journalism and business) into three levels: languages (Chinese and foreign languages), journalism and business. In comparison to a career in business or journalism, jobs in language teaching-related sectors, especially Chinese language teaching are reserved for local Beijingers, as I have discussed in Chapter 2. This difference can potentially have an impact on students' language use.

### 3.4.4 Social class

Social class is one of the key factors I am interested in, and in order to study the correlation between language variation and social class among these young Chinese adults, I devised a social class index following several existing research in sociolinguistics (e.g. Kirkham, 2013; Labov, 2001; Trudgill, 1974).

The social class index contains three indicators: occupation, education and locality. The first two are measured by the occupation and education

level of the students' parents, following the common practice in similar situations where the target population are unemployed adolescents and/or students (Labov, 2001; Trudgill, 1974). As for locality, I used the family's home location instead of the students' since all of them lived on campus during term time and returned home during holiday while some of them lived at home on weekends during term time.

Before moving on to the specific scales used in the index, I want to address a potential issue with this approach. This type of approach where students' class is essentially determined by their parents' class is by no means flawless: in fact, it has been criticised by Eckert (1988) and Rickford (1986) for not taking into consideration of the socioeconomic structure and dynamics in the adolescent or student community. While this might be true for the current study, I argue that parents' class is essential to the understanding of this group of young adults and is the suitable factor to investigate. To illustrate, I am interested in the students' (upward) mobility which is more closely related to their (parents') class background—the starting point of their mobility—than their group membership in universities. In other words, the social class index is seen as a measure of the family class background rather than simply the students' 'category affiliation' (Eckert 1988; cf. (Dickson and Hall-Lew, 2017)). The students' socioeconomic dynamics and upward mobility are addressed in the next social factor, aspiration, in the following section.

Regarding the index itself, I first included occupation since it has been shown to be a good indicator for socioeconomic class in sociolinguistic research (Labov, 2001). Outside of linguistics, numerous economic and sociological studies also utilise occupation as a key criterion in determining people's socioeconomic status, often by using the widely-used International Socio-Economic Index of occupational status (ISEI). For this project, I adopted Lu's (2002) categories of occupations and classes in China, and assigned a score from 1 to 10 for each parent of each participant based on the parent's occupation (Table 3.1). The merits of Lu's theory lie in the fact he takes into account the unique patterns of social stratification in modern Chinese society while incorporating two widely-recognised indexes—the ISEI and ISCO (International Standard Classification of Occupations). Following Table 3.1, I gave each participant a score between 2 to 20 using demographic information on their parents (age, education, occupation, place of birth, etc.) gathered both from the interviews and the survey in Appendix C.7.

Similar to occupation, parents' education was measured by a score from

| Score | Occupation |
|---|---|
| 10 | Senior government officials |
| 9 | Senior business executives |
| 8 | Private business owners (with eight or more employees) |
| 7 | Professionals (academic or technical, including teachers) |
| 6 | Clerical workers (including lower-level officials) |
| 5 | Private business owners (with seven or fewer employees) |
| 4 | Service industry workers |
| 3 | Industrial workers ('workers' in the traditional definition) |
| 2 | Farmers |
| 1 | Urban and rural unemployed or underemployed |

Table 3.1: Parents' occupation score used in social class index (Lu, 2002)

| Score | Education level |
|---|---|
| 7 | Postgraduate |
| 6 | University |
| 5 | Technical college (*dazhuan*) |
| 4 | High school or technical school (*zhongzhuan*) |
| 3 | Secondary school (*chuzhong*) |
| 2 | Primary school |
| 1 | None |

Table 3.2: Parents' education score used in social class index

1 – 7 based on a seven-category index (Table 3.2) and each parent was assigned an education score according to the data provided in the interview and survey.

Finally, for locality, I divided the city of Beijing into three parts based on the proximity to the city centre and coded the current home location of each participant (where their parents and extended family lived at the time of interview). The reason to include locality is that since housing price increases dramatically from the outskirts of Beijing to the inner city, owning a property in the city centre is often a symbol of wealth (Ma and Zhang, 2006). More specifically, the three parts are central, urban and suburban Beijing, as previously seen in Figure 2.1 in Chapter 2. Central Beijing refers to the area within the second Ring Road of the city, essentially the two central-most districts of the city, Xicheng and Dongcheng which have been the city centre dating back to when Beijing was the capital of the Qing Dynasty (mid-17th century to early 20th century). The residents here are (or were, since mass relocation has moved most of these residents from city centre and made the city into a commercial and political area) considered the authentic local Beijingers. Urban Beijing is made up of four other districts—Haidian, Chaoyang, Fengtai, and Shijingshan—which are

newer development further out from the city centre on the west, east and south side respectively. The rest of Beijing, which is roughly outside of the city's fifth Ring Road, is considered suburban in this study, and consists of ten districts. In the index of locality, participants scored from 1 to 3 (suburban = 1, urban = 2 and central = 3). Based on these three indices, each participant was assigned five scores (two for parents' occupation and education respectively and one for locality). The potential social class index score ranges from 5 to 37. I then divided them into five social class groups:

| Score | Class Category |
|---|---|
| 34+ | Upper class |
| 28 – 33 | Upper-middle class |
| 21 – 27 | Middle-middle class |
| 12 – 20 | Lower-middle class |
| 5 – 11 | Lower class |

Table 3.3: Social class index

In Table 3.4, I provide all participants' social class scores, calculated from the aforementioned indices. As we can see, my participants were all middle class—eight of them were from a lower-middle class background and the rest were middle-middle class[2].

### 3.4.5 Aspiration

To investigate the correlation between social mobility and linguistic variation in Beijing, I also accounted for students' aspiration. Although not as widely-researched as social class, aspiration was featured in one of the earliest studies. In Labov (1963), residents from Martha's Vineyard showed different use of diphthong centralisation depending on whether or not they are aspired to pursue more urban occupations and a mainland lifestyle. More recently, adolescents with different future aspirations have been studied in Taiwan (Baran, 2007, 2014) and Newfoundland (Knee and Van Herk, 2013), and their findings also suggested where locally-affiliated speakers retained more local features and upwardly-mobile speakers did not.

Again, since my participants were students who did not yet have an occupation, I created a social aspiration index to calculate their aspiration

[2]It is worth noting that one of the participants—Charlie—scored 30 on the class index while all the others were under 28. While acknowledging the difference in his background from the others, I categorised him into the middle-middle class since I was mainly interested in the difference between middle-middle class and lower-middle class students.

| Participant | Class Score | Class |
|---|---|---|
| Daisy | 14 | Lower-middle |
| Rachel | 14 | Lower-middle |
| Helen | 15 | Lower-middle |
| Kevin | 15 | Lower-middle |
| Terry | 16 | Lower-middle |
| Clare | 17 | Lower-middle |
| Matt | 18 | Lower-middle |
| Mary | 20 | Lower-middle |
| Fred | 22 | Middle-middle |
| Sara | 23 | Middle-middle |
| David | 24 | Middle-middle |
| Nancy | 24 | Middle-middle |
| Betty | 25 | Middle-middle |
| Harry | 25 | Middle-middle |
| Mike | 25 | Middle-middle |
| Cat | 26 | Middle-middle |
| Daniel | 26 | Middle-middle |
| Hannah | 26 | Middle-middle |
| Scott | 26 | Middle-middle |
| Bob | 27 | Middle-middle |
| Charlie | 30 | Middle-middle |

Table 3.4: Social class scores and levels for all participants

regarding their future plan and social mobility. The index includes two parts: the first part focuses on career plan and is devised from their answers to a set of eight questions targeting at the importance of various issues in their career choice in the survey (see Appendix C.7.4). The second part is mainly about their career preparation which factors in their part-time work experience and postgraduate education preparation.

Regarding the first part of the index, I first performed a principal components analysis on the eight questions to reduce the dimensions to be included in the index. Table 3.5 shows the results from the analysis. As can be seen from the table, question 1 and 2 loaded onto two different components respectively; therefore, I have excluded them to keep the index as simple and clear as possible. Additionally, there are several other questions that do not directly measure participants' upward mobility, and I have decided to only add up scores on two questions (7 and 8) for the career plan index since only these two seemed to be only measuring upward mobility.

As answers to both questions were on a scale from 0 to 4, each participant was assigned a career plan score ranging from 0 to 8. Four participants either did not respond to the survey or had missing data for this part, so

| Questions | Component 1 Upward Mobility | Component 2 External Pressure | Component 3 Personal Interests |
|---|---|---|---|
| 1.To have stability/security so that I can balance between work and personal life | **-0.48** | **0.68** | 0.01 |
| 2. To do what I am interested in doing | **-0.57** | 0.29 | **0.43** |
| 3. To do what my parents/family would like me to do | -0.06 | **0.85** | 0.09 |
| 4. To do something similar to what my peers are planning to do | 0.01 | **0.78** | -0.05 |
| 5. To have long-term career prospects | 0.10 | 0.18 | **0.88** |
| 6. To stay in Beijing | -0.07 | -0.19 | **0.92** |
| 7. To earn a lot of money | **0.89** | -0.02 | 0.21 |
| 8. To have a high social status | **0.95** | -0.08 | -0.08 |
| Loadings | 2.26 | 1.95 | 1.87 |
| Cumulative Variance | 0.28 | 0.53 | 0.76 |

Table 3.5: Principal components analysis results on career choice questions
Loadings greater than 0.33 are in bold.

| Score | Work Experience | Education Preparation |
|---|---|---|
| 0 | No work experience | No postgraduate education preparation |
| 1 | Work experience at small to medium-size companies, and/or local government agencies | Intending to sit the exams for Chinese universities or apply to overseas universities |
| 2 | Work experience at Large national company, national government agencies, and/or international companies | Already preparing for exams or submitting applications; Already secured places in universities |

Table 3.6: Career preparation score used in aspiration index

I used information in the interview in order to assign scores for them.

For the second part of the index, I considered the students' work experience which included part-time jobs, internships, and placements, for those who had plans for further education, as well as their postgraduate preparation. Each student was given a score from 0 to 2 based on whether they had work experience and/or whether they were preparing for postgraduate education. In cases where students have had more than one job, I assigned the score based on the highest-level one. The detailed criteria are shown in Table 3.6.

Finally, I added up scores on both parts of the aspiration index for each participant to give them a total score. The potential social aspiration index scores ranged from 0 to 10 and were then grouped into two categories—high and low aspiration—for future analysis (Table 3.7). Specifically, participants with a score higher than or equal to 6 were considered highly aspirational and the rest of them were grouped into the lower aspiration category. Although the aspiration index I developed is numeric, students' aspiration was less continuous in the sense that someone with a score of 8 was not necessarily twice as aspirational as someone who scored a 4 on the scale. In fact, the notion of aspiration or upward mobility is largely binary in the local culture. As I have described in previous chapters, the stereotypical persona of an 'alley saunterer' is the extreme of one who lacks upward mobility, and it is not uncommon for Beijinger—my participants at least—to align themselves either with this persona or against it. Many of my participants mentioned that young Beijingers were not motivated while those who were motivated emphasised that they were not like the typical Beijingers. I grouped the numbers into two levels also to take into consideration of this more locally-specific contrast of aspiration.

Additionally, I drew a line between high and low aspiration at 6, essentially grouping Daniel and Kevin, the only participants who scored 6, with the highly aspirational students instead of their low aspiration counterparts. I based this decision on the fact that Daniel and Kevin were more similar with those who had higher aspiration scores judging from the interviews, survey results and my observation when interacting with them. For instance, both participants strongly preferred jobs with high status and income, as shown in their mobility survey results. Compared with students with low aspiration, they both had a relatively clear career plan: Daniel was preparing for a teaching certificate as a back-up plan after graduation while Kevin has decided to apply for jobs in start-up companies so that he could later set up his own business. With regard to upward mobility, both

| Participant | Aspiration Score | Aspiration Level |
|---|---|---|
| Betty | 2 | Low |
| Charlie | 2 | Low |
| Harry | 2 | Low |
| Helen | 2 | Low |
| Scott | 2 | Low |
| Bob | 3 | Low |
| David | 3 | Low |
| Fred | 3 | Low |
| Daisy | 5 | Low |
| Hannah | 5 | Low |
| Daniel | 6 | High |
| Kevin | 6 | High |
| Mary | 7 | High |
| Rachel | 7 | High |
| Sara | 7 | High |
| Cat | 8 | High |
| Clare | 8 | High |
| Nancy | 8 | High |
| Mike | 9 | High |
| Terry | 9 | High |
| Matt | 10 | High |

Table 3.7: Aspiration scores and levels for all participants

of these two students were still relatively motivated despite their mid-range score on the index.

As Table 3.7 shows, all participants were coded into high and low aspiration groups according to their scores from the index. I use the binary categorical variable in the following analysis.

### 3.4.6 Correlation between social factors

Before presenting an overview of all the participants with relevant social factors, I checked to see if there was any correlation between the aforementioned social factors to ensure the social factors used are measuring the participants' social attributes independently.

A series of chi-square tests were then carried out to determine if there was any correlation between the categorical factors including gender, university, discipline, social class and aspiration level. Two significant correlations were identified: between university and discipline ($\chi^2(2) = 10.08$, $p = 0.006$) and between class and aspiration ($\chi^2(1) = 4.68$, $p = 0.03$).

One possible explanation for the first correlation lies in the sampling process, namely, participants who studied business were all from BCU since

I did not recruit business students from BMU. Therefore, I excluded university and kept programme in my analysis to ensure the independence of social factors.

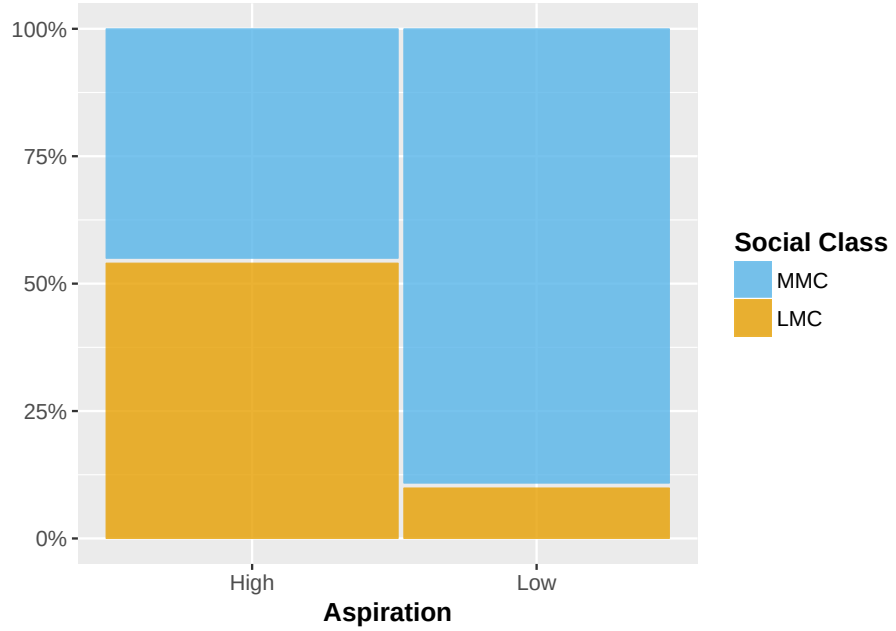


Figure 3.2: Correlation between aspiration and social class

As for the second correlation, Figure 3.2 shows that students with a lower-middle class (LMC) background were more likely to have higher aspiration than middle-middle class (MMC) students. Here, I briefly address this interesting interaction as it is both essential for future analysis in this thesis and the understanding of class and educational/occupational aspiration in Beijing.

In sociolinguistics, the relationship between class and aspiration is seldom studied: most studies have investigated social class (e.g. Labov, 1972a) or aspiration/mobility (Baran, 2014), and studies that include both class and mobility do not necessarily address the correlation between the two factors (e.g. Dickson and Hall-Lew, 2017; Labov, 1966a). In the field of sociology and economics where this correlation has been researched, due to the vastly different methods (e.g. criteria, measurements, population, analytical tools), little consensus has been reached. Some suggest that a higher class background often leads to higher aspiration level, especially educational aspiration (e.g Savage and Egerton, 1997; Sewell and Shah, 1968; Tseng, 1971), which is the opposite of what we have observed here. I propose that there might be several explanations for this. First, the societies that have been previously studied are Western societies with more established class structures (e.g. United States) while the current study

is situated in Beijing where social class is less established. Secondly, it is unsurprising for students with a lower class background to score higher on the aspiration index designed to study their expectation for their future career and preparation for further education and career. After all, in the contemporary Chinese society where class inequality exists, as discussed in Chapter 2, young adults from a less privileged background are perhaps forced to aim higher[3].

Again, to avoid collinearity, I excluded social class from the analysis and focused on the effect of aspiration on language variation in the data. The reasons are twofold: first, I want to focus on the more locally-defined category of aspiration instead of class, since aspiration incorporated upward mobility, occupational and educational preparation as I have described above, while the class index was mainly based on the parents' economic status. Additionally, the participants of this project were from a narrow

| Participant | Gender | University | Programme | Class | Aspiration |
|---|---|---|---|---|---|
| Cat | Female | BMU | JRNL | M | High |
| Mike | Male | BMU | LAN | M | High |
| Nancy | Female | BMU | LAN | M | High |
| Sara | Female | BCU | JRNL | M | High |
| Betty | Female | BMU | LAN | M | Low |
| Bob | Male | BCU | JRNL | M | Low |
| Charlie | Male | BCU | BUS | M | Low |
| Daniel | Male | BCU | BUS | M | Low |
| David | Male | BCU | BUS | M | Low |
| Fred | Male | BCU | LAN | M | Low |
| Hannah | Female | BCU | JRNL | M | Low |
| Harry | Male | BMU | LAN | M | Low |
| Helen | Female | BCU | BUS | M | Low |
| Scott | Male | BCU | BUS | M | Low |
| Kevin | Male | BCU | BUS | L | High |
| Mary | Female | BCU | BUS | L | High |
| Matt | Male | BMU | LAN | L | High |
| Clare | Female | BCU | LAN | L | High |
| Rachel | Female | BCU | BUS | L | High |
| Terry | Male | BCU | JRNL | L | High |
| Daisy | Female | BCU | BUS | L | Low |

Acronyms for discipline: business and management (BUS), journalism and media studies (JRNL), languages (LAN)

Table 3.8: Participant profile including all social factors

[3]It is worth mentioning that the class and aspiration indexes here do not measure whether upward mobility is achieved or even achievable, which are also interesting issues.

range of class backgrounds as Table 3.4 has shown while students' aspiration differed greatly from each other and thus capturing more variation in the population. Table 3.8 on previous page provides an overview for all participants and the social factors I have just described.

## 3.5 Data Collection

### 3.5.1 Participant observation

As discussed in Section 3.2, a semi-ethnographic approach was used for this project where a moderate amount of participant observation was accompanied by interviews and self-recordings. I have also discussed the benefits and rationale of a semi-ethnography for the current study: the approach enables me to develop an understanding of the community with some participation—not as a community member but as a student researcher—while at the same time allows me to collect a large quantity of speech data in a shorter amount of time.

During the time when I was in Beijing, I rented a flat 15 minutes' walk away from BCU's Business campus, and it took me about 10 minutes to get to Arts campus and 50 minutes to BMU on the subway. I spent many hours walking around the campuses, reading in the libraries and classrooms, having meals in the canteen with other students, and attending events hosted by the university and student organisations. Additionally, living in Beijing as a regular resident has enabled me to experience the life in the city and the challenges these students were and are still experiencing, which is invaluable for my understanding of the local culture. While I did not attend any classes with my participants since many of the third-years and fourth-years had already finished taking classes for credits and were interning or working part-time away from campus, I gained valuable insights into the life as a student at the two universities and in Beijing, which enabled me to design questions for my interviews and surveys. I now move on to discuss the methods used to collect data from all participants.

### 3.5.2 Sociolinguistic interviews

Traditionally, sociolinguistic interviews have been used to elicit a style range, with a focus on eliciting the 'vernacular'—a speaker's most unself-conscious speech style—and were designed to minimise the effect of the Observer's Paradox, i.e. to minimise a speaker's attention to their speech

(Labov, 1972a). In this project, rather than focusing on the participants' speech while the least amount of attention is paid to it, I am more interested in how they make sense of the linguistic resources they possess in negotiating their identity as young Beijingers in daily interactions, including when talking with non-Beijingers like me. I adopt Wolfson's (1976) viewpoint and consider sociolinguistic interviews as a particular type of speech event situated in a setting where the speech is being studied. I also acknowledge that my interactions with participants were influenced by the Observer's Paradox, and the technique used in these interviews, i.e. a recorded interview with a researcher who was essentially an outsider, might have affected the naturalness of their speech. Trying to lessen the unnaturalness and the power differences between the participant and me, I presented myself as a student who was simply curious about the student life in Beijing. In addition, I conducted the interviews in a semi-structured conversational style to encourage participants to share opinions even when they went off topic. Following suggestions made by Labov (1972b) on minimising errors caused by wrong interpretations of the data at hand, I also used different types of data to achieve convergence across my data sets. It is proposed that by adopting different methods, including but not limited to, elicitation, judgement, observation, and experiments in collecting data for analysis, linguists can get more comprehensive answers for complicated questions. I discuss the additional method, self-recording, employed in this study in the following section.

With regard to interview topics, I have adopted the framework established by Labov (1984) and included several modules of general questions on demography, family, peers, school and language use. Labov's original modules on street crimes and danger of death seemed to be less relevant for 20-year-old students in urban Beijing, so I modified these and added others which would prompt more narratives for my participants. As can be seen in Appendix A (see Appendix B for the Chinese version used in data collection), I include questions about the students' thoughts on future career, experience with part-time jobs (Appendix A.5 and B.5), as well as social and environmental changes in urban Beijing, especially the smog in winter which my participants often mentioned (Appendix A.7 and B.7 'Changes in local environment/culture'). The purpose of this was both to distract their attention from the fact that they were being recorded and to gather information on their socioeconomic background and future aspiration. I believe that these students have experienced first-hand the rapid changes in Beijing and their identities are being shaped by the society in various

ways and knowing their opinions on these topics would in turn help me answer the research questions.

Out of the 21 interviews used in data analysis, nine were conducted in classrooms on campus. When the students were on holiday and classrooms were unavailable, I asked them to meet at quiet cafes or places that had a private lounge suitable for recording, and I recorded 10 participants in this way. The remaining two participants were interviewed in student halls since no other options were available at the time. The majority of the interviews lasted for 60 – 90 minutes, but several recordings were more than two hours long (see Table 3.9).

| Participant | Length of recording |
|---|---|
| Bob | 104 |
| Betty | 86 |
| Clare | 63 |
| Cat | 115 |
| Charlie | 73 |
| David | 60 |
| Daniel | 47 |
| Fred | 136 |
| Mary | 124 |
| Mike | 153 |
| Nancy | 112 |
| Hannah | 139 |
| Sara | 88 |
| Terry | 126 |
| Daisy | 70 |
| Harry | 90 |
| Helen | 72 |
| Rachel | 68 |
| Kevin | 90 |
| Scott | 52 |
| Matt | 123 |

Table 3.9: Length of interviews for all participant in minutes

At the beginning of the interview, all participants were presented with the information sheet and consent form (available in Appendix C.1 and C.3 for the English version and Appendix C.2 and C.4 for the Chinese version). I explained the research and answered all the questions they had before they signed the form. For participants who had to commute to our meeting, I reimbursed them for the cost and asked them to sign a payment form (see Appendix C.5 and C.6). For all interviews, I used a Marantz PMD661 MK2 recorder with an external omnidirectional mi-

crophone (Audio-Technica 803) which was mounted onto the interviewee's clothing. When possible, the recorder was connected to a power socket while I used batteries in other situations. Interviews were recorded and stored in uncompressed WAV form (24-bit PCM with a sampling rate of no less than 44.1 kHz).

### 3.5.3 Self-recordings

I adopted more than one data collection method in this study as briefly mentioned in the previous section. This helped me answer my research questions regarding the social meanings of local features among young adults transitioning from university to the labour market, taking into consideration the effects of their gender identity, speech style and aspiration. Before getting into the specific methods I have used, I first motivate the use of self-recordings in the study of language variation and in particular, style variation.

In this project, self-recordings were made by participants who had been instructed to use hand-held devices (usually their mobile phones) to record themselves in conversations with other people. There are numerous advantages to using self-recordings. First, it helps to enrich the understanding of speech style in Chinese as a whole. Research in languages other than Chinese have provided evidence for variation in stylistic range across speakers and suggested that style-shifting is influenced by various social factors such as age, gender, ethnicity, and class (Labov, 1966b; Rickford, 2014). Yet, little research has been done regarding stylistic variation in Chinese.

As put by Labov (1972b, p.112), 'there are no single-style speakers'; therefore, researchers have to accept the fact that no individual data collection method could document the whole stylistic repertoire of any given speaker. Speakers generally have a range of speech styles which allow them to access when in different contexts, and so do my participants. In this project, I investigated a rage of speech styles among Beijingers, instead of assuming any one of these styles was more fundamental (or 'vernacular') than the others.

The second purpose for adopting this data collection technique was to balance out any unnaturalness (e.g. a lack of local features) occurred in data collected during interviews—an interaction with an outsider, as mentioned above. Self-recordings presented a way to further record my participants' interactions within their social networks, which offered me a wider range of contexts as opposed to the interview-only approach.

Furthermore, by removing the researcher from the interaction, self-recordings allow sociolinguists to study speech produced in settings which are normally inaccessible to outsiders. In a study conducted by Stenström et al. (2002), the researchers recruited teenagers to record conversations whenever they could and managed to gather speech data from not only students and teachers, but also parents, neighbours and even customers at local shops. This is particularly valuable for the current project since a full ethnography of the community was not feasible and interactions in which the participants were involved would help my understanding of the students and their social networks.

My interests in style include variation induced by changes in both topics and interlocutors—two issues studied by many sociolinguists before (e.g. Bell, 2001; Le Page and Tabouret-Keller, 1985). My sociolinguistic interviews contained a range of topics which enabled me to investigate the first type of style shifting, but collecting self-recordings from my participants provided me with an opportunity to study changes caused by different interlocutors, which is under-studied in traditional sociolinguistics due to the limitation of the interview techniques. Traditional sociolinguistic research on style variation tend to focus on changes in topics rather than interlocutors (Rickford, 2014), and by adding this angle, the current project has the potential to enrich our understanding of the potentially changing social value of Beijing Mandarin. To illustrate, I want to find out whether students use more local features when in conversation with family members and friends, which would support previous findings regarding the effect of formality and accommodation (Labov, 1972a; Rickford, 2014), or they retain certain local features across different interactions which potentially suggests that such features function more like indicators and carry meanings associated with a regional identity (e.g. Zhang, 2001, 2005, 2007b; Zhao, 2012). Finally, using self-recordings can also help gather information regarding the students' parents whose linguistic and social background is crucial in understanding the students.

In studies conducted during the past 30 years, the use of self-recordings in studying individuals' style range as well as inter-speaker stylistic differences has been proven fruitful . Coupland (1980) demonstrated different styles of a travel agency assistant in his Cardiff study, using recordings made by the speaker in which her use of regional features varied as the topic, audience and channel changed. In the 1990s, Rampton (2006, 2014) conducted fieldwork in a London secondary school using self-recordings. More recently, research on the variation in Danish teenagers' speech con-

ducted by Quist (2008) and Schøning and Møller (2009) also used self-recordings. Moreover, self-recordings from Sharma (2011) reveal different linguistic patterns, e.g. the retention of Indian English features such as a retroflex /ʈ/, in the home domain among a group of second-generation British Asians in West London.

Naturally, there are certain downsides in using participants who are untrained in recording: the unpredictable outcome. Unlike semi-structured interviews, self-recordings aim at obtaining natural conversations in participants' daily life, which makes it hard to compare across recordings as it is impossible to control contexts, topics, and interlocutors (Sharma, 2011). The length and quality of the recording might also be a problem. Moreover, the researcher misses paralinguistic information such as body language, gestures, and facial expressions during the conversation and might even fail to understand the content of the conversation as an outsider (Levon, 2014b). It has also been questioned whether self-recordings are reliable in uncovering speakers' natural speech since the presence of a recorder might cause just as much unnaturalness as an interviewer. As mentioned before, my primary purpose of gathering self-recorded conversations was not to study the 'vernacular' but rather to piece together young Beijingers' stylistic repertoire. I therefore agree with Schøning and Møller (2009) in viewing self-recordings as a speech event different from interviews for the interlocutors (and overhearers) but not necessarily in terms of how 'vernacular' the language elicited is.

In this project, I asked all of my participants to record their conversations with other people after their interviews with me. I told them to record one with their family members (most likely with parents), one with work colleagues if they had a part-time job or an internship, and one with friends. As I have noted above, these self-recordings, complementary to the interview data, allow me to study how the use of Beijing Mandarin changes across topics and interlocutors, which sheds light on the social meaning associated with speech styles, and therefore help us understand if and how formality, accommodation and the social meanings certain features carry play a role in language variation in Beijing.

All participants were given instructions on how to record WAV form audio files using their mobile phones prior to the recording and were asked for the recordings to be at least 30 minutes long. To make up for the fact that I was not present during the conversation, I asked each participant for background information on the other interlocutors (and overhearers if there were any), such as their regional and linguistic background, age, gender,

relationship with my participants. I also double-checked the content of the conversations with them when the recorded conversations were ineligible due to poor recording quality.

Although I anticipated problems with self-recordings (e.g. limited storage space on their phones, incompatible software and recording applications) and have taken necessary precautions by offering them hand-held recorders and suggesting compatible software. In the end, not all of the participants recorded themselves. In total, I have 12 self-recordings from 10 participants. Five out of these 12 recordings involved conversations between participants and family members, while the other seven were between my participants and their friends. Most of the self-recordings lasted between 25 and 60 minutes, except for two that lasted for less than 20 minutes. Below, I present more details about these recordings in Table 3.10. Participants who did not provide any self-recording (Bob, Betty, Charlie, Daniel, Fred, Hannah, Terry, Daisy, Helen, Rachel, and Scott) are not included in this table. To recap, all participants were asked to record a 30-minute

| Participant | Length | Interlocutor | Information on Interlocutor | Information on Overhearer | Location | Topic |
|---|---|---|---|---|---|---|
| Cat | 6 | mother (1) | BM | – | home | group project |
| Cat | 34 | classmate (1) | BM | – | home | dinner preparation |
| Clare | 10 | parents (2) | BM | relatives (2) BM | home | dinner preparation |
| David | 25 | friends (4) | BM | – | cafe | friends, hobbies |
| Harry | 42 | friend (1) | BM | – | dorm | family, friends, hobbies |
| Kevin | 30 | room-mates (3) | BM | – | dorm | exams, hobbies |
| Mary | 6 | father (1) | BM | – | restaurant | driving lessons |
| Matt | 33 | mother (1) | BM | – | home | family, work, dinner |
| Matt | 42 | friend (1) | BM | – | dorm | family, friends, hobbies |
| Mike | 54 | classmates (3) | non-BM | – | dorm | project, friends, hobbies |
| Nancy | 34 | room-mate (1) | non-BM | room-mate (1) non-BM | dorm | hobbies, shopping, travel, |
| Sara | 31 | parents (2) | BM | – | home | friends, work |

Note: Length of recordings is in minutes, numbers in parentheses represent numbers of interlocutors/overhearers.

Table 3.10: Detailed information for self-recordings for all participants

conversation with no more than two interlocutors for the self-recordings, preferably in a quiet environment. However, as can be seen from the table, the lengths of recordings vary across participants. The shortest ones (e.g. Cat's and Matt's) are both under 10 minutes long while the longest one from Mike lasts for more than 50 minutes. Regarding interlocutors and environment, most participants followed my instructions and recorded themselves in conversation with one or two other people either at home or in their dormitories. Two students—David and Mike—recorded conversations with four and three friends respectively which reduced the amount of

their own speech in these recordings. Moreover, David's recording, along with Mary's, was also recorded in a public environment where the background noise has made it more difficult to auditorily identify the tokens for the variables. Overall, however, the quality of these recordings are satisfactory for auditory coding. I also include information on overhearers in two of the recordings, as can be found in the table below.

In general, these recordings are largely homogeneous in terms of interlocutor and topic. All but two (Mike and Nancy) participants were only talking to Beijing Mandarin speakers in the recordings. After broadly categorising the topics for all the recordings, I included them in the last column of Table 3.10. As seen in the table, they are mostly daily conversation topics which help to ensure a casual speech style.

In this chapter, I outlined the methodology used in this study and where necessary, I provided details on my decisions regarding the fieldwork site, participant recruitment, and data collection methods. The current chapter, together with the previous two chapters, serves as the background of this study on language variation in Beijing Mandarin and its relationship with speakers' identity. In the following four main chapters, I present the analysis and results for this study. Chapters 4, 5, and 6 cover the analysis of neutral tone, classifier omission, and intensifier *te* respectively, explaining the patterns observed in the interview data. Chapter 7 brings together both interview and self-recording data and investigates the stylistic variation and persona construction among young Beijingers.

# Chapter 4

# Neutral Tone

In previous chapters, I covered the social and linguistic background of the study as well as the methods used to collect production data. In this chapter and the following three chapters (Chapters 5–7), I proceed to discuss in detail the findings of this project regarding the target variables.

The current chapter presents the analysis for neutral tone and the use of this feature among Beijingers in relation to the potential social meanings associated with it. The chapter begins with a description of neutral tone and a review of relevant literature in sociolinguistics, phonetics, and dialectology. An acoustic profile of neutral tone follows to further describe the properties of the variable and to illustrate its complexity. I then describe the criteria used for including and excluding neutral tone tokens in the analysis as well as the coding scheme for linguistic and stylistic factors used in later statistical analyses. The quantitative analysis of neutral tone is then presented, along with a discussion of the findings.

## 4.1 Overview

As briefly described in Chapter 2, neutral tone is a phonological/phonetic feature found in most Mandarin Chinese varieties. In standard Chinese and Beijing Mandarin, all stressed syllables have one of the four lexical tones (Tone 1–4) as shown in Table 4.1.

| | Level | Rising | Dipping | Falling |
|---|---|---|---|---|
| *Pinyin* | *fēn* | *fén* | *fěn* | *fèn* |
| IPA | /fə̄n/ | /fə́n/ | /fə̌n/ | /fə̀n/ |
| Translation | ‘fragrance’ | ‘tomb’ | ‘powder’ | ‘element’ |

Table 4.1: Four tones of /fən/ in standard Chinese and Beijing Mandarin

However, syllables in unstressed positions often lose their original tone. The lexical tone of such a syllable varies depending on the tone of the surrounding (mainly preceding) syllables and sentence intonation (Shen, 1990), and these syllables are considered to have a neutral tone (Norman, 1988). Neutral tone can only occur in non-initial positions and thus only appears in non-monosyllabic words with the exception of sentence-final particles such as *le*/˙ㄌ, which is used to mark the perfective aspect (He, 2004). Essentially, neutral tone syllables are un-stressed syllables, and the neutralisation process can sometimes change words' lexical meaning and/or word class. The following examples show the three scenarios.

(1) neutral tone without lexical meaning/word class changes

a. *xīn* + *xiān* = *xīnxiān*
'new' + 'fresh' = 'fresh' (adj.)

b. *xīn* + *xiān* = *xīnxian*
'new' + 'fresh' = 'fresh' (adj.)

(2) neutral tone with lexical meaning changes only

a. *dà* + *rén* = *dàrén*
'big' + 'person' = (honorific) 'senior' (n.)

b. *dà* + *rén* = *dàren*
'big' + 'person' = 'adults' (n.)

(3) neutral tone with lexical meaning and word class changes

a. *fēng* + *guāng* = *fēngguāng*
'scene' + 'light' = 'scene' (n.)

b. *fēng* + *guāng* = *fēngguang*
'atmosphere' + 'honour' = 'honourable' (adj.)

As a phonological/phonetic feature found in Mandarin, neutral tone has been studied by many researchers, although mainly in the context of the standard language. In the field of acoustic phonetics, several key aspects of neutral tone including its duration, (fundamental) frequency and intensity in standard Chinese have been researched (Jing, 2002; Shen, 1990). It is also commonly believed that in comparison to stressed syllables, neutral tone syllables tend to be shorter in duration, lower in pitch, and less intense (Norman, 1988). According to Liu (2002) who reviewed over 80 studies on the phonology and phonetics of neutral tone conducted since 1950s, there is still a lack of universal explanation for many aspects of neutral tone including its origin, mechanism and acoustics despite various theories proposed over the years. Moreover, the description of neutral tone relies heavily on laboratory-based tasks rather than natural speech, as I will

expand in Section 4.2.

Outside of acoustic phonetics, it is worth mentioning that neutral tone has also been discussed frequently—mostly as part of the tonal system in the standard language—in fields such as language teaching (Shen and Shao, 1997), language policy and planning (Chen, 2007; Li, 2005), and phonology (Bao, 1999; Fromkin, 1978; Li, 2002; Liu, 2002).

Additionally, we find existing research relevant to the current study and the sociolingusitics of neutral tone in Beijing in descriptive dialectology. Studies in dialectology have investigated the existence of neutral tone (or lack thereof) in different regional varieties in China. For instance, Lu (1995) compiled a list of 1713 neutral tone words in Beijing dialect, while according to the Contemporary Chinese Dictionary (*Xiandai Hanyu Cidian*/现代汉语词典) (Chinese Academy of Sciences, 1977), standard Chinese only has 1372 neutral tone words, which is around 20% fewer than the Beijing dialect. Moreover, He's (2004) study of a dictionary corpus found that word structure, meaning of the syllable, word frequency all have an effect on whether a syllable can be neutralised.

Neutral tone is widely considered a stereotypical feature of Beijing Mandarin by both linguists and laypeople, as mentioned in Chapter 2. Specifically, Hu (1987, p. 28) argues that neutral tone is one of major differences between Beijing Mandarin and standard Chinese while Zhang (2005, p. 445) describes neutral tone as contributing to the stereotypical 'Beijing tune' or '*jingqing jingdiao*'.

There are relatively few sociolinguistics studies on neutral tone in general and even fewer in variationist sociolinguistics. Jing (2002) and Zhou (2006) both investigated Beijing speakers' use of neutral tone: Jing used self-reported data from Beijing Mandarin speakers while Zhou analysed spontaneous speech data from a corpus compiled in the 1980s. Although their methodologies differ, their results share many similarities on the social stratification of neutral tone. For example, they found that male speakers tend to use neutral tone more often than females. There is also a negative correlation between use of neutral tone and education level/occupation status; namely, the lower the education level/occupation status, the more frequently a speaker neutralises. Findings regarding age were inconsistent: Zhou (2006) noticed that older Beijingers (aged 50 and over) used neutral tone the most and younger speakers (aged under 30) used it the least; however, Jing (2002) showed that young speakers aged under 35 had the most frequent use of neutral tone, while middle-aged people (aged 36 – 55) used it the least. Zhou (2006) attributed this difference to middle-aged speakers'

higher sensitivity to standard speech.

Another important variationist study on neutral tone is Zhang's (2005) research on Beijing Mandarin. Although the project focuses more on the use of full tone in neutral tone words, i.e. using the original tone when a neutral tone should be used in Beijing Mandarin, it provides useful insights into the social meaning of this feature. Using speech data from Beijing professionals in international and state-owned businesses, she found a preference for full tone , which was associated with modernism over the local stereotypical neutral tone among managers in foreign-owned company ('yuppies'), and they used full tone to construct their metropolitan identity (Zhang, 2005, 2007b). Within the yuppies, two more observations are worth mentioning: first, men maintained the local variant (neutral tone) more than women; and speakers used more local variants when engaging in local topics rather than 'professional' topics.

To summarise, the existing literature on neutral tone offers some understanding of the phonological and acoustic nature of the feature, although more work is needed to establish a more widely-accepted theory. The use of neutral tone in the standard language has been investigated, thus providing an overall picture of the standard use of neutral tone in language teaching, education, policy-making etc. Regarding the sociolinguistics of neutral tone, previous studies have looked into several key concepts such as gender, education/professional status, age as well as topic in Beijing. However, to date, two main issues with the study of neutral tone still exist: first and foremost, both the width and depth of existing studies are very limited—little is known about neutral tone outside of the standard language nor its properties beyond basic acoustics. Additionally and more relevant to Beijing Mandarin, Zhang's (2005) study from more than a decade ago is among the most recent studies on the social aspects of neutral tone in Beijing dialect, and we need a more up-to-date investigation into this feature and the new development of its social meanings in Beijing.

In the following analysis, I aim to provide a more in-depth examination of neutral tone by offering both an acoustic profile of neutral tone syllables in natural speech and a quantitative investigation into the linguistic and social factors influencing the variation observed in a newly-established corpus.

## 4.2 Acoustic Profile

As proposed by previous studies on the acoustic properties of neutral tone, the key characteristics of a neutral tone syllable include a lower fundamental frequency ($F_0$), a lower intensity and a shorter duration when compared to the original full tone syllable, and these three characteristics can be observed in the spectrogram generated by Praat (Boersma and Weenink, 2016). In this section, I provide several sets of Praat screen-shots for neutral tone syllables produced by both female and male speakers in the corpus. This description of the variation observed in neutral tone syllables is intended to illustrate the complex nature of these syllables in natural speech rather than being an exhaustive or conclusive list of all possible realisations of neutral tone syllables. As I discuss in the next section (Section 4.3), the coding of neutral tone was done auditorily, it is therefore important to offer a brief look into the acoustics of the target feature while an acoustic analysis is certainly one of future directions in the study of neutral tone.

Ideally, in order to capture the variation in neutral tone in a corpus consisted of both genders, I ought to provide a graph for every combination of tones in non-monosyllabic syllables; however, due to space limitations, I only include disyllabic words as they make up the majority of the tokens coded in this project. Moreover, I have excluded words that must carry a neutral tone (what I call obligatory neutral tone words in Section 4.3.1 below) as they do not vary and thus making it impossible to compare full tone and neutral tone variants.

Before presenting the screen-shots, I briefly summarise the acoustic properties of neutral tone found in existing studies regarding the three characteristics: First, although the $F_0$ of neutral tone syllables is considered to show 'a flattened plateau shape' by Shen (1990), more recent studies have suggested that neutral tone actually shows different contours after different tones (Liu, 2002). Despite a lack of consensus on the tone values of neutral tone syllables following the four lexical tones, it is widely agreed that neutral tone behaves similarly after Tone 1, 2 and 4, manifested by a falling $F_0$ (Liu, 2002) or a low tone (Wee and Li, 2015) but not when occurring after Tone 3, which shows a rise in $F_0$ (Liu, 2002) or a high tone (Wee and Li, 2015). Duration is another important characteristic of neutral tone syllables. According to Liu (2002), the average length of a neutral tone syllable is about half of that for its full tone counterpart. The third characteristic, intensity, has been widely cited as an identifying quality of neutral tone syllables (Lin and Yan, 1980; Liu, 2002), yet recently

this been challenged in literature. For instance, both Liu (2002) and Wee and Li (2015) proposed that neutral tone does not necessarily show a lack of intensity after reviewing several contemporary studies.

I now present the acoustic profile of neutral tone syllables observed in this project, focusing on the aforementioned three properties, which can be seen in the following four sets of screen-shots (Figure 4.1–4.8). Since it is suggested that preceding tone is the determining factor for $F_0$ values of neutral tone syllables (Liu, 2002; Shen, 1990; Wee and Li, 2015), four sets of screen-shots are provided with each of them focusing on neutral tone syllables occurring after one of the four lexical tones. The tokens presented here were selected from the interview data, and my main criteria included audio quality and the tone combination they represent. In all figures, fundamental frequency and intensity are indicated by blue and green lines respectively. Duration in milliseconds can also be seen in the figures.

### 4.2.1 Preceded by Tone 1

According to previous findings, when preceded by Tone 1, which is a high level tone (55), neutral tone shows a falling contour regardless of its original tone. In the top figure in Figure 4.1 (next page), we can see a high level $F_0$ (represented by the blue line) throughout the disyllabic word as both *sheng* and *yin* have Tone 1. In the bottom figure where the ultimate syllable /in/ carries a neutral tone, a slight lowering of $F_0$ is seen towards the end of the syllable. Regarding its duration and intensity, there is little difference in the two figures, both produced by a female speaker—Clare—although the auditory differences were less ambiguous, as I was able to auditorily distinguish the neutralised and full-tone syllables.

For each preceding tone, I also provide graphs from a male speaker. In this case, Figure 4.2 shows a neutral tone syllable preceded by Tone 1 from Terry—a male student from BCU. In his graph, neutral tone syllable /tiɛn/ is shorter and less intense than the full tone syllable in the top figure. The bottom figure also lacks an $F_0$ contour for the most part of the neutralised syllable, and this suggests a lowered pitch as well as a low intensity.

### 4.2.2 Preceded by Tone 2

As with neutral tone syllables following Tone 1, those following Tone 2—a rising tone—are also expected to show a falling contour. Figure 4.3 and

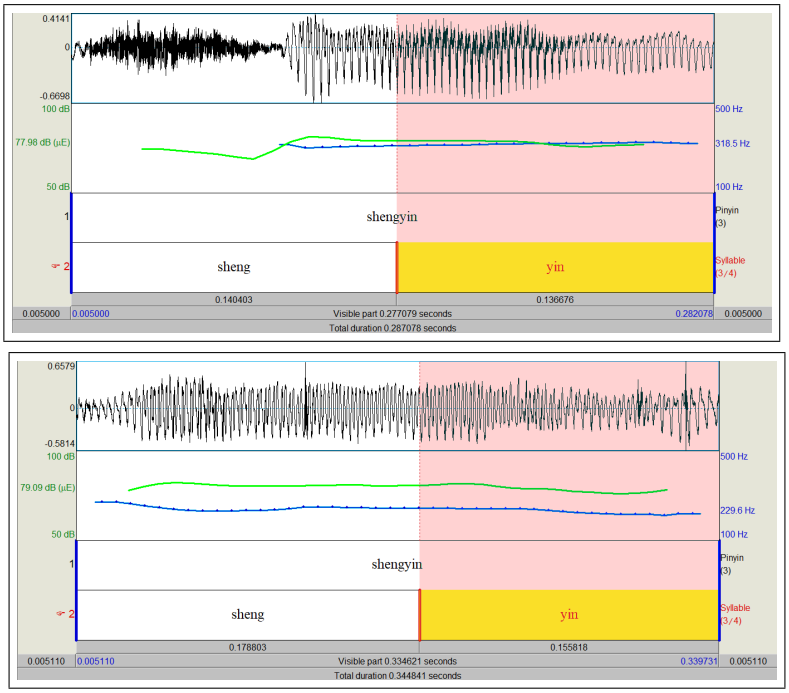


Figure 4.1: Neutral tone preceded by Tone 1: *shēngyīn* 'sound' by Clare
Top: full tone; bottom: neutral tone.

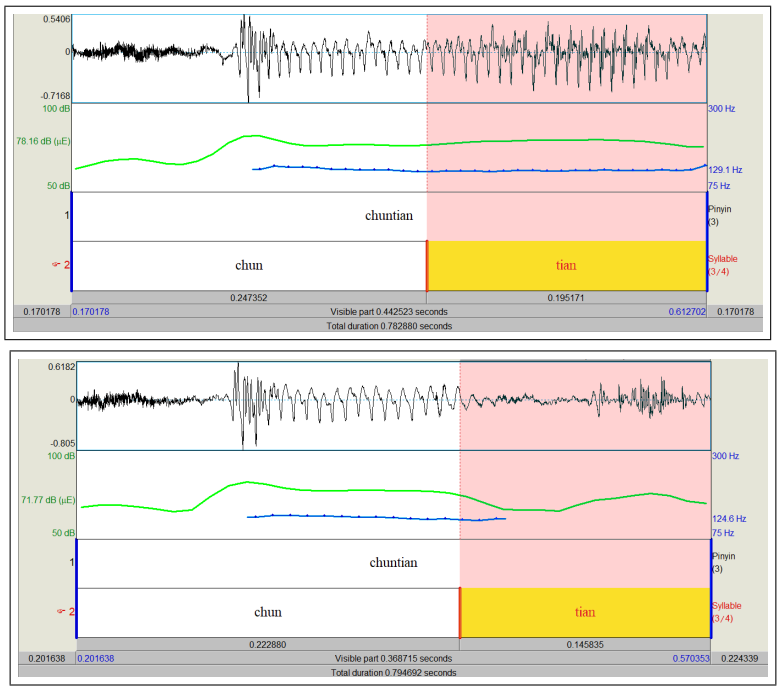


Figure 4.2: Neutral tone preceded by Tone 1: *chūntiān* 'spring' by Terry
Top: full tone; bottom: neutral tone.

4.4 show the neutralisation of *xuéshēng* ('student'), a Tone 1 neutral tone syllable preceded by Tone 2 from Helen and Fred respectively.

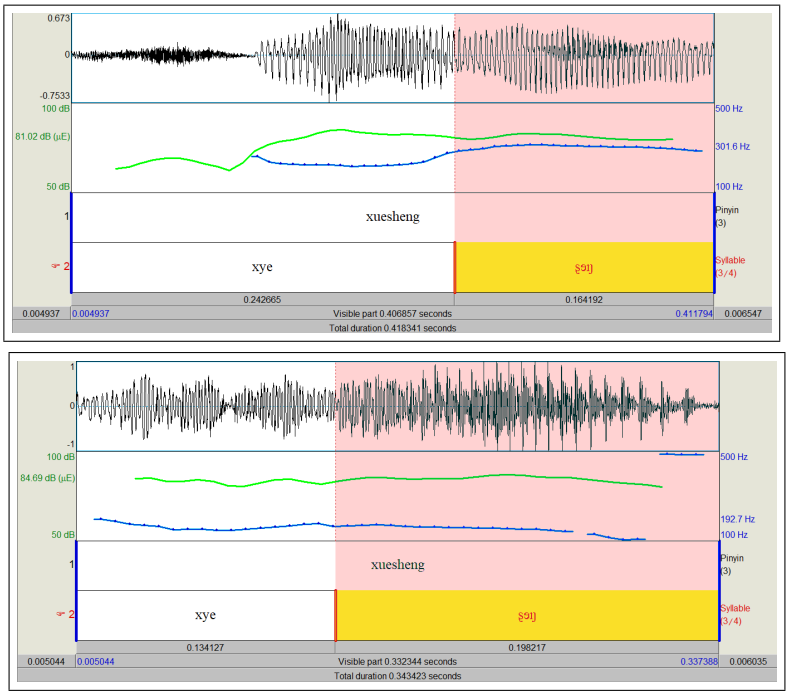


Figure 4.3: Neutral tone preceded by Tone 2: *xuéshēng* 'student' by Helen Top: full tone; bottom: neutral tone.

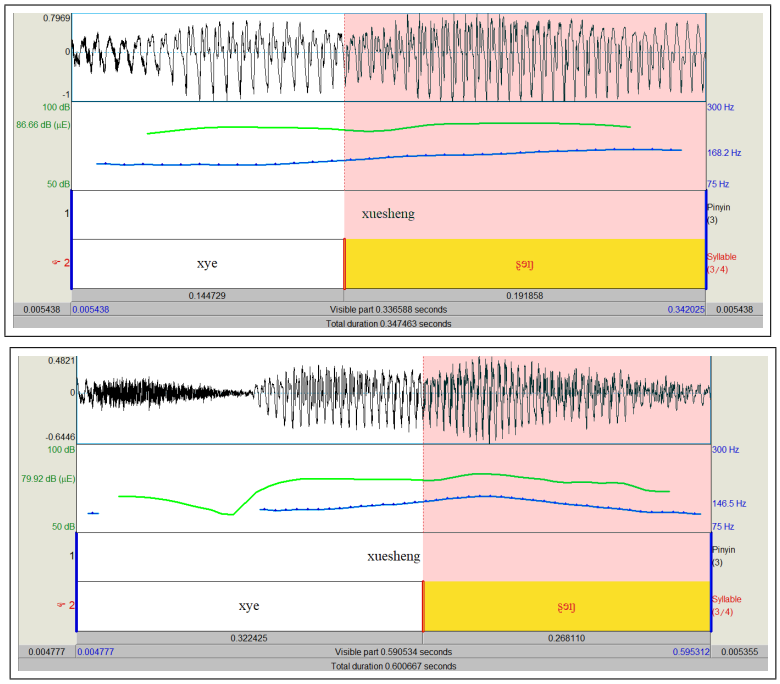


Figure 4.4: Neutral tone preceded by Tone 2: *xuéshēng* 'student' by Fred Top: full tone; bottom: neutral tone.

In both sets of figures, we see little variation in the intensity of neutralised versus full tone syllables, similar to the previous sets of figures for

neutral tone syllables following Tone 1. However, the duration of syllables are inconsistent across female and male speakers: for Helen, her neutral tone token is longer than her full tone token while Fred's tokens confirm expectations from previous research: neutral tone syllables show a shorter duration.

In these sets of screen-shots, a clearer lowering of $F_0$ can be observed: both Helen and Fred pronounced /ʂəŋ/ with a falling contour in the neutral tone token and this is especially obvious towards the end of the syllable.

### 4.2.3 Preceded by Tone 3

As discussed above, neutral tone syllables following Tone 3 (dipping) behave differently from those following the other three tones in these syllables' $F_0$. Instead of a falling contour, we expect a level tone for neutral tone after Tone 3.

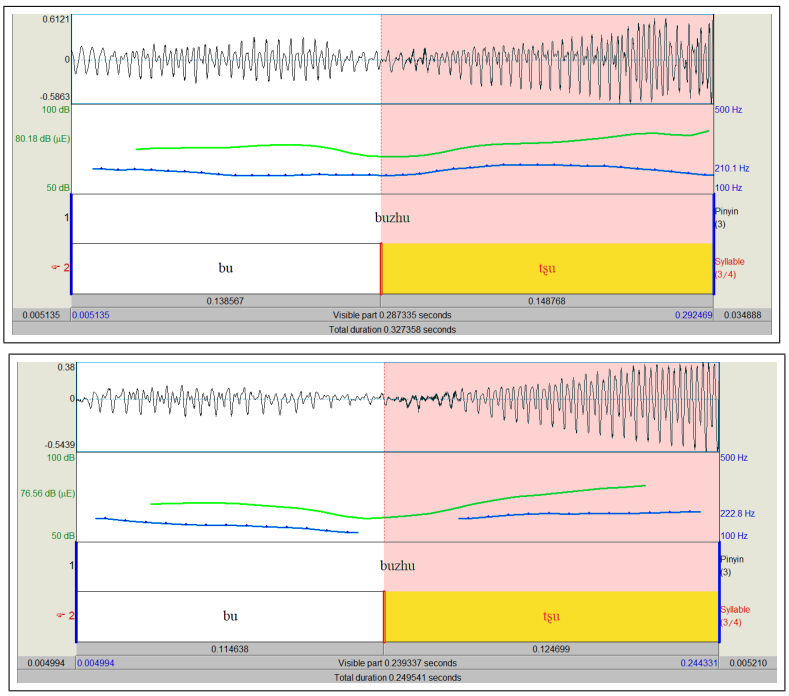


Figure 4.5: Neutral tone preceded by Tone 3: *bǔzhù* 'allowance' by Helen Top: full tone; bottom: neutral tone.

Both words in Figure 4.5 and 4.6 (see next page) consist of Tone 3 followed by Tone 4, and a falling contour of the ultimate syllable demonstrating a Tone 4 can be seen from the top figures in each set. Helen's token—/tʂu/ in *bǔzhù* ('allowance')—showed a steadier slope than Terry's /ie/ in *qǐyè* ('corporation') but both showed a falling contour.

Judging from the bottom figure for both female and male speakers, neutral tone syllables preceded by Tone 3 are indeed different from the

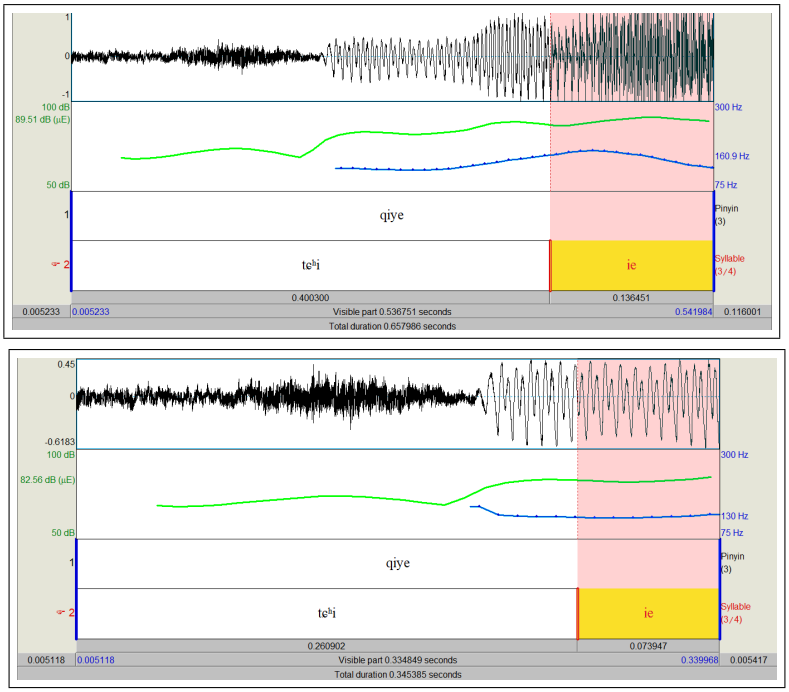


Figure 4.6: Neutral tone preceded by Tone 3: *qǐyè* 'corporation' by Terry Top: full tone; bottom: neutral tone.

others in terms of their fundamental frequency. Both speakers produced a level tone instead of a falling one.

Once again, we see little evidence of a contrast in the intensity of full tone and neutral tone tokens. Both speakers showed very little difference in intensity for neutral tone variation and this can be seen in the intensity line.

Regarding duration, data from Helen showed little variation in the duration of two variants while Terry produced the neutral tone variant much shorter than the full tone token, thus confirming what was suggested in existing research.

### 4.2.4 Preceded by Tone 4

The last set of figures (Figure 4.7 and 4.8, next page) illustrate variation of neutral tone syllables following the falling tone (Tone 4). The words shown here are made up by two syllables with the falling tone (*yuànyì* and *biànhuà*). From the top figures which show the full tone variants, we can see a falling contour for the ultimate syllable (Tone 4); however, in the bottom figures where neutralisation occurs, the lowering in $F_0$ seems to be very minimal, if not non-existent. Neutralisation also changed the contour into a level plateau.

There is strong evidence for a shorter duration in neutral tone syllables

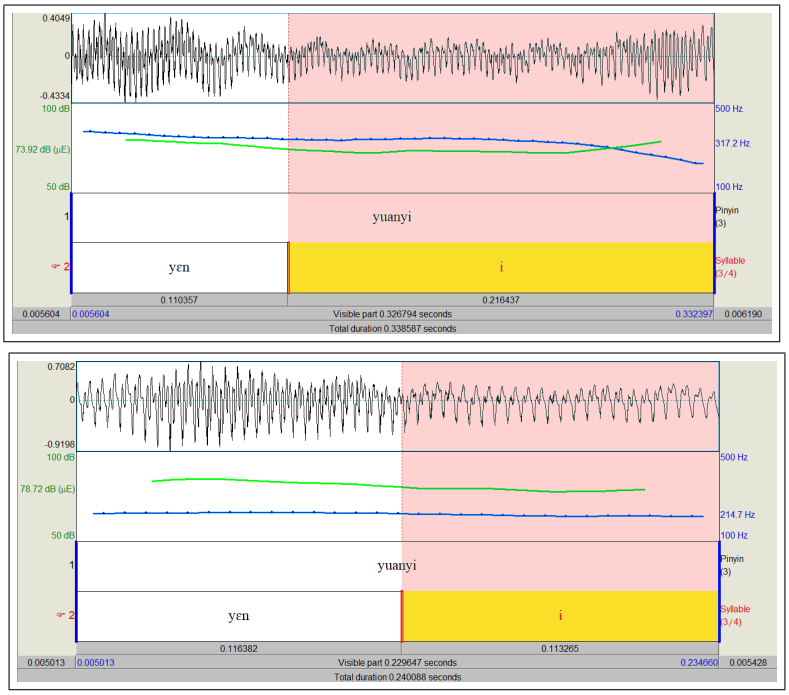


Figure 4.7: Neutral tone preceded by Tone 4: *yuànyì* 'willing' by Betty
Top: full tone; bottom: neutral tone.

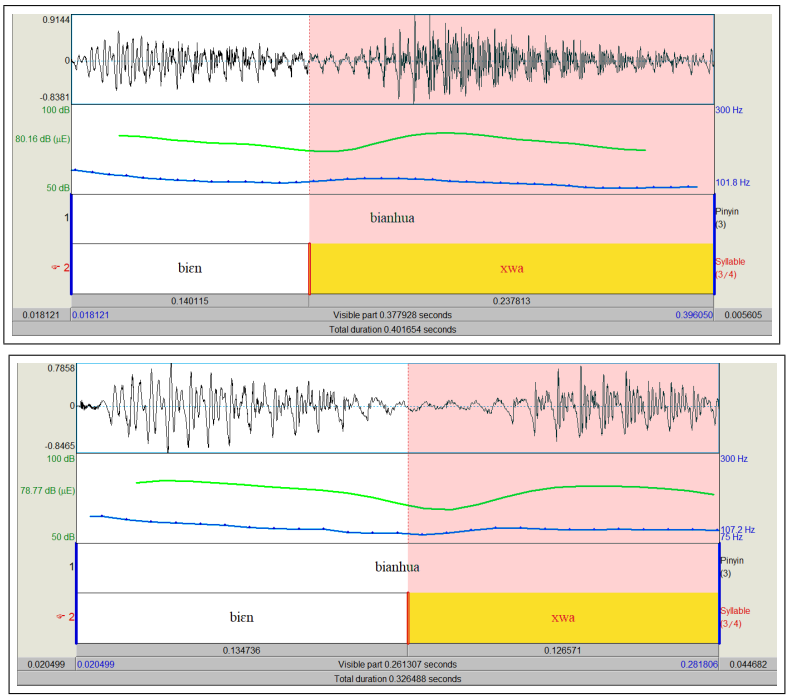


Figure 4.8: Neutral tone preceded by Tone 4: *biànhuà* 'change' by Kevin
Top: full tone; bottom: neutral tone.

than their full tone counterparts. By contrast, a consistent decrease in intensity was not found across the two sets of figures.

### 4.2.5 Summary

In this section, I provided four sets of examples of the variation in neutral tone syllables in natural speech, using Praat screen-shots of full tone and neutral tone variants from female and male speakers. As I have stated in the beginning of this section, the purpose is mainly to offer a starting point of the acoustic analysis of neutral tone in natural speech and the examples here might not have been comprehensive (e.g. not every tone combination is considered).

Several main observations are addressed here. First, neutral tone syllables show variation after different tones. Generalisations have been made about the patterns of variation (e.g. neutral tone becomes a falling contour after Tone 1, 2 and 4) and my data confirm the existence of these patterns. Nonetheless, without acoustic measurements, the subtle differences in fundamental frequency is very difficult to determine from Praat screen-shots alone.

Additionally, the variation in the duration of neutral tone is also profound. Most neutralised tokens were shorter in duration, though some of these examples showed little contrasts in duration with one neutralised token being longer than its corresponding full tone token. Moreover, it seems that the intensity of neutral tone syllables are less fundamental to the nature of neutral tone as we did not observe any differences in intensity from the figures. With regard to speaker gender, although we observed differences across male and female speakers in the screen-shots, the aforementioned general patterns were confirmed in both genders. In other words, the acoustic properties seen in the screen-shots were consistent across gender. Last but not least, neutralisation can be acoustically realised in a number of ways regarding the three main properties we looked at (fundamental frequency, duration, and intensity). The fact that these different acoustic patterns were all perceived as neutral tone suggests that neutral tone is both a phonetic phenomenon and a perceptual one. It is then essential to consider the perceptual dimension for a fuller understanding of this feature.

## 4.3 Methods

As mentioned in the previous section, for the analysis of neutral tone, I have chosen to reply on auditory coding. Coding the variable auditorily allows for a more holistic perspective as neutral tone is a perceptual phenomenon as well as an acoustic one. In the current section, I begin with the criteria used in selecting neutral tone tokens before moving on to introducing the linguistic (phonological and morph-syntactic), social and stylistic factors used in later analyses. The coding scheme used of style remains the same for all three linguistic variables and is only covered in detail in this section. More information on the self-recordings collected from a subset of 10 participants will also be included as it is essential for the understanding of Beijing Mandarin speakers' stylistic variation. I refer back to the specific methods in this section in the next two chapters when analysing classifier omission (Chapter 5) and intensifier *te* (Chapter 6).

### 4.3.1 Circumscribing the variable context

Due to the complex nature of neutral tone, I considered several important points during the impressionist coding process. First, in determining whether a syllable carries a neutral tone or a full tone, I relied mostly on auditory cues such as a shortened duration and a lower pitch as described in existing research. For ambiguous tokens, I used the spectrograms produced by Praat (Boersma and Weenink, 2016) to determine the presence of the acoustic properties relevant to neutral tone syllables. As both auditory coding and spectrograms require relatively clear speech, I have excluded the following tokens.

A potential token was excluded if it:

a. occurred with loud background noise;
b. was spoken in reduced forms and the original form was unintelligible;
c. occurred in fast speech and was thus unintelligible;
d. occurred in environments that made the syllable ambiguous with no clear cues present in spectrograms (e.g. creaky voice)

It is also important to determine the envelope of variation for neutral tone according to existing literature before coding. I first limited my coding to unstressed non-initial syllables in non-monosyllabic words since both Standard Chinese and Beijing dialect only allow neutral tone in unstressed syllables in these situations (Zhou, 2006).

More importantly, in both standard Chinese and Beijing Mandarin, some neutral tone words are obligatory while some are not. The words in the first category are referred to here as 'obligatory' since speakers are expected to produce the relevant syllables in these words with a neutral tone and failing to do so is considered non-standard/non-native. The 'optional' neutral tone words, on the other hand, are not restricted by language standardness in this way. The use of neutral tone on these optionally-neutralised words/syllables does not affect how standard/native a speaker is perceived. Moreover, although often not discussed explicitly, there exists a third category in both varieties that I call the 'prohibited' category. These words are never neutralised due to either linguistic (phonological or semantic) constraints and/or other reasons that are yet to be explored. Using a neutral tone on these words would be considered non-standard/non-native and would lead to misunderstandings.

Across the two varieties, obligatory neutral tone words largely overlap and this means these syllables do not vary within or across variety. I excluded these obligatory neutral tone words in my coding and analysis. These words fall into three types—affixes and particles, reduplicated morphemes in fixed phrases and meaning-distinguishing minimal pairs—and the reasons that they must carry a neutral tone vary depending on their specific type (Pei, 2008). For the first two types, as shown in example 4 and 5, it is believed that grammaticalisation is the cause of neutralisation (Pei, 2008; Shi and Li, 2001). More specifically, when Chinese content words, which are often mono-syllabic characters, undergo grammaticalisation and become affixes and sentence particles which mark grammatical functions (e.g. nominal marker in example 4a), their carry little lexical meaning, and are often neutralised. As for the second type which involves the reduplication of content words, Pei (2008) proposed that the neutralisation was resulted from the trend of reduplicating monosyllabic morphemes to make new disyllabic words in Modern Chinese ('disyllabification') and the grammaticalisation of these reduplicated morphemes (e.g. the second syllable in example 5a). In short, since these morphemes are repetitive of their preceding morphemes, they tend to be neutralised.

(4) Affixes and Particles[1]

a. nominal suffix *zǐ*:

[1]This type includes the following affixes and particles: *zi*/子, *tou*/头, *men*/们, *me*/么, *ren*/人, *he*/呵, *ba*/吧, *jia*/家, *shang*/上, *xia*下, *li*里, *shi*事, (nominal) *de*/的, *lai*/来, *qu*/去, *le*/了, *zhe*/着, (adverbial) *de*/得, *bian*/边, *li*/哩, and *bu*/卜 (Pei, 2008).

(i) *hái + zǐ = háizǐ*
'child' + *zǐ* = 'child'

b. plural suffix *mén*:

(i) *tā + mén = tāmen*
'he/she' + *mén* = 'they'

c. infix *bù* (negation marker):

(i) *guòlái + bù = guòbulái*
'come' + *bù* = '(can)not come'

d. question marker *ma*:

(i) *guòlái ma*?
come ma?
'(are you) coming?'

e. relative marker *de*:

(i) *tāmen de háizi*
they de child
'their child'

(5) reduplicated morphemes in fixed phrases

a. AA pattern:

(i) *jiéjie*
'older sister'

b. AABB pattern:

(i) *fēngfeng diāndiān*
'crazy'

The third type, shown in example 6, usually contains a pair of words with different meanings and are only distinguishable from each other by the presence and absence of a neutral tone. In these cases, neutralisation is obligatory in order to convey the intended meaning.

(6) meaning-distinguishing minimal pairs

a. *dà + yé = dàyé*
'big' + 'father' = 'boss'

b. *dà + yé = dàye*
'big' + 'father' = 'elderly man'

In the process of excluding obligatory neutral tone syllables, I have consulted a word list in the textbook for *Putonghua* pronunciation test (*Putonghua Shuiping Kaoshi*) (Putonghua Training and Testing Centre, State Language Commission of China, 2004) since it specifies whether or not a syllable must be neutralised. I excluded all words in this list during coding. The list can be found in Appendix D.1.

After excluding obligatory neutral tone words, I then focused on the

differences between standard Chinese and Beijing Mandarin regarding the 'optional' and 'forbidden' neutral tone words in each variety. As defined in Chapter 2, neutral tone variation in Beijing Mandarin is seen in both the range of words neutralised and the frequency of the neutralisation of these words. To be more specific, Beijing Mandarin has a bigger inventory of words with optional neutral tone syllables than the standard variety. That is to say, Beijing Mandarin has a smaller number of words in the forbidden category than standard Chinese. As mentioned before, Lu (1995, p. 36) has listed 1713 words with (obligatory and optional) neutral tone in Beijing Mandarin and suggested that 371 of them (20%) are not included in the Modern Chinese Dictionary (*xiandai hanyu cidian*)—the authoritative dictionary for Modern Standard Chinese.

To determine the words in each of these two categories for both standard Chinese and Beijing Mandarin, I consulted three word lists, including the one mentioned above and another two containing optional neutral tone words in Modern Standard Chinese and Beijing Mandarin from Lu (1995) and Zhou (2006). The textbook for *Putonghua* pronunciation test lists words that are recommended to have a neutral tone in standard Chinese and I call these 'recommended' neutral tone words (Appendix D.2.1). Lu (1995) provided a list of neutral tone words that exist in both Beijing Mandarin and Modern Chinese Dictionary—which I call the 'optional neutral tone words' (Appendix D.2.2)—as well as a list of words only neutralised in Beijing Mandarin (the 'forbidden neutral tone words' in Appendix D.3.1). Additionally, Zhou (2006) compiled a list of neutral tone words only used by Beijingers based on interview data with 120 Beijingers in the 1980s, which was also used in the process of coding (part of Appendix D.3.2).

In Table 4.2, the different categories for words in Beijing Mandarin and standard Chinese are shown. For words that either carry an obligatory neu-

| Variety | Neutral tone words category | | | |
|---|---|---|---|---|
| Beijing Mandarin | Obligatory | Optional | | Forbidden |
| Standard Chinese | Obligatory | Recommended | Optional | Forbidden |

Table 4.2: Categories of neutral tone words

tral tone or cannot be neutralised in both Beijing Mandarin and standard Chinese, that is, the invariant words, I did not include them in the current project. Two out of the three categories I use here—recommended and optional—correspond to those in standard Chinese, as mentioned above. The forbidden category in the current project is therefore those words cat-

egorised as forbidden in standard Chinese yet can be neutralised in Beijing Mandarin.

There are several points worth mentioning regarding the use of word lists found in dictionaries and pronunciation guides. Word lists compiled to guide people's language use are closely tied to the ideology of language standardness, and tend to be more prescriptive than descriptive. Specifically, the purpose of neutral tone word lists in standard Chinese and Beijing Mandarin is to regulate how certain words should be pronounced in order for the speaker to be considered standard or authentic by pronunciation tests and native speakers. Additionally, due to the fact that compiling dictionaries and pronunciation guides requires both time and resources on a national scale, they tend to lag behind language change and are not updated frequently. Specifically, most of the word lists used in this project were made more than a decade ago, and the others are based on dictionaries and corpora from the 1980s. Lastly, although these lists exist and are often used in language testing and/or research, little is known about their accuracy due to a lack of relevant research. Nonetheless, I decided to use these word lists in the current study since they provide me with the most up-to-date neutral tone words that can then be coded and analysed. I also used multiple lists by different authors to be as comprehensive as possible.

Regarding interview data, I first aimed to extract at least 200 neutral tone tokens for each participant and I coded no more than five occurrences of the same lexical item to avoid lexical skewing, using the aforementioned lists. In order to achieve this, I first searched and coded words in Appendix D.2 and D.3. However, most of the participants did not have 200 tokens after this procedure and as a solution for this, I then created a third word list consisted of all non-initial syllables in non-monosyllabic words that were auditorily identified as having a neutral tone even if the word was not in any of the neutral tone lists (see Appendix D.3.2). In the second round of token extraction, I searched and identified words from the new list[2]. As a result of the second round of token extraction (i.e. adding new neutral tone tokens to all participants' token list), several participants ended up with more than 200 tokens. During this process, each token was coded as either having a neutral tone or not having a neutral tone—ambiguous tokens were discarded.

[2]It is possible that by including words that are only neutralised once or only by one participant, this method could skew the neutralisation rate for neutral tone words only available in Beijing Mandarin. This turned out to be less of an issue since among the words coded in this way, more than 70% of them were used multiple times/by multiple speakers.

As for self-recordings, I followed the protocol used in coding interview data (this was done for all three variables). However, it is worth noting that I only included words selected in the coding of interview data (i.e. I did not add any potential new neutral tone words from the self-recordings even though such cases exist). Regarding the number of tokens in self-recordings, I did not set a lower limit since the length of the recordings vary from several minutes (for example, Mary only had a 6-minute long self-recording) to more than one hour long (e.g. Harry and Matt). I provide more details on the self-recordings in Table 3.10 in Section 4.4.5.

After all tokens have been identified, I then coded them for linguistic, social and stylistic factors relevant for the understanding of neutral tone variation. The following section focuses on the coding of linguistic factors and style while social factors have been covered in Chapter 3.

### 4.3.2 Linguistic factors

The following linguistic factors were included, representing the phonological, lexical and grammatical constraints on the use of neutral tone according to previous research.

1. Syllable structure and position [disyllabic final; polysyllabic final; polysyllabic non-final]
2. Tone of target syllable (original tone if neutralised) [level; rising; dipping; falling]
3. Preceding tone (of target syllable) [level; rising; dipping; falling]
4. Following tone (of target syllable) [neutral tone; level; rising; dipping; falling; pause (when appears at word boundary)]
5. Word structure [simple; affixation[3]; compound; phrase]
6. Word class (of host word) [adjective; adverb; verb; noun; number; pronoun; preposition; conjunction; particle]
7. Function of host word [subject; object; predicate; attributive; complement; adverbial; independent phrase]
8. Use [recommended; optional; forbidden]

[3]Generally, in word structure, affixation refers to the use of affixes to form words and these affixes include those must be neutralised as listed in Section 4.3.1 and others that do not necessarily carry a neutral tone. Since affixes with an obligatory neutral tone have already been excluded in Section 4.3.1, tokens coded here are not invariant.

The first factor, syllable structure, combines two factors—word syllable and syllable position—since both of them have been found to be relevant in predicting neutral tone. Zhou (2006) found that syllable position is a significant factor in determining if a syllable is neutralised in polysyllabic words (since only the ultimate syllable can carry a neutral tone in disyllabic words). She also noted that the word-medial syllables are less likely to be neutralised than final syllables, and when neutral tone appears, the degree of neutralisation is smaller.

Additionally, I coded for the original tone of these syllables as research investigating the distribution of neutral tone words found that final syllables with the fourth tone are more likely to be neutralised in disyllabic words (Yuan, 2007, p.12). Yuan's (2007) data showed that syllables preceded by Tone 1 are also more likely to be neutralised; therefore, I included preceding tone as a phonological factor. Finally, I coded following tone to explore its potential effect on neutralisation in natural speech since existing literature have suggested that neutral tone syllables rely heavily on their surrounding syllables regarding tone values, it is reasonable to hypothesise that the tone of following syllables could influence neutralisation.

Regarding lexical factors, Chen (2000, p. 385) suggested that neutralisation is 'lexically idiosyncratic' and many researchers have studied it from the perspective of lexicology. He (2004) investigated the effect of word formation on neutralisation in standard Chinese using data from Modern Chinese Dictionary and concluded that the structure of words influences the distribution of neutral tone. Although she categorised neutral tone words into 12 types depending on their word formation, I have collapsed them into four categories: single-morpheme words (simple words), words with affixes (affixation), compounds and phrases (noun/verb phrases).

He (2004) also proposed that nouns and verbs are more likely to be neutralised than adverbs in simple words while Yuan (2007) suggested nouns are neutralised more than verbs and adjectives in compounds. I then coded word class of the host word to investigate this effect in my data. Function of the host word was coded as Yuan (2007) suggested a tendency for objects to be neutralised rather than predicates, attributives and complements.

Lastly, I coded all the tokens according to how the words are used in standard Chinese, as mentioned in the last section. For those in Appendix A.2.1, they were coded as 'recommended', and those in Appendix A.2.2 were coded as 'optional'. Those only found in Beijing Mandarin (i.e. Appendix A.3) were coded as 'forbidden' since they are not neutralised in standard Chinese.

### 4.3.3 Coding Style

The purpose of the coding scheme used here is to establish a three-level contrast in the participants' speech for all Beijing Mandarin variables. As mentioned in Chapter 3 (Section 3.5.3), a comparison between interviews and self-recordings allows me to investigate the effect of interlocutors as well as formality where these two types of recordings differ (Coupland, 1980; Quist, 2008; Sharma, 2011). Self-recordings are seen as the least formal style in this project and this is controlled by ensuring the context, audience, and topic and the relevant information has previously been provided in Table 3.10 in 3.5.3, Chapter 3. In addition, within interviews alone, participants vary their use of Beijing Mandarin features based on formality, and some of this further variation is captured by coding interviews into careful and casual speech. I am interested in how different local features differ in speakers' speech, i.e. which features are more likely to vary with formality and would be considered a stereotype or marker, and which are is less sensitive to formality. More importantly, I aim to investigate the social meanings of different features in the context of different styles and how this relates to their more agentive identity construction.

The criteria used to code style in interview data, as can be found in Table 4.3, are mainly based on Labov's (2002) decision tree and Labov's (2006) channel cues (cf. Becker, 2013, p.93–94 for recent debates on this method). All three main variables were coded for formality and the results

| Careful Speech | Casual Speech |
|---|---|
| • First 10 minutes in interview or self-recording<br>• Response and descriptive answers<br>• Mentioning of recorder or being recorded<br>• Topics including language, career or job<br>• Consistent slow speech rate<br>• High register lexicon<br>• Unreduced forms | • Later in interview<br>• Narrative<br>• Topics including school, family, friend, leisure and gossip<br>• Change in speech rate<br>• Non-performative dialectal forms<br>• Laughing and swearing<br>• Reduced forms (of other features) |

Table 4.3: Formality coding criteria

will be presented and discussed in relevant sections in Chapter 5–6, following the respective analysis on linguistic and social predictors. Regarding the stylistic variation of neutral tone, I present the findings and offer an discussion in Section 4.4.5 in this chapter.

### 4.3.4 Neutral tone survey

Before submitting all coded tokens of neutralisation to quantitative analysis, I first took a closer look at how consistent these lists are regarding Beijingers' actual language use. In other words, I wanted to understand if words in different categories are perceived (in terms of standardness in *Putonghua*) and used (in natural speech) differently by my participants. This not only helps us understand the reliability for these word lists designed to regulate language use, but also provides me with more information regarding Beijingers' awareness of the standard language and their local dialect. In order to achieve this, I designed and conducted a survey with 14 of the 21 participants, using 20 randomly-selected words from the four categories (obligatory, recommended, optional and forbidden).

Regarding the specific procedures in conducting this survey, first, based on all interview data in this project, five words in each category were randomly selected. These 20 words—which can be found in Appendix A.4—were then randomised and presented to participants using an online survey tool (Shanghai Xunhuan Info Tech Co. Ltd., 2017). Participants were also asked to give their names for identification purposes so that their survey results can later be compared to their production data. The 14 participants who completed the survey are: Betty, Bob, Cat, Charlie, Clare, Daisy, David, Helen, Kevin, Matt, Mary, Mike, Nancy, and Terry. The survey was conducted after the recording of their interviews and self-recordings. I discuss the results in relation to their social and linguistic backgrounds in the next section.

As mentioned above, the survey (see Appendix D.4) aims to answer two main questions: first, are Beijingers aware of the existence of a standard in neutral tone use and is their perceived standard actually accurate? To answer this question, Question 2 in the survey asked the 14 participants to judge which of the four categories each one of the 20 words belongs to. In this way, I was then able to compare the use for these words in standard Chinese against participants' perceived standard. The second aim for the survey was to understand the relationship between participants' actual language use and their reported language use with regard to the standard

use of neutral tone. Therefore, in Question 3, participants were required to indicate how they normally pronounce/neutralise these 20 words (always, sometimes, never). By comparing their reported use to their perceived standard and their actual use in interviews, I could then find out if words in different categories are neutralised differently.

## 4.4 Results

I now proceed to present results regarding the variation of neutral tone in the dataset. The section begins with an overview of the data obtained from both the neutral tone survey and interviews, revealing general patterns in participants' perceived standard and reported neutral tone use while focusing on the variation observed in speakers' use of neutral tone words of different categories (recommended, optional and forbidden). The main part of the analysis consists of detailed results from three statistical models investigating the phonological, morpho-syntactic, social, and stylistic factors described above. All data were processed and analysed using R (R Core Team, 2016) and specific packages used are mentioned in relevant sections.

### 4.4.1 Overview of neutral tone use

The neutral tone survey mentioned above in Section 4.3.4 focuses on the perceived standard and reported use of neutral tone. I begin this section with the results from the survey, which helps us understand the relationship between the standard usage in standard Chinese, Beijingers' perception of such a standard and their use of neutral tone (both reported use and actual use in recorded interviews).

As described in the previous section, participants were asked to identify the standard use of 20 words in standard Chinese. The results showed that Beijingers' perceived standard in using neutral tone do not closely match the standard set in various dictionaries and pronunciation guides. Figure 4.9 below shows that overall, none of the four categories were 100% identified according to the prescriptive standard. In fact, each category was believed to contain words from other categories by the participants. For instance, 57% forbidden words were identified, meaning that the remaining 43% of words that should not be neutralised in standard Chinese were thought to be obligatory (6%), recommended (11%) or optional (26%). Additionally, participants classified 76% of the 'optional' neutral tone words to other categories—51% of which were thought to be forbidden in stan-

dard Chinese. Nonetheless, this result tells us that Beijingers do have a certain level of awareness towards the standard use of neutral tone and, perhaps more interestingly, they are better at identifying words from certain categories—forbidden (57%) and obligatory (41%)—than the other two categories, i.e. recommended (27%) and optional (24%).

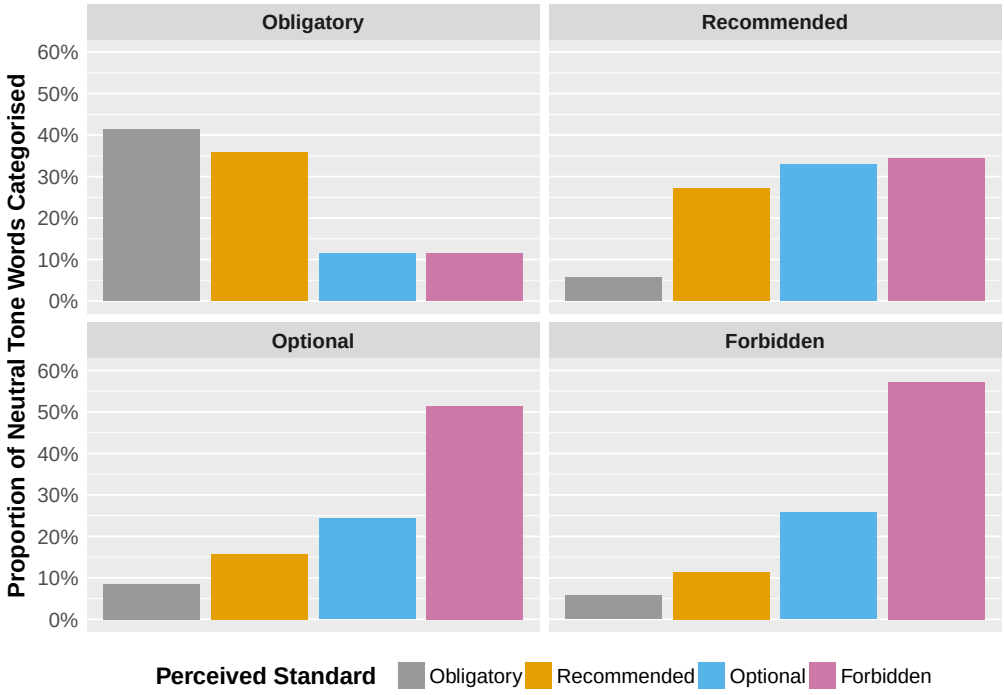


Figure 4.9: Survey results: perceived standard for neutral tone words
Note: Each facet represents one neutral tone category in standard Chinese, as indicated on top of the facet. Different colours indicate the categories participants perceive the words to be in.

I also asked the participants to indicate how they pronounce the 20 words (i.e. the final syllables in these words). For each word, they had three options: always (neutralise), sometimes (neutralise), or never (neutralise). Figure 4.10 shows the results for their reported use of these words (indicated by different colours) in relation to their standard use in standard Chinese (indicated by the four facets). As can be seen, again, a considerable number of words in each category are reported to be used incorrectly according to the standard set in standard Chinese. More specifically, 64% of the obligatory words were reported to be pronounced with a neutral tone at all times, which means 36% of them were (reported to be) pronounced 'incorrectly'. Moreover, participants reported that around half of the words in the recommended (46%) and optional (54%) categories were never produced with a neutral tone. Even for words that are never neutralised in standard Chinese, Beijingers still reported to neutralise 44% of

them. The data from the obligatory and forbidden categories are particularly interesting since they were again more accurate than the other two categories.

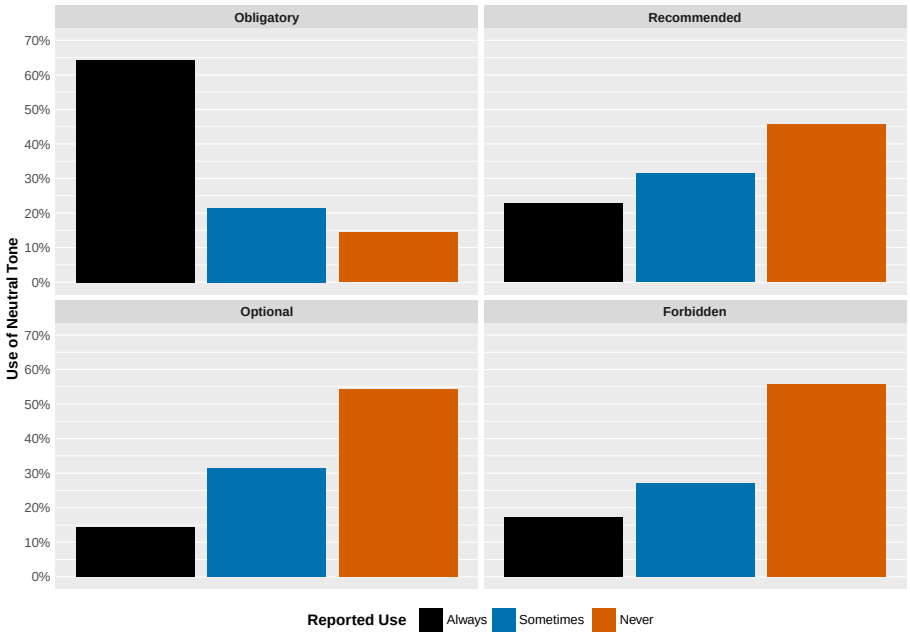


Figure 4.10: Survey results: reported use for neutral tone words

Participants' actual use of neutral tone for these words in the interview data, however, did not seem to closely match their reported use. I plot the average frequencies of the neutral tone words included in the survey in Figure 4.11. The figure is based on the interview data from the 14

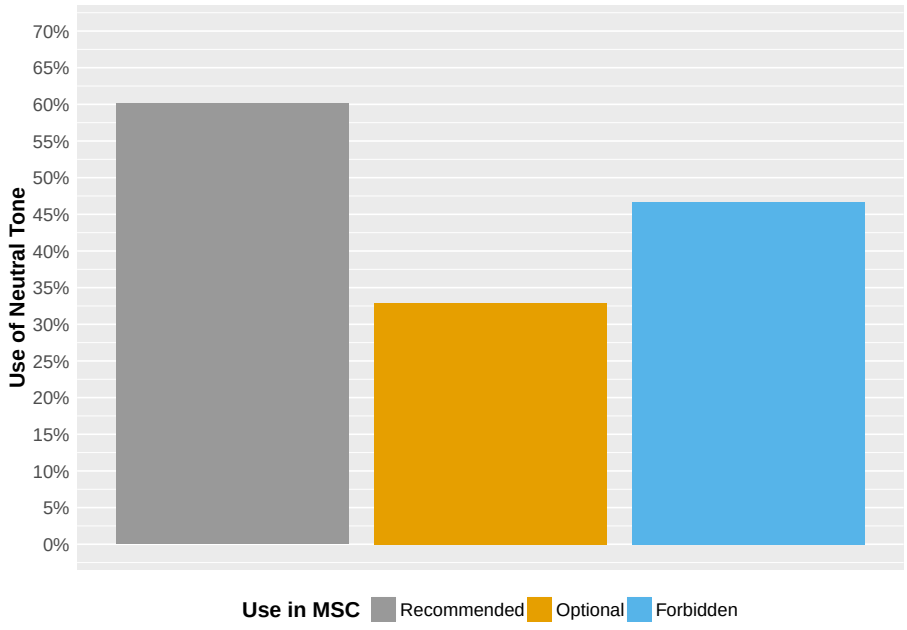


Figure 4.11: Actual use for neutral tone words in interview

participants who took part in the survey, and only shows data for 15 neutral tone words instead of all 20 of them. Five obligatory neutral tone words were excluded as they do not vary and were not included in the coding of neutral tone in the first place.

Although these participants reported to never neutralise around 50% of the words in each category (45% for recommended and 55% for both optional and forbidden categories), in actual production, they neutralised 60% recommended neutral tone words, 47% for the forbidden category and 33% for the optional category.

Taking the above results into consideration, it is reasonable to assume that although these participants are aware of the standard in the use of neutral tone in standard Chinese, there is a lack of accuracy in identifying the specifics of the standard as well as a lack of standardness in the their use of neutral tone words. They tended to be more aware of the standard in using the obligatory and forbidden words as shown in both questions. One possible explanation for this is that overt standard for language use tend to focus more on the extremes (i.e. words that must or must not be neutralised, in this case).

The neutral tone survey offered some insights into how Beijingers use neutral tone; however, in order to fully understand the variation in the use of neutral tone, it is necessary to take a closer look into their production data. I now move on to the interview data from all 21 participants and discuss some general findings in relation to the survey results before submitting the data to inferential statistics.

In total, 4206 tokens were coded for all 21 participants and on average, each participant had 200 tokens. The lowest and highest numbers of tokens per participant are 163 and 219 respectively, with the majority having over 200 tokens. Out of the 4206 tokens, 2307 (55%) were neutralised and 1899 (45%) were pronounced with a full tone. Although various word lists used in the coding process contained more than 1500 unique neutral tone words, only 460 of them are present in the dataset. To clarify, this situation is likely to be caused by the fact that most of the words in various lists, especially the ones from dictionaries and pronunciation guides, are either of low frequency (e.g. dialectal forms and obsolete words) or more suitable for a written register (e.g. formal/high-register lexicons). Out of these 460 words, 56 of them are 'recommended' in standard Chinese, and a further 121 words can be neutralised in standard Chinese (optional). The majority of them—283 words—are only neutralised in Beijing Mandarin.

In the following bar chart (Figure 4.12), each participant's use of neutral

tone is displayed in descending order. All participants used neutral tone around 50% of the time in the interview, which matches the overall usage as we have just discussed above. Additionally, neutral tone usage showed little variation in frequency amongst the participants. Only two participants neutralised more than 60% of all the tokens (Fred and Harry) and only three did it less than 50% of the time (David, Kevin, and Terry).

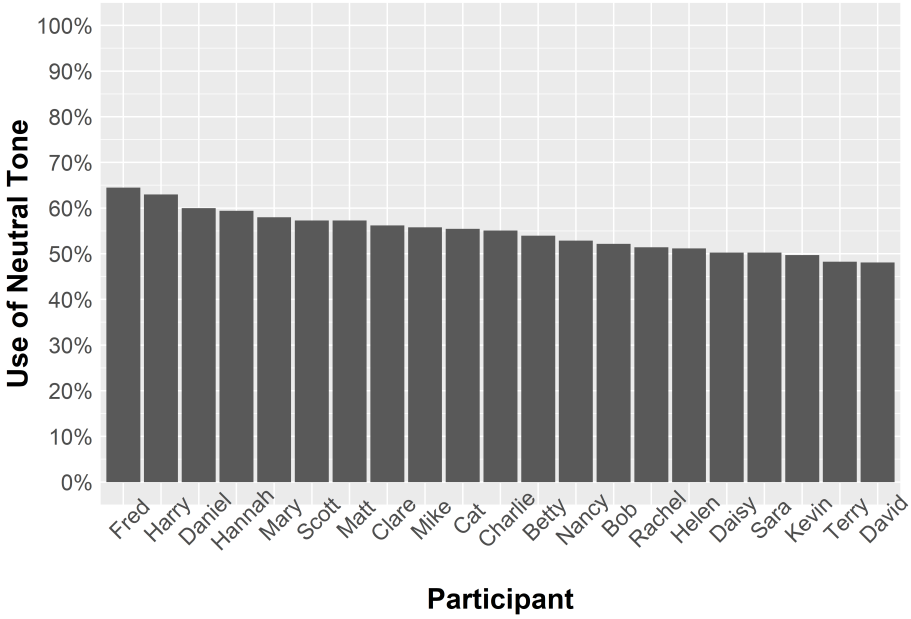


Figure 4.12: Frequency of neutral tone across all participants

Results from the neutral tone survey showed that neutral tone words from different categories are perceived and used differently in relation to the standard language. Therefore, it is reasonable to expect variation in the actual speech production of neutral tone among words in different categories. If speakers' use of this feature is tied to language standardness and particularly, standardness in the official standard language, for example, they are then likely to increase the rate of neutralisation for words that are prescriptively neutralised. In order to observe the potential differences, I present three separate plots showing individuals' use in Figure 4.13 to 4.15[4]. The order of the x axis (i.e. participants) is kept consistent with Figure 4.12 to make it easier to compare across figures.

First, there seems to be a lack of difference across the categories when we look at the participants as a group. Figure 4.13 presents the frequency for 56 words that are recommended to have a neutral tone in standard

[4]Note that obligatory neutral tone words are not included in the production data since these words are believed to be invariant, as explained in Section 4.3.1; therefore, only the remaining three categories (recommended, optional, forbidden) are discussed here.

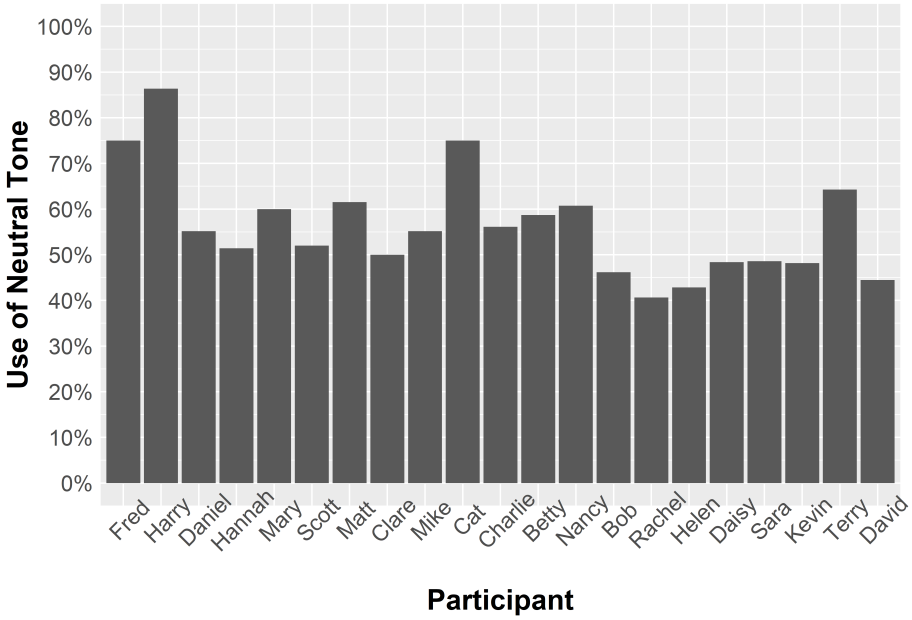


Figure 4.13: Frequency of neutral tone for 'recommended' words

Chinese. Out of the 653 tokens in this category, 366 (56%) were neutralised. Although explicitly recommended to be pronounced with a neutral tone by various prescriptive word lists, these words were not neutralised all the time in Beijinger's speech. Figure 4.14 shows a similar pattern for the 121 'optional' words and overall, 53% (477) of the 859 tokens are neutralised.

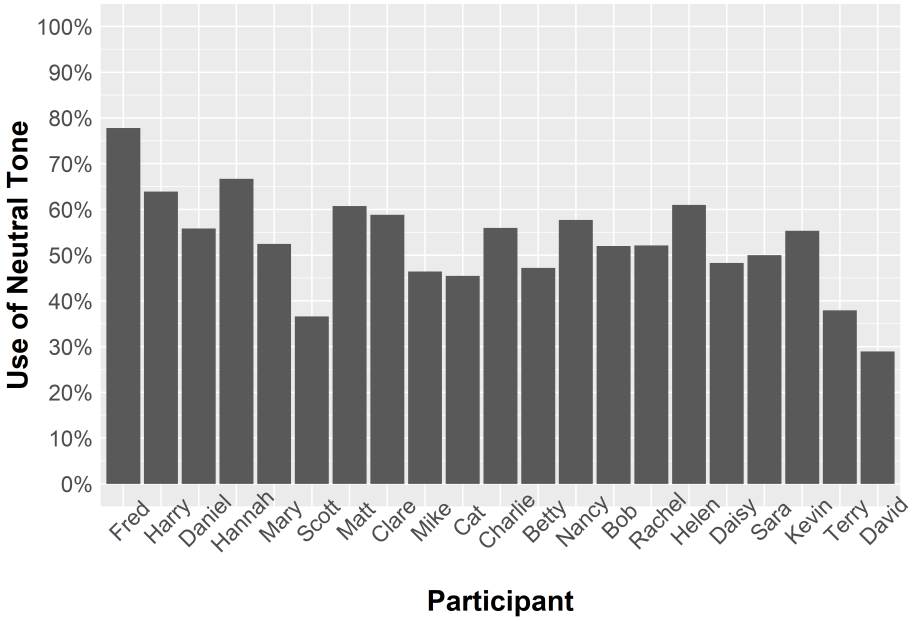


Figure 4.14: Frequency of neutral tone for 'optional' words

The third figure (Figure 4.15) contains frequencies for 283 words that are only neutralised in Beijing Mandarin and again, the overall neutralisation rate is around 55%, similar to all previous subsets of data. This lack of

variation across categories was also confirmed statistically by a chi-square test ($\chi^2$ (2) = 1.31, $p$ = 0.52 >0.05), although I will further investigate the effect of these categories in the quantitative analysis by including 'use in *Putonghua*' as a linguistic factor in the two regression models focusing on phonological and morpho-syntactic factors below.

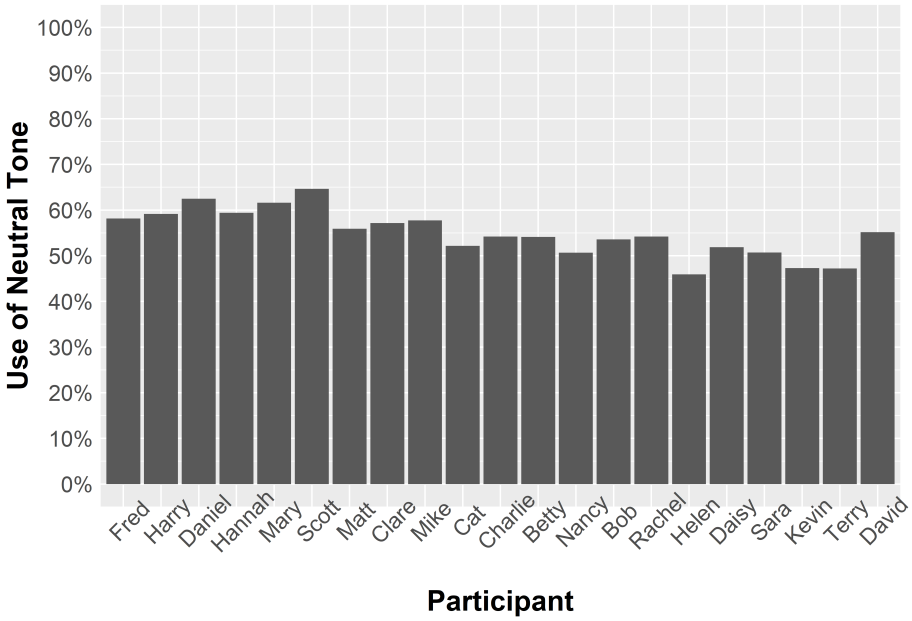


Figure 4.15: Frequency of neutral tone for 'forbidden' words

In addition, we observe some variation in the range of neutralisation rates for words in different categories. Overall, the rate of neutralisation across participants varied from 48% to 64%, and this 16% difference indicated that they do not differ much from each other when we consider all the words from all three categories. The same lack of differences across participants can be seen in the forbidden neutral tone words, where the gap between the highest neutralisation rate (65% for Scott) and the lowest (46% for Helen) was again less than 20%. In contrast, we see more variation in the recommended and optional words where some speakers neutralise significantly more than others. For recommended neutral tone words, participants' rates of neutralisation range from 41% (Rachel) to 86% (Harry), showing a 45% difference across the dataset. A similar range was seen in the optional neutral tone words where there was a 49% difference between David who neutralised the least (29%) and Fred who neutralised the most (78%).

This pattern where participants vary less for the forbidden words (i.e. words only neutralised in Beijing Mandarin) might be surprising as we expect different Beijing Mandarin speakers to utilise these unique words vari-

ably to express different levels of localness—or a lack of standardness—in their speech. Instead, we observe a relatively consistent use of neutral tone across speakers at a high rate (55%, as mentioned above). This pattern is, however, consistent with the survey results where words in the forbidden category differed from those in the other two categories. This between-category contrast in different types of data indicates that for Beijingers, neutral tone words reserved for Beijing Mandarin are unique and can potentially be linked to Beijingness despite that the overall difference was not statistically significant. I return to and expand on this in later discussions on the social meaning of neutral tone in Section 4.5.2.

Based on the data at hand, several possible explanations can be proposed here. I posit that Beijingers utilise words available in both standard and Beijing varieties (recommended and optional words) to show localness (and maybe also non-standardness) by changing their rates of neutralisation instead of relying on words that are uniquely neutralised in Beijing Mandarin. It is possible that a norm in the frequency of neutralisation exists in Beijing Mandarin that this could result in the relatively uniformed rates of neutralisation in this category. And if this is true, it is reasonable for Beijingers to neutralise words in standard Chinese non-standardly in order to express meanings such as localness, yet this hypothesis requires more future work into Beijing Mandarin.

Besides the differences in the range of variation, there were also individual differences. Firstly, some speakers tended to have a consistent use of neutral tone across different categories: both Fred and Harry maintained a high percentage of neutralisation (over 60%) in all three categories. David, on the other hand, showed low neutralisation rates across all categories (less than 45%) and was in fact the least frequent neutral tone user in all participants.

More interestingly, not all participants were consistent as we saw several other participants varying their neutralisation rates for words in different categories. Since these categories are linked to how standard or Beijing one might sound, I include a few examples to help to shed light on how individuals express standardness and Beijingness using neutral tone.

Scott, who showed an average frequency of neutral tone in both the overall (58%) and recommended (52%) categories, was seen to have occupied the lower end in optional words (37%) while using more neutral tone (60%) than all other speakers for the 'forbidden' words (i.e. more Beijing or less standard). In contrast, although Cat also shows an average use of neutral tone overall (55%), her neutralisation rate increased to 75% in words

from the recommended category (i.e. more standard). She maintained an average neutralisation rate for the other two categories at 46% and 52% respectively.

This comparison showed that speakers with the same overall neutralisation rate used words from different categories differently. This distinction is potentially significant in understanding how Beijing Mandarin speakers express and explore language standardness and localness in the use of neutral tone. I further explore this distinction in the quantitative analysis below and in Section 4.4.5 when I discuss the stylistic variation in the data.

In the following sections, I present results from statistical analysis for neutral tone. The first part of the analysis focuses on interview data: linguistic factors (as listed in Section 4.3.2) are considered first before I move on to discuss the social factors (described in Section 3.4 in Chapter 3) and stylistic factor (discussed in Section 4.3.3).

In all analyses in the current chapter and the following two chapters (Chapter 5 and 6), I present separate regression models for phonological, morpho-syntactic, and social factors and discuss the results based on these separate models instead of presenting the full models with all factors. I acknowledge that this approach is not standard in variationist studies as it potentially overlooks the interactions between different factor groups, and I offer some justifications here. First, as the variation of these features has received little attention in variationist research, we have limited existing research to base any hypotheses of interactions on. As a solution, I decided to build separate models for different factor groups (cf. Walker, 2010, 2012). To ensure the validity of these separate models, especially the effect of the significant social factors (i.e. the patterns observed for social factors are not predictable by just linguistic factors), I include the integrated regression models with all linguistic and social factors in Appendix F.1 for all three main variables. As can be seen in the appendix, the integrated models have been checked to make sure the social effects were not rendered insignificant by linguistics factors.

### 4.4.2 Phonological factors

In this project, I used mixed-effects logistic regression as the main statistical method to determine the effect linguistic and social factors have on neutral tone variation. All models were fitted to the data using the glmer function in the lme4 package in R (Bates et al., 2015). I provide an outline of the modelling procedure here while specific details of model-fitting for each

model can be found in the relevant sections below.

In all models, the use of neutral tone—whether neutral tone syllables were neutralised or not— was entered as the dependent variable. Separate models were fitted to data with different groups of factors, i.e. phonological, morpho-syntactic and social factors, in order to find out the effects of different types of factors. Interactions between independent variables that were motivated by existing literature were also considered although only those selected in the best-fit models are included and presented. Participant was included as a random factor for all models[5]. Models were fitted using a step-up approach where fixed factors and interactions were added one by one to the base model which only contained random factors until the best model was determined. Again, a more standard way of model-building would be using the step-wise or step-down (i.e. backward elimination) approach (Halinski and Feldt, 1970), but this was deemed inappropriate for the current dataset. As discussed before, the numerous levels of the independent variables in the current corpus could lead to potential issues regarding multicollinearity when building a full model using the backward elimination method. I therefore chose to use the forward selection method as this reduces the possibility of have non-converging models from the beginning. Model selection was conducted by using ANOVAs and comparing both AIC and $\chi^2$ values, and only final models are reported. Multicollinearity in final models was tested by calculating the Variance Inflation Factors (VIFs) and will be discussed in respective sections.

The first set of factors tested include all four phonological factors — tone, preceding tone, following tone and syllable structure and position, and use in *Putonghua*. Zhou (2006) suggested that syllable structure and position can be used to predict whether a syllable is neutralised based on a Beijing Mandarin corpus from 1990s. Moreover, Yuan (2007, p. 13) conducted a study on all neutral tone words in the Contemporary Chinese Dictionary and the results suggest that two types of syllables in disyllabic words are likely to be neutralised: syllables carrying Tone 4 and those preceded by Tone 1. Additionally, following tone was included to explore whether it also has an effect on the realisation of neutral tone. Use in *Putonghua* was included to test if words unique to Beijing Mandarin (i.e. those in the forbidden category) would be neutralised differently by the speakers.

[5]Initial data explorations also included word as a random factor; however, due to the large number of levels in word as a random effect as well as the low token counts, models for these two features were unable to converge and/or became unstable. Therefore, word was excluded in the final models.

As mentioned above, instead of testing all possible interactions, I only included between-factor interactions motivated by existing literature when fitting models. For phonological factors, only one two-way interaction was investigated, building on what Yuan (2007) has found in her study on disyllabic words in the Contemporary Chinese Dictionary. In her research, the interaction between tone and syllable position and structure seems to predict neutralisation. Specifically, she found that final syllables with Tone 4 are more likely to be neutralised in disyllabic words and I aim to further explore this interaction in the current dataset.

Table 4.4 on the next page shows the best-fit model for phonological factors. The table shows the correlation between each independent variable and the dependent variable (in this case, neutral tone). As with all the mixed-effects models I present in the following sections and chapters, the leftmost column lists the factors (and interactions where relevant) selected for the final model. Since these are binomial logistic regression models, the log-odds, presented as estimates in the second column, represent the change in the likelihood for one variant of the dependent variable (e.g. neutralisation) to be used over the other (e.g. full tone). The estimate value for any given independent factor can be positive or negative, meaning that a factor might increase or decrease the chance of the target variant being used when everything else in the model is held stable. Both standard error and Z score refer to each factor's variability with regard to the estimates; therefore, smaller values in both indicate less deviance in the model while positive and negative Z scores point to the direction of the deviance. The corresponding $p$ value in the rightmost column indicates whether the change in probability is significant for individual factors, and I consider any $p$ values lower than 0.05 to be significant. I also provide the total number of tokens and the log likelihood for each model, as can be seen at the bottom of the table, together with the factor levels for the intercept.

Regarding fixed factors, the final model did not include the tone of the syllable as a main effect, and this suggests that the lexical tone of the neutral tone syllable is not a good predictor for neutralisation. On the other hand, the interaction between tone and syllable structure and position was included, indicating that the interaction between the two factors is significant in predicting neutralisation. This result confirms findings in Yuan's (2007) study, where final syllables in disyllabic words with a Tone 4 are more likely to be neutralised. In Yuan's (2007) study, they have also found that Tone 4 syllables, regardless of their position, are prone to neutralisation. The results from the current analysis suggests that this

| | N | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|---|
| (Intercept) | | 0.62 | 0.11 | 5.78 | **<0.001** |
| Preceding Tone - 1 | 1003 | -0.85 | 0.09 | -9.37 | **<0.001** |
| Preceding Tone - 2 | 686 | -0.97 | 0.11 | -8.79 | **<0.001** |
| Preceding Tone - 3 | 922 | -0.19 | 0.1 | -1.96 | **0.050** |
| Following Tone - 1 | 527 | 0.52 | 0.13 | 3.83 | **<0.001** |
| Following Tone - 2 | 664 | 0.54 | 0.13 | 4.28 | **<0.001** |
| Following Tone - 3 | 663 | 0.17 | 0.13 | 1.38 | 0.167 |
| Following Tone - 4 | 1052 | 0.29 | 0.11 | 2.54 | **0.011** |
| Following Tone - Pause | 726 | 0.09 | 0.12 | 0.75 | 0.453 |
| Syllable - Polysyllabic Final | 134 | 1.89 | 0.43 | 4.4 | **<0.001** |
| Syllable - Non-Final | 85 | 0.52 | 0.33 | 1.58 | 0.114 |
| Use - Recommended | 653 | 0.75 | 0.11 | 6.77 | **<0.001** |
| Use - Optional | 895 | 0.38 | 0.09 | 4.24 | **<0.001** |
| Syllable - Disyllabic Final:Tone - 1 | 589 | -1.63 | 0.11 | -15.45 | **<0.001** |
| Syllable - Polysyllabic Final:Tone - 1 | 10 | -2.43 | 0.78 | -3.11 | **0.002** |
| Syllable - Non-Final:Tone - 1 | 11 | 0.037 | 0.77 | 0.05 | 0.962 |
| Syllable - Disyllabic Final:Tone - 2 | 553 | -1.54 | 0.11 | -14.65 | **<0.001** |
| Syllable - Polysyllabic Final:Tone - 2 | 36 | -1.92 | 0.55 | -3.47 | **<0.001** |
| Syllable - Non-Final:Tone - 2 | 7 | -2.15 | 0.92 | -2.35 | **0.019** |
| Syllable - Disyllabic Final:Tone - 3 | 234 | -1.33 | 0.16 | -8.13 | **<0.001** |
| Syllable - Non-Final:Tone - 3 | 4 | 13.23 | 441.46 | 0.03 | 0.976 |

N: 4206; Random effects: Participant (21); Log likelihood: -2539.5
Intercept represents tokens in forbidden category (use) with Tone 4 (tone) in final syllable position in disyllabic words (syllable) preceded by Tone 4 (preceding tone), followed by neutral tone (following tone).

Table 4.4: Logistic regression model for neutral tone: phonological factors

effect could be due to the aforementioned interaction. The inconsistency is not entirely unexpected. The differences we see here might be caused by the differences between the two datasets and the analytical methods used: Yuan's (2007) results came from largely descriptive statistics based on a corpus of standard Chinese (i.e. one standard Chinese dictionary) while the current dataset takes into consideration of various other phonological factors in natural speech. Nonetheless, a lack of significant effect of tone suggests that statistically, syllables with a Tone 4 are not any more likely to be neutralised than syllables with other tones.

Preceding tone was also found to be significant in the model, although the effect was not consistent with previous patterns noted in Yuan (2007). We observe that rather than syllables preceded by Tone 1, those preceded by Tone 4 are significantly more likely to be neutralised than when preceded by any other tones ($p$ <0.01 for Tone 1 and 3, $p = 0.05$ for Tone 3). I posit that the cause of this is tied to neutral tone's low $F_0$, that is, when following Tone 4 which is a falling tone, the onset of a potential neutral tone syllable is already low and this makes it more economic to neutralise. Moreover, following tone was also a significant predictor for neutralisation in the dataset. Following neutral tone disfavours neutralisation, as demonstrated by the positive estimate values. When a syllable is followed by any of the four tones or a pause, it is more likely to be pronounced with a

neutral tone in comparison to when followed by a neutral tone, although the effects were only significant for following Tone 1, 2 and 4 ($p < 0.01$). Essentially, this result shows that Beijing Mandarin disfavours consecutive neutral tone syllables (i.e. consecutive un-stressed syllables).

Moreover, compared with final syllables in disyllabic words, it is more common to observe neutralisation in polysyllabic words ($p < 0.01$). Again, the results here contradict those of Zhou's (2006) where non-final syllables are more like to carry a neutral tone. Apart from the differences in our datasets (Beijing Mandarin corpora from different years) and analytical methods (descriptive vs inferential statistics), it is worth noting that her data has included obligatory neutral tone words which would show a high rate of neutralisation (e.g. infix in example (4-c)and reduplicated morphemes in example (5-b) in Section 4.3.1). It is then possible that the high rate of neutralisation she observed was inflated by these invariant tokens.

We also see that the use of words in *Putonghua* was kept in the final model and this indicates the categories we have used to characterise neutral tone words help to predict neutralisation. Particularly, words only neutralised in Beijing Mandarin are more likely to carry a neutral tone in the current dataset, in contrast with those in 'recommended' and 'optional' categories. This finding sheds some light on the pattern of variation in the data. More specifically, as I have discussed before, the overall rate of neutralisation did not seem to vary much across categories (shown in Figures 4.13-4.15). Yet when included in a mixed-effect regression model, the significant differences arise, as we have seen here in 4.4. I continue to include this factor in the next two models (morpho-syntactic and social factors, respectively) and address this factor in detail in Section 4.5.

### 4.4.3 Morpho-syntactic factors

This section presents results from logistic models fitted to the data focusing on the three morpho-syntactic factors: word structure, word class and function of host structure. As discussed before, existing research has suggested that these factors have an effect on the use of neutral tone. In this section, I test whether they indeed influence neutralisation in the current dataset. Before fitting the models, I first address and deal with a potential issue involving two of the aforementioned factors (word class and function) which have more than four levels. Since both variables have many levels, they are likely to generate overly-complex and/or non-convergent mixed-effects models; therefore, I first recoded the levels for these two variables.

For word class, nine levels were coded originally, but these were collapsed into three bigger categories. These three categories are nominal, verbal and functional, and the categorisation is based on the use and function of Chinese words. Nominal structures include nouns, pronouns, and numerals, structures often used to form nominal phrases in Mandarin (Chao, 1968). Verbal structures include both verbs and adjectives since both tend to act as predicates in forming sentences (Chao, 1968, though see Huang et al., 2009 for the differences between Chinese adjectives and verbs). The last two categories are often grouped into one in traditional Chinese philology since parts of speech such as adverbs, prepositions, conjunctions and particles are considered *xuci* ('empty word') which do not have lexical functions as content words do (Huang et al., 2009; Sun, 2006; Xing, 2002).

Similarly, the number of levels for grammatical function was also reduced. The existing eight levels were recoded into three levels: core function, modifying element and independent structure. The first level includes the three most essential elements of a sentence—subject, predicate and object, while all the structures used to modify the core elements—adverbial, attributive and complementary structures—are grouped under the second level. Independent phrases, which mainly consist of sentence words (Bloomfield, 1984) and parenthetical phrases, and words with no formal syntactic functions (i.e. conjunctions) are considered independent structures since they are relatively free in the construction of sentences.

After recoding, I fitted a series of mixed-effects logistic regression models to the data using word structure, word class, function, and use in *Putonghua* as the independent variables. The first three fixed factors included here were all studied in existing literature: according to He (2004), compounds are less likely to be neutralised than simple words and words formed by affixation. As for word class, both He (2004) and Yuan (2007) have proposed an interaction between word class and word structure, namely, both nouns and verbs are neutralised more than adverbs in simple words while only nouns are more likely to be neutralised (than verbs and adjectives) in compounds. The function of host structure was found to influence neutralisation in Yuan (2007, p. 17) where objects are often neutralised[6]. Use in *Putonghua* was also included to find out if the categories makes a significant predictor. Regarding interactions, I included the interaction between word structure and word class as discussed above. For all models, participant

[6]It is worth pointing out that after recording, the levels of each factor in the current project do not match those in previous studies. I discuss this issue when interpreting the statistical results.

was included as a random factor.

The output of the best-fit model is presented in Table 4.5 on the next page. As can be seen, grammatical function was selected as a main effect in the final model, suggesting that words with different sentence functions differ significantly regarding neutral tone use. Specifically, words with core functions (subjects, predicates and objects) are more likely to be neutralised than both modifying structures and independent phrases. Although I have used different categories in coding, these results are in line with Yuan's (2007) study where he found that objects (core function) are more likely to be neutralised than attributes and complements (modifying structure). One possible explanation proposed by Yuan (2007) is that words used to modify other structures usually contain new information unlike subjects and objects (core function), and are thus often stressed and carrying a full tone.

We observe a lack of main effect for both word class and word structure, and this suggests that these two factors do not significantly influence neutral tone use on their own. However, we find their interaction significant in the final model. More specifically, when compared with nominal words (i.e. noun, pronouns and numerals), functional words are neutralised significantly more in all full types of structures while verbal words/phrases (i.e. adjectives and verbs) only significantly increase the rate of neutralisation in compound words and phrases. Although not directly comparable, the results here largely contradict what has been proposed by previous studies (He, 2004; Yuan, 2007), that is, nouns are neutralised more than other structures such as adjectives, verbs and adverbs. Again, the differences could have been caused by the different coding as well as the nature of the corpora. Moreover, within nominal words, phrases are more likely to be neutralised than simple words while nominals formed by affixation are less often neutralised.

Use in *Putonghua* was again selected for the best-fit model. Both 'recommended' and 'optional' words are less likely to be neutralised in comparison to 'forbidden' words, although only the difference between 'optional' and 'forbidden' neutral tone words is significant ($p$ <0.01) while the difference between 'forbidden' and 'recommended' words is not ($p = 0.221$). Again, Beijingers neutralised words unique to their variety more, similar to what we have seen in precious model for phonological factors.

| | N | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|---|
| (Intercept) | | 0.89 | 0.07 | 1.35 | 0.178 |
| Function - Independent | 386 | -0.26 | 0.14 | -1.87 | 0.062 |
| Function - Modifying | 1528 | -0.48 | 0.082 | -5.87 | **<0.001** |
| Use - Recommended | 653 | -0.11 | 0.09 | -1.23 | 0.221 |
| Use - Optional | 895 | -0.26 | 0.08 | -3.13 | **0.002** |
| Word Class - Functional:Word Structure - Simple | 1753 | 1.21 | 0.11 | 10.91 | **<0.001** |
| Word Class - Functional:Word Structure - Compound | 34 | 2.4 | 0.55 | 4.35 | **<0.001** |
| Word Class - Functional:Word Structure - Affixation | 43 | 1.56 | 0.38 | 4.13 | **<0.001** |
| Word Class - Functional:Word Structure - Phrase | 74 | 3.25 | 0.52 | 6.25 | **<0.001** |
| Word Class - Verbal:Word Structure - Simple | 900 | 0.19 | 0.09 | 2.21 | **0.027** |
| Word Class - Verbal:Word Structure - Compound | 109 | 1.59 | 0.25 | 6.35 | **<0.001** |
| Word Class - Verbal:Word Structure - Affixation | 38 | 0.14 | 0.35 | 0.41 | 0.681 |
| Word Class - Verbal:Word Structure - Phrase | 46 | 1.02 | 0.33 | 3.09 | **0.002** |
| Word Class - Nominal:Word Structure - Compound | 215 | 0.09 | 0.16 | 0.57 | 0.572 |
| Word Class - Nominal:Word Structure - Affixation | 167 | -0.46 | 0.18 | -2.55 | **0.011** |
| Word Class - Nominal:Word Structure - Phrase | 98 | 0.98 | 0.23 | 4.22 | **<0.001** |

N: 4206; Random effects: Participant (21); Log Likelihood: -2742.1

Intercept represents simple (word structure) nominal (word class) words with core function in forbidden category (use).

Table 4.5: Logistic regression model for neutral tone: morpho-syntactic factors

### 4.4.4 Social factors

The last group of factors tested includes three social factors — gender, programme, and aspiration. As discussed in Chapter 3, both programme and aspiration were further coded into broader groups to reflect the similarities within each group. For programme, students of Chinese and foreign languages are grouped as language students, leaving programme with three levels instead of four. As for aspiration, although it was originally measured on a continuous scale, I have divided all participants into high ($\geq 6$) and low ($<6$) aspiration based on their scores.

As with the two sets of linguistic factors, a series of mixed-effects logistic regression models were fitted to the data, using participant as the random factor. For the three main social factors, I considered all possible interactions since previous sociolinguistic studies—both in and outside of Chinese sociolinguistics—have found interactions between gender and other social variables (Eckert, 1989a; Labov, 1972a; Moore and Podesva, 2009; Stuart-Smith, 2007; Trudgill, 1972; Zhang, 2005). More specifically related to this project, in Baran's (2014) study on high school students in Taiwan, she found that male and female students use features from the local Taiwan Mandarin differently depending on their course and future plan. I aim to investigate whether the three factors interact in the current dataset regarding the use of neutral tone.

| | N | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|---|
| (Intercept) | | 0.41 | 0.07 | 5.68 | **<0.001** |
| Gender - Female | 2086 | -0.24 | 0.11 | -2.19 | **0.029** |
| Gender - Male: Programme - Business | 954 | -0.24 | 0.1 | -2.44 | **0.015** |
| Gender - Male: Programme - Journalism | 364 | -0.41 | 0.13 | -3.22 | **0.001** |
| Gender - Female: Programme - Business | 841 | -0.06 | 0.11 | -0.58 | 0.561 |
| Gender - Female: Programme - Journalism | 621 | 0.03 | 0.11 | 0.26 | 0.792 |

N: 4206; Random effects: Participant (21); Log Likelihood: -2888.5
Intercept represents male (gender) students studying language (programme)

Table 4.6: Logistic regression model for neutral tone: social factors

Table 4.6 shows the significant fixed factors and interactions selected for the best-fit model. Perhaps surprisingly, aspiration was not included in this model. This suggests that participants' future aspiration is not a good predictor of their neutral tone use and thus is inconsistent with other studies where aspiration has been found to be a significant factor for the

use of local dialectal features (cf. Baran, 2014). This finding potentially shows that neutralisation is not used to express meanings directly related to future aspiration. I discuss this inconsistency in the next section.

Nonetheless, we find the other two social factors—gender and programme—significantly influence participants' use of neutralisation. First, compared with male students, female students disfavour neutralisation (log odds = -0.24, p <0.05). This finding is unsurprising since similar patterns have been observed in previous studies where men use the local/vernacular/less prestigious variant more than women (Labov, 1972a; Trudgill, 1972). The implication of this, however, goes beyond a simple correlation between gender and a high use of the vernacular variant. As argued by Eckert (1989b), differences in language use ultimately reflect power differences between different genders. I address this issue in more detail in the discussion section (Section 4.5).

In the best-fit model, we also observe the effect of programme, although its influence on neutral tone use is only evident when in interaction with gender. No main effect of programme is seen in the model. The programmes participants are studying alone do not significantly change their use of neutral tone, instead, the differences between male and female students on different programmes have more influence. In order to further illustrate this interaction, I plotted the overall rate of neutralisation for both genders, separated by their programme types (Figure 4.16).

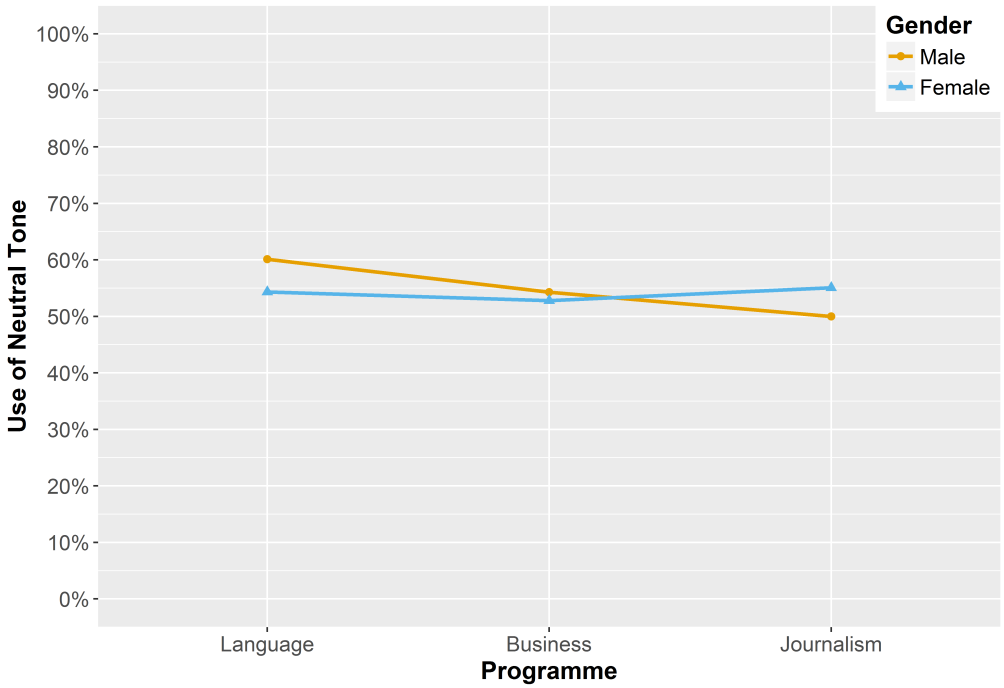


Figure 4.16: Use of neutral tone by gender and programme

As can be seen, the interaction is shown in the difference between male and female students' use of neutral tone across programmes. To be more specific, male students studying language courses (60%) neutralise more than male students from the other programmes (54% for business students and 50% for journalism students). Female students, however, do not show any significant difference across disciplines (54% vs 53% vs 55%). It seems that programme choice, i.e. future career plan is only relevant in predicting neutralisation for male students. The possible reasons for these patterns are presented in Section 4.5.

### 4.4.5 Stylistic variation

Moving on from investigating different predictors of neutralisation in the interview data alone, in this section, I describe and analyse the effect of style, to be more exact, careful and casual interview and self-recording, utilising both interview and self-recording data and present a detailed comparison between the three styles. I first use interview data to uncover style variation in neutral tone, focusing on variation triggered by formality alone. After discussing the results from mixed-effects regression models focusing on the effect of style in interviews, I then proceed to include self-recordings from 10 participants to look at participants' style range across interviews and self-recordings.

In the analysis on participants' stylistic range for neutral tone, I focus on two social factors — gender and aspiration — in order to shed light on how different Beijing Mandarin features are used by different social groups. Although as results from the current chapter and those from Chapter 5 and 6 show, the effect of these two factors are not the most significant across the board for all variables, keeping the same variables allows us to further explore the use of Beijing Mandarin features in different gender and aspiration groups and the systematic directions of their respective style-shifts. Recall also that aspiration was chosen over social class in the current project, though many previous research (e.g. Dickson and Hall-Lew, 2017; Eckert, 1989a; Labov, 1997; Macaulay, 1976, 1977; Trudgill, 1972) have investigated class differences in speakers' stylistic variation. As discussed before, this decision was made to take into consideration the correlation between class and aspiration, as well as the fact that the social class background for participants are relatively similar. To keep consistent the use of social factors, aspiration was deemed to be more relevant for my participants in the current stylistic analysis.

First, the overall use of neutral tone across different styles in the interview is shown in Figure 4.17 where we observe a general pattern where the local variant was used more in casual speech than in careful speech in the interview setting. Considering the vernacular nature of Beijing Mandarin and the fact that neutral tone is often seen as a stereotypical Beijing feature, these results are unsurprising.

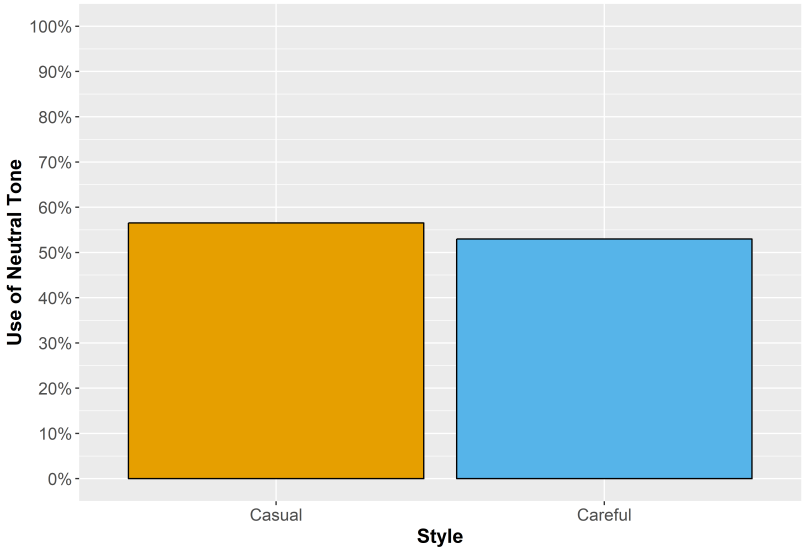


Figure 4.17: Style variation for neutral tone

Recall that the data presented here does not include words which have an obligatory neutral tone (i.e. words with a neutralisation rate of 100%), it might be surprising to see that neutralisation is seen around 57% in casual speech and 53% in careful speech. As neutral tone is a vernacular feature, we might expect a much lower frequency for neutral tone in interview speech]. However, I argue that the frequent use of neutral tone in interviews, especially in careful speech, is due to the fact that neutral tone is a feature present in both standard Chinese and Beijing variety. Although we do not have quantitative evidence due to a lack of research on this topic, it is possible that a relatively high use of this feature is part of the variety itself.

The differences in the use of neutral tone across styles were confirmed by mixed-effects logistic regression models. As with other models in this chapter, this model fitted using neutralisation as the dependent variable, style as the only fixed factor, and speaker as a random factor. As shown in Table 4.7, the use of neutral tone showed a significant style effect ($p$ <0.05) where participants were significantly less likely to neutralise when speaking in a more careful style. I discuss the implication of this and all previous models in the discussion in this chapter (Section 4.5).

| | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|
| (Intercept) | 0.259 | 0.049 | 5.321 | **<0.001** |
| Style – careful | -0.138 | 0.063 | -2.194 | **0.028** |
| N: 4206; Intercept represents neutral tone in casual speech | | | | |
| Random effects: Participant (21); Log Likelihood: -2891.8 | | | | |

Table 4.7: Logistic regression model for neutral tone: style

Regarding the style range for all participants, I combine data from interviews and self-recordings in the reminder of this analysis. As mentioned in Chapter 3, 12 self-recordings were collected from 10 participants: seven of them were recorded with a family member or family members and five with friends. Basic information of these recordings can be found in Table 3.10 in Section 3.5.3.

I begin the analysis on stylistic range with Table 4.8 below, listing relevant information for all participants regarding the use of neutral tone in there interviews and self-recordings. Data from interviews are separated

| Participant | Gender | Aspiration | Style | | | |
|---|---|---|---|---|---|---|
| | | | Careful | Casual | Self-recording | Range |
| Hannah | Female | Low | 57% | **60%** | – | 3% |
| Terry | Male | High | 46% | **51%** | – | 5% |
| Betty | Female | Low | 50% | **56%** | – | 6% |
| Scott | Male | Low | 55% | **61%** | – | 6% |
| Charlie | Male | Low | 52% | **59%** | – | 7% |
| Fred | Male | Low | 60% | **67%** | – | 7% |
| Daisy | Female | Low | 43% | **60%** | – | 17% |
| Nancy | Female | High | 53% | 53% | **55%** (114) | 2% |
| Harry | Male | Low | 63% | 63% | **66%** (44) | 3% |
| David | Male | Low | 43% | 53% | **53%** (30) | 10% |
| Cat | Female | High | 63% | 50% | **67%** (117) | 17% |
| Helen | Female | Low | **51%** | **51%** | – | 0% |
| Bob | Male | Low | **54%** | 51% | – | 3% |
| Rachel | Female | High | **56%** | 47% | – | 9% |
| Daniel | Male | Low | **64%** | 52% | – | 12% |
| Clare | Female | High | 54% | **58%** | 53% (15) | 5% |
| Sara | Female | High | 48% | **52%** | 46% (107) | 6% |
| Mary | Female | High | **59%** | 57% | 53% (19) | 6% |
| Matt | Male | High | 53% | **62%** | 61% (79) | 9% |
| Mike | Male | High | 46% | **61%** | 54% (67) | 15% |
| Kevin | Male | High | 43% | **59%** | 45% (31) | 16% |

Note: Participants without self-recordings are presented before those with self-recordings in ascending order of style range; top half shows those with an expected formality-based style-shifting pattern; boldface indicates individuals' highest frequency; numbers in parentheses represent total token numbers.

Table 4.8: Style range for all participants: neutral tone

into careful and casual as mentioned before while tokens from two different

types of self-recordings (i.e. family and friends) are combined. As the lengths of self-recordings vary across participants, I include the total token numbers in parentheses. Participants' gender and aspiration level, along with their range of neutral tone use across different styles are also provided.

As can be seen from the top half of Table 4.8 , 11 of all 21 participants showed an expected formality-based style-shifting pattern where the local variant—neutralisation—is used more in the most casual setting (i.e. casual interview and self-recording respectively). Compared with previous findings on the stylistic variation of vernacular variables, for example, the use of /r/ in Labov's (1966b) New York City study, the patterns observed in these 11 participants support the vernacular status of neutral tone. Existing research on neutral tone (Hu, 1987; Zhang, 2005) also suggests that neutralisation is seen as vernacular and local, which is consistent with this style-shift.

In the bottom half of the table, however, there seems to be a lack of uniformed patterns: some participants seemed to favour neutralisation in careful interview setting (e.g. Bob, Rachel and Daniel) while those with self-recordings used more neutral tone in casual interview setting rather than in the supposedly more casual self-recordings. Regarding the inconsistency between the two groups, I argue that this could potentially be caused by the students' aspiration levels. As shown in the table, there seems to be a divide between students with low and high aspiration levels regarding their style-shifting in the use of neutral tone, though this trend is by no means clear-cut. Tentatively, I suggest that students with low aspiration (top half of Table 4.8) tend to style shift in the anticipated direction, while most of those who did not display clear a formality-based style-shifting pattern have higher aspiration. These results suggest that, potentially, neutral tone has different social meanings for different Beijing Mandarin speakers, which I explore in later discussion 4.5.

It is also worth mentioning that speakers in the top half of the table—the subgroup with lower aspiration—showed a slightly higher use of neutral tone than those with a higher aspiration level. Though the range of variation is very small, it is indicative of a pattern where students who are characterised by a low aspiration not only used the local variety more frequently but also showed sharper formality-based style-shifts.

Additionally, Table 4.8 also reveals that the participants have a relatively narrow range for neutral tone use. 16 out of the 21 speakers show a range of less than 10% and even the biggest range here is under 20% (Cat and Daisy). A possible explanation for this lack of variability in style

range is the unique nature of neutral tone. Due to a lack of research on the topic, we do not yet know what the typical range of neutral tone variation is for standard Chinese or Beijing Mandarin and more empirical evidence is needed to determine whether participants in the current study display a narrow or wide style range.

Turning our attention to social factors including gender and aspiration, Figure 4.18 and 4.19 show how these factors relate to style-shifting across all participants.

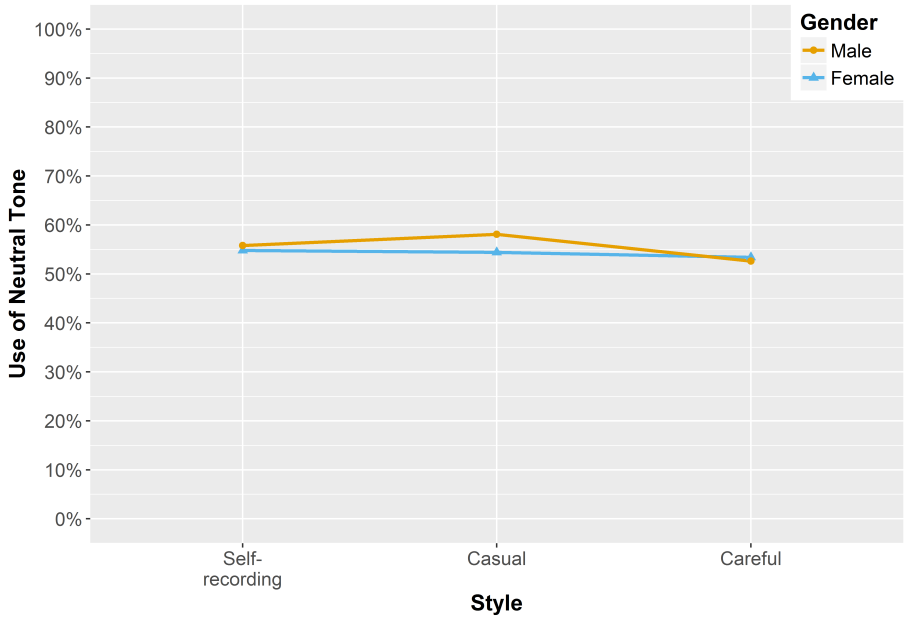


Figure 4.18: Style variation for neutral tone: gender

In both figures, different styles are shown on the x-axis with the most casual style on the left. According to previous research on speech styles and stylisation (Podesva, 2011; Sharma, 2011), we expect the participants to be more conservative (i.e. less neutralisation) when in more careful speech styles (i.e. careful interview), with between group differences where women and highly aspired students neutralise less. For self-recordings, the mean value of neutralisation was calculated based on the 10 participants with self-recording data, while for interview styles, the average for all participants was used. Patterns in these figures mirror those found in Table 4.8: overall, there was a lack of the classic formality-based stylistic shifting, yet, certain subgroups seemed to follow this pattern. Specifically, in each figure, only one of the subgroups—male students and students with low aspiration—show a decrease in neutral tone use from more casual setting (self-recording/casual interview) to least casual setting (careful interview).

On a more general level, the figures also demonstrate that neutral tone,

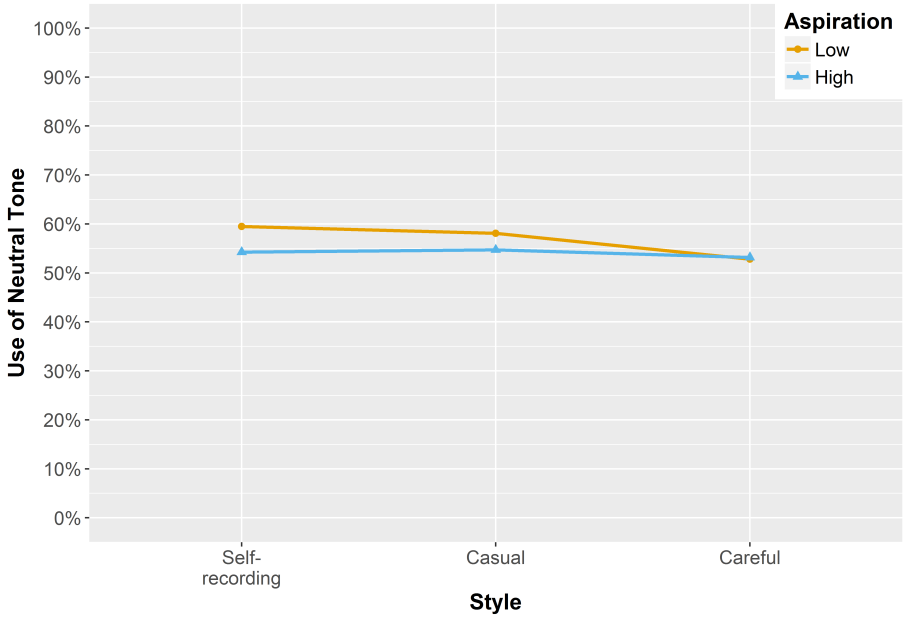


Figure 4.19: Style variation for neutral tone: aspiration

as a local feature, is used more by certain social groups. Regardless of the direction of style-shifting, male speakers neutralised more than females in Figure 4.18 while those with low aspiration used more neutral tone than students with higher aspiration. These results are within our expectation since existing studies on vernacular features have often found that men as well as speakers with stronger local identity tendency to favour the local variant (Labov, 1972a), as I will expand in the next section (Section 4.5).

### 4.4.6 Summary of results

The results presented in this section covered a wide range of factors potentially influencing the use of neutral tone in Beijing Mandarin. I now briefly summarise the findings before discussing them in relation to the status and social meanings of neutral tone.

First, we observed variation in native Beijingers' perception and use of neutral tone. The results from the neutral tone survey revealed that Beijingers are aware of the standard of neutral tone in standard Chinese, though they have a better sense of what must and must not be neutralised than the words in recommended and optional categories. This is not surprising considering the strong standard language ideology in China and the emphasis on standardness in the promotion of a national language—*Putonghua*. Students are often taught to focus on the use of neutral tone in words in the obligatory and forbidden category defined in dictionaries and pronunciation guides. Words that only require neutral tone option-

ally are therefore neglected in formal education and since these cases are not meaning-distinguishing, speakers are less likely to be aware of the prescriptive rules. Regarding the use of neutral tone in general, there is also a great degree of variation among the participants, especially in terms of words from different categories. Moreover, speakers seemed to have different preferences when using words from different categories, as demonstrated by those who shared a similar overall neutralisation rate yet neutralised different categories. More details on the variability among speakers are discussed in Chapter 7 where I relate the use of neutral tone to Beijing Mandarin speakers' stylistic variation and repertoire in general.

The main analysis, which covered phonological, morph-syntactic, social, and stylistic factors relevant to neutral tone variation, also provided valuable insights into the use of neutralisation[7]. With regard to linguistic factors, we found all phonological factors tested—lexical tone (manifested in the interaction with syllable structure and position), preceding and following tone, and syllable structure and position—affecting neutralisation. For morph-syntactic factors, grammatical function and the interaction between word class and structure are found to have a significant effect on neutralisation. Some of these findings match previous studies' results while others do not and I have suggested that this could largely be explained by the differences among the corpora used. More research based on natural speech data are need to find out more about the linguistic restraints on neutral tone. Neutral tone words' use in *Putonghua* is also selected in the models with both groups of linguistic factors, and this indicates that words from 'forbidden' category are likely to be used in a different way regarding neutralisation.

Most relevant to the question at hand, that is, the social meanings of neutral tone, we also observe that neutral tone use is stratified by students' gender and an interaction between gender and programme. The gender effect where male students use more local variant (neutralisation) than females is expected for a stereotypical local feature like neutral tone. Moreover, the interaction leads to a sharper contrast in neutral tone use among male students on different programmes, but not for female students, as seen in Figure 4.16. Style—shown in interviews as careful and casual—is also a significant factor in predicting neutralisation: speakers prefer neutral tone in more casual speech. The analysis on style-shifting and style

[7]Since the integrated regression model for all linguistic and social factors is very complicated, I include the model output in Appendix F.1 but discuss the results based on the separate models. The integrated model was checked to make sue social effects were not rendered insignificant by linguistics factors, as seen in the appendix.

range, incorporating gender and aspiration, reveals a complex picture of participants' diverse styles in neutralisation: some subgroups show a more classic style-shift pattern where local variant is preferred in casual speech while others do not.

## 4.5 Discussion

After exploring the data at hand with a focus on participants' awareness and use of neutral tone, I now move on to discuss in general the significance of the patterns we saw in previous sections. One of the main aims of this study is to understand the use of Beijing Mandarin in general by investigating a range of local features, and neutral tone is one of the most stereotypical features in Beijing Mandarin. I begin this discussion with a summary of the findings regarding neutral tone's linguistic constraints and seek possible explanations for them from relevant literature in Chinese linguistics. The majority of this section is devoted to addressing the research question regarding the social meanings of neutral tone. I use both the statistical results and relevant qualitative data from the corpus to support the claims I make in the following sections.

### 4.5.1 Linguistic constraints of neutral tone

According to results from the first two mixed-effects logistic models, the use of neutral tone is conditioned by a wide range of linguistic factors. First, consistent with Yuan's (2007) finding where syllables carrying Tone 4 (falling tone) are more likely to be neutralised, I find the interaction between lexical tone and syllable position and structure is significant in predicting neutralisation. As Yuan (2007) also found that Tone 4 syllables, regardless of their position, are prone to neutralisation and the main effect of lexical tone is not significant in my data, I posit that the difference could be caused by the fact Yuan's (2007)'s study relies mainly on descriptive date and the main effect could actually be a by-product of the aforementioned interaction. The effect from following tone is less straightforward. The statistical results suggest that a following neutral tone disfavours neutralisation while a following Tone 1, 2 or 4 favours neutralisation. I propose that consecutive neutral tone syllables (e.g. a neutralised disyllabic word followed by particle *le* which must be neutralised) are to be avoided in Beijing Mandarin, although such a hypothesis needs more research on this topic in order to be verified. Finally, we observe that

polysyllabic words are neutralised more than disyllabic words due to the word stress pattern in Mandarin (Duanmu, 2007, p.147): the majority of disyllabic Mandarin words end on a heavy syllable while the same rule does not apply for polysyllabic words. In polysyllabic words, stress clash (i.e. two adjacent stressed syllables) is to be avoided, and this means non-initial syllables often have to occupy a light foot (unstressed) which then makes these syllables prone to neutralisation.

For morpho-syntactic factors, the results suggest that whether neutral tone words carry new information, that is, whether the word is the focus of the sentence or phrase, is a key factor in neutralisation. As pointed out by Yuan (2007), structures containing known information such as words in the category which I call core function here are less likely to be the focus of the utterance, and are therefore more likely to subject to neutralisation. The interaction between word structure and word class, however, seems more complicated and is inconsistent with previous findings by He (2004) and Yuan (2007). I propose here that more relevant studies on this topic are needed for a more thorough understanding of the interaction.

Additionally, the use in *Putonghua*, coded as 'recommended', 'optional', and 'forbidden', has been found to significant affect neutralisation among neutral tone words, as shown in both models with linguistic factors. The data show that words in the forbidden category (i.e. those that are prescriptively unique to Beijing Mandarin) are more likely to be neutralised than words in the other two categories. This indicates that Beijing Mandarin speakers are neutralising words only available in their variety more, which provides useful property for these words and Beijing Mandarin.

### 4.5.2 Masculinity

One of the main findings in Section 4.4 was the association between neutral tone and gender; specifically, men favoured the local variant than women. This is not unexpected since both Jing (2002) and Zhou (2006) have found that men neutralise more than women, though neither of them has developed this correlation further to incorporate the potential social meanings of neutral tone. This gendered linguistic practice is often interpreted as a mere distancing from the refined standard way of speaking (e.g. Baran, 2014), while it is better understood when related to how power relations are constructed in different communities and how women (and men) negotiate their identities through the use of symbolic resources including languages (Eckert, 1989b). In this section, I discuss how speakers use neutral tone

variation to construct social meanings related to masculinity.

First, the gender effect found in the current project is closely related to the localness of neutral tone (which I expand in the following section). Neutral tone, as one of the stereotypical features in Beijing Mandarin, signifies localness and is an essential part of the identity of an authentic Beijinger. As I have discussed in Chapter 2, the mentioning of a typical native Beijinger ('*lao beijing*') often evoke the mental image of a male Beijinger—who are referred to as 'smooth operators' (*jing youzi*) by Zhang (2005). Such an individual is almost always a locally-born native who is authentic, tactful, streetwise and always in the middle ground (Zhang, 2005). For many of my participants, the typical Beijinger is also a man who displays a type of male masculinity specific to Beijing. One of the female students, Cat, jokingly listed some characteristics of an authentic Beijinger in our interview in extract (1).

(1) Cat: Authentic Beijingers
(details and brief explanation in parentheses)
Character:
我感觉就跟他说话一一他的味儿特别重。那男生、男生那说话那味儿，就特别重那种感觉。然后就特别一一北京人几个标志就是看国安嘛，什么就国安喊那种的，然后那个还有就是金鱼反正。
Translation:
I feel like his accent (*weir*, literally taste or tone, instead of *kouyin*, the word for accent) is very heavy when I talk to him. That guy's accent is so heavy and it's very— There are several criteria for authentic Beijingers: supporting Guoan (Beijing Sinobo Guoan, the local football club), knowing Guoan's chants (which are filled with Beijing-style swearing—*jingma*) and keeping pet goldfish (considered a sign of wealth and a hobby for well-off Beijingers historically).

The extract implies that for Cat, authenticity and localness are linked to a typical male masculinity which includes typical masculine behaviours such as an interest in sports, swearing, and potentially financial security. She then went on to talk about swearing in Beijing culture and explicitly pointed out the gendered practice in constructing an authentic Beijinger identity. In extract (2), Cat indicated that a public display of masculinity through swearing is part of the authentic Beijing identity while at the

same time, rejecting women using the same language as their fellow male Beijingers.

(2) Cat: Masculinity
Character:
遇到了他们，然后他们会说脏话，所谓你说，就是会加一些语气词。然后那，当时我就觉得听了超级亲切。就我能听出来如果你是外地的，但是他为了刻意去学，或者说你跟一些人待久了。但他说的就是不是那感觉，而且他其实我觉得那种话其实不是所谓骂、骂人的。然后我觉得可能那是属于文化那种东西。但是我可能原来会觉得说那东西好像是骂人怎样，但是我感觉后来就是好像真的是只有属于这个地方的人……换个女生的话，这就会有一些问题了。但是那我怎一一我只能这么说，那样儿的女生，就是她比较适合和跟她同样那种也说那种话的女生和男生一起玩儿。
Translation:
When I meet guys from Beijing, they always swear, as you would call it. They are actually just some interjections. [...] I feel closer to them when they swear [...] I don't think it's swearing, it's just part of our culture. [...] But if it's a girl, then there would be problems. [...] I can only say that a girl like that is probably better off hanging out with girls and guys who talk like her.

Another example comes from Matt, who is a final-year language student at BMU. The extract below shows his response when I asked him to picture a feminine girl who has a strong Beijing accent and a high use of stereotypical vernacular features such as neutral tone and *erhua*. After much struggling, during which he repeatedly said 'no, that's impossible, I have never seen any girl like that', he described what he thought girls with a strong Beijing accent would look like in extract (3).

(3) Matt: Beijing-accented Girls
Character:
你说这个我还就是，我好像感觉就是说，嗯，北京口音重的女孩儿，有两种人。一种我刚才说那种短头发那种中性，一种是稍微有点儿胖，个儿一米七往上，然后长头发，很、很痞的那种女孩儿。就、就、就这两种，没有别的了。

> Translation:
> I think girls with a strong Beijing accent, there are two types. One is the type I just mentioned, with short hair and tomboyish. The other kind would be a girl who is chubby, and taller than 170cm/5'7", she has long hair, and very ruffian. There are only these two types, that's it.

In this example, Matt constructed two images of women with a heavy local accent which does not fit with their gender identity. To resolve the inconsistency between the female gender and masculinity, he assigned masculine traits to these women: short hair, big body size, above-average height, and tomboyish or even violent behaviours. Participants' narratives about gender identity in Beijing in relation to Beijing Mandarin are consistent with the linguistic patterns we have observed in the current project where women use less of the vernacular variant (e.g. neutral tone). If we closely examine the 'authentic Beijinger' these narratives have constructed and the masculinity they represent, we can understand how closely related neutral tone's localness and the construction of masculinity are.

So far, I have argued that masculinity is one of the key social meanings of neutral tone in Beijing Mandarin and demonstrated how the meaning comes about in discourse. Evidence of this particular social meaning and its use can also be seen in the stylistic analysis in earlier discussions. In general, neutralisation occurs more in men's speech than in women's, as shown in Figure 4.18. This further supports the finding here and suggests that male students use neutral tone to express their masculinity (and localness, as I discuss below) in their language production.

### 4.5.3 Localness

As one of the key features for the local Mandarin variety in Beijing (Chen, 1999), apart from masculinity, neutral tone is often tied to localness and is directly related to a Beijing identity, as noted by Zhang (2005, 2007b). In Zhang's (2005) study of business managers in Beijing, state professionals used neutral tone categorically by neutralising all potential tokens to separate themselves from the cosmopolitan yuppies who used the non-local full tone variant. In the current project, neutralisation also indexes localness, as I will show in this section.

Before discussing the meaning of localness, I want to first address the relationship between localness and non-standardness in the context of neutral tone and Beijing Mandarin in general. It is not uncommon to associate

local varieties and features with a lack of standardness as existing studies have suggested (e.g. /-in/ in Norwich in Trudgill, 1974). In the current project, I argue that this is the case, and we should be cautious when putting localness at the exact opposite of standardness regarding neutral tone. Compared to other categorically-nonstandard features such as classifier omission and intensifier *te*, neutralisation (as well as some other features in Beijing Mandarin) has a rather complex nature since it is a phenomenon that exists both in standard Chinese and Beijing Mandarin. The variation in the use of neutral tone is both categorical (in the sense that forbidden words in standard Chinese can be neutralised in Beijing Mandarin) and continuous (as in the variation is frequency-based, though we do not have a baseline due to the lack of research on this topic). Neutralisation in Beijing Mandarin can then potentially index localness without being considered non-standard.

One example of this non-contrastive relationship is found in my interview with Cat, a final-year journalism student at BMU, as seen in Extract (4).

(4) Cat: *Putonghua* Pronunciation Test
(**boldface** = neutralised tokens; underline = full tone tokens)
Character:
嗯，没有，只是我们学校比较这个氛围。然后我们班主任他比较……嗯，**反正**他是**比较愿意**让我们多考点儿什么。因为可能以后如果想做新闻类的话，做记者的话，一般都**比较**需要。像我们班考的也**比较**多一点儿反正挺多人的。基本上、**基本上**考的话，因为一甲比较难嘛。然后**基本上**一乙的话都差不多，像我还属于是低分儿飘过的。我不知道为什么。我**准备**了，我、我还一一而且、而且我很认真的**准备**了。然后而且我当时考试，我觉得每个题都好简单，根本就没有我**准备**那些特别难的词。然后可能就是因为我读得太快了——他们说你考试读的越慢，分儿越高，因为它**机器**审嘛。他说你如果语速特别快的话，就**机器**可能判断不出来，他就会……对，但其实是因为很**熟悉**，所以才读的很快。所以就是，不过也还好，无所谓了不过。

*Pinyin*:
*en meiyou zhishi women xuexiao bijiao zhege fenwei. ranhou women banzhuren ta bijiao (.) en: (.)* ***fanzheng*** *ta shi* ***bijiao yuanyi*** *rang women duo kao dianr shenme. yinwei keneng yihou ruguo xiang zuo xinwenlei de hua, zuo jizhe de hua yiban dou* ***bijiao*** *xuyao. xiang womenban kao de ye* ***bijiao*** *duo yidianr. fanzheng tingduo ren de. jibenshang-* ***jibenshang*** *kao de hua yinwei yijia bijiao nan ma. ranhou* ***jibenshang*** *yiyi de hua dou chabuduo, xiang wo hai shuyu shi difenrpiaoguo de. wo buzhidao weishenme wo* ***zhunbei*** *le, wo-wo hai erqie-erqie wo hen renzhen de* ***zhunbei*** *le. ranhou erqie wo dangshi kaoshi, wo juede mei ge ti dou hao jiandan, genben jiu meiyou wo* ***zhunbei*** *naxie tebie nan de ci. ranhou keneng jiushi yinwei wo du de tai kuai le. tamen shuo ni kaoshi du de yue man fenr yue gao. yinwei ta* ***jiqi*** *shen ma, ta shuo ni ruguo yusu tebie kuai de hua, jiu* ***jiqi*** *keneng panduan bu chulai ta jiu hui- dui dan qishi shi yinwei hen* ***shuxi****, suoyi cai du de hen kuai suoyi jiushi. (.) buguo ye hai hao wusuowei le buguo.*
Translation:
Hmm, not really. It's just my university kind of has a tradition. And our tutor tends to (.) hmm: (.) he **always really** wants us to get some qualifications. Probably because you will **really** need it if you want to be in the journalism industry or be a journalist. **A lot** of people in my class have done it. There are a lot of us. Basically- **basically**, because it's very hard to get an A1, **almost** all of us get an A2. I passed with a lower score. I don't know why, I **prepared** for it, I really **prepared** for it carefully. And when I was taking it, I thought every question was so easy, and didn't even see the difficult words that I had **prepared** for. Maybe I read them too quickly. They say that the slower you read, the higher marks you get because it's marked by a **computer programme**. They say if you speak too fast, the **machine** wouldn't be able to follow. yeah, but it was actually because I **know** the words so well. that I just read them too fast. but it's fine, I don't care.

Extract (4) was her response to me when I mentioned that she had a Beijing

accent, to which she replied 'I think my *Putonghua* is very standard, I even got an A2 (second highest level) in the pronunciation test!'. She continued to describe her experience of taking the standardised *Putonghua* pronunciation test and how she found it very easy. Although both the topic and the intention of this narrative were to convince me that she speaks standard *Putonghua*, she neutralised 12 out of 15 neutral tone words in this extract (neutralised tokens are indicated by boldface while full tone tokens are underlined). Her high use of neutralisation—in this extract alone since her overall use of neutral tone is not high (55%)—shows that the use of neutral tone does not necessarily contradict language standardness and that the distinction between standard Chinese and Beijing Mandarin regarding neutral tone is minimal.

Recently development in the sociolinguistic understanding of place has challenged the view that place in variationist studies is fixed, 'consensual', or purely physical (Eckert, 2004; Johnstone, 2004; Moore and Carter, 2015). As put by Eckert (2004, p.108), 'place is an idealization of the physical' and in this study, Beijing and Beijingness are also social constructs that certain groups pf Beijingers (and non-Beijingers) value in their lives. Expressing place—or specifically, localness in this case—can be done in different ways (Moore and Carter, 2015): previously, sociolinguistic studies have focused on the use of vernacular/local features (e.g. Labov, 1972a) while recent findings suggest that standard or non-local features can also be used in this process (e.g. Moore and Carter, 2015; Zhang, 2005). In the current study, we also see a non-contrastive relationship between Beijing Mandarin and standard Chinese regarding neutral tone, as I have explained above, and this opens up possibilities to use neutral tone to index to localness despite that the feature is shared by both standard Chinese and Beijing Mandarin.

Returning to the localness conveyed by neutral tone, we first see this meaning in the survey results. Although perceptually Beijingers draw a distinction between their use of neutral tone in standard Chinese and Beijing Mandarin, this distinction is only for clear-cut for words in categories heavily influenced by standard language ideology (i.e. obligatory and forbidden). For neutral tone words available in both varieties (i.e. 'recommended' and 'optional' words), we observe a lack of differences in both their perception and production, as shown in previous discussions, especially the significant difference in neutralisation between these two categories and 'forbidden' words but not between the two categories themselves. Even though *Putonghua* is phonologically based on Beijing Mandarin which leads

to very minimal differences across the two varieties, speakers are still able to distinguish and use words unique to Beijing Mandarin by neutralising more of these words. As the vernacular variant of neutral tone is not linked to non-standardness due to the unique nature of the feature. A high use of neutral tone does not mean that the speaker is non-standard. This lack of non-standardness is relevant here due to China's strong standard language ideology and vigorous promotion of *Putonghua*. Graduates are often required to maintain a certain level of language standardness in the job market, especially for certain industries such as education and broadcasting. The non-contrastive relation between the vernacular and standard use of neutral tone—and indeed between the two varieties themselves as I will elaborate in the next section—enables speakers to explore the localness and masculinity associated with neutral tone and Beijing Mandarin in building their professional identity.

Taking Cat's high use of neutral tone from the above extract as an example, we can argue that instead of posing her language use as perfectly standard, she actually displayed a 'normal' use of neutral tone as a native Beijinger (a Beijing style) in the context of discussing *Putonghua* test. The same level of high use of neutralisation was seen in many other participants, especially when a local Beijing identity was being conveyed in the conversation. In the following extract (5), Fred, who was a final-year language student at BCU, was describing his disapproval towards migrants in Beijing (again, neutralised tokens are indicated by boldface while full tone tokens are underlined). During his interview with me—someone who is not a native Beijinger—Fred repeatedly stated that he was against the mass migration of non-natives into Beijing. He has also said that migrants in Beijing were jealous of and even held hatred towards locals like him who enjoyed certain privileges. For Fred, his Beijing identity is what gives him the right to not have to worry about employment after graduation since his parents 'have already found his a school to teach in'.

(5) Fred: Tiananmen Square
(**boldface** = neutralised tokens; underline = full tone tokens)
一次过年，我骑车去天安门。那广场里边儿，就、就根本就进不去人哪。我就骑车就那边儿逛呢。塞满了人。然后降旗的时候，连那广场边儿上的马路都塞满了人。就是、就是他们好多，就是像什么——像**北京人**当然习惯天安门天安门，**但是**很多**外地人**就觉得这**就是**一个那个圣地。

你是中国人这辈子你就要来一次。看升旗。还要看一一看**升旗**，还特地赶上有军乐队那天看升旗。就、就、就、就、就像每、每年那个、那个罗马那教皇不都每年出来溜几圈儿嘛，就像**那样儿**一样儿。你每天就看那东西，**反正**你看着他那像，你就特高兴。你看着他那个毛、毛泽东的像在那儿，啊，好高兴，好伟大呀。

*Pinyin*:

*yici guonian wo qiche qu (.) tiananmen na guangchang libianr jiu -jiu genben jiu jinbuqu ren na. wo jiu qiche jiu nabianr guang ne (.) sai man le ren (.) ranhou jiangqi de shihou lian na guangchang bianr shang de malu dou sai man le ren. jiushi -jiushi tamen haoduo jiushi xiang shenme xiang* ***beijingren*** *dangran xiguan tiananmen tiananmen* ***danshi*** *henduo* ***waidiren*** *jiu juede zhe* ***jiushi*** *yige nage shengdi (.) ni shi zhongguoren zhe beizi ni jiu yao lai yici. kan shengqi haiyao kan- kan shengqi hai tedi ganshang you junyuedui natian kan* ***shengqi****. jiu xiang mei -meinian nage -nage luoma na jiaohuang bu dou meinian chulai liu ji quanr ma, jiu xiang* ***nayangr*** *yi yangr ni meitian jiu kan na dongxi* ***fanzheng*** *ni kan zhe ta na xiang ni jiu te gaoxing ni kanzhe ta nage mao -maozedong de xiang zai nar a hao gaoxing hao weida ya.*

Translation:

One time during Chinese new year, I cycled to Tiananmen Square. There was nowhere to stand on the square. I was just wondering around the city. The square was full of people. When they were lowering the flag, people were forced to stand on the roads next to the square. Many of these people think—Us **Beijingers** are used to seeing the square, **but many** of these **non-native people** think **it's** like a holy ground. Being Chinese, you must visit it once in your lifetime. They all have to attend the **flag raising** ceremony on the day when the Army Band is playing. It's like the Pope in Rome who comes out a couple of times every year, it's just like **that**. They come everyday to see it, to see the portrait of Mao, and it **must** make them feel so happy. When they see the portrait of Mao Zedong hanging there, they just go 'Wow, I'm so happy now. He was so great.'

In the extract, Fred positioned himself at the opposite end of 'those

non-native tourists' who flooded into the square and blocked the roads just to see the square and the portrait of Mao Zedong. Towards the end of the narrative, he compared the tourists in Beijing to those gathering in Rome to see the Pope and ridiculed them by describing them as people who blindly admired Mao and would be extremely happy upon seeing the portrait of Mao.

Fred's overall use of neutralisation is the highest among all participants and as can be seen in the extract, he neutralised seven out of nine tokens. The only two full tone tokens also occurred in the very beginning of the narrative, before he started to describe the un-Beijing behaviours of the tourists. Fred also used intensifier *te*—another Beijing Mandarin feature—in this example, as indicated in italic in the last paragraph. Both of these extracts I have presented here demonstrate how neutralisation is used in speech by Beijingers in this project and how localness (as well as a lack of non-standardness) is conveyed.

The meaning of localness is not only supported by the qualitative data, but also by results from the quantitative analyses. First, in the stylistic analysis of neutral tone, we see a significant style effect in the interview data where neutralisation is more likely to occur in casual style. This further supports the meaning of localness in the use of neutral tone as a vernacular variable.

Moreover, although aspiration was not a significant factor in the initial regression model, by studying speakers' style range and style-shifting, we find that students with low aspiration neutralise more frequent and show sharper shifts. These patterns are again consistent with neutral tone's social meanings, that is, localness and vernacularity. To illustrate, neutral tone is marked for its localness and vernacularity while for students with high aspiration, it is potentially used simply as part of the Beijing variety without drawing on its localness meaning. One possible explanation for this contrast is related to a particular local identity—'*guo xiaorizi*' (to live a simple life)— I have mentioned in Chapter 2. Speakers with low aspiration are less ambitious in their future career and are more inclined to this local identity where a simple minimal lifestyle is valued. For those who want to achieve this, being local is a big part of their identity and they are therefore more likely to subscribe to the idea that Beijing Mandarin indexes localness. This could be why they seemed to be more aware of the stereotypical nature of neutral tone and tried to shift to a less vernacular style in careful speech. On the other hand, students with a higher level of aspiration, though not necessarily unaware of the localness of neutral tone in Beijing Mandarin,

are less likely to rely on neutral tone to express localness. For the latter group, less effort is paid to modulate the use of neutralisation in speech, which resulted in a lack of classic formality-based patterns for them.

recall that we see an effect involving both participants' gender and programme in Section 4.4.4 and this brings together the two meanings—masculinity and localness—we have discussed. As Figure 4.16 in Section 4.4.4 shows, language students used more neutral tone than the others, but this is only true amongst male students. Female students showed no significant shifts across programmes.

Focusing on male students across different programmes, as briefly mentioned in the last section, these students face the pressure to maintain a certain level of language standardness on the job market, and the requirements are different across different industries (for example, broadcasting requires a high proficiency in *Putonghua*). These students are then able to express both localness and masculinity using variation in neutral tone (and Beijing Mandarin in general). Regarding the differences across three programmes, I argue that language students use more of the local variant than those from the other two programmes to construct a linguistic style and potentially a professional identity suitable for their future career. As mentioned in Chapter 2, it is common for employers in Beijing to differentiate and sometimes outright discriminate graduates without a Beijing *hukou*. The preference of local students varies across difference industries and between state-owned and joint-owned/private employers. For instance, most teaching jobs in public schools are essentially reserved for native Beijingers while in contrast, most business and media companies are private and/or jointly-owned nowadays, thus putting few constraints on the origin of the graduates they hire.

As a result, depending on the programme they are in, most Beijing students are introduced to the labour market and the differences in the number of local employees when they start internships or part-time jobs. Another consequence of the practice in hiring is the differences in linguistic diversity among employees at educational institutions and at other companies. Public schools in Beijing, for instance, mostly hire local Beijingers; therefore, there is little need for non-vernacular speech as the use of local features does not impede communication or language standardness. It is then unsurprising that language students are the ones who use more local variant—neutralisation—since this seems to be the norm in their future jobs.

In my interview with Fred, the Chinese language student who wanted

to become a secondary school teacher after graduation, he insisted that he would not change his vernacular language use in teaching in the future. 'we (students and teachers) are all from Beijing and there is no need to speak the standard language,' and he would only use *Putonghua* to teach if he were 'teaching outside of Beijing'. This view is shared by many of the language students who also reject the use of the prescriptive standard as the norm in teaching. As a result, the institutional requirements in the education sector makes these language students to use more neutral tone than students from other programmes who would potentially interact with more non-Beijingers.

However, there is still one remaining question regarding programme and the indexical meaning of localness, that is, why is this effect not shared across gender groups? I draw on findings on masculinity from last section to offer an explanation. First and foremost, it is important to recognise that since masculinity and localness are closely related, the expression of localness across men and women could potentially also be gendered. Specifically, as neutral tone is a stereotypical vernacular feature, the extremely high use of the feature is likely to carry meanings related to masculinity more than just localness. Women are restricted in their use of neutral tone to index localness in the sense that they can only access the non-extreme use of neutral tone since using neutral tone too much would revoke the masculinity connotation, which is undesirable for women as Extracts 1–3 above have shown.

By using more neutral tone (and potentially other Beijing features, as I will discuss in the following chapters), male speakers not only can claim authenticity but also are able to utilise the fact that Beijing Mandarin is a 'linguistic middle ground' in terms of standardness (i.e. it is not strictly standard or outright non-standard, as discussed in the previous sections) to be tactful in their linguistic practice. Female speakers, on the other hand, do not have this option in constructing their gender identity since neutral tone is reserved for this image of stereotypical male Beijingers. Female students in the data, being influence by the gendered meaning of neutral tone, showed a lower rate of neutralisation overall, as confirmed in stylistic variation.

To summarise, the tendency for male language students to use more neutral tone while female students lack such differences across programmes is likely caused by the fact that the expression of localness is gendered in Beijing. An extremely high use of neutral tone is strongly associated with typical male masculinity. Women, therefore, are limited in the range

of neutral tone variation they can access and show little variation across programmes. This interesting gender pattern in a way mirrors what I have previously noticed in the perception of neutral tone variation in my MA thesis (Zhao, 2012): when switching from a standard use to a Beijing use of neutral tone, men are perceived more negatively than women. A similar claim has been put forward by Chappell (2016) where she proposes women and men differ in 'their disparate access to nonstandard variants' indexical fields' in Costa Rican Spanish. In the current study, despite the different preferred levels of localness in different jobs, female students training for different jobs do not differ from each other in their neutral tone use like their male counterparts do.

Before I move on to the other Beijing Mandarin features, I mention briefly one of the fundamental questions relevant to this study and the theory of language variation: the taxonomy of linguistic variables as indicator, marker, and stereotype (Labov, 1972a) and its implication on whether and how social meanings are shared by language users. In this chapter, the results we have found so far—clear general stylistic stratification and indexing meanings including masculinity and localness—suggest that neutral tone is likely an established vernacular feature of Beijing Mandarin. Neutral tone has also been mentioned in overt social commentaries from both existing literature and my initial Beijing consultants. Taking into consideration of all of these findings, neutral tone in Beijing Mandarin should be considered a 'stereotype' under the Labovian framework.

However, we observe consistent differences across subgroups (e.g. across high- and low-aspiration students and men and women) where the classic style-shifting pattern where the use of vernacular variant decreases with the increasing of formality. In addition, we see individual differences in the overall frequency and stylistic range for all speakers. These subgroup-specific patterns observed in neutral tone are in support for a more nuance way to view and classify linguistic features instead of the current generalised categorisation of linguistic variables regardless of their users or the contexts where features are used.

# Chapter 5

# Classifier Omission

In Chapter 4, I described the patterns in the use of neutral tone and presented relevant findings regarding its linguistic and social constraints as well as its stylistic variation among the participants. As discussed, neutralisation among Beijing Mandarin speakers is conditioned by several phonological and morpho-syntactic factors which have been studied in existing literature. More interestingly, two social factors—gender and programme—were found to significantly influence the use of neutral tone. Speakers' stylistic range and style shifts also reveal informative patterns regarding neutralisation across different speech styles. Drawing on quantitative and qualitative data, I argued that neutral tone in Beijing Mandarin conveys localness and masculinity—meanings that are consistent with the vernacular status of Beijing Mandarin.

Since neutral tone is an established Beijing Mandarin feature, the findings so far are unsurprising. To further investigate the social meanings of Beijing Mandarin, especially in less well-established features, I analyse the variation found in a second variable—classifier omission—in the current chapter. I include classifier omission in the project because it is a less well-known Beijing Mandarin feature in comparison to neutral tone, which could shed light on how social meaning is conveyed for features that have different levels of awareness. Furthermore, classifier omission is, on the surface, a syntactic feature, as opposed to neutral tone which is phonetic/phonological[1]. Looking into different types of linguistic features can help us develop a fuller understanding of the social meanings in Beijing Mandarin. Finally, classifier omission is a feature under-studied in both sociolinguistics and Chinese linguistics and a variationist analysis on this feature can further our understanding in both fields.

[1]Though, as discussed later, Tao (2006) proposed that classifier omission is in fact the result of phono-syntactic process in Beijing Mandarin.

The structure of this chapter is as follows: I begin with a detailed description of the feature to provide background information for the understanding of its variation. The methods in selecting and coding tokens for classifier omission and all linguistic factors investigated in the quantitative analysis are then provided. I also incorporate style as a factor in the analysis, following what I have done for neutral tone. For the results section, I first present the general pattens of variation observed in the data. I then discuss the results from mixed-effects logistic regressions, focusing on the relevant linguistic and social factors for classifier omission. Stylistic variation is then described and presented. I conclude the chapter with a discussion of the patterns found in the analyses and show how they are related to the social meanings of classifier omission and Beijing Mandarin in general.

## 5.1 Overview

Classifiers in Mandarin Chinese, as defined by Li and Thompson (1981, p.104) are a group of words that form an obligatory part of speech that 'occur with a number, and/or a demonstrative or certain quantifiers' when preceding nouns in noun phrases. All examples from (1) contain an obligatory classifier. Examples (1-a) to (1-c) demonstrate how classifier *ge* combines with a number, a demonstrative or a quantifier in modifying nouns. Examples (1-d) and (1-e) show the same classifier joined with either a number and a demonstrative or a quantifier.

(1) a. *yi ge pengyou*
yi CL friend
'a friend'

b. *zhe ge pengyou*
this CL friend
'this friend'

c. *mei ge pengyou*
every CL friend
'every friend'

d. *zhe yi ge pengyou*
this one CL friend
'this friend'

e. *mei yi ge pengyou*
every yi CL friend
'every friend'

Classifiers in Mandarin Chinese are a closed word class consisted of several dozens of classifiers, and most of them can be found in a list compiled by Chao (1968). In general, a noun can only be modified by specific classifiers based on the shape, texture, quality of the object it refers to. For example, elongated objects normally take *tiao* as their classifier, as shown in example (2-a). Books and other flat objects often appear with *ben* (example (2-b)). Using the wrong classifier for nouns is generally considered ungrammatical or awkward, as example (2-c) shows.

(2) a. *yi tiao she*
one CL snake
'a snake'

b. *yi ben shu*
one CL book
'a book'

c. **yi ben she*
one CL snake
*intended*: 'a snake'

Apart from bare nouns, classifiers are also needed for nouns with other modifying elements (e.g. attributives), noun phrases and noun structures formed by nominalisation. In example (3), different combinations of classifiers and noun structures are shown, and the classifier always precedes the entire noun structure. In example (3-a), the noun is modified by adjective *hao* (good), while in example (3-b), the noun phrase *daxue pengyou* is preceded by *ge*. The last example shows a verb *chi* (eat) followed by an nominal suffix -*de*. The nominalised verb is preceded again by classifier *ge*.

(3) a. *liang ge hao pengyou*
two CL good friend
'two good friends'

b. *liang ge daxue pengyou*
two CL university friend
'two friends from university'

c. *liang ge chi de*
two CL eat DE
'two (kinds of) food'

To summarise, in Mandarin Chinese, nouns and noun structures must be paired with a suitable classifier in forming phrases and sentences. Exceptions of this rule exist but can only occur in a very limited number of contexts. According to Yang (2001), most of these cases are found in 'colloquial, poetic and idiomatic expressions', often known as *chengyu*/成语, especially those originated from Classical Chinese. The omission of classifier in these phrases is obligatory, as seen in example (4).

(4) a. *yi shi wu cheng*
one deed negation achieve
'accomplish nothing'

b. *yi qin yi he*
one lute one Crane
'pack lightly'

Another exception where the omission of classifier is obligatory is when certain nouns referring to dates and time are preceded by numbers (Huang, 2003; Yip, 2003) as can be seen in example (5-a) and (5-b). These words include, to name a few, *tian* ('day'), *xingqi* ('week'), *zhou* ('week'), *ji* ('season'). In standard Chinese and Beijing Mandarin, adding a classifier between the number and the noun is ungrammatical.

(5) a. *yi tian*
one day
'a day'

b. **yi ge tian*
one CL day
*intended:* 'a day'

In the current study, I focus on a subset of structures that contain both the number one—*yi* in Chinese—and classifier, as seen in previous example (1-a), (1-d) and (1-e). This is because the target variable here—classifier omission—can only occur in this particular structure. To illustrate, classifier omission in Beijing Mandarin, as Tao (2006) suggests, refers to when speakers omit the classifier in structures like 'one + classifier + noun'. Such an omission of an obligatory classifier is ungrammatical in *Putonghua*, as shown in example (6-a) and (6-b) below.

(6) *Putonghua*:

a. *ta shi wo yi ge pengyou.*
He is my one CL friend
'He is a friend of mine.'

b. **ta shi wo yi pengyou.*
He is my one friend
*intended*: 'He is a friend of mine.'

In Beijing Mandarin, however, such omissions are acceptable. In example (7-a), classifier *ge* is optional and does not effect the semantic meaning of the sentence. Example (7-b) and (7-c) shows two other optional classifiers (*tian* and *ben*) in Beijing Mandarin.

(7) Beijing Mandarin:

a. *ta shi wo yi (ge) pengyou.*
He is my one (CL) friend
'He is a friend of mine.'

b. *zhe shi yi (tiao) she.*
this is one (CL) snake
'this is a snake.'

c. *na shi yi (ben) shu.*
that is one (CL) book
'that is a book.'

In these cases of classifier omission, the meaning of the noun is restricted to its inherent property and cannot convey the noun's temporary quantity. To clarify, *shu* ('book/books') requires *ben* as a classifier when referring to the default quantity since *ben* is used for flat objects (e.g. books, magazines, etc.). But *shu* can also be preceded by *dui* ('pile') or *da* ('dozen'), among other classifiers which indicate the collective quantity of objects, as shown in example (8).

(8) a. *mai yi shu*
buy one book
'buy a book'

b. *mai yi ben shu*
buy one CL book
'buy a book'

c. *mai yi dui/da shu*
buy one pile/dozen book
'buy a pile/dozen (of) books'

In example (8-a), *mai yi shu* ('buy a book') has the same meaning as

the omission of *ben* (Example (8-b)), but doesn not mean a pile/dozen (of) books *(mai yi dui/da shu*) (Example (8-c)).

Classifier omission is a feature that has hardly been investigated before and has only been observed in Beijing Mandarin. This is part of the reason why I chose this feature—to study a linguistically-unique yet under-studied feature. Several scholars have mentioned the feature in Beijing Mandarin (Dong, 2004; Du, 1993; Huang, 2003; Liu, 2004), while very few of them have investigated it in detail apart from Tao (2006) and Wu (2005).

It has been suggested that classifier omission is related to the expression of indefiniteness in Mandarin (Tao, 2006; Wu, 2005). Unlike English, Mandarin does not have definite and indefinite determiners used to explicitly express (in)definiteness (Li and Thompson, 1981). Instead, noun phrases preceded by the 'number + classifier' structure alone are seen as indefinite unless they are modified by demonstratives such as *zhe* ('this') or *na* ('that'). In the previous example (8-b), 'book' is indefinite; in contrast, 'this/that book' in (9-a) is definite and so is the plural noun phrase *liangbenshu* in (9-b). In expressing definiteness, number + *ge* structure can be paired with definite demonstrative in standard Chinese and Beijing Mandarin as these examples have shown.

(9) a. *mai zhe/na yi ben shu*
buy this/that one CL book
'buy this/that book'

b. *mai zhe/na liang ben shu*
buy this/that two CL book
'buy these/those two book'

Wu (2005) proposed that classifier omission—specifically the omission of classifier *ge*—in 'yi + classifier + noun' structure is the result of phonetic erosion. He built on Chao's (2002) findings that *ge* (pronounced /kə/) is often reduced to /ə/ in spoken Beijing Mandarin and suggested that in *yi* + *ge* structure, /ikə/ is further reduced to /i/. He further claimed that the omission is the result of the '*yi* + *ge*' structure developing into an indefinite article in Beijing Mandarin. Tao (2006) presented a similar analysis, agreeing with Wu's (2005) conclusion by saying classifier omission—which she terms 'classifier loss'—is caused by a phono-syntactic conspiracy. To illustrate, in Mandarin, numeral *yi* carries fourth tone before Tone 1, 2, and 3; however, it undergoes tone sandhi and takes on the second tone be-

fore tone 4, which happens to be the tone of classifier *ge*—one of the most frequently-used classifiers. She then suggested that when *ge* is omitted, *yi* maintains a second tone regardless of the tone of the following syllable.

Apart from these studies, on a more general level, research on classifiers have primarily focused on its typology (e.g. Hong, 2007; Rovira-Esteva, 2008; Zhang, 2012), cognitive bases (Shi, 2001, 2003), and its (second language) acquisition (Gao, 2010; Kong, 2012; Zhang and Lu, 2013). Due to a lack of existing literature, a more detailed investigation of this feature and its variation is needed in Chinese sociolinguistics.

## 5.2 Methods

### 5.2.1 Circumscribing the variable context

Since classifier omission is a syntactic feature, I manually searched through the transcription of all recordings to determine whether a token should be included and how tokens should be coded. As discussed above, classifier omission has yet to be thoroughly documented; therefore, I mainly relied on data available in the corpus while taking into consideration patterns suggested by existing studies. Acceptability judgements from several of my participants (mainly Cat, Clare, and Matt) were also gathered after the main data collection period as a supplementary method to confirm the context where variation occurs for classifier omission in the data. I briefly introduce the process of obtaining acceptability judgements from my participants before describing the variable context. I first constructed example sentences containing classifier omission in different contexts, then presented the sentences in writing to my participants and asked them to read the sentences out. The participants were then asked to tell me whether such a sentence is acceptable in Beijing Mandarin.

To recap, Beijing Mandarin speakers tend to omit the classifier following numeral one (*yi*) when the classifier expresses the inherent property of the noun structure. Based on previous studies and the use of this feature in the data, I focus on three syntactic properties that I investigate in the following sections: whether the omission is permitted (1) in different noun structures; (2) with different syntactic functions and (3) in different sentence positions.

Classifier omission can occur in structures including nouns with attributes, noun phrases and noun structures formed by nominalisation of adjectives and verbs, as well as bare nouns, as we have seen above. Three examples are shown in example (10).

(10) a. *yi (ge) hao pengyou*
one CL good friend
'one good friend'

b. *yi (ge) daxue pengyou*
one CL university friend
'one friend from university'

c. *yi (ge) chi de*
one CL eat DE
'one (kind of) food'

It is also widely accepted to have classifier omission at sentence initial, final, and middle positions as well as in noun structures functioning as subject, object and attribute respectively (example (11)).

(11) a. *yi (ge) pengyou gaosu wo de.*
one (CL) friend tell me DE
'A friend told me.'

b. *ta you yi (ben) shu.*
He has one (CL) book
'He has a book.'

c. *zhe shi wo yi (ge) pengyou de shu.*
this is my one (CL) friend DE book
'This is my friend's book.'

As can be seen, classifier omission can occur in a wide rage of linguistic contexts based on existing research and acceptability judgements from my participants. Therefore, I only excluded the two cases where classifier omission is obligatory, as mentioned in Section 5.1 (examples (4) and (5)): fixed phrases (*chengyu*) that contain *yi* + noun structure and *yi* + noun structure where the nouns are temporal nouns.

After excluding all contexts where the use of classifier does not vary in Beijing Mandarin, tokens were coded as either omitted (one + noun) or present (one + classifier + noun). Due to the fact classifier omission is less frequent in the corpus, I did not set a minimal token number for this variable. Instead, I coded all qualified classifier tokens for all participants, regardless of the classifier or noun structure in the token.

After selecting all eligible tokens, I then coded them for linguistic, social and stylistic factors. As with the previous chapter on neutral tone, I now proceed to introducing linguistic factors in the following section. As I have mentioned in the previous neutral tone chapter, details of the social and

stylistic factors coded are discussed separately in Chapter 3 and 7.

### 5.2.2 Linguistic factors

In deciding the linguistic factors to code for classifier omission, I relied on relevant studies both on the general use of Chinese classifiers and classifier omission. Again, due to the lack of existing research on this feature, I also consulted my participants and the information from their acceptability judgements. The following linguistic factors were coded for classifier omission:

1. Preceding tone [neutral tone; level; rising; dipping; falling; pause]
2. Tone of numeral one (*yi*) [rising; falling]
3. Tone of (omitted) classifier [level; rising; dipping; falling]
4. Following noun structure tone [level; rising; dipping; falling]
5. Following noun structure syllable [monosyllabic; disyllabic; polysyllabic]
6. Following noun structure [adjective + *de*; simple noun; compound noun; attributive + noun; noun phrases]
7. Function of following noun structure [subject; object; attributive; complement; adverbial; independent phrase]
8. Sentence position of noun structure [initial; final; mid pre-verb; mid post-verb; independent phrase]

According to Tao (2006) and Wu (2005), classifier omission in Beijing Mandarin is the result of the *yi* + *ge* structure going through phonetic erosion as part of its development into an indefinite article. They also proposed that when *ge*, which carries tone 4, is omitted, *yi* maintains a second tone regardless of the tone of the following syllable. In order to find out if this is the case in my corpus, I have coded the tone of the preceding syllable, the numeral, the classifier (when the classifier is omitted, I coded the most frequently used one for the noun) and the following syllable (i.e. first syllable of noun structure).

Classifier omission can occur both pre-verbally and post-verbally and is relatively unrestricted regarding its grammatical functions. I therefore coded sentence position and grammatical function to explore any positional/grammatical restraints on this feature. I also included the length of

the following noun structure measured by both the number of syllable and noun structure as an initial examination of the data suggested that shorter and/or simpler noun structures tend to appear with classifier omission.

## 5.3 Results

In the following subsections, I present findings on the use of classifier omission in the dataset. The section begins with an overview of the variation observed in the interview data, revealing patterns in individuals' use of classifier omission. I then proceed to discuss results from mixed-effects logistic regression models investigating the effect of phonological, morpho-syntactic, social, and stylistic factors respectively. Data from self-recordings will also be addressed in this section with regard to the stylistic variation in the corpus. I contrast the results in this section with the previous analysis on neutral tone to explore the similarities and differences between a well-established vernacular feature and a relatively new one.

### 5.3.1 Data overview

This subsection provides information on the use of classifier omission in interviews, and self-recordings are analysed in Section 5.3.5 later in this chapter. In total, 875 tokens were coded in interview data from all 21 participants. As can be seen, classifier omission is a relatively infrequent feature in Beijing Mandarin in comparison with neutral tone which yielded over 4000 tokens. Within these 875 tokens, 126 (14%) are cases where the classifier was omitted, and this again is much lower than the neutralisation rate previously observed for neutral tone (55%). This is possibly due to the fact that classifier omission is forbidden in the standard language, and therefore is considered more non-standard in interviews.

As I have coded all eligible tokens in the data due to the low frequency of this variable, the numbers of tokens across participants varied greatly. Though each participant was coded for 41 classifier omission tokens on average, the lowest number of tokens per participant is 11 for Kevin and the highest is 78 for Fred. In total, I coded 523 unique noun structures and 27 different classifiers.

Figure 5.1 shows the use of classifier omission across all participants. As can be seen, first, three participants—Helen, Scott and Terry—did not omit any classifiers in their interview and consistently produced the full structure. The remaining 18 participants all showed variation in their use

of the '*yi* + classifier + noun' structure and had at least one instance where the classifier was omitted. Although some participants showed a very low frequency in the use of this feature (for instance, Sara omitted classifiers 3% of the time while Helen, Scott, and Terry did not omit at all), it is informative to see this less-known vernacular feature being used by the majority of these Beijing Mandarin speakers.

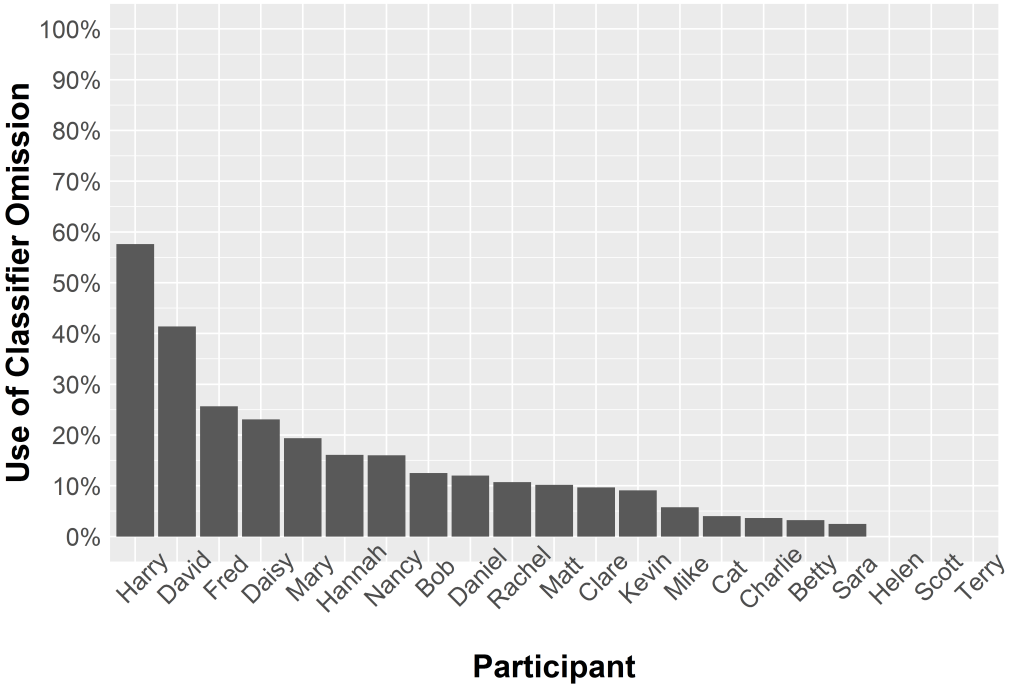


Figure 5.1: Frequency of classifier omission across all participants

Additionally, participants show a wider range of variation in classifier omission than in neutral tone as previously discussed in Section 4.4. For neutral tone, most participants neutralised around 50% of the tokens while the frequency of classifier omission varies from 0% to 58%. Interestingly, we also notice two frequent users of this feature—Harry and David—who omitted significantly more than the others (58% and 41% respectively versus less than 30% for all the other participants). Beijing Mandarin speakers seem to have a wider range in the use of classifier omission than neutral tone. This is somewhat inconsistent with the fact that speakers are less aware of classifier omission in contrast with neutral tone. One possible explanation for this is that classifier omission, as a non-standard feature, is avoided by the speakers to different degrees, while neutral tone, as we have discussed in the previous chapter, does not directly invoke non-standardness. Speakers vary the use of neutralisation in specific words (i.e. forbidden words) instead of avoiding it altogether. I return to this point in later discussions in this chapter.

Recall that Tao (2006) proposed that due to the potential indefiniteness of the *yi* + noun structure, the numeral always maintains a second tone regardless of the tone of the following syllable. I have coded tone of numeral *yi*, the (omitted) classifier, and the first syllable of the following noun structure to see if this claim holds in the current dataset. In this analysis, I focus on whether or not all zero classifier tokens 1) had or could have the general classifier *ge*, 2) contained a numeral one, *yi*, that was produced in tone 2, and 3) were only used to express indefiniteness.

Regarding the first point, a closer look into the data reveals that all but two noun structures where the classifier was omitted can be quantified by *ge* although *ge* might not have been the chosen classifier prescriptively. For example, *niao* ('bird') is more often used with classifier *zhi* which often quantifies small animals but can nonetheless be quantified by the more generic classifier *ge*. Therefore, it seems that Tao (2006)'s claim—classifier omission is essentially a recent development of the structure *yi* + *ge*—is at least partly supported here as my data shows the majority of classifier omission tokens can be used in *yi* + *ge* structure. On the other hand, the two exceptions in my data are both instances of *dui* being omitted. *Dui* is a mass-noun classifier—a type of classifier used to count non-discrete nouns or measure units for discrete nouns (Zhang, 2007a). It means 'a pair of' and cannot be replaced by *ge* which can only represent singular nouns. Due to the limitation of the dataset, these two tokens are also the only token of *dui* being used as a mass-noun classifier in the dataset, and therefore even though I am reluctant to disagree with Tao (2006), there is evidence that the *yi* + *ge* structure is not the only structure in classifier omission.

In respect to the second hypothesis, I checked all 126 zero classifier tokens, and all instances of the numeral *yi* were pronounced with a rising tone. According to the tone sandhi of numeral *yi*, *yi* only carries Tone 2 before Tone 4 and carries Tone 4 before all other tones. In the current dataset, only 31 of the following syllable—first syllable of the noun structure—carries Tone 4 and 95 of them were pronounced in tone 1, 2 or 3. This also supports what Tao (2006) has predicted, namely, when classifier omission becomes (or is developing into) an indefinite article in Beijing Mandarin, its tone becomes fixed and invariable.

Lastly, I provide some further evidence showing that *yi* + (*ge*) + noun structure exclusively expresses indefiniteness in my data. As we have discussed above in Section 5.1, definiteness is marked by demonstratives *zhe* ('this') and *na* ('that') in Chinese and often expressed by pairing *zhe/na* with the *yi* + *ge* + noun structure. Interestingly, among the 126 tokens

where the classifier was omitted, none of them had a definitive demonstrative. In other words, *zhe/na* did not co-occur with classifier omission in the current dataset. While acknowledging the potential effect of phonological reduction from the omission of classifier *ge* and other semantic and/or syntactic factors, I tentatively present this pattern as proof that classifier omission in Beijing Mandarin is likely to be linked to indefiniteness.

### 5.3.2 phonological factors

In the previous section, I presented an overview of the use of classifier omission and provided evidence for the claim proposed by existing research (Tao, 2006; Wu, 2005) where the *yi* + number structure is developing into an indefinite article in Beijing Mandarin. In this section, I proceed to the quantitative analysis of classifier omission by modelling the variation observed in classifier omission using mixed-effects logistic regression.

There are two main purposes for this analysis. First, by submitting data on the use of classifier omission to multivariate analyses focusing on different linguistic factors, I can investigate the internal constraints for this under-studied feature. In addition, as we have looked at the effect of social factors for neutral tone, another mixed-effects analysis enables us to compare the social meaning of classifier omission with neutral tone and investigate whether this relatively new feature behaves similarly to the more-established neutral tone.

In fitting the models presented below, the use of classifier (omitted or present) was entered as the dependent variable. Separate models were fitted for phonological, morpho-syntactic, and social factors in order to study the linguistic constraints of classifier omission independent of the social factors in this project. Since existing literature is very limited, I explored all the reasonable interactions but only significant interactions and main effects are reported here. Again, I used a step-up approach in reaching the best-fit models for separate groups of predictors[2].

I begin the statistical analysis with the phonological factors after addressing the issue of collinearity in this group of variables. As mentioned earlier in the chapter, the tone sandhi of numeral '*yi*' suggests that the tone of '*yi*' depends on the tone of the following classifier. Including both tone of numeral and classifier in the modelling process would affect the outcome of the models, especially individual factors' effects. Therefore, I excluded

[2]The rationale for the statistical analysis is discussed in Section 4.4.1, Chapter 4. The integrated model is checked to ensure the effect of different factors and I include the integrated model in Appendix F.2.

the tone of numeral which can be predicted by the classifier in fitting the models to avoid any collinearity issues. The four remaining independent phonological predictors—preceding tone, tone of classifier, following tone and following noun structure syllable—were entered into the models as fixed predictors while participant was used as the random intercept. All possible two-way and three-way interactions were considered in the modelling process to investigate whether there is any interaction between the phonological variables for classifier omission.

Table 5.1 shows the final model for phonological factors. Except for following noun structure tone, all fixed factors were selected, suggesting that the tone of the following noun structure is less likely to be affecting classifier omission. This is unsurprising since we have already established in the overview section that when the classifier is omitted, numeral *yi* takes the rising tone regardless of the following tone (i.e. tone of the first syllable in the noun structure).

| | N | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|---|
| (Intercept) | | -5.16 | 1.25 | -4.13 | **<0.001** |
| Classifier Tone - 2 | 14 | -14.95 | 2667.2 | -0.01 | 0.996 |
| Classifier Tone - 3 | 27 | -14.78 | 1977.36 | -0.01 | 0.994 |
| Classifier Tone - 4 | 819 | 2 | 1.18 | 1.7 | 0.09 |
| Preceding Tone - 1 | 83 | 1.16 | 0.39 | 2.96 | **0.003** |
| Preceding Tone - 2 | 48 | -0.07 | 0.6 | -0.12 | 0.907 |
| Preceding Tone - 3 | 259 | 0.97 | 0.3 | 3.25 | **0.001** |
| Preceding Tone - 4 | 184 | 0.7 | 0.34 | 2.08 | **0.038** |
| Preceding Tone - Pause | 44 | -0.8 | 0.69 | -1.16 | 0.245 |
| Following Noun - Monosyllabic | 158 | 0.32 | 0.33 | 0.97 | 0.332 |
| Following Noun - Disyllabic | 372 | 0.72 | 0.25 | 2.85 | **0.004** |

N: 875; Random effects: Participant (21); Log Likelihood: -295.3
Intercept represents classifiers with Tone 1 preceded by a neutral tone (preceding tone) and followed by polysyllabic nouns (noun structure syllable)

Table 5.1: Logistic regression model for classifier omission: phonological predictors

Although the best-fit model included preceding tone, tone of classifier and syllable of following noun structure, the differences between different tones did not reach the significance level as seen in the model output. Further pairwise comparisons yielded similar results where there seems to be a non-significant trend for classifier carrying a falling tone to be omitted. I acknowledge that the non-significance here could be caused by the imbalance in the data regarding the token number of different classifiers, as included in the second column of the table. As discussed before, many noun structures in Mandarin can be quantified by the generic classifier *ge* which carries Tone 4. For tokens where the classifier was omitted, *ge* was

often coded as the classifier and this might have resulted in the majority of classifiers being coded as having Tone 4.

Regarding the tone of the preceding syllable, we observe that Tone 1, 3 and 4 favour classifier omission than a preceding neutral tone. In comparison, classifiers in *yi* + classifier + noun structure following Tone 2 and pauses are even less likely to be omitted. I posit that this could be the results of the tone sandhi of *yi* and the stress pattern between preceding tone and *yi*. As mentioned above, numeral *yi* changes its tone between high-falling (Tone 4) and mid-rising (Tone 2) depending on the following tone, and when the classifier is omitted, *yi* always carries a Tone 2. It is then interesting to see that all tones apart from Tone 2 favour classifier omission, and this could be caused by the stress pattern of Mandarin which avoids two of the same lexical tones consecutively (Li, 1997). As for the preceding neutral tone and pauses which are weakly-stressed syllables, a following classifier omission is potentially also weakly-stressed and the combination of these is also discouraged in the stress pattern of Mandarin.

The last significant factor is the syllable structure of the following noun. The results show that classifiers are more likely to be omitted when preceding both monosyllabic and disyllable noun structures than when preceding polysyllabic structures. The effect is only significant for disyllabic noun structures (log odds = 0.72, $p = 0.004$), indicating that Beijing Mandarin speakers tend to omit classifiers in *yi* + classifier + disyllabic noun structures. These results confirmed my initial observation that shorter noun structures seemed to occur with classifier omission more often in the corpus. Regarding the fact that disyllabic nouns are actually more likely to occur with classifier omission than monosyllabic nouns, one possible explanation could be related to frequency. According to Bybee (2006), frequency is a driving force of grammaticalisation and high-frequency items are more likely to undergo the process. In Mandarin, only 16% of nouns are monosyllabic while the majority of the remaining nouns are disyllabic (Duanmu, 2007, p. 160). Hence, if *yi* + *ge* is undergoing grammaticalisation, it is reasonable to expect a frequency effect which leads to frequent nouns—disyllabic nouns—occurring more often with classifier omission.

### 5.3.3 Morpho-syntactic factors

Before fitting mixed-effects models with morpho-syntactic factors, I first collapsed the levels for two of these factors to ensure the stability of the models as done for the analysis of neutral tone in the previous chap-

ter. Noun phrase function, originally containing six levels, was recoded into three levels—core function (subject and object), modifying structure (adverbial, attributive and complementary structures) and independent phrase, as was done for neutral tone. Sentence position of noun structure was recoded into pre-verbal (initial and pre-verbal), post-verbal (post-verbal and final) and independent (independent phrase) to investigate whether classifier omission prefers pre-verbal or post-verbal position. I did not collapse noun structure which also has five levels since I am interested in how these five different types differ from each other in the use of classifier omission. Although no previous literature has suggested this, during the initial examination of my data, it seemed that shorter and/or simpler noun structures tend to appear with classifier omission.

After recoding the factors, I fitted mixed-effects logistic regressions the data with noun structure type, noun structure function and noun structure position as fixed factors and participant as the only random factor[3]. All possible interactions between the three main effects were considered.

The results from a series of regression models show no significant main effect nor interaction, suggesting that the morph-syntactic factors coded here (noun structure type, noun structure function and noun structure position) do not significantly affect the chance of a classifier being omitted. This further supports the grammaticalisation claim we have discussed in previous sections. To illustrate, the *yi* + *ge* + noun structure is believed to be undergoing grammaticalisation and this is closely linked to the phonetic erosion of classifier '*ge*'. The fact that we have found phonological factors, but not morpho-syntactic factors, to significantly influence the use of classifier omission suggests that classifier omission could be better explained by phonological processes occurring with grammaticalisation (e.g. erosion). Nonetheless, future investigations focusing on other morpho-syntactic factors would be beneficial for our understanding of classifier omission.

### 5.3.4 Social factors

As with neutral tone, three social factors—gender, programme and aspiration—were included for the analysis of classifier omission. Male and female participants were grouped into three different programmes (language, business, and journalism) and two aspiration levels (high and low). By using the same social factors for classifier omission and neutral tone, I

[3]Due to the low token count for classifier omission (N = 875) and high number of noun structures (N = 523), adding noun structure as a random effect could make the model unstable; therefore, only participant was included as the random factor.

aim to investigate if and how less well-established Beijing Mandarin feature (i.e. classifier omission) differs from neutral tone, a stereotypical local feature. Focusing on these three social factors also furthers our general understanding of the use of classifier omission among participants with different social backgrounds.

Using the three social factors as fixed factors and participant as the only random factor, I fitted a series of mixed-effects logistic regression models to the data for classifier omission. All possible interactions were considered in this process. The best-fit model is provided below in Table 5.2.

| | N | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|---|
| (Intercept) | | -4.17 | 0.89 | -4.7 | **<0.001** |
| Programme - Journalism | 210 | 0.03 | 0.96 | 0.03 | 0.975 |
| Programme - Language | 210 | 1.65 | 0.68 | 2.42 | **0.016** |
| Aspiration - Low | 432 | 2.13 | 0.74 | 2.89 | **0.004** |
| Programme - Business: Aspiration - High:Gender - Female | 87 | 2.34 | 1.04 | 2.25 | **0.024** |
| Programme - Journalism: Aspiration - High:Gender - Female | 90 | 0.65 | 1.34 | 0.48 | 0.629 |
| Programme - Language: Aspiration - High:Gender - Female | 87 | 0.48 | 0.8 | 0.61 | 0.543 |
| Programme - Business: Aspiration - Low:Gender - Female | 74 | -0.47 | 0.8 | -0.58 | 0.56 |
| Programme - Journalism: Aspiration - Low:Gender - Female | 56 | 0.32 | 1.09 | 0.29 | 0.769 |
| Programme - Language: Aspiration - Low:Gender - Female | 31 | -3.14 | 1.32 | -2.39 | **0.017** |
| Programme - Business: Aspiration - High:Gender - Male | 36 | 1.98 | 1.14 | 1.74 | 0.082 |
| Programme - Journalism: Aspiration - High:Gender - Male | 32 | -13.55 | 1224.3 | -0.01 | 0.991 |

N: 875; Random effects: Participant (21); Log Likelihood: -309.4
Intercept represents business students (programme) with high aspiration (aspiration)

Table 5.2: Logistic regression model for classifier omission: social factors

As can be seen, there is a main effect of programme as well as aspiration. More specifically, language students favour classifier omission in comparison to business students (log odds = 1.65, $p$ <0.05). First, as we have discussed in Chapter 4 regarding the interaction between gender and students' programme, language students are more inclined to a local identity due to the preference of local Beijingers in their future career as teachers. Only male students use neutral tone differently across programmes due to the fact that neutral tone, as an established vernacular feature, also convey a sense of typical male masculinity. In the current analysis for classifier, we found similar results in relation to programme where language students, regardless of their gender, tend to use more classifier omission.

Furthermore, we also find that aspiration plays an important role in

predicting participants' use classifier omission: students with lower aspiration use more classifier omission than their counterparts who have higher aspiration. This pattern is unsurprising considering the non-standard status of classifier omission which I have discussed in the beginning of this chapter. Students with higher aspiration (i.e. those who are more upwardly mobile) are more likely to limit their use of non-standard variants in speech to move away from a vernacular identity and to conform to the more standard language use, as observed in Baran (2014).

Considering the non-standardness of classifier omission and the main effect of programme and aspiration above, it is perhaps surprising to see that there is no main effect of gender. In other words, for a variable that carries non-standardness and localness, we would expect men to display a high use than women. Instead, we observe significant three-way interaction between gender, programme and aspiration. To study this interaction in more detail, I plot the use of classifier omission in Figure 5.2 where the use of classifier omission is displayed for female and male students on the x axis, and their programmes are indicated by different colours and shapes. The data is presented separately for students with different levels of aspiration.

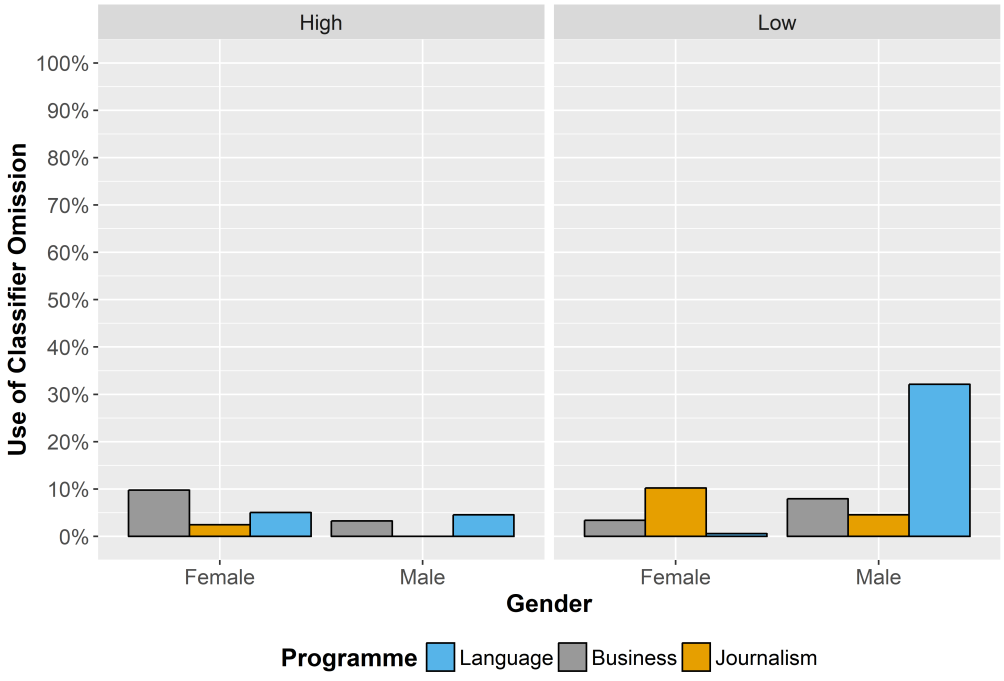


Figure 5.2: Use of classifier omission by gender, programme, and aspiration

As seen in the figure, there is little variation for business and journalism students in their use of classifier omission across genders or aspiration levels. For both groups, the use of classifier omission is very low (less than 10%). The significant difference is in fact between male and female lan-

guage students with different aspiration levels. To be more specific, for high-aspiration language students, the variation of classifier omission use is very minimal with women and men both omitting about 5% of the time. In contrast, male language students with low aspiration show a shape increase in the use of this feature (32%) from their female counterparts (1%). The change in use is also in the direction we expect, namely, that men used more of the vernacular variant than women. This gendered pattern for language students, together with the lack of variation among business and journalism students, is both similar to and different from what we have seen for neutral tone variation. I elaborate on this in the discussion section.

### 5.3.5 Stylistic variation

This section follows the procedure of stylistic analysis for neutral tone. I first consider the effect of style in interview data by fitting mixed-effect models. In the next step, both interview and self-recording data are considered to uncover patterns in the three styles (careful, casual, and self-recording) and more specifically, variation regarding the two social factors—gender and aspiration.

I first provide Figure 5.3 showing the average use of classifier omission across two different styles in interview data.

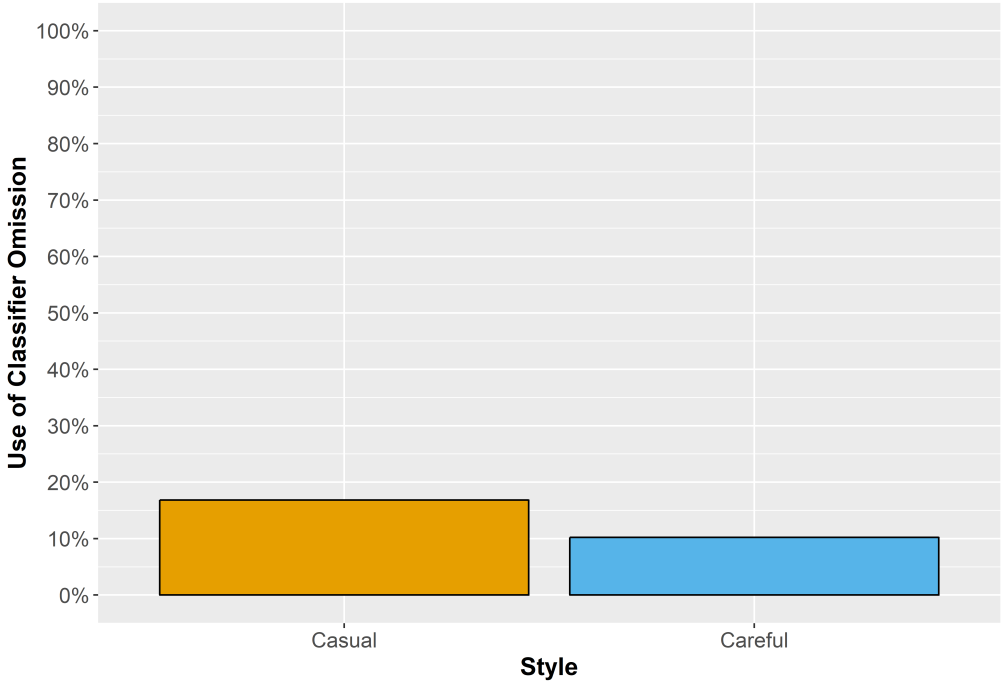


Figure 5.3: Style variation for classifier omission

Similarly to neutral tone, classifier omission was also used more fre-

quently in casual setting (16.8%) than in careful setting (10.2%), confirming its status as a vernacular feature in Beijing Mandarin. The average frequency for classifier omission was much lower than that of neutral tone, and this is due to the non-standardness of classifier omission. As mentioned in previous discussions, the use of classifiers in standard Chinese is mandatory and omitting classifiers is considered non-standard. Therefore, in interviews where the setting is still relatively formal, participants remained more standard, hence showing a proportionately lower use of classifier omission in comparison to when using neutral tone.

The logistic regression in Table 5.3 tested the effect of style on classifier omission The aforementioned difference across careful and casual interviews is statistically significant ($p$ <0.05).

| | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|
| (Intercept) | -2.061 | 0.292 | -7.067 | **<0.001** |
| Style - careful | -0.597 | 0.24 | -2.491 | **0.013** |
| N: 875; Intercept represents classifier omission in casual speech | | | | |
| Random effects: Participant (21); Log Likelihood: -314.9 | | | | |

Table 5.3: Logistic regression model for classifier omission: style

I now proceed to the analysis of stylistic range. Table 5.4 on the next page shows each participant's social background, mean rate of classifier omission in three styles. Since classifier omission occurs less frequently, I have included the total numbers of the Beijing variant (i.e. omitted classifier) for each style. In cells where the use of classifier omission is 0%, only total token numbers are shown. The final column lists individuals' style range for this variable.

First, we observe a major difference between the use of classifier omission and neutral tone regarding participants' style range. Due to the existence of neutral tone in standard Chinese, we did not have participants who showed no use of neutral tone in previous chapter; however, in Table 5.4, 10 participants maintained the standard use of classifier in different styles. I want to point out that out of these 10 participants, there are three participants at the top of the table (Helen, Scott and Terry) who did not omit classifiers at all in the corpus. This could either be caused by their avoidance of the vernacular feature in relatively formal speech or their lack of acquisition of this feature. Nonetheless, the other seven participants' avoidance of classifier omission is in line with the status of classifier omission as a non-standard Beijing feature, which is to be avoided in formal/standard speech.

| Participant | Gender | Aspiration | Style | | | |
|---|---|---|---|---|---|---|
| | | | Careful | Casual | Self-recording | Range |
| Helen | Female | Low | **0%** (23) | **0%** (25) | – | 0% |
| Scott | Male | Low | **0%** (9) | **0%** (9) | – | 0% |
| Terry | Male | High | **0%** (14) | **0%** (18) | – | 0% |
| Betty | Female | Low | 0% (6) | **4%** (1/25) | – | 4% |
| Charlie | Male | Low | 0% (26) | **7%** (2/29) | – | 7% |
| Daniel | Male | Low | 11% (2/18) | **14%** (1/7) | – | 3% |
| Fred | Male | Low | 14% (4/28) | **32%** (16/50) | – | 18% |
| Hannah | Female | Low | 5% (1/21) | **23%** (8/35) | – | 18% |
| Daisy | Female | Low | 14% (2/14) | **33%** (4/12) | – | 19% |
| Sara | Female | High | 0% (15) | 4% (1/25) | **8%** (1/12) | 8% |
| Mike | Male | High | 0% (20) | 9% (3/32) | **13%** (2/15) | 13% |
| David | Male | Low | 40% (6/15) | 43% (6/14) | **64%** (7/11) | 24% |
| Harry | Male | Low | 50% (6/12) | 60% (28/47) | **83%** (10/12) | 33% |
| Mary | Female | High | 19% (4/21) | 20% (2/10) | **67%** (2/3) | 48% |
| Matt | Male | High | 15% (2/13) | 9% (4/46) | **78%** (14/18) | 69% |
| Clare | Female | High | 4% (1/25) | 14% (5/37) | **100%** (2/2) | 96% |
| Rachel | Female | High | **15%** (2/13) | 9% (3/43) | – | 6% |
| Bob | Male | Low | **22%** (2/9) | 9% (2/23) | – | 13% |
| Cat | Female | High | 0% (9) | **5%** (2/41) | 0% (9) | 5% |
| Nancy | Female | Low | 14% (1/7) | **17%** (3/18) | 0% (18) | 17% |
| Kevin | Male | High | 0% (5) | **17%** (1/6) | 0% (2) | 17% |

Note: Participants without self-recordings are presented before those with self-recordings in ascending order of style range; top section = those with no use of omission, middle section = those with an expected formality-based style-shifting pattern; boldface indicates individuals' highest frequency; numbers in parentheses represent target and total token numbers.

Table 5.4: Style range for all participants: classifier omission

Among the students who used classifier omission in their speech, the majority tended to omit classifiers in their most casual style depending on whether they have recorded self-recordings, as seen in the middle section of the table. It is worth mentioning that five participants did not conform to this pattern and instead showed a slightly higher use of classifier omission in their careful speech; for those with self-recordings, their use in casual interview setting was higher. As we can see, all of them had low numbers of the local variants (under three for all of their styles), I posit that this lack of a general pattern might have been caused by their extremely infrequent use of the feature.

Additionally, the stylistic range for classifier omission (0% to 96%) is considerably wider than that for neutral tone (0% to 17%). It should be acknowledged that the low numbers of tokens for classifier omission could have inflated the range. For instance, Clare showed a range of 4% to 100% from her careful interview style to self-recording, but the latter only had two tokens. For a non-standard feature like classifier omission, Table 5.4 shows a wide range of variation across participants, ranging from a categorical avoidance (e.g. Helen) to a near-categorical preference (e.g. Matt and Clare).

As mentioned in Section 5.3.4, the use of classifier omission in interviews seemed to be conditioned by programme and aspiration, while the gender effect was manifested through an interaction with the other two factors. In the following discussion, I identify and address the correlation of style variation and two main social factors, gender and aspiration, in all interviews and self-recordings.

In Figure 5.4 and Figure 5.5, we can see similar formality-based style-shifting patterns where the use of the vernacular variant decreased as formality increased for all social groups. Specifically, for both male and fe-

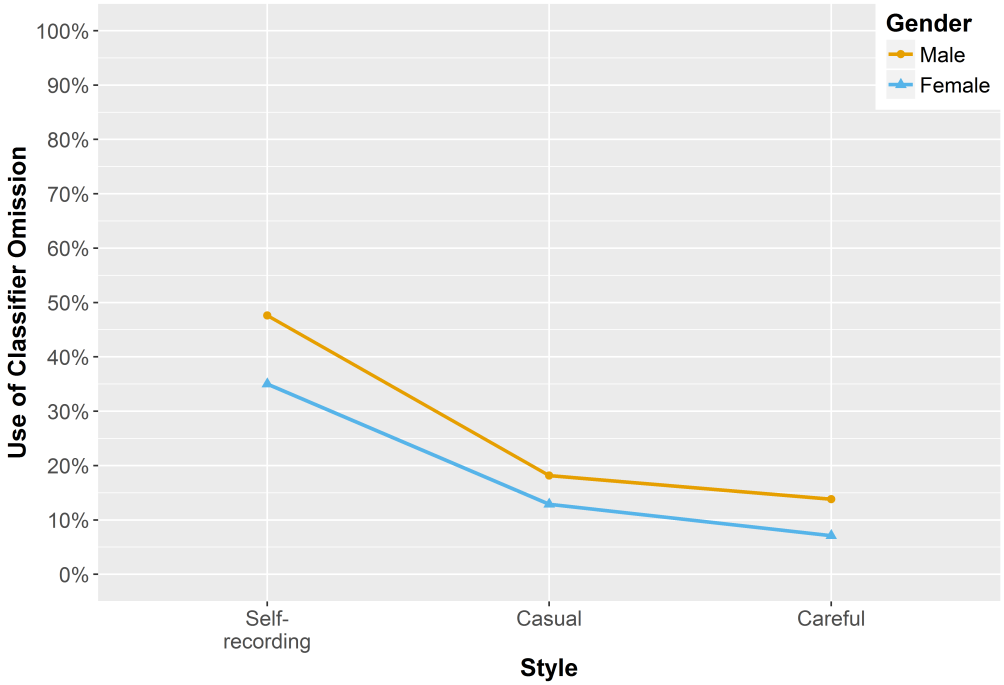


Figure 5.4: Style variation for classifier omission: gender

male students in Figure 5.4 as well as those with low and high aspiration in Figure 5.5, the highest use of classifier omission occurred in self-recordings while the lowest use was seen in careful interview style. This maintenance of stylistic variation suggests that classifier omission is a stable linguistic feature in Beijing Mandarin.

The differences between different styles are also of interest here. For both gender and aspiration groups, the decrease in the use of classifier omission is greater between self-recordings to interviews, and the differences between casual and careful interview styles are minimal in comparison. This could be caused by two different reasons.

First, the notion of register (Halliday, 1978), as I have mentioned in Chapter 1, can be very useful in explaining this pattern. Specifically, there seems to be a casual Beijing Mandarin register, as opposed to a more careful

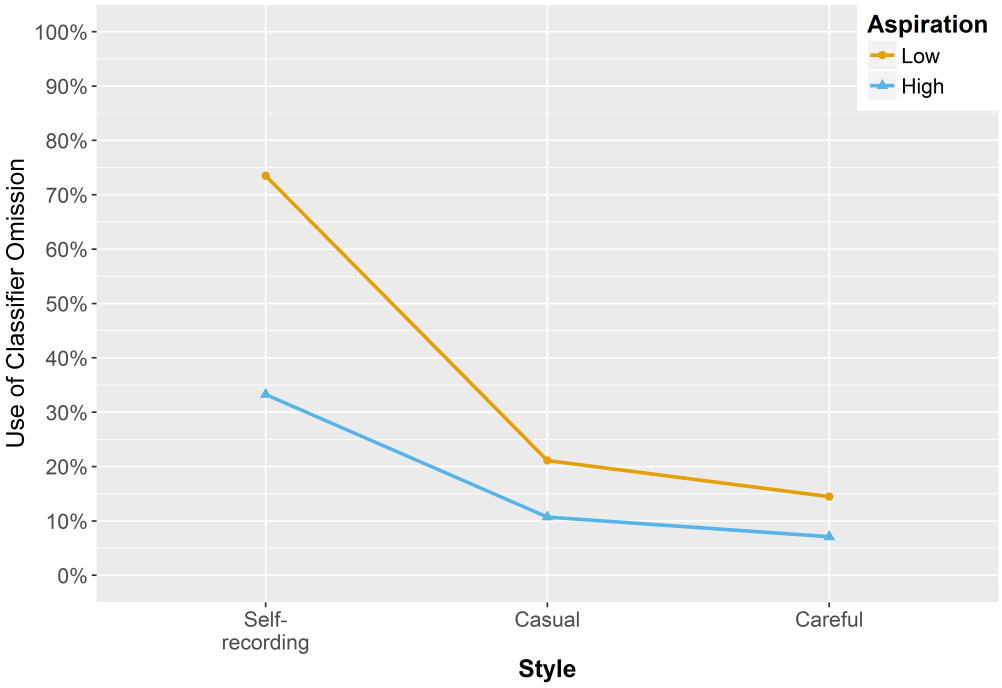


Figure 5.5: Style variation for classifier omission: aspiration

or formal register. Beijing Mandarin potentially has different registers and speakers vary their use of linguistic features depending on the registers they use in any given situation. Here, the use of classifier omission clearly differs across registers, that is, across the more casual self-recordings and the more formal interviews.

Another factor contributing to a sharp contrast across self-recordings and interviews could be the effect of the interlocutor—in this case, the difference between talking to friends and family versus me, a researcher and an outsider. Based on Bell's (1984) audience design theory, it is possible the speakers were responding to the changes in their addressees by modifying their use of this non-standard/casual feature either consciously or unconsciously across the two speech setting.

There is also the expected pattern for social stratification in the use of classifier omission in each figure. As a non-standard/stigmatised local feature, classifier omission was predicted to be used more by men and by those with lower aspiration and we observe these patterns in Figure 5.4 and Figure 5.5 where the yellow dots (males or low aspiration) are consistently higher than the blue triangles (females or high aspiration).

If we compare these two figures here with previous figures for neutral tone (Figures 4.18 and 4.19), two key observations can be made. First, for neutral tone, we only observed a minimal formality-based shift in two subgroups (female students and low-aspirational students) while classifier

omission showed a much sharper style-shift across all social groups, pointing to different social associations: specifically, neutral tone is mainly related to localness and classifier omission to non-standardness. The two sets of figures also share a similarity—the preference of the local variant by male speakers and those with low aspiration (both shown in yellow lines), though classifier omission again showed a sharper contrast between the subgroups.

### 5.3.6 Summary of results

In previous sections, I covered the phonological, morpho-syntactic and social factors with regard to classifier omission in interviews, and presented the results for the stylistic analysis. As mentioned in Section 4.4.1 in Chapter 4, I first checked the integrated regression model with all linguistic and social factors (see Appendix F.2). The output of the integrated model showed that linguistic factors did not render the social factors insignificant, in fact, both aspiration and programme remained significant and so was the three-way interaction between aspiration, programme and gender. I now summarise all the results based on the descriptive and statistical analyses presented above to offer a clearer overview of the variation at hand, before presenting a detailed analysis for this feature in Section 5.4.

Classifier omission, in comparison to neutral tone, is both less frequent overall in the dataset and used less by participants individually. This Beijing Mandarin feature also shows more variation in range across participants: several participants avoided the non-standard use of classifier entirely and did not omit classifier in their interviews while the most frequent user of classifier omission produced the *yi* + noun structure over half of the time. Furthermore, an overview of the omitted classifiers and the tone of numeral *yi* in the data reveals that classifier omission possibly originates from the *yi* + *ge* + noun structure. More specifically, when the original structure undergoes phonetic erosion as part of the grammaticalisation process in becoming an indefinite article, numeral *yi* always carries Tone 2. The omission of classifier also seems to be limited to noun phrases with an indefinite interpretation, supporting previous claims that *yi* + *ge* structure is developing into an indefinite article in Beijing Mandarin (Tao, 2006; Wu, 2005)

The use of classifier omission is found to be conditioned by several phonological factors including the tone of the classifier, the preceding syllable and the syllable structure of the following noun. Surprisingly, although manifested as a syntactic feature, classifier omission is not affected by the

morpho-syntactic factors coded in the current study. More specifically, the type, function and position of the noun structure do not seem to be related to whether a classifier is omitted in the corpus.

A close look into the effect of the three social factors (gender, programme, and aspiration) yielded very interesting results. We found that both language students and those with low aspiration prefer the use of classifier omission. Similar to what we have seen in the variation of neutral tone, the influence of gender on classifier omission is again displayed in a complex way where male language students show a bigger variation than female students across different aspiration levels.

Similar to the results on neutral tone use, style is also a significant factor in predicting omission in interviews and speakers omit more in casual interview speech. By investigating participants' style-shifting and style range in relation to gender and aspiration, I find that classifier omission shows a more classic style-shifting pattern across all speakers where the vernacular variant is used in casual speech. The relatively clear difference between a casual and formal register, coupled with potential audience effect also offers an interesting perspective into the variation of this feature.

## 5.4 Discussion

To better understand classifier omission on its own and as part of the Beijing Mandarin variety, I offer a more general discussion in this section. I draw on findings in existing literature to explain the patterns we observed in the current corpus. Regarding the linguistic constraints, I focus on arguing for the grammaticalisation claim put forward by scholars such as Tao (2006) and Wu (2005). Moreover, I discuss the social meanings of classifier omission in the context of Beijing Mandarin and the differences and similarities between classifier omission and neutral tone.

### 5.4.1 Linguistic constraints

As mentioned above, classifier omission has been suggested to be the result of the *yi* + *ge* structure undergoing phonetic erosion and grammaticalisation. Results from mixed-effects logistic models concerning various linguistic factors confirm the presence of phonological/prosodic influences on classifier omission while showing a lack of significant correlations between morpho-syntactic factors and the omission of classifier. These findings, together with the invariant Tone 2 numeral *yi* always carries, suggest that

classifier omission is likely developed in Beijing Mandarin as a result of the *yi* + *ge* structure becoming an indefinite article as proposed by Tao (2006) and Wu (2005). To illustrate, the grammaticalisation of *yi* + *ge* structure, coupled with phonetic erosion, has led to the lack of predictability of the morpho-syntactic predictors and the invariant Tone 2 for *yi* in classifier omission—both are signs indicating that the omission has become (or is becoming) an indefinite article.

I also provide further evidence in which classifier omission never occurs with the definiteness markers *zhe* ('this') and *na* ('that') in my corpus, although more relevant research are needed to fully understand the development of this linguistic phenomenon in Beijing Mandarin.

More specifically, classifier omission is found to occur more in *yi* + classifier + noun structure preceded by Tone 1, 3, or 4 instead of Tone 2, neutral tone, or pauses. I posit that this is related to the stress pattern of Mandarin where both consecutive syllables with the same tone (Tone 2 + Tone 2 in this case) and weak + weak patterns (e.g. neutral tone/pause + erosion) are avoided (Duanmu, 2007). Regarding following noun structure syllable length, I found that disyllabic noun structures are most likely to occur with classifier omission. The reason behind this is likely related to the high frequency of disyllabic words in Mandarin and the effect of frequency in grammaticalisation.

### 5.4.2 Non-standardness and vernacularity

One of the differences between the use of classifier omission and neutral tone, as discussed above in the results section, is the *total* avoidance of classifier omission for several Beijing Mandarin speakers—Helen, Scott and Terry—in their interviews. As I have mentioned in Section 5.3.5, this could be caused by a lack of acquisition of the feature or participants regulating their speech as we do not have any self-recordings from them. Nonetheless, as their style range in Table 5.4 in the last section shows, six out of the remaining 18 participants showed no omission of classifiers in their formal interview style while shifted to a higher omission rate in more casual styles (e.g. in casual interview and/or self-recording).

As we have discussed in the previous chapter, neutral tone is a feature available in both standard Chinese and Beijing Mandarin and as a result, the (non-extreme) use of neutral tone does not necessary convey non-standardness. Classifiers, on the other hand, are an obligatory feature in the construction of noun phrases in standard Chinese (Li and Thomp-

son, 1981), and the omission of classifier is considered non-standard (Tao, 2006).

Recall that when determining the relevant Beijing Mandarin variables for this project, I have consulted six Beijingers on their opinions of a list of Beijing Mandarin features, as mentioned in Section 2.4, Chapter 2. Five out of these six consultants commented on the non-standardness of classifier omission and mentioned that they tended to omit in casual settings. The non-standardness of this feature means that using classifier omission is discouraged in formal contexts such as interviews. We find further support for this in the analysis of style range for all participants where 13 out of 21 participants show the least omission in careful interview setting but omit more in more casual settings. Moreover, since classifier omission is a grammatical feature, its use is likely to be ore constrained than phonetic features such as neutral tone by nature. These two reasons together explain why participants showed a much lower use of classifier omission in interviews (14%) than that of neutral tone (55%).

Students with low aspiration, that is, those who are less upwardly mobile, also showed a high use of this feature and this further demonstrates that classifier omission conveys, perhaps primarily, non-standardness. To illustrate, as I have discussed in Chapter 2, upward mobility in the contemporary Chinese society heavily relies on education which in turn relates to the standardness of one's language due to the strong standard language ideology. Students who display a high use of non-standard features are likely to be perceived as un-educated and having low aspirations. This pattern is also supported by the stylistic variation between subgroups with different aspiration levels where a between-group contrast was maintained across three styles with low-aspiration students leading the use of classifier omission.

In the extract below, I show how one of my participants, Fred, who has low aspiration and has a overall omission rate of 25%, switches to a more standard register when disagreeing with me regarding the relationship between standard Chinese and Beijing Mandarin. All five underlined noun phrases are produced with the full one + classifier + noun structure (omission rate = 0%). Fred is a language student who later became a teacher in a public school in Beijing. He was clearly aware of the non-standardness of Beijing Mandarin, as shown in the italic sentence where he pointed out *Putonghua* is Beijing Mandarin without the 'bad', 'non-standard' 'things'. Interestingly and suitably, he used the standard variant for classifier omission while attempting to show his knowledge of his own language variety.

It is likely the topic change triggered his upward shift of register regarding the use of classifier omission.

(1) Fred: Beijing Mandarin
(underline = standard classifier omission token)
Character:
普通话其实不就是北京话，然后给他规范一下儿，就变成普通话了吗？就——所以说换句话说，北京话就是普通话呀。所以什么情况下你说的都是普通话啊。其实他这、他这两个东西不是两个点儿吧？是一个大圆和一个小圆吧？我不可能在大圆外边儿啊，我在小圆里也同时也肯定在大圆里边儿啊。就是说，有一部分是北京话里边儿没有，但是普通话有。那这一部分话不就是所谓的被规范了的北京话吗？但是我会把这堆被规范的和没被规范的都叫普通话。不、不是，这不是一个大集合和一个小集合的事儿吗？就是小集合北京话，然后是就是北京话。然后北京话如果有一些不好的，就是怎么说呢，不规范的东西，变成普通话。所以北京话就是普通话，只不过是改了一些东西而已嘛。我肯定是没有，我说的肯定都是北京话。我觉得普通话这个东西吧，他是一个叫官方用语(的 )，对吧？然后像我这样儿非官方的肯定不会用这东西的。
Translation:
Didn't they standardised Beijing Mandarin so that it became *Putonghua*? So Beijing Mandarin is *Putonghua*. The two (varieties) are not too extremes on a line, they should be a small circle inside of a big circle. If I'm in the small circle (Beijing Mandarin), I'm definitely also in the big one. [...] Some words only exist in Beijing Mandarin but not in *Putonghua*, but isn't this part the so-called standardised Beijing Mandarin? I call both standardised and non-standardised Beijing Mandarin. [...] No, they (Beijing Mandarin and *Putonghua*) are like a big set and a small set. The smaller set is Beijing Mandarin and *the bad things or the non-standard things then (get standardised and)* become *Putonghua*. So Beijing Mandarin is *Putonghua* but with a few changes. [...] I don't speak *Putonghua*, I only speak Beijing Mandarin. I think *Putonghua* is an official thing, right? And I'm not official so I surely don't use it.

Classifier omission is also related to localness and a Beijing identity, but in a more complex and indirect way. First, in the Beijing context,

non-standardness largely implies localness and Beijingness as the omission of classifier has only been found in Beijingers' speech, judging from both existing research and data in the current corpus. More importantly, other than low-aspiration students, language students also showed a preference for classifier omission. Building on what I have suggested in Chapter 4, I argue this is also related to second group's tendency towards a local identity. These language students, educated in university with a goal to obtain a highly-competitive job in the public sector where a large number of local graduates congregate due to the limitations put on non-Beijing students. Both their future social and linguistic environment urge them to develop a local vernacular in preparation for their future career.

The combination of non-standardness and localness of classifier omission is seen in the language and attitudes of language students who are not upwardly mobile. If we revisit the extract above, we see that Fred is very proud of his use of Beijing Mandarin and his local identity. After distinguishing the standard variety and his dialect, he insisted that he 'only speaks Beijing Mandarin' towards the end of this extract. To better illustrate how he uses Beijing Mandarin to supplement his identity as a typical Beijinger with little ambition, I include another extract below. The only omission is indicated again by boldface, and the classifier in the underlined phrase was not omitted[4].

(2) Fred: Future job

(underline = standard classifier omission token; **boldface** = omitted token)

Character:

看呗，明年——今年教师证儿应该是没考下来，好难啊。然后明年看看应该能考下来，能考下来我直接找**一学校**。我妈说，嗯，她已经说就是说有一个学校说，你这孩子到时候有教师证儿，然后毕业，然后有那学位证儿，然后就可以直接来这儿。就是类似于就、就收了那样儿的。然后当三年吧，班主任。然后开始代课，然后就是正经的老师。

Translation:

We will see next year. I probably did not pass the exam to get my teaching certificate. [...] It was so hard. [...] We will see about that next year, but I should be able to pass.

[4]Indefinite article 'a' in unmarked noun phrases within the extract were produced in Mandarin without the *yi* + classifier structure, and the article was added as part of the translation.

> And if I do, I can just go find **a school**. [...] My mum told me about a school who said if I can get the certificate and graduate with a diploma, I can just go work for them.[...] They will hire me. [...] Then I need to be a teaching assistant for three years before I can be a teacher.

As a native Beijinger, Fred is privileged in the way that his middle-class parents could use their personal connections to find him a job. He was very relaxed about his future career, as can be seen in his speech. Classifier omission, in this case, shows his lack of ambition as well as non-standardness[5].

The non-standardness of classifier omission is tied to its other social meanings such as localness (and potentially masculinity, which I discuss below), centring the notion of vernacularity as defined earlier in Chapter 1, Section 1.2.2. To recap, vernacularity to refer to a set of social meanings often associated with typical vernacular varieties, though I view the vernacular as the (most) locally-based variety as defined by Eckert (2012) rather than a speaker's most natural or fundamental language (Labov, 1972a). For locally-valued varieties like Beijing Mandarin, non-standardness and localness are among the most common social meanings these vernaculars have (Eckert, 1989a; Labov, 1972a; Rickford, 1986; Zhang, 2005).

Despite the contrast in the overall use between neutral tone and classifier, the two features both convey a high degree of vernacularity. This is first supported in the significant style effect for both features. As features from the local vernacular, both neutral tone and classifier omission are preferred in more casual speech and avoided in formal settings.

For neutral tone, a stereotypical Beijing Mandarin feature, vernacularity manifests primarily as localness—and related to that, masculinity. Classifier omission is less recognised directly as a marker of Beijing identity, yet its stylistic patterning across different aspiration groups (and gender, as I expand on in the next section) shows a clear classic shift away from the local non-standard variant in formal speech.

When asked about the differences between Beijing Mandarin and standard Chinese during the interview, most of my participants commented on *erhua* (which I discuss in Chapter 7) and neutral tone while none of them mentioned classifier omission (or intensifier *te*, which I cover in Chapter 6) as a Beijing Mandarin feature. Nonetheless, as I have demonstrated, the differences in (non-)standardness and (non-)stereotypical status between

[5]As classifier is an infrequent feature, I acknowledge one shortcoming for these extracts which have a low number of tokens and potentially seem less convincing.

these two features do not affect these features' status as part of the vernacular. It is through the indirect link of non-standardnes and localness, classifier omission takes on meanings associated with vernacularity.

### 5.4.3 Masculinity

In the previous chapter on neutral tone, we observed a main effect of gender where women used the vernacular form less often than men. As a non-standard feature from the local dialect, classifier omission mainly indexes non-standardness as I have discussed above and it is then perhaps surprising that we did not find such a sharp gender effect for the omission of classifier in the interview data allow. Instead, we noticed a between-factor interaction similar to, but at the same time more subtle and complicated than neutral tone in the quantitative analysis. This three-way interaction between gender, aspiration and programme, as I argue in the reminder of this chapter, is an unique display of the masculinity associated with classifier omission and Beijing Mandarin.

The link between gender and non-standard languages and varieties, as discussed before in Chapter 1 and 4, is often neither clear-cut nor direct. In the case of classifier omission, the gender difference is manifested in the use of the feature among low-aspiration language students where men significantly prefer the vernacular feature than women (see Figure 5.2 in Section 5.3.4). This is of particular interest on a general level in the current project as we observed a similar interaction between gender and programme in the case of neutral tone.

For neutral tone, gender interacts with programme—or rather, future career path. While male students as a whole differ from female students in their use of the stereotypical Beijing feature, male language students uniquely used the local variant significantly more than male students from other programmes while female students showed little variation across programmes. I propose that due to the underlying stereotypical masculinity of the extreme use of neutralisation, women are limited both in their access to social meaning and expression of localness, where an extremely high use of the local variant invokes a non-normative female masculinity. Women are therefore less likely to vary across programmes even though the levels of localness desired in different programme are different.

Coming back to the variable in question here, classifier omission, as a local feature of Beijing Mandarin, also indexes social meanings such as non-standardness, localness, and potentially masculinity. The correlation

between gender and classifier omission needs to be understood with caution since the gender effect was only observed for one out of six groups of participants (separated by programme and aspiration), as seen in previous Figure 5.2. Also, let us revisit the style analysis where we see both men and women shift towards a more vernacular style (by using more omission) in self-recordings while men maintained a higher rate of classifier omission across three styles (Figure 5.4). This figure also demonstrates a potential gender contrast, although less clear-cut as that found in neutral tone.

As the meaning of masculinity is conditioned by other factors for classifier omission, it is important to point out that this indexical meaning—as with other ideological constructions used by speakers to express meanings and construct styles—is shared within the language community (Eckert, 2008). To illustrate, for neutral tone variation, although female students are limited in using neutralisation due to its link to typical male masculinity, they are still aware of the feature's meaning of localness and negotiating their identity through the use of this feature (and other features in Beijing Mandarin).

This meaning of masculinity can be found in the speech of my participants, as I will show with the following extracts show. Here, Beijingers vary their use of classifier omission to express the masculinity associated with it. I have selected several extracts from different participants, focusing on the use of classifier omission and the stereotypical masculinity traits implied in the utterances. While acknowledging the potentially speculative nature of isolated extracts, I posit that the meaning of masculinity associated with classifier omission does exist on a discourse level, even when such correlation was not present in the multivariate analysis.

In the following extracts, all classifiers were omitted (shown in boldface), and I use italic to indicate utterances related to masculinity (or the lack of it).

(3) Hannah: Student union
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
就是可能个人太强势了。他想，他说你要是当副主席的话也不行，所以就不给我学生会。说那我给你建**一办公室**。就又给我建**一办公室**。

Translation:
Maybe I'm *too bossy*. He said that I *wouldn't want to be the vice president* (of the student union) so he didn't offer it to me. He then promised to create **an administrative position** for me and then just created **a position** for me.

In extract (3), Hannah, a journalism student from BCU, was talking about how she had been very bossy throughout three years of university. Here, her use of classifier omission is associated with the toughness of masculinity and bossiness, especially when she mentioned how her boss at the student union had to create her own position[6].

(4) Fred: Drinking
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
喝的特别多的话，就是他们送我回家一般———就不是扶着我嘛，就得找一女的，找男的话绝对会被我打。
Translation:
*After drinking a lot,* they have to get me home so someone has to help me walk. It has to be **a woman** because *I would definitely punch him if it were a guy.*

(Fred)

Extracts (4) and (5) are both from Fred who enjoyed drinking with his friends but always got into trouble afterwards. Previous studies have suggested various attributes and behaviours that are considered typically masculine (Cheshire, 1982; Eckert, 1989a; Kiesling, 1998, 2007; Trudgill, 1972). In these extracts, Fred also describes his typical male behaviours—drinking, getting drunk, violence, and even his subtle sexist remark which implied men should not punch women (underlined in the extract), and the masculinity they convey is consistent with his use of classifier omission.

(5) Fred: Being drunk
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
然后还有那个就是喝多了，他们在那儿拦出租车，我坐在马路边儿上，拿**一酒瓶儿**往那个地上碎(è)。

[6]This use of omission here could also have be a direct quote from the boss and therefore does not reflect Hannah's own language use. As there is no definite proof of this, I include this extract and acknowledge the potential ambiguity.

Translation:
And *when I'm drunk*, they would try to get a taxi and I just sit on the pavement and pick up **a beer bottle** and *knock it against the ground*.

As mentioned before, swearing is another trait often associated with toughness, streetness and typical male masculinity. The following extracts (6), (7) and (8) show how masculinity is constructed in discourse through the use of profanity and local non-standard features such as classifier omission. In the first two extracts, Hannah was complaining about a colleague at the student union while Harry, a final-year Japanese student, was mocking his gay classmate for his lack of masculinity. The final extract quotes one of Harry's professor who had a strong opinion about a Chinese person who had settled in Japan, and since Harry himself did not enjoy studying Japanese, he shared the same incomprehension.

(6) Hannah: Colleague
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
她现在是学生会的部长。但是我了解之后，丫就**一心机婊**。
Translation:
She is the officer in the student union [...] but after I got to know her, that *bastard* turned out to be **a manipulative bitch**.

(7) Harry: Gay course-mate
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
天天一米、一米九**一大壮汉**。我操，跟你打招呼，“哎呦！亲，你怎么来了？好高端啊！”我操，**一他妈傻逼似的**。
Translation:
**A huge guy,** 6'2" tall, when he *fucking* greets you, it's like 'hey sweetie, what brings you here?' or 'it's so:: great!' *Fuck that, what* ***a fucking retard***.

(8) Harry: Professor
(**boldface** = omitted token; *italic* = indication of masculinity)
Character:
我们那原来老师有**一同学**，也是学日语的，就去他妈日本了。后来我们老头子，对，五十多岁，四五十岁。有**一老头儿**，快快退休五十多了可能。他比较愤青儿的跟我们说：“操。”说那个天天上课讲，“我们有**一同学**规划日本，叫他妈日本人爷爷！”

> Translation:
> My professor has **a former classmate** who also studied Japanese and went to Japan. [...] (The professor is) About 50, about 40 to 50 of age, **a little old man** who is about to retire. He would say: '*fuck*, I have **a classmate** who has settled in Japan and *calls the fucking Japanese grandpa* now (meaning he has denied his Chinese root)!'

After providing evidence suggesting that the use of classifier omission is indeed related to masculinity, I move on to explain why this social meaning was not directly manifested in the quantitative analysis, and was found to interact with both programme and aspiration. First, as we have discussed above, the primary meaning of classifier omission is more likely to be non-standardness while masculinity derives from the non-standardness of this vernacular feature, as shown in the extracts above. Therefore, regardless of gender and programme, students with high aspiration are less likely to use the non-standard feature since they value the standardness of their speech more than those with limited upward mobility. Within low-aspiration students, I propose, the meanings of localness and masculinity interact in a way similar to the situation with neutral tone. Namely, for those who are drawn to a more local identity and language use (i.e. language students), use of classifier omission is stratified based on gender. For others who are not particularly local in their future linguistic and social environment (i.e. journalism and business students), the benefit of this non-standard local feature is similar across women and men. The fundamental reasons behind this gender pattern is again likely to be that women and men have different access to meanings indexed by the same linguistic feature in the same variety.

We now have observed twice the pattern where female language students are more limited in their production of vernacular features in comparison to male language students. Both neutral tone and classifier omission convey vernacularity, as suggested in the previous sections, despite that their awareness levels are different. This potentially suggests that Beijing Mandarin, as a vernacular variety, is gendered in a complex way.

# Chapter 6

# Intensifier *te*

In Chapter 4 and 5, I described the use of neutral tone and classifier omission in interviews and self-recordings, and presented findings regarding linguistic, social, and stylistic factors for these two features. The current chapter focuses on the third variable—intensifier *te*. I include in the following sections a detailed description of this feature, its use among my participants, the linguistic, social and stylistic factors conditioning the use of *te*. Furthermore, I discuss the results from this feature as well as the other two features with an aim to shed light on the social meaning of Beijing Mandarin.

From the analyses in the previous two chapters, we learned that the variation in both features are conditioned by various linguistic factors. For neutral tone which has been studied before, most of these findings were unsurprising and consistent with existing literature. With regard to classifier omission, which is yet to be researched in depth, I found evidence supporting the claim that classifier omission is resulted from the grammaticalisation of the *yi* + *ge* structure (Tao, 2006; Wu, 2005).

Findings regarding social factors for both features confirmed the vernacular status of Beijing Mandarin. More specifically, as a more established vernacular feature, neutral tone showed a significant gender divide where women neutralise less than men. This points to the fact that the use of neutral tone, especially an extremely-vernacular use, has a strong association with typical male masculinity. For classifier omission, we did not observe a similar direct and robust gender effect on its own, which I argue is related to the status of classifier omission as a new and non-stereotypical Beijing feature. Additionally, male and female students also differ in their use of neutral tone across different disciplines, which is most likely caused by the preference of an local identity among language students whose future career values localness and fosters a local linguistic environment. A similar effect

of programme/designated career was also present in the variation of classifier omission, both as a main effect and in conjunction with gender and aspiration where male language students differ from each other depending on their aspiration levels. The direction of variation is consistent with the vernacular status of Beijing Mandarin and the two variables. Interestingly, aspiration was found to influence the use of classifier omission but not neutral tone. This is likely due to the non-standardness of classifier omission which carries more negative connotation regarding language standardness, and therefore avoided by highly-motivated students.

Stylistic analysis results further support these observations. First, as classifier omission carries a strong indication of non-standardness, participants show a considerably wider style range than neutral tone which primarily indexes localness. Although both features show a formality-based style shift, again, the non-standard classifier omission show a much sharper contrast than neutral tone, which displays minimal shifts. Nonetheless, these shifts confirm the nature of their vernacularity, as discussed in the last chapter.

In this chapter, I aim to further our understanding of the vernacularity of Beijing Mandarin by analysing a third linguistic variable—intensifier *te*. As briefly introduced in Chapter 2, intensifier *te* is a lexical feature used in Beijing Mandarin and including *te* in this project widens the scope of the study beyond phonetic and syntactic variation. In addition, similar to classifier omission, intensifier *te* has also received little attention from variationist sociolinguistics or Chinese linguistics. Perhaps due to the fact that lexical features are highly restricted in discourse, *te* is seldom discussed as a local feature from Beijing Mandarin and even less noticed than classifier omission. Incorporating a third variable—intensifier *te*—helps to develop a fuller and deeper understanding of Beijing Mandarin.

In the following sections, I present the analysis of intensifier *te*, focusing on the relevant linguistic factors, social factors including gender, programme, and aspiration, and its stylistic variation. The chapter begins with a detailed description of the target variable and its use in Beijing Mandarin. I then describe the criteria used in token selection and coding. After presenting the analysis of the variation observed for intensifier *te* in the dataset, I discuss the results and explore the potential social meaning of *te* in relation to both the other two linguistic variables and Beijing Mandarin in general.

## 6.1 Overview

English intensifiers, sometimes referred to as amplifiers or boosters, have been the subject of many linguistic investigations (e.g. Childs, 2016; Hazenberg, 2012; Ito and Tagliamonte, 2003; Macaulay, 2002; Núñez Pertejo and Palacios Martínez, 2014; Pichler, 2010; Tagliamonte and Roberts, 2005; Xiao and Tao, 2007). Some of these studies investigated a wide range of intensifiers to gain an understanding of how intensifiers are used as a class of words in discourse and speech (Núñez Pertejo and Palacios Martínez, 2014; Tagliamonte and Roberts, 2005; Xiao and Tao, 2007), while others are situated within the variationist framework. Existing variationist research suggested that the variation of intensifiers is closed related to age (Childs, 2016; Macaulay, 2002), gender (Hazenberg, 2012; Ito and Tagliamonte, 2003), and identity (Macaulay, 2002; Pichler, 2010). Chinese intensifiers, however, have yet to be subject to variationist analysis. In the current project, I consider the use of intensifiers in Beijing Mandarin from a variationist point of view and focus on one particular intensifier native to the Beijing dialect. My purpose is, again, to study linguistic features that potentially carry social meanings related to the vernacular status of Beijing Mandarin.

The intensifier studied here is *te*/特, and I chose this feature as it fits the following criteria. First, as mentioned above, *te* is considered a dialectal feature and the use of *te* as an intensifier is restricted to Beijing and its surrounding areas (Fu, 2014). Secondly, *te* is seen as a vernacular form in comparison with other more formal intensifiers in Mandarin and is only used in spoken register (Qi, 2012). The combination of these characteristics allow me to explore the link between the use of *te*, formality and vernacularity in Beijing Mandarin speakers.

Before turning to the use of *te* in Beijing Mandarin, I first briefly introduce the structural characteristics of intensifiers in Mandarin Chinese. Unlikely English intensifiers which only modify adjectives and adverbs, Mandarin intensifiers—often called degree adverbs (*chengdu fuci*/程度副词) modify a wider range of structures. According to Fu (2014), intensifiers in Mandarin can be used to modify most adjectives, stative verbs, auxiliary verbs (*zhudongci*, written as 助动词) and certain noun structures such as *xiang* ('like') + noun, *you* ('have') + noun and even bare nouns[1].

In example (1), I show how all six different types of structures can be

[1]Although the last use is considered an innovative adjectivification of such nouns (Xing, 2002), I return to this issue in the next section.

modified by an intensifier. As there are many intensifiers other than *te*, I have included some of the most commonly used intensifiers in *Putonghua* (shown in boldface)—*hen, feichang, tebie, zhen, ting, shifen.* In example (1-a), *hao* is an adjective and is intensified by *hen.* Example (1-b) and (1-c) show intensifiers *feichang* and *tebie* modifying verbs while the last three examples contain the three types of intensified noun structures.

(1) a. *zhe shi yi zhi* ***hen*** *pang de mao.*
this is one CL very fat DE cat
'this is a fat cat.'

b. *wo* ***feichang*** *xihuan mao.*
I very like cat
'I really like cats.'

c. *wo* ***tebie*** *yuanyi qu.*
I very willing go
'I really want to go.'

d. *ni zhe zhong xingwei* ***zhen*** *xiang xiaotou.*
you this type behaviour very like thief
'You look like a thief with this kind of behaviour.'

e. *ta* ***ting*** *you danliang de.*
she very have courage DE
'She is very courageous.'

f. *zhege gushi jieju* ***shifen*** *beiju.*
this story ending very tragedy
'This story has a tragic ending.'

Some of the Mandarin intensifiers used here have different syntactic and/or semantic constraints. For example, *ting* tends to appear with *de* which marks the preceding adjective structure, as seen in example (1-e) (see Zhu, 1999, for more details on the use of different adjectives in Mandarin). Additionally, the above examples also show that intensifiers in Mandarin can be used attributively (example (1-a)) or predicatively (example (1-e)).

Although intensifiers can be used to modify a wide range of structures as mentioned above, there are structures, specifically adjective structures, that cannot be intensified. I briefly introduce these here. According to Lin (2001), three types of adjective structures cannot be modified by any intensifiers since they carry the meaning of intensification inherently. The first adjective structure is shown in example (2) and (3) where an adjective head is either reduplicated (example (2-a)) or suffixed by a reduplicative suffix (example (3-a)). As argued by Li and Thompson (1981) and Sun (2006), these duplicative structures carry an intensified meaning of the adjective head inherently and require the relative marker -*de* in constructing

phrases and sentences.

(2) a. *taiyang hong hong de.*
sun red red DE
'The sun is (very) red'

b. **taiyang hen hong hong de.*
sun very red red DE
*intended*: 'The sun is (very) red'

(3) a. *taiyang hong tong tong de.*
sun red very very DE
'The sun is (very) red'

b. **taiyang hen hong tong tong de.*
sun very red very very DE
*intended*: 'The sun is (very) red'

The second type of structure that cannot be intensified consists of disyllabic compounds formed by prefixing a noun to an adjective head and an example is shown in examples (4-a) and (4-b). The noun in this type of adjective structures enhances the intensity of the adjective head and therefore has to be consistent with the semantic meaning of the adjective head as demonstrated in the two examples (i.e. snow is white and lacquer is black). Due to this enhanced intensity, this structure cannot be further modified by *te* or any other intensifiers, as seen in example (4-c).

(4) a. *tian shang you xuebai de yuncai*
sky on exist snow-white DE cloud
'There are white clouds in the sky.'

b. *ta toufa qihei*
She hair lacquer-black
'Her hair is black.'

c. **tian shang you hen xuebai de yuncai*
sky on exist very snow-white DE cloud
*intended*: 'There are white clouds in the sky.'

The last type of adjective structures is the four-syllable fixed phrases with an adjective head and affixes of an onomatopoetic nature[2]. The construction of these structures is highly idiosyncratic (Sun, 2006, p. 92), and both prefixing and suffixing are possible. Example (5-a) shows the prefixing of *huli* to *hutu*—meaning confused—where the first syllable of the adjective head ('*hu*') is repeated in the prefix. In example (5-b), adjective head *sha*

[2]Note that here onomatopoetic is used to refer to both the sound-mimicking nature—a meaning which most of these affixes have lost—and the prosodic function affixes have in forming quadrisyllabic words in Mandarin, see Liu (1997) for more detail on this topic.

(stupid) is followed by a tri-syllabic onomatopoetic suffix to make the whole structure quadrisyllabic.

(5) a. *na ren hulihutu de*
that person HULI-confused DE
'That person is clueless.'

b. *zhe ren shalebaji de*
this person stupid-LEBAJI DE
'This person is stupid.'

c. **zhe ren hen shalebaji de*
this person very stupid-LEBAJI DE
'This person is very stupid.'

The target variable in this study—intensifier *te*—is a intensifier present in Beijing Mandarin but seldom used in *Putonghua*. *te* is often believed to be a short form of one of the 'standard' intensifier, *tebie*, and is a new intensifier which has only started to gain popularity since 1970s (Xu, 1990, p.391). Dialectology studies on the use of different intensifiers in different areas and/or Mandarin varieties often describe *te* as a northern feature used primarily in Beijing (Hao, 2012; Qi, 2012). Nonetheless, *te* shares many characteristics with the other intensifiers. Syntactically, *te* functions similar to *hen* in example (1-a): it modifies a wide range of structures and can be used in attributive or predicative positions, as shown in example (6).

(6) a. *zhe shi yi zhi* ***te*** *pang de mao.*
this is one CL very fat DE cat
'this is a fat cat.'

b. *wo* ***te*** *haipa she.*
I very fear snake
'I am really scared of snakes.'

c. *ta* ***te*** *hui da lanqiu*
She very able play basketball
'She is really good at playing basketball.'

d. *na tiao shengzi kanqilai* ***te*** *xiang yi tiao she.*
that CL rope look very like one CL snake
'That rope really looks like a snake.'

e. *ta* ***te*** *you wenhua.*
she very have knowledge
'She is very knowledgeable.'

f. *ta chuan le yi jian* ***te*** *xiatian de shangyi.*
She wear LE one CL very summer DE top
'She is wearing a summery top.'

Regarding its semantic meaning, *te* conveys a stronger intensity than *hen*—a more generic intensifier. Moreover, as seen in example (7-a) and (7-b), *te* can also be used for both positive and negative meanings. For *te*, negation is expressed by inserting the negation marker *bu* between *te* and the following modified structure, as shown in example (7-c).

(7) a. *wo* ***te*** *xihuan ta.*
I very like her
'I really like her.'

b. *jieshang ren* ***te*** *shao.*
street people very few
'There are very few people in the street.'

c. *wo* ***te*** *bu xihuan ta.*
I very NEG like her
'I really do not like her.'

In existing literature on Chinese linguistics, *te* has received very limited attention as an individual lexical feature. Existing research have solely concentrated on the description of its use, usually in written texts and dictionaries. Both Hao (2012) and Liu (2011) studied the diachronic development of *te* and similar intensifiers in classic and modern literature while Fu (2014) compared *te* with other intensifiers in Beijing dialect and other Northern Chinese dialects, using contemporary dictionaries. As mentioned in the beginning of the section, I aim to build on these very limited existing literature and investigate the use of *te* in speech data from a variationist point of view.

## 6.2 Methods

In the previous section, I have introduced the background for intensifier *te* in detail. Building on existing literature, this section covers the methods used in the token selection, coding, and analysis of *te*. I first determine the envelope of variation and describe the specific criteria used in token selection. The linguistic factors relevant to the use of intensifier *te* are then presented, along with the rationale for including them in the quantitative analysis.

### 6.2.1 Circumscribing the variable context

As a lexical feature, intensifier *te* differs from the two features we have discussed in previous chapters. One of the major differences, which is

also a widely-debated issue in studying discourse and pragmatic features in general, lies in the variable context of these features. Traditionally, the variable context of any given linguistic variable is determined on whether the alternative forms share the same semantic meaning (Labov, 1972a; Waters, 2016). The meaning-based criteria were originally developed to capture phonological and phonetic variation where semantic equivalents exist (though cf. Aijón Oliva and Serrano, 2012). When the same criteria are extended to the study of pragmatic-discourse variables, it becomes rather difficult and problematic as semantic equivalence cannot always be established for these features (Pichler, 2010). Several other approaches have been proposed and put into practice in recent years to solve both the practical issues in circumscribing the variable context and to advance the theories on our understanding of the linguistic variable. As suggested by Sankoff and Thibault (1981) and Waters (2016), a functional approach where only variants with the same pragmatic or discourse function are included is often used when semantic equivalence could not be established. Pichler (2013), on the other hand, used a derivational approach in research negation in English. Urging sociolinguists to move away from these two 'equivalence' approaches, Aijón Oliva and Serrano (2012) argued for the use of 'the absolute variable' in which the overall frequency (per 1000 word, for example) of a certain feature is calculated and used as the basis for further analysis. While acknowledging these different approaches, I adopt the function-equivalence approach used by many others in studying discourse variables for the current analysis of intensifier *te*. This is deemed appropriate in the current study since the function of *te* is relatively easy to define and clear-cut, in comparison with its semantic meaning.

Since its primary function is to modify adjective structures, intensifier *te* can only occurred when intensification occurs in speech. Therefore, I first narrow down the context where the use of *te* can vary to where intensification occurs, and limit the token selection to all cases of intensification in the corpus.

After establishing the overall environment for token selection to where intensification is present, I then focus on excluding contexts where the use of *te* is forbidden. As discussed in the previous section (Section 6.1), some intensifiers are syntactically-unique and only appear in specific structures (Lin, 2001, p.103). Intensifier *te* is among these intensifiers and is limited to certain structures, although it can be used to modify a wide rage of structures including adjectives, stative and auxiliary verbs and certain noun structures. In this section, I list and describe these structures which were

excluded during the token selection process.

First, according to Zhou (2008), *te* cannot appear in either 'intensifier + adjective/verb/noun structure + *le* (perfective aspect marker)' or 'intensifier + adjective/verb/noun structure + *de*' structure when they are used as predicates or attributes. Examples of these two structures are provided below in examples (8) and (9). Example (8-a) shows the first structure with the intensifier *te* while example (8-b) is an ungrammatical example of *te* in the same structure. If needed, we can use the structure in (8-c) to express the same meaning.

(8) a. *ni yijing zuo de* ***hen*** *hao le.*
you already do DE very good LE
'You have done really well.'

b. **ni yijing zuo de* ***te*** *hao le.*
you already do DE very good LE
*Intended:* 'You have done really well.'

c. *ni zuo de* ***te*** *hao.*
you do DE very good
'you have done really well.'

The examples in (9) demonstrate the same constraints on *te*, using *ting* as the alternative intensifier. In examples (9-a) and (9-b), we observe that *ting* can occur in predicative position in the 'intensifier + adjective + *de*' structure while *te* cannot. The same meaning can only be expressed in (9-c) with *te* in the predicative position.

(9) a. *tianqi* ***ting*** *hao de.*
weather very good DE
'The weather is very nice.'

b. **tianqi* ***te*** *hao de.*
weather very good DE
*Intended:* 'The weather is very nice.'

c. *tianqi* ***te*** *hao.*
weather very good
'The weather is very nice.'

After excluding these two structures, all intensified adjectives, stative verbs, auxiliary verbs and the two aforementioned 'intensifier + noun' structures (*xiang* ('like') + noun and *you* ('have') + noun ) were identified as places where *te* can be used. Each token was coded as 'intensifier *te*' or 'other intensifier' when an intensifier other than *te* was used.

Similar to classifier omission, intensifiers are less frequent in the data due to its lexical nature; therefore, I coded all eligible tokens for all partic-

ipants without setting a limit for token numbers per participant.

### 6.2.2 Linguistic factors

After identifying all tokens of intensifier *te* in the corpus, I then coded them for linguistic, social and stylistic factors. The same social (gender, programme, and aspiration) and stylistic factors (casual and careful) were coded for intensifier *te* and the specifics are discussed in Chapter 3 and 7 respectively. In this section, I focus on the linguistic factors coded for intensifier *te*. Based on existing literature in Chinese linguistics and sociolinguistics in general, I coded the following three linguistic factors for intensifier *te*:

1. Modified structure syllable [monosyllabic; disyllabic; polysyllabic]
2. Modified structure [adjective; verb; phrase]
3. Function of modified structure [subject; object; predicate; attributive; complement; adverbial; independent phrase]

Regarding modified structure syllable, Qi (2012) proposes that frequently-used intensifiers (e.g. *hen*, *feichang*, *tai*) can be used to modify adjectives regardless of syllabic structures, while low-frequency intensifiers like *te* tend to only modify adjectives which have matching syllable structures. To be more specific, disyllabic intensifiers tend to pair with disyllabic adjectives while monosyllabic intensifiers modify monosyllabic adjectives. I therefore coded the syllabic structure of the modified word to see if this is the case with *te*, which is infrequent and therefore predicted to favour monosyllabic structures.

As mentioned above in Section 6.1, since intensifiers in standard Chinese and other dialects can modify adjectives as well as verbs and noun structures, I included grammatical type of the following structure in order to further understand intensifier *te* in Beijing Mandarin. The grammatical function of the intensified structure was also included for this reason as it has been found relevant in existing literature. For instance, Ito and Tagliamonte (2003) have noted that in York, England, younger speakers favour 'really' when intensifying predicative adjectives.

## 6.3 Results

In this section, I present the results on the use of *te*, focusing on both the linguistic and social factors. I first offer a general overview of the variation

in using intensifiers in Beijing Mandarin by describing the differences in individuals' use of intensifier *te* as well as the different intensifiers found in the data. The main analysis is then presented, focusing on the aforementioned linguistic and social factors. The stylistic analysis follows the quantitative analysis. I then discuss the results with respect to previous analyses on neutral tone and classifier omission, aiming to understand the status and meaning of Beijing Mandarin as a variety.

### 6.3.1 Data overview

Regarding intensifier *te*, a total number of 1262 tokens were coded across 21 participants in their interviews. Out of these 1262 tokens, 85 were cases where *te* was used (6.7%). As can be seen from these statistics, *te* seems to be less frequent than both neutral tone (55%) and classifier omission (14%). The difference observed in the frequencies is not surprising considering the nature and vernacular status of these Beijing Mandarin features. First, intensifier *te* is highly lexical and restricted in comparison with the other features; additionally, based on existing literature on Beijing Mandarin, neutral tone and classifier omission are both more recognised as related to Beijing speech while *te* is often considered 'northern' and dialectal but not specifically tied to Beijing Mandarin.

Moreover, partly due to the infrequent nature of *te*, I did not establish a limit for the token number coded for each participant as mentioned above. As a result, although each participants had around 60 tokens on average, actual numbers of tokens per participant varied from 13 (Mary) to 118 (Betty). In total, 417 following structures including adjective, verbs, and noun structures were coded in the dataset.

To gain insights into how participants vary their overall use of *te* in the corpus, I present individuals' use of intensifier *te* in Figure 6.1 on the next page. As can be seen, the use of *te* was infrequent for most of the participants. Similar to what we have seen in the patterns of classifier omission, several participants did not use the local variant (*te* in this case) throughout their interviews (Bob, Helen, Rachel, and Terry). Among the remaining 17 participants who have used *te* in the recordings, only six participants used *te* for more than 10% of the time (Charlie, Clare, David, Harry and Kevin, Sara). This is also consistent with the overall results where *te* is used less frequently than the other two Beijing Mandarin features.

Finally, we also observe one particular participant—Harry—using the local variant significantly more than everyone else. He maintained an over-

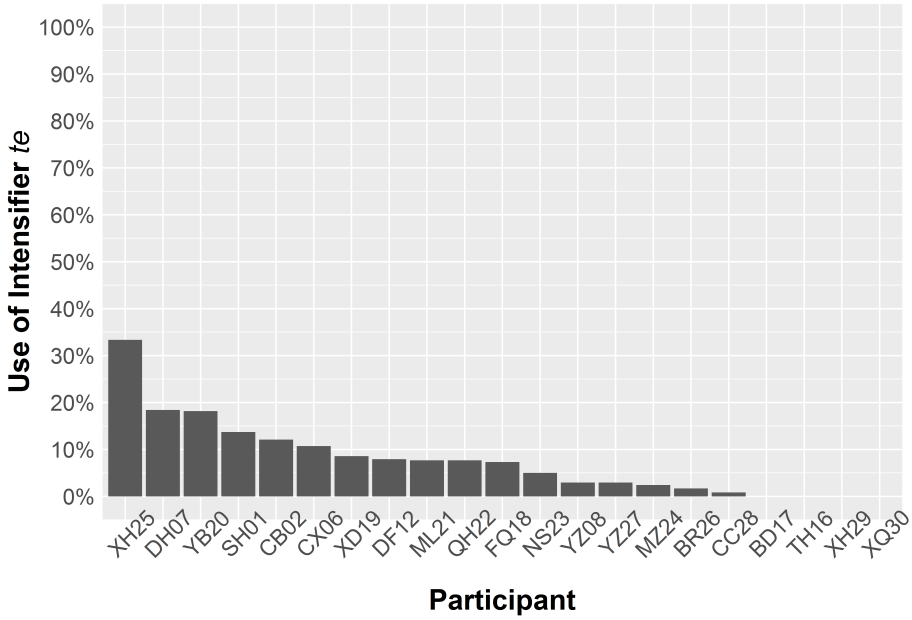


Figure 6.1: Use of intensifier *te* for all participants

all rate of 33.3% while the second most-frequent user only used *te* less than 20% of the time. I discuss his high use of Beijing features in Chapter 7, focusing on his individual speech style.

Before moving on to the quantitative analysis of intensifier *te*, I offer a more detailed discussion on the use of intensifiers in general in Beijing Mandarin. Using the data I have coded and described above, I took a closer look of the 'other intensifiers' category to find out which and how other intensifiers were used by Beijingers in the data. It should be noted that during token selection, certain structures where *te* cannot occur were excluded (see Section 6.2.1 for details) and this limits the scope of this analysis on intensifier use to environment where *te* is permitted. Nonetheless, I include an analysis on the use of intensifiers—especially vernacular intensifiers—in Beijing Mandarin to achieve a fuller understanding of *te* regarding its vernacular status in comparison to the other intensifiers.

Including *te*, there are 21 intensifiers coded in the dataset, though most of them were only used very few times. In Table 6.1, I provide the frequencies for all 21 intensifiers. The table contains three types of different intensifiers that I have classified according to existing literature (Chen, 2006; Fang, 2013; Fu, 2014; Hao, 2012; Qi, 2012; Zhou, 2008). Boldface indicates intensifiers used in spoken/informal registers while underlined intensifiers are considered Beijing. The ones in italic are used in standard Mandarin and formal/written speech as well as in Beijing Mandarin (Chinese Academy of Sciences, 1977).

| Intensifier | Frequency |
|---|---|
| *tebie* (*tebiede*, *tebietebie*) | 619 (49.01%) |
| *hen* | 415 (32.86%) |
| ***te*** | 85 (6.73%) |
| *hao* | 64 (5.07%) |
| *feichang* (*feichangde*, *feichangfeichang*) | 23 (1.82%) |
| ***ju*** | 12 (0.95%) |
| *bijiao* | 9 (0.71%) |
| ***beir*** | 7 (0.55%) |
| ***chao***, *ting* | 6 (0.48%) |
| ***chaoji***, *tai*, ***zei*** | 3 (0.24%) |
| *wanquan* | 2 (0.16%) |
| ***bao***, *duo*, ***man*** | 1 (0.08%) |

Note: Boldface indicates intensifiers often used in spoken register and underscore represents dialectal intensifiers.

Table 6.1: Frequencies of different intensifiers

The three Beijing-specific intensifiers—*te*, *beir* and *zei*—are seen as dialectal and not used in *Putonghua* at all. Both *te* and *beir* are exclusively used in Beijing while *zei* is also widely used in Northeastern Mandarin (Fu, 2014). *Beir*, in particular, is highly enregistered as a vernacular Beijing feature as it is often used in portraying Beijingers in television programmes and advertisements. A famous example in China is found in a crosstalk (相声/*xiangsheng*) actor's performance in a toothpaste advertisement where he says '*chi mar mar xiang, shengti* ***beir*** *bang*! (吃嘛嘛香，身体倍儿棒)'. The slogan, meaning 'with healthy teeth, you can enjoy food better and good health will follow', employs Beijing Mandarin features (*beir* and *erhua*/rhotacisation)to portray a local Beijinger to build rapport with its audience. On the other hand, *te* is a feature that local Beijingers are aware of, yet does not attract overt social commentaries or stigma like *beir* does. In the corpus, *te* was used much more than the other two intensifiers, and this possibly related to its status as an vernacular feature in Beijing Mandarin as I have discussed above.

Overall, as can be seen from the table, Beijingers used intensifiers available in both formal and informal settings more than those exclusively reserved for informal and/or spoken registers (indicated by boldface). Apart from *te*, each of these intensifers occurs less than 1% in the whole dataset across 21 participants. *te* was used 85 times, much lower in frequency than the formality-neutral intensifiers *hen* and *tebie* but was used more often than any of the other informal intensifiers. Most of these informal intensifiers are not considered dialectal with the exception of *man*, which is often

seen as Southern and/or Taiwan Mandarin (Fang, 2013; Qi, 2012). We also see that the participants make use of other informal intensifiers—*ju*, *chao*, *chaoji*, *bao*—which are sometimes considered new intensifiers originated from Taiwan and/or Hong Kong (Qi, 2012).

Regarding participants' use of the formality-neutral intensifiers, *tebie* (and its derivative forms *tebiede* and *tebietebie*) and *hen* were used over 80% of the time, followed by *hao* and *feichang*. This is consistent with previous research which have suggested that these are the most frequently used intensifiers in Mandarin. The results in the current study confirm these findings with data from a spoken corpus instead of using written data.

After presenting the overall patterns observed in the use of intensifier *te* in the data, I move on to the quantitative analysis of *te* in the current section. The aim of this analysis, similar to those for neutral tone and classifier omission, is to check if the linguistic factors coded affect the use of *te* among Beijingers as well as to understand the social constraints on this feature. From the initial informal consultations (presented previously in 2.2 in Section 2.4), in comparison to the other two Beijing features intensifier *te* is even less recognised as a typical Beijing Mandarin feature. And the contrast among the three linguistic features offers valuable insights into the social meaning of Beijing Mandarin as a vernacular variety.

Following the protocols established in previous analyses, I fitted separate mixed-effects models to the data, focusing on linguistic factors and social factors respectively. The use of *te* (*te* or other) was entered as the dependent variable while participant was included as the only random intercept. Again, I explore all possible interactions when fitting models, aiming at offering a better understanding of the variation observed here. The best-fit models, selected using a step-up approach, are reported below in relevant sections. I again used the Variance Inflation Factors to check if there is any multicollearity issue with the final models, and I discuss this in detail regarding the relevant model.

### 6.3.2 Linguistic factors

Since there are only three linguistic factors—modified structure type, syllable, and function—coded for the analysis of intensifier *te* and they are closely related to each other and present potentially significant interactions, I fitted the regression models with all of them instead of building separate models for phonetic and morpho-syntactic factors. Multicollinearity in fi-

nal model was tested by calculating the Variance Inflation Factors (VIFs), as I have done for all other models. It is worth mentioning that due to the low token numbers for this feature, building regression models might not be as powerful as for the other variables. I discuss this when interpreting statistical analysis results, and I provide qualitative data to further support my claims.

Before fitting mixed-effect models, I first collapsed the seven levels in function of modified structure into three, following what I did in previous analyses. The new levels for modified structure function were core function (subject, object, and predicate), modifying structure (adverbial, attributive, and complementary structures) and independent phrase.

As mentioned above, during the process of model fitting, I included all possible three-way and two-way interactions to find out if there are any correlations between the linguistic factors. The final best-fit model is reported here in Table 6.2.

| | N | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|---|
| (Intercept) | | -1.92 | 0.42 | -4.55 | **<0.001** |
| Structure - Adjective | 991 | -0.84 | 0.3 | -2.8 | **0.005** |
| Structure - Phrase | 75 | -0.38 | 0.51 | -0.74 | 0.457 |
| Function - Core | 688 | -0.57 | 0.27 | -2.1 | **0.035** |
| Function - Independent | 167 | -1.67 | 0.64 | -2.61 | **0.009** |
| N: 1262; Random effects: Participant (21); Log Likelihood: -278.5; Intercept represents modifying (function) verbal structures (following structure) | | | | | |

Table 6.2: Logistic regression model for use of *te*: linguistic factors

First, the best-fit model only contained two out of the three linguistic factors tested: syllable of the modified structure was not included. This suggests that the number of syllables in the modified structure is unlikely to affect whether *te* is used in the current dataset. The results here contradict what Qi (2012) has found in her study on intensifiers in Mandarin Chinese. She claimed that infrequent intensifiers like *te* are more restricted in what structures they can intensify than more frequently-used and highly-grammaticalised intensifiers (e.g. *hen*). According to Qi's (2012) prediction, we would expect *te* to show a preference of monosyllabic structures over disyllabic or polysyllabic structures, yet we find no evidence of this from the regression results.

One possible explanation for this pattern could be that in the current dataset, the number of tokens, especially the *te* tokens, is very low (85 out of 1262), so this lack of agreement with existing literature could be caused by the low token count. The other reason, which I include here tentatively,

could be related to Qi's (2012) point on the frequency and grammaticalisation of intensifiers. It is possible that the lack of correlation between use of *te* and syllable structure suggests that *te*, as an intensifier, is increasing in frequency and is becoming more and more grammaticalised. This could result in *te*, which used to be infrequent and highly restrained in the structures it modifies due to its residual semantic meaning, to become less limited when modifying structures with different numbers of syllables. In fact, as we have observed in Table 6.1, *te* was already used more than most other intensifiers apart from *tebie* and *hen*. Nonetheless, this generalisation should be considered with extreme caution and more data on the use of *te* is needed for a more reliable explanation.

Regarding the two main effects included in the final model, we can see that both structure type and function influence whether *te* is used significantly. Verbs seem to be most likely intensified by *te* in comparison to adjectives and noun phrases, although only the difference between verbs and adjectives was statistically significant. This indicates that *te*, as a Beijing Mandarin intensifier, prefers verbs and noun structures over adjectives. Additionally, we find that modifying structures such as adverbial, attributive, and complementary structures, in contrast to core structures and independent phrases, are more likely to be intensified by *te*, and the differences between groups are all significant. This means that *te* also strongly favours certain following structures—adverbial, attributive and complementary structures—over others. Bearing in mind that the current dataset is extremely small and might not be as representative, these findings here are still interesting and informative since no existing research on intensifiers in Mandarin has investigated the preference of modified structures or their functions. These results can still enrich our understanding about intensifiers in Mandarin in general.

Finally, none of the interactions tested seem to significantly increase or decrease the use of *te* in the corpus. This could potentially suggest that the two main effects—structure type and function—are likely to influence the use of *te* independently. In addition, with a limited corpus as the current one, it is also reasonable to suspect that there is simply not enough data for interactions to be present and meaningful. Again, this should be one of the future directions for the study of intensifier *te*.

### 6.3.3 Social factors

In this section, I discuss the effects of social factors on the use of *te*, which include the same group of three factors: gender, programme, and aspiration. To recap, participants were categorised into three programmes (language, business, and journalism) and two aspiration levels (high and low). Since I have analysed the these three social factors for neutral tone and classifier omission, which has offered interesting findings with regard to the use of different vernacular features, an investigation into how variation in the use of intensifier *te* is conditioned by the same factors would be beneficial for a comprehensive understanding of Beijing Mandarin as well as intensifier *te* itself.

Due to the low token number of this feature, I first checked for zero cells in the data. The distribution of all tokens in relation to the three social factors is shown in Table 6.3. As can be seen in the table, male journalism students showed no variation in their use of the feature. Since empty cells may cause multivariate models to be inaccurate, I recoded the data before fitting a series of mixed-effect logistic regressions. Specifically, data from the subgroup of male journalism students was excluded from the model-fitting process. Again, I considered all possible interactions in fitting the models, taking into consideration the complex interactions between factors. The VIF scores for the final best-fit model were calculated to check for potential multicollearity.

Female:

| Programme | Aspiration | |
|---|---|---|
| | High | Low |
| Business | 1/78 | 3/101 |
| Journalism | 11/189 | 6/78 |
| Language | 14/151 | 2/117 |

Male:

| Programme | Aspiration | |
|---|---|---|
| | High | Low |
| Business | 11/60 | 15/181 |
| Journalism | **0/30** | **0/79** |
| Language | 3/109 | 19/89 |

Table 6.3: Token distribution for intensifier *te* across all social factors
Note that male journalism students have zero *te* token (shown in boldface).

Perhaps surprisingly, the results from model-fitting show no significant social factor or significant interaction, suggesting that gender, programme, and aspiration are not strong predictors for the variation we have observed in the use of intensifier *te*. As I have emphasised multiple times in this chapter, the token count for this feature is extremely low in comparison to the other linguistic variables. While this could be the reason why no significant social effect is seen here, I provide some insights into other plausible explanations for the pattern we see here.

First, aspiration, although shown to be influential in the use of classifier omission, is not a good predictor of the variation in using *te* or neutral tone. This pattern is likely related to the non-standardness classifier omission carries, or rather the lack of stigma attached to neutral tone and intensifier *te*. As mentioned above, *te* is considered a Beijing Mandarin feature similar to neutral tone, yet neither of these two features are as enregistered as their stereotypical lexical and phonetic counterparts—*beir* and *erhua*, as I will argue in later discussion. In other word, both *te* and neutral tone are Beijing features that are not considered non-standard, hence can be used by students with different aspiration levels without indicating a low education level.

Furthermore, gender and programme were not found to be significant in this analysis either and it is likely that the invariant group of male language students have influenced this pattern. A further study that includes more data for the use of *te* is needed to tease apart the potential gender and programme/future career effects. I discuss the stylistic variation of intensifier *te* in the next section and include results from self-recordings to help develop a better understanding of the possible social meanings indexed by *te*.

### 6.3.4 Stylistic variation

Perhaps due to its nature as an infrequent lexical feature and low token count in the current corpus, intensifier *te*, showed a different pattern in social stratification in previous analysis. Unlike the other Beijing Mandarin features, the use of *te* was not clearly predicted by social factors including gender, programme, and aspiration. In this section, I study the stylistic variation for *te* with the aim to shed light on social patterning not captured by previous statistical analyses.

First, as with the other variables, Figure 6.2 first offers the average use of *te* across the two interview styles: participants used *te* 7.2% and 5.5 % of the time when in casual and careful setting respectively. Note that the frequency of *te* is much lower than neutral tone and at the same time, similar to that of classifier omission, due to its status as a lexical feature and possibly also non-standardness.

Moreover, the marginal difference seen in Figure 6.2 is not statistically significant ($p = 0.289 > 0.05$). Table 6.4 shows the non-significant tendency where casual speech favours *te*. At this point, based on the analysis we have done so far, working under the traditional variationist framework which

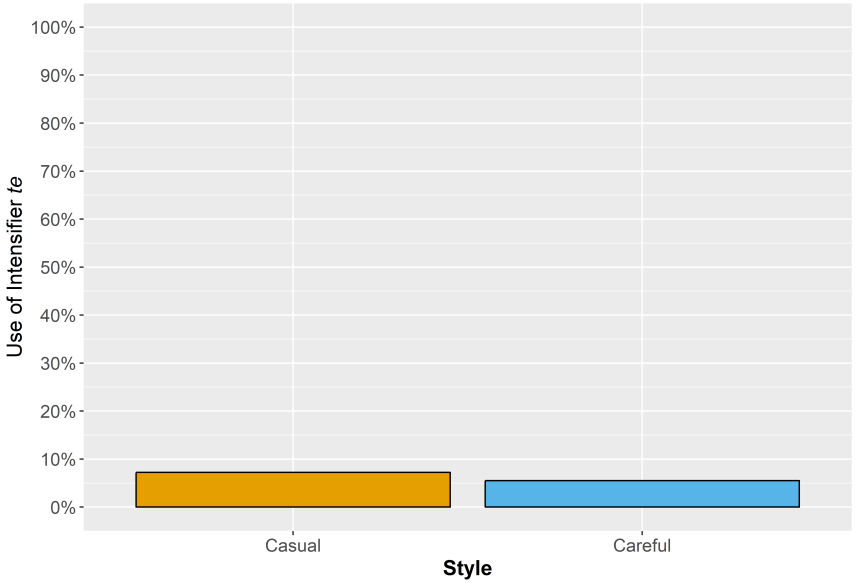


Figure 6.2: Style variation for intensifier *te*

relies on interview data alone, it is tempting to conclude that *te* is an indicator of Beijing Mandarin since there seems to be a lack of robust shared social meanings for the use of *te* in the data, nor was there a style effect. But self-recording data show that this is not the case, as I mention in late discussions.

| | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|
| (Intercept) | -2.93 | 0.3 | -9.7 | **<0.001** |
| Style - careful | -0.3 | 0.28 | -1.061 | 0.289 |
| N: 1263; Intercept represents intensifier *te* in casual speech | | | | |
| Random effects: Participant (21); Log Likelihood: -286.6 | | | | |

Table 6.4: Logistic regression model for intensifier *te*: style

Table 6.5 on the next page includes details for all participants' use of intensifier *te* across different styles. First, we see that some participants never used *te*, similar to what we have observed in the use of classifier omission. This is because that similar to classifier omission, *te* is also considered non-standard and dialectal. Specifically, four participants (top of Table 6.5) had zero token of *te* while 10 others showed no use of *te* in one or more styles.

Perhaps partly due to the fact that *te* is highly lexical, most participants had very low numbers of *te*. As the middle part of Table 6.5 shows, nine participants had less than five *te* tokens in their speech in total. The low numbers of target variant, combined with the low total numbers of intensifiers for some of these participants (e.g. Mary has 23 tokens in

| Participant | Class | Aspiration | Style | | | |
|---|---|---|---|---|---|---|
| | | | Careful | Casual | Self-recording | Range |
| Bob | M | Low | **0%** (20) | **0%** (59) | – | 0% |
| Helen | M | Low | **0%** (19) | **0%** (47) | – | 0% |
| Rachel | L | High | **0%** (22) | **0%** (43) | – | 0% |
| Terry | L | High | **0%** (12) | **0%** (18) | – | 0% |
| Betty | M | Low | 0% (25) | **2%** (2/93) | – | 2% |
| Cat | M | High | 0% (34) | 1% (1/82) | **3%**(1/33) | 3% |
| Mike | M | High | 0% (11) | 3% (1/30) | **5%** (1/19) | 5% |
| Daisy | L | Low | **10%** (1/10) | 8% (2/25) | – | 2% |
| Scott | M | Low | **7%** (1/15) | 0% (19) | – | 7% |
| Fred | M | Low | **25%** (3/12) | 0% (29) | – | 25% |
| Mary | L | High | **33%** (1/3) | 0% (10) | 0% (14) | 33% |
| Kevin | L | High | 17% (2/12) | **20%** (2/10) | 0% (7) | 20% |
| Nancy | M | Low | **5%** (1/19) | **5%** (2/41) | 0% (47) | 5% |
| Hannah | M | Low | 6% (1/18) | **8%** (5/60) | – | 2% |
| Daniel | M | Low | 12% (2/17) | **24%** (5/21) | – | 12% |
| Charlie | M | Low | 0% (20) | **14%** (9/64) | – | 14% |
| Sara | M | High | 10% (3/30) | **16%** (7/43) | 14% (3/22) | 6% |
| David | M | Low | 7% (1/14) | 8% (4/49) | **30%** (3/10) | 23% |
| Harry | M | Low | 30% (3/10) | 34% (13/38) | **60%** (9/15) | 30% |
| Matt | L | High | 3% (1/29) | 3% (1/39) | **52%** (12/23) | 49% |
| Clare | L | High | 0% (12) | 14% (11/79) | **100%** (2/2) | 100% |

Note: Participants without self-recordings are presented before those with self-recordings in ascending order of style range; top section = those with no use of *te*, bottom section = those with an expected formality-based style-shifting pattern; boldface indicates individuals' highest frequency; numbers in parentheses represent total token numbers.

Table 6.5: Style range for all participants: intensifier *te*

total) potentially make it difficult to reach any generalisations for the use of intensifier *te*.

For the remaining speakers who had more tokens (bottom part of Table 6.5), there seems to be a style-shifting pattern in the direction we have observed before. To illustrate, seven out of the eight speakers showed a decrease in the use of *te* as the formality increased. Only Sara used more *te* in her casual interview than in her self-recordings.

Another interesting finding regarding the use of intensifier *te* lies in the style range for all participants. Although there are participants with style ranges wider than those for neutral tone and classifier omission, generally they were less uniformed than the patterns we have seen in previous tables (Table 4.8 and 5.4)

So far, both multivariate analysis and style-shifting results have indicated that intensifier *te* shows a lack of obvious pattens in its social and stylistic stratification. In order to further investigate this, I present below two plots of the feature's social and stylistic variation in relation to the two main social factors—gender and aspiration.

Similar to classifier omission (Figure 5.4 and Figure 5.5), the use of intensifier *te* in both Figure 6.3 and Figure 6.4 showed a sharp decease in

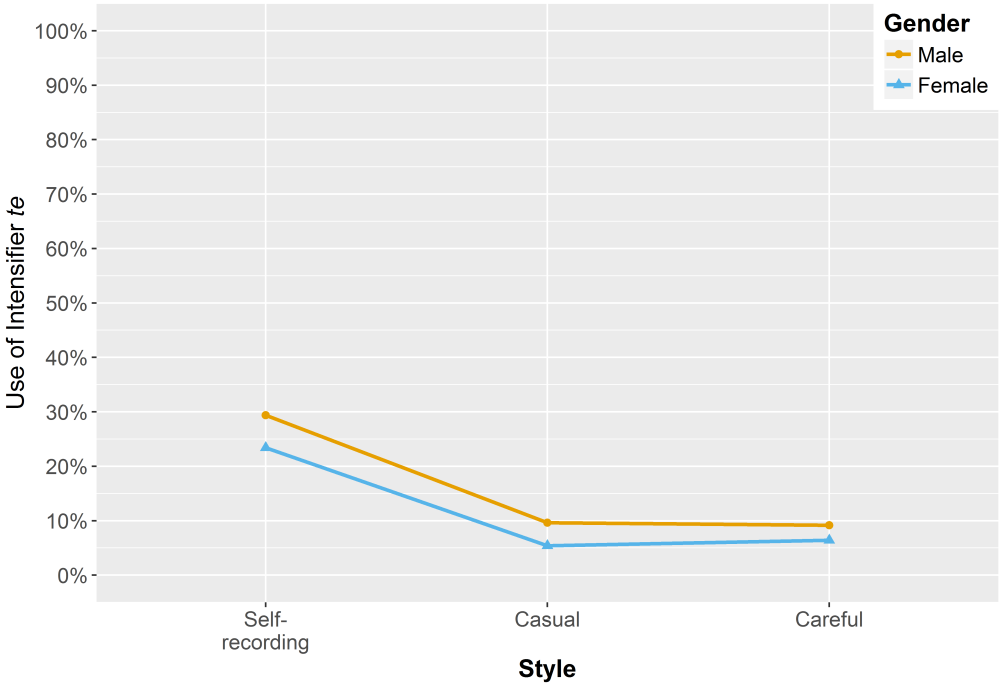


Figure 6.3: Style variation for intensifier *te*: gender

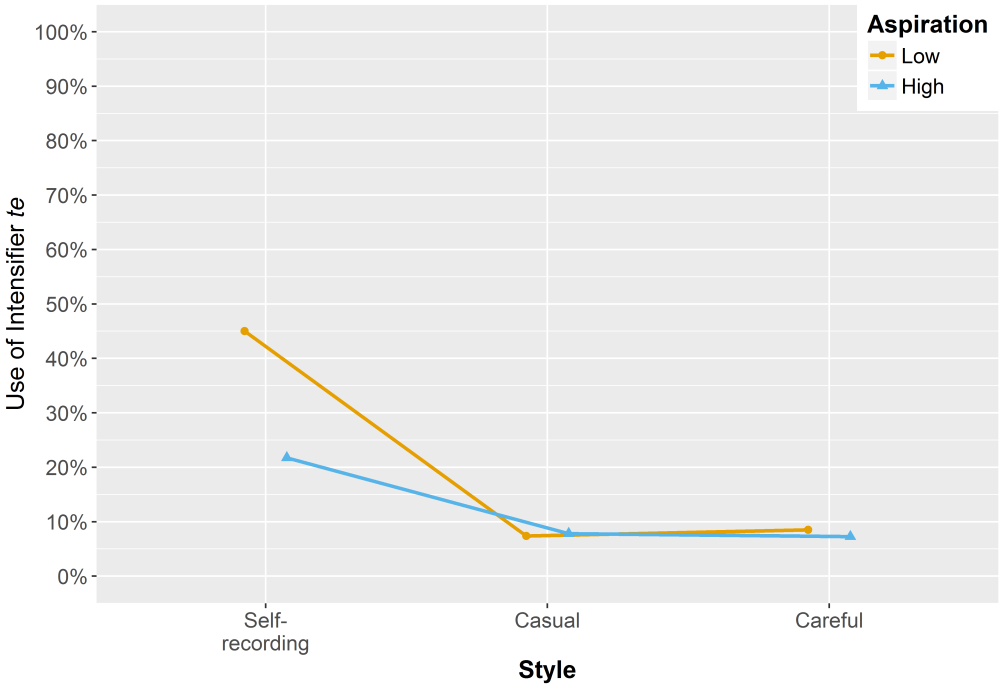


Figure 6.4: Style variation for intensifier *te*: class

the use of *te* between self-recordings and interviews, and this is true for all social groups. Despite the low token number for *te*, these results challenge what we have observed before in the interview data alone where we saw little shared social meaning for *te*. As with classifier omission, intensifier *te* is also linked to a casual Beijing Mandarin register. Specifically, the use of *te* clearly differs across registers, that is, across the more casual self-recordings and the more formal interviews. By including data from self-recordings, we found that *te* does have important social meanings (i.e. non-standardness and casualness), contrary to a lack of social patterning as suggested by the interview data alone.

### 6.3.5 Summary of results

In the previous sections, I have analysed and presented results related to the variation of intensifier *te* in the data. One of the limitations of these analyses lies in the limited size of the corpus, and as I have suggested, this could be due to the lexical nature of *te* and its infrequent use in the current project.

To summarise, we see the use of *te* is conditioned mainly by two linguistic factors and no social factors were found significant in the mixed-effect models. The lack of obvious social constraints seems to be confirmed in the analysis of style where participants showed no shifting from careful to casual interview setting. Combining self-recordings with interviews, in the analysis of style range, we begin to see a subtle pattern of formality-based style shift, although this is only evident for less than half of the participants. Furthermore, when we plot the use of intensifier *te* across styles and social groups (by gender and aspiration), a more interesting and familiar style shift appears in the data. Similar with classifier omission, the use of the local variant—te—also demonstrates a upward shift from the more formal interview register to the more casual self-recording register.

## 6.4 Discussion

Both the descriptive overview and quantitative analysis of intensifier *te* provided us with informative findings on the use and variation of the feature. In this section, I summarise the findings and offer an discussion in relation to the linguistic constraints of *te* and its potential social meaning, incorporating some qualitative data as I have done for neutral tone and classifier omission. I also draw comparisons between *te* and the other two Beijing

Mandarin variables, aiming to further understand Beijing Mandarin as a variety in general.

### 6.4.1 Linguistic constraints

Out of the three linguistic factors—modified structure type, syllable, and function—tested in the regression models, only modified structure type and function showed significant influence over the use of intensifier *te* in the corpus. Specifically, *te* tends to be used to intensify certain grammatical types (verbs and to a lesser degree, noun structures) and structures with certain functions (adverbial, attributive, and complementary structures). As there is a lack of existing research on intensifier *te*, these results are informative and useful for future research in the area of Mandarin intensifiers.

Additionally, we find that the number of syllables in the modified structure does not affect the use of *te*. This, in a way, contradicts the claim put forward by Qi (2012) where *te*—considered an infrequent intensifier—is restricted to modifying monosyllabic structures. Based on the data at hand, I argue that the lack of significant influence from number of syllable on the use of *te* is the result of intensifier *te*'s increase in frequency and possible further grammaticalistion. As previously shown in Table 6.1 in Section 6.1, the overall frequency of *te* in the current data is much higher than other dialectal/informal intensifiers and only lower than the two most frequently used intensifier *tebie* and *hen*. Intensifier *te* is used by the participants' in this study more frequently than expected, and it is reasonable to posit that the increased frequency is linked to more grammaticalisation, which leads to fewer limitations on the syllable numbers of the modified structure.

### 6.4.2 Non-standardness and vernacularity

According to existing research (Hao, 2012; Qi, 2012), intensifier *te* is similar to classifier omission regarding its (non-)standardness: the use of *te* instead of other 'standard' intensifiers such as *hen* or *tebie* is also seen as dialectal and non-standard in *Putonghua*. There is evidence in the data at hand supporting the potential meaning of non-standardness of intensifier *te*. For example, we found four participants avoided *te* altogether in the corpus, similar to what we saw in the analysis of classifier omission. The overall rate for intensifier *te* (6.7%) is also much lower than that of neutral tone (55%) and slightly lower than classifier omission (14%). The reason of this is twofold: first, as a non-standard feature, *te* is avoided by participants' in formal speech such as interviews. Secondly, intensifier *te* is a lexical

feature, which is more limited in its use than phonetic (e.g. neutral tone) and syntactic (e.g. classifier omission) features in general. The combination of these two factors explains the extremely low frequency of intensifier *te* in the data.

There are also differences between the (non-)standardness of intensifier *te* and classifier omission. As mentioned at the beginning of this chapter, *te* is seldom studied as part of the Beijing Mandarin dialect in comparison to classifier omission and neutral tone. Consistent with a lack of research on the feature, *te* also receives fewer overt commentaries from Beijing Mandarin speakers, as shown both in the initial consultations of this project and in the following extracts from my interviews.

In the extracts (1) and (2), the participants were aware of the feature as part of the Beijing Mandarin variety, but since they did not list them as the major characteristics, it is likely that *te* is less stereotypical of the local variety.

(1) Betty: Intensifier
Character:
巨、巨。嗯，巨很——巨就大家都会用。巨也是，对，巨也是……特。
Translation:
(When asked about whether Beijing Mandarin uses *hen* to intensify) We use *ju*, everyone uses *ju*, *ju* is one of the intensifiers, and *te*.

(2) Nancy: Beijing accent
Character:
所以我就觉得你北京话说的很好啊，比我还好。就是儿化音有了，然后就很多连起来的那些音也有，然后语速还特别快……嗯，倍儿，特，嗯。
Translation:
I think you speak Beijing Mandarin really well, better than I do. You have the *erhua* and you link the pronunciations of words (lenition) and you speak really fast. [...] (We also use) *beir* and *te*.

Additionally, Extract (3) represents many participants' attitudes and metalinguistic awareness towards this feature. In the first extract, Fred first denied that *te* is Beijing before correcting himself, while insisting that *beir* is the stereotypical intensifier in Beijing. It is interesting to mention

that Fred was using the feature before and after this short extract in his interview, further indicating his lack of awareness for this feature.

(3) Fred: Intensifier
Character:
北京人也没有说特的吧？你要刻意这么说的话，会有人说，但是现在少多了。一般不都是倍儿嘛。
Translation:
Beijingers don't say *te*, do we? If you really pay attention, there must be people using it, but not that many. It's normally *beir*.

This lack of awareness in the current data, together with suggestions made on other more stereotypical Beijing Mandarin features such as *erhua*, neutral tone, and those listed in Table 2.2 in Chapter 2 Chen (1999); Hu (1986a,b); Zhang (2005), it is then not hard to see that in contrast with neutral tone (and to a lesser degree, classifier omission), intensifier *te* is less recognised as a Beijing Mandarin feature and thus potentially conveys less vernacularity. In fact, some scholars (e.g. Fu, 2014; Hao, 2012) treat *te* as broadly northern and generally consider the stereotypical Beijing intensifier to be *beir*, just as extract (3) shows.

In other words, intensifier *te* seems less enregistered as part of the Beijing identity, as least in contrast to the other two Beijing Mandarin features. This lack of clear geographic association to Beijing and overt awareness leads to the impression that intensifier *te* is dialectal, non-standard, but not necessarily Beijing. Nonetheless, from the results of stylistic analyses where a clear register shift is present across social groups, we have learned that *te* does have important social meanings. To be more exact, as a dialectal feature, te is associated with vernacularity, which translates to both non-standardness and casualness in this case.

The combination of non-standardness and the lack of awareness can potentially help us understand the lack of significant effects from social factors in the analysis. Since we did not see a clear picture regarding social factors from the data in this project, it is possible that the social stratification of *te* is less direct and clear-cut than neutral tone and classifier omission which features are relatively more-established. The pattern could also be a result of the low number of tokens, which I have acknowledged in previous sections.

To summarise, intensifier *te* is often used as a non-standard dialectal feature and conveys non-standardness as classifier omission does, although

not as strong. As a less well-established Beijing Mandarin feature, *te* shows little clear social stratifications regarding the factors I have tested. Its association to localness and vernacularity is likely to be expressed indirectly through non-standardness, though the quantitative evidence from the current study is inconclusive.

# Chapter 7

# Stylistic Repertoire

The three main variables presented in Chapters 4, 5 and 6 were shown to convey social meanings relating in different ways to localness, non-standardness, and masculinity. Neutral tone behaves like a traditional vernacular feature with strong links to masculinity as well as localness. Specifically, male students, regardless of their programmes, have access to a wider range of neutral tone variation than their female counterparts. Classifier omission, on the other hand, conveys non-standardness across different programmes, which is further related to aspiration. Language students with low aspiration show the highest use of classifier omission. I have suggested that intensifier *te* is also likely to be associated with verncularity—non-standardness, localness, and casualness—though to a much lower degree since the pattern seems to be less clear across different types of data.

These results on how individual Beijing Mandarin features are used by speakers indicate that these linguistic variables are associated with social meanings beyond their semantic meanings and syntactic functions. Investigating individual variables is of course important and meaningful for the understanding of Beijing Mandarin and its users. Nonetheless, as pointed out by Moore (2004), a full understanding of sociolinguistic variation needs to incorporate both inter- and intra-speaker variation by considering socially-conditioned variation and speakers' stylistic variation. In the third-wave variarionist approach (Eckert, 2012), style and stylisation reach way beyond formality and attention paid to speech (Labov, 1966b), and are seen as a more multidimensional and holistic practice for the language user. Particularly relevant to the Beijing Mandarin features mentioned here—neutral tone, classifier omission and intensifier *te*—is the discussion on the indeterminacy in the study of social meaning (Eckert, 2012; Johnstone and Kiesling, 2008; Moore and Podesva, 2009; Podesva and Chun, 2007). The association between social meanings and linguistic variables/variants

are often underspecified, which in turn allows speakers to construct more context- and community-specific meanings in interactions through stylistic practices (Moore and Podesva, 2009; Podesva and Chun, 2007). So far in this thesis, we have looked at the social meanings indexed by different Beijing Mandarin features; however, an analysis of Beijingers' style and repertoire is needed to fully explore the construction of locally- and individually-significant meanings in Beijing.

In this chapter, I build on previous discussions on the stylistic variation observed in the data, and try to piece together if and how speakers use the variety and the meanings associated with individual features agentively to construct distinct identities and personae (Eckert, 2016). In the following sections, I also introduce an additional Beijing Mandarin feature which is often considered a stereotypical feature of Beijing Mandarin (Zhang, 2005)—*erhua* (syllable-final rhotacisation)—to offer a fuller picture of Beijing Mandarin.

The chapter is structured as follows: I first introduce *erhua* (rhotacisation) and explain briefly the stylistic variation in the use of this phonetic feature, focusing on style range and social factors including gender and aspiration, as I have done for the three main variables in previous chapters. I then present three individuals with different styles/personae in my data, aiming to understand how individuals make use of Beijing Mandarin variables differently in constructing individual speech styles and how an understanding of these individuals' styles can help us disentangle the social meanings of Beijing Mandarin as a variety.

## 7.1 Additional Phonetic Variable: *erhua*

To further enrich our understanding of Beijing Mandarin as a variety, I introduce an additional variable '*erhua*', also known as (word-final) rhotacisation, in the current section. Including a fourth variable in this chapter helps to confirm (or contrast) the stylistic patterns found in my previous analyses, especially regarding neutral tone. Neutral tone and *erhua* have many characteristics in common: they are both phonetic features considered representative for Beijing Mandarin and are both stereotypes that attract overt metalinguistic comments. As a more well-known feature, *erhua* in Beijing Mandarin has been previously researched in variationist sociolinguistics by Zhang (2005, 2007b, 2008). By incorporating *erhua*, I aim to link my findings with those from previous studies regarding the social meanings of *erhua* and Beijing Mandarin in general.

Due to the supplementary status of *erhua* and the limit of space in the project, in the following sections, I provide a brief introduction of the feature and an analysis focused on participants' style range rather than presenting a full analysis. This approach helps to showcase the stylistic range my participants have and how a combination of variables can be used in different ways to index social meanings according to speakers' needs.

### 7.1.1 *erhua*

As briefly mentioned in Chapter 3, *erhua* (Chinese: 儿化), literally translated as 'rhotacisation', is a phonological/phonetic phenomenon found in most Mandarin varieties including Beijing Mandarin and the standard variety. During the process of *erhua*/rhotacisation, a rhotic suffix /ɚ/—often written as 'r' in *pinyin*—is inserted after certain syllables. *Erhua* is also referred to as the '[ɚ] suffix' (e.g., Duanmu, 1990) or 'the *er* suffix' (e.g., Lin, 1989, 1993).

The suffix /ɚ/, written as *er*/儿, means 'son' in isolation. Historically, *er* was considered a diminutive suffix and conveyed the notion of 'smallness' when affixed to nouns (Duanmu, 2007). Several scholars (Duanmu, 2007; Li and Thompson, 1981) have suggested that the suffix has now lost its semantic meaning and can be added to many other word classes such as verbs, adjectives and classifiers, although Zhang (2001) showed that words incompatible with a diminutive meaning are less likely to be rhotacised.

Example (1) below shows how *erhua* is represented in both *pinyin* and character[1]:

(1) 'flower'
original: *hua* – 花
*erhua*: *huar* – 花儿

According to Duanmu (2007), *erhua* is a unique feature in Mandarin varieties since many other Chinese dialects do not have *erhua* at all. There is little confusion in communication due to the fact that *erhua* mainly serves stylistic function rather than grammatical or semantic functions. Nonetheless, within Beijing Mandarin, *erhua* can sometimes be used to distinguish meaning as shown in example (2-a) (original word) and (2-b)(with *erhua*):

(2) a. *bao* *bei* (宝贝)
precious shell

[1]the process of *erhua* is also reflected in its phonology, see Duanmu (1990, 2007) and Lin (1989, 1993) on their discussions of *er* suffixation

'precious'

b. *bao* *beir* (宝贝儿)
precious shell-R
'term of endearment'

Similar to the case of neutral tone, *erhua* is also used more in Beijing Mandarin than in the standard language. The only major difference between *erhua* and neutral tone in their use across the two varieties is that since *erhua* is marked in orthography as well as pronunciation. Language users are expected, if not required, to indicate *erhua* in written texts. The standard use of *erhua* is restricted to certain lexical items which are listed in *putonghua* pronunciation guides and dictionaries. According to these texts and the use of *erhua* in Beijing Mandarin, *erhua* words can be divided in to four categories: obligatory (in both varieties), optional (in both varieties), discouraged (only rhotacised in Beijing Mandarin) and forbidden (in both varieties). In examples (3-a) to (3-d), I present the four types of words regarding the use of *erhua*.

(3) a. obligatory:

小 孩儿
*xiao* *hair*
small child

'child'

b. optional:

香 水(儿)
*xiang* *shui(r)*
fragrance water-R

'perfume'

c. discouraged:

密 码儿
*mi* *mar*
secret code-R

'password'

d. forbidden:

*手 机儿
**shou jir*
hand machine-R

*intended*: 'handset, mobile phone'

As suggested in Zhou (2006), there seems to be no linguistic reasons in these

categorisations. One possible criterion for words that cannot be rhotacised (forbidden) is that these words are not compatible with a diminutive meaning, as seen in example (3-d).

Several linguistic constraints of *erhua* have been studied by previous research. For example, Zhang (2001) has investigated the effect of the rhotacised final and found that vowels like /i/ and /y/ are the more likely to be rhotacised. She also noted that words compatible with a diminutive meaning are more likely to be rhotacised. Zhou (2006), as I have mentioned before, discovered that nouns are the most rhotacised word class. Since linguistic constraints are not the focus for this section, I now move onto the process of coding and analysing *erhua* in the current dataset.

### 7.1.2 Token selection and coding

As discussed above, my main purpose in including *erhua* for the stylistic analysis is to provide a fuller picture of participants' stylistic variation with a wide range of variables. Therefore, I have adopted a slightly different approach in coding and analysing *erhua* by focus more on the social factors and less on the statistics-based quantitative analysis. I provide details in the coding and analysis of *erhua* in this section.

Token selection of *erhua* was done auditorily and in two stages. First, when transcribing the recordings, I marked *erhua* by adding a rhotic suffix *er*/儿 to words that were pronounced with *erhua* since *erhua* is usually marked in orthography. Same as neutral tone, the coding of *erhua* was done auditorily. During the process, the status of any ambiguous tokens was determined on an individual basis by visually inspecting the spectrogram produced by Praat (Boersma and Weenink, 2016). A lowering in the third formant was used as the main criterion for the presence of *erhua* as research has found that rhoticity in vowels result in a lowered $F_3$ (Thomas, 2010). Figure 7.1 and 7.2 are two examples of fa/法 ('method'). The first shows the non-rhotic vowel /a/ (around 2500Hz) and the second one can be seen with a much lower $F_3$ (lower than 2000Hz) which suggests rhoticity/*erhua*. Tokens were then marked with *er* when necessary and included as part of the orthographic transcription for respective participants.

During the second stage of coding, I relied on the transcriptions with marked *erhua* tokens. For each participant, I only included their use of 20 *erhua* words in the analysis to offer a snapshot of individuals' range in using *erhua*. Specifically, for both interviews and self-recordings, a list of all the words and their frequencies were generated using an on-line tool hosted

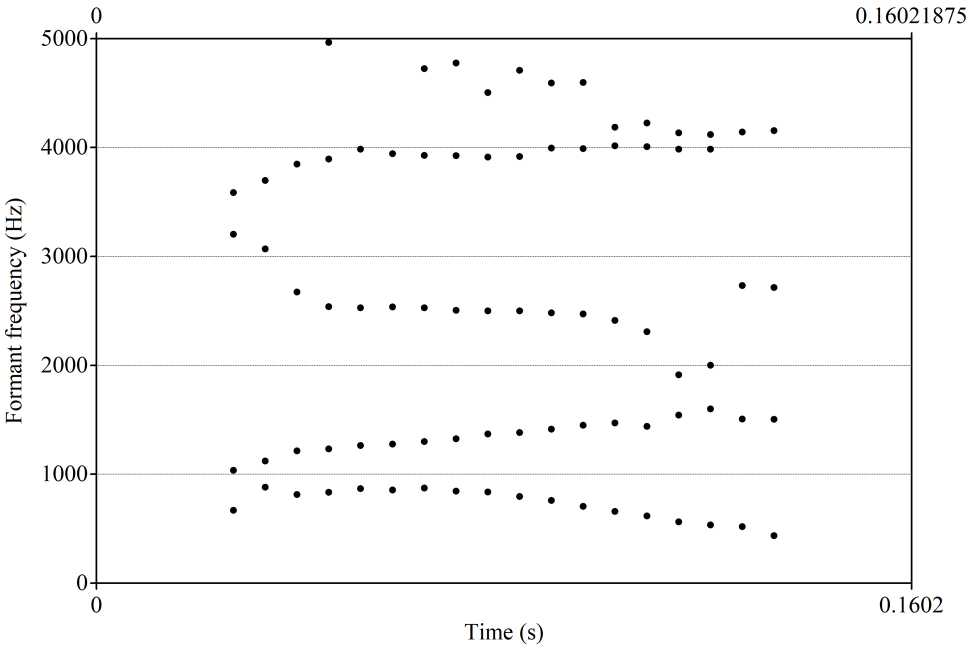


Figure 7.1: Formant contour of a non-rhotic /a/ in *fa*/法 'method'

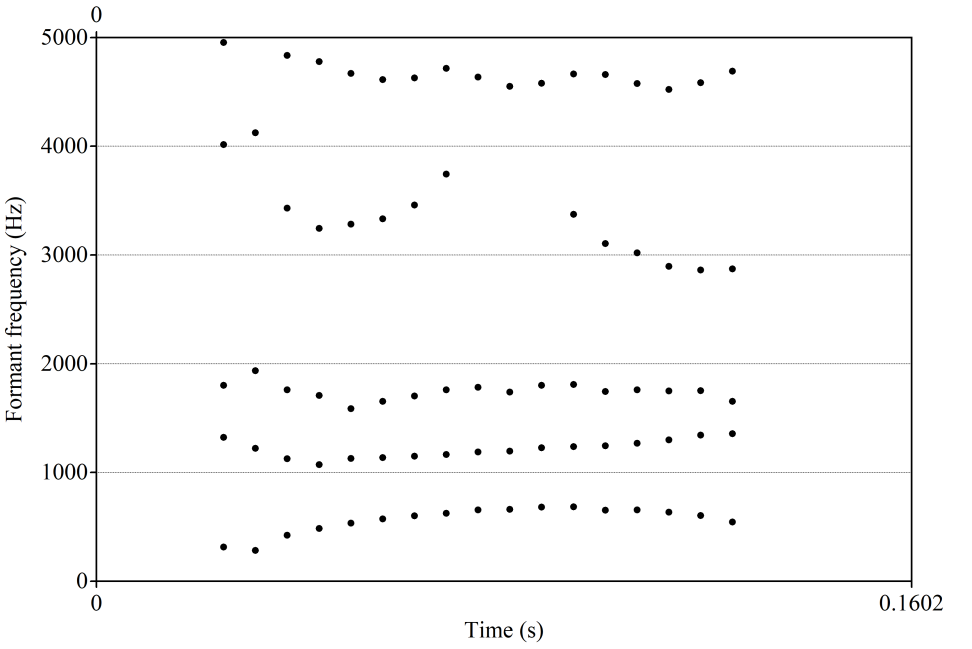


Figure 7.2: Formant contour of a rhotic /aɻ/ in *erhua* in *far*/法儿 'method'

by Ministry of Education and Institute of Applied Linguistics (2009). The top 20 most frequently used words were chosen after excluding words that are either always rhotacised (obligatory) or never rhotacised (forbidden), as mentioned in example (3-a) and (3-d). Two word lists were used for this procedure: Wang's (1999) list of obligatory *erhua* words and both Lu's (2001) and Wang's (1999) word lists for the forbidden *erhua* words. The lists of words used in coding *erhua* are included in Appendix E. To clarify, the *erhua* words coded here include those can be rhotacised in both standard Chinese and Beijing Mandarin as well as the ones only rhotacised in Beijing Mandarin—similar to what I did for the coding of neutral tone.

Additionally, I made sure that all participants have at least 100 *erhua* tokens across the pre-selected 20 high-frequency words for interview and 50 tokens for self-recording. For recordings where this was not possible because participants did not use the high-frequency words, I went through the transcriptions of these recordings and included *erhua* words not in the pre-selected list until 50 tokens were coded. For some of the short recordings, I coded as many *erhua* tokens as possible. Table 7.1 shows the distribution of tokens across participants for both interview and self-recording data.

| Participant | Recording Type | |
|---|---|---|
| | Interview | Self-recording |
| Bob | 111 | n/a |
| Betty | 101 | n/a |
| Clare | 101 | 9 |
| Cat | 111 | 70 |
| Charlie | 112 | n/a |
| David | 104 | 47 |
| Daniel | 104 | n/a |
| Fred | 107 | n/a |
| Mary | 102 | 23 |
| Mike | 102 | 50 |
| Nancy | 140 | 50 |
| Hannah | 106 | n/a |
| Sara | 118 | 51 |
| Terry | 111 | n/a |
| Daisy | 104 | n/a |
| Harry | 104 | 56 |
| Helen | 114 | n/a |
| Rachel | 123 | n/a |
| Kevin | 102 | n/a |
| Scott | 106 | 20 |
| Matt | 106 | 55 |

Table 7.1: Token number for all participants: *erhua*

As the analysis here is limited to style, the focus is in the overall fre-

quency of *erhua* and its variation across contexts. No linguistic factors were coded for *erhua* in this analysis, though social factors such as gender, aspiration, and programme were coded following the criteria in Chapter 4.

### 7.1.3 Stylistic variation

In this section, I present the analysis of participants' stylistic range and a comparison between *erhua* and the three main variables, especially neutral tone. The aim of this analysis, as before, is to further our understanding of the social meanings of Beijing Mandarin and individuals' stylistic variation by incorporating a secondary phonetic variable. Following the structure in previous sections, I first present participants' range of *erhua* across different styles before discussing the patterns regarding the two social factors—gender and aspiration.

Table 7.2 presents all participants' use of *erhua*. As expected, the rate of rhotacisation was more similar to that of the other phonetic variable—neutralisation. Only four participants (Betty, Cat, Nancy, Rachel) had an overall rate of less than 70% across all contexts. This again is caused by the similar nature of the two phonetic variables: they are both a part of the phonology/phonetics of the standard language, and are unlike classifier omission and *te* which are forbidden in *Putonghua*.

Regarding the formality-based style-shifting, the table shows a much more complex pattern than found for the previous variables. Ten participants showed little difference in using *erhua* across styles, as shown in the top part of the Table 7.2. Moreover, most of these participants (i.e. apart from Daniel, Daisy and Terry) also showed the opposite direction of shifting where they used more *erhua* in careful speech. The next five participants in the middle part of the table had a wider range of variation in using *erhua*, although they also showed the opposite pattern in style-shifting.

The bottom six participants seemed to conform to a formality-based stylistic variation pattern and used *erhua* more in their most casual speech. Possibly due to the low token number in his self-recording, Kevin, who did not use *erhua* the most in his self-recording, still showed a preference of *erhua* in casual speech in general. Although less clear than the pattern found for neutral tone (Table 4.8), aspiration seems to be effecting speakers' use of rhotacisation. Five of the last six speakers who have shown a tendency towards an increase of *erhua* in less formal speech have a higher aspiration level. Compared with the use of neutral tone across contexts for all participants, the use of *erhua* seems to have different meaning for students with

| Participant | Gender | Aspiration | Style | | | |
|---|---|---|---|---|---|---|
| | | | Careful | Casual | Self-recording | Range |
| Daniel | Male | Low | 78% | **79%** | – | 1% |
| Daisy | Female | Low | 89% | **91%** | – | 2% |
| Terry | Male | High | 77% | **82%** | – | 5% |
| Fred | Male | Low | **95%** | 92% | – | 3% |
| Bob | Male | Low | **86%** | 81% | – | 5% |
| Rachel | Female | High | **59%** | 53% | – | 6% |
| Betty | Female | Low | **59%** | 53% | – | 6% |
| Charlie | Male | Low | **83%** | 76% | – | 7% |
| Helen | Female | Low | **96%** | 88% | – | 8% |
| Mary | Female | High | **92%** | 89% | 88% (22/25) | 4% |
| Scott | Male | Low | **93%** | 79% | – | 14% |
| Hannah | Female | Low | **96%** | 81% | – | 15% |
| Harry | Male | Low | **100%** | 96% | 88% (50/57) | 12% |
| Mike | Male | High | **83%** | 71% | 67% (34/51) | 17% |
| Nancy | Female | Low | **76%** | 69% | 51% (27/53) | 25% |
| Kevin | Male | High | 74% | **89%** | 82% (14/17) | 15% |
| Clare | Female | High | 81% | 89% | **91%** (10/11) | 10% |
| Sara | Female | High | 70% | 78% | **92%** (49/53) | 22% |
| David | Male | Low | 70% | 89% | **94%** (48/51) | 24% |
| Matt | Male | High | 74% | 83% | **99%** (66/67) | 25% |
| Cat | Female | High | 24% | 52% | **59%** (39/66) | 35% |

Note: Participants without self-recordings are presented before those with self-recordings in ascending order of style range; top section = those with minimal stylistic variation, bottom section = those with an expected formality-based style-shifting pattern; boldface indicates individuals' highest frequency; numbers in parentheses represent target and total token numbers.

Table 7.2: Style range for all participants: *erhua*

different aspiration levels. For those who have high aspiration, using *erhua* in words from the optional and forbidden categories is less standard and avoided in formal settings, while for students with low aspiration, no such pattern was found in their production. This is somewhat similar to the results from Zhang's (2001) study on Beijing managers. She found no overall topic effect for *erhua* in the Beijing managers' production nor among state managers who value a local identity; however, within the subgroup of yuppies, there was a topic effect and yuppies used more *erhua* when talking about Beijing-related topics. It is interesting that here I have noticed the same pattern where those who are more inclined to a local identity (i.e. students with low aspiration) showed little stylistic variation for *erhua* and those with high aspiration style-shifted according to the formality level.

In Figure 7.3 and 7.4, I plot the use of *erhua* by different social groups in different styles. The figures show that a high use of the feature was maintained by male speakers and those with low aspiration. In contrast with all the other variables, *erhua* showed a bigger and clearer divide between subgroups. Men and students with low aspiration consistently used 15% more *erhua* than women and highly-aspirational students. Overall, this is in line with existing literature which have found that male speakers and speakers

with low aspiration prefer the local variant (Baran, 2014). Specifically for gender, the patterns here also mirror Zhang's (2005) findings of *erhua* in her study where the local variant is disfavoured by women.

Regarding the gender differences here, I want to draw a comparison between the gender patterns we have observed here and those for neutral tone. Recall that for neutral tone, men showed a higher overall use than women, yet the gender differences in both self-recordings and careful interview setting were minimal (Figure 4.18). In their use of *erhua*, a more established Beijing Mandarin variable, the gender differences are much clearer.

In addition, the stylistic variation within each social group is very different. First, Figure 7.3 shows that for both men and women, there was a contrast in using *erhua* between self-recordings and interviews while no such difference was found across the two interview styles. This is similar to the register effect we have seen in classifier omission and intensifier *te*. If we compare Figure 7.3 with Figure 7.4, which shows a similar between-interlocutor effect (i.e. between self-recordings and interviews), it is reasonable to posit that the cross-interlocutor shifting is closely related to participants' share knowledge of *erhua* being a local feature and thus disfavoured in formal speech.

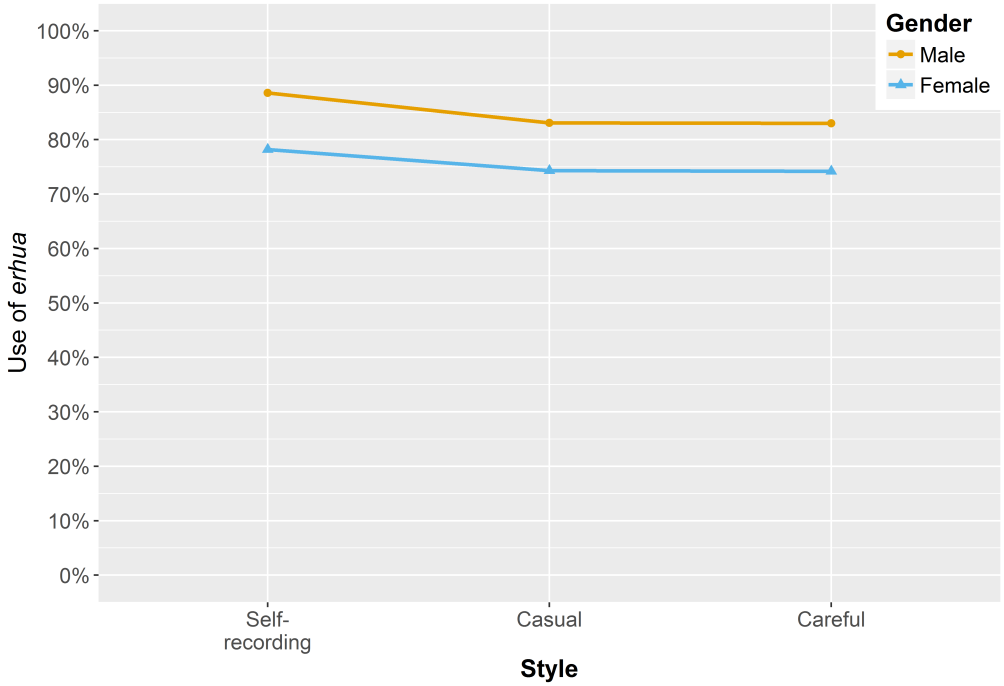


Figure 7.3: Style variation for *erhua*: gender

Taking into consideration of both gender and style differences I just discussed, it is interesting to see that the use of *erhua* showed a sharp gender divide without a clear style pattern. Traditional Labovian studies have of-

ten associated the use of established vernacular features with sharp gender and style differences (Trudgill, 1972, 1974); however, in my data, this pattern was not confirmed. I argue that this further challenges the usefulness of traditional formality-based style distinction as well as the association between linguistic features—established or not—and fixed meanings (e.g., gender and/or formality).

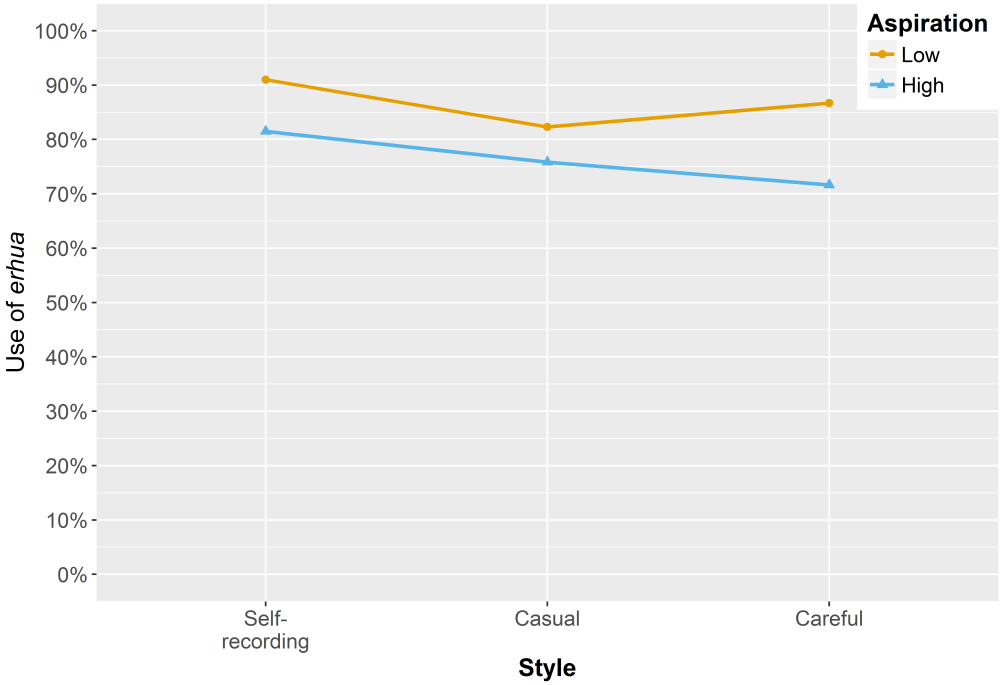


Figure 7.4: Style variation for *erhua*: class

There are also differences between the two figures in the interview data alone: while men and women both showed little style-shifting across casual and careful interview styles, groups with different aspiration shifted towards opposite directions across their interview styles. The different patterns potentially suggest that the meaning of *erhua* differ across different aspiration levels. To illustrate, for students with high aspiration (the blue line), as mentioned in the results from Table 7.2, the non-standardness of *erhua* seemed to be the main meaning of the feature in formal speech as they continued to lower the rate of rhotacisation across three contexts. The other group—students with low aspiration do not show this pattern and in fact used more *erhua* in careful interview than in their casual interview, which suggests that they did not limit their use of rhotacisation to in formal speech.

### 7.1.4 Discussion

In this discussion, I bring together different style-shifting patterns from the four variables and engage existing literature on Beijing Mandarin and language variation in order to address the key question regarding Beijing Mandarin's social meaning.

Combining the results from statistical modelling and stylistic analysis, I have suggested that different Beijing Mandarin features share certain social meanings. First, all four features convey casualness, as demonstrated in the decrease in the use of local variants from formal interview setting to casual interview setting (e.g., neutral tone and classifier omission) or from interviews to self-recordings (e.g., intensifier *te* and *erhua*). This pattern is not as clear and obvious for all the participants, yet as I have argued in previous chapters, this is the general trend in the data, especially when self-recordings are considered.

To further illustrate the casualness shared by all linguistic factors, I provide two extracts from the same speaker—Matt—who showed a sharp style-shift from careful to casual style. In extract (1), I asked about his internship and future career plan, he first complained about how busy the job was but then followed up by saying that he wanted to stay at the company because he did not want an easy job. In the extract here (and the following extract (2)), I use capitalisation for neutral tone words, boldface for classifier omission, and underlined words for *erhua* tokens. Intensifier tokens are represented by boldface and underline. Words wrapped in boxes were produced using the respective Beijing Mandarin variant.

There are 10 Beijing Mandarin tokens (neutral tone = 7; classifier omission = 1; intensifier *te* = 1; *erhua* = 1) in this example and four of them were realised using the local variants. These four tokens are all neutral tone tokens, and the example shows the speaker's more standard/less local style where he neutralises 60% of neutral tone words while using the non-local variant for all three other variables.

(1) Matt: Future career
(CAPITALISATION = neutral tone, **boldface** = classifier omission, underline = *erhua*, **boldface + underline** = intensifier; box = Beijing Mandarin variant)

*Pinyin*:
*haishi wo keneng bijiao shuyu nazhong, yourenxing de ren, jiushi nazhong. na dajia dou juede lei, na wo ye juede* ***hen*** *lei. danshi wo kankan wo daodi neng jianchi dao shenme CHENGDU, ranhou daodi neng zuodao shenme CHENGDU. jiushi BUZHI YU jiushi shuo a gan sayue, wo bugan le, wo zai quzhao biede. zhao dao zuihou, baozhe zhezhong sixiang, KENDING zuihou jiu zhao* ***yige*** *qingsongde, huozhe shi, ye bushi shuo, ye bushi shuo jiushishuo leide yiding hao, qingsong yiding buhao. danshi jiushi ganjue haishi chen nianqing duo gan yixie ba, jiushi zhezhong ganjue. youjinr ganjin shi ba, bie deng yihou sansishi le, zai xiang pin pinbule le. jiu wo zhezhong shuyu nazhong jiushi mei shenme houguzhiyou nazhong, fang, fang bama gei zhunbei haole, che, che bama gei zhunbei haole. sha dou gei zhunbei haole, ni jiu zheng duo zheng shao FANZHENG neng huo. jiushi zheizhong. najiu geren ZHUIQIU buyiyang, wo geng qingxiangyu ni zheizhong ZHUIQIU.*
Character:
还是我可能比较属于那种有韧性的人，就是那种那大家都觉得累，那我也觉得很累。但是我看看我到底能坚持到什么程度，然后到底能做到什么程度。就是不至于就是说，啊，干仨月，我不干了，我再去找别的。找到最后，抱着这种思想，肯定最后就找一个轻松的，或者是一一也不是说、也不是说就是说累的一定好，轻松一定不好。但是就是感觉还是趁年轻多干一些吧，就是这种感觉。有劲儿赶紧使吧，别等以后三四十了，再想拼拼不了了。就我这种属于那种就是没什么后顾之忧那种。房，房爸妈给准备好了。车，车爸妈给准备 好了。啥都给准备好了，你就挣多挣少反正能活。就是这种。那就个人追求不一样，我更倾向于你这种追求。
Translation:
Maybe I am just more resilient. When everyone else thinks it's very tiring, of course I feel tired as well. But I want to see how far I can go with this and how much I can take. I don't want to quit a job after three months and start looking for a new one. If you have that mentality, you will end up with a job that's easy to do. I'm not saying easier jobs are

> bad, but I feel like I should try to do more when I'm young. Better work hard now because when I'm 30 or 40, I won't have this much energy. I don't really have to make a lot of money: my parents have got me a flat and a car, so I can make a living doing any job. I just have a different life philosophy like you do.

In extract (2) below, however, we can see that Matt shifted to a more local style. The following narrative is extracted from his self-recording with a male friend who is also from Beijing. Prior to this narrative, the friend was talking about how much his parents interfered with his personal life (e.g., job, study, relationship etc.) and Matt responded with a story involving his own parents.

(2) Matt: Parents

*zhe zhong* shir *bu shi ni ma shuo ma yinggai. you shenme ke da de ya, ni haizi de lu ziji zou bei, zhe you shenme ke da de ya? yihou yuan qiong yuan fu, guan tei duo le zhe jiushi: wo shi tanlian'ai wo bama mei guan wo, kaoshi wo bama mei guan wo, wo tama gaokao nayinian, kao wan diyi-tian, woshuo huijia,* JIALI *mei* renr, ***yi*** renr *meiyou. wo bama dou buzhidao wo gaokao wanle. lia* renr ***yi*** renr *mei huijia. jiu wo tama zailouti zuo le yixiaoshi, deng dier-tian jiezhe kao. ranhou tama bushi yuanlai ya nage shuo shenme xie wan zuihouyi* ker *dou meiyou yuxiangzhongde jidong, woshuo qunima, wo xiewan zuihouyi* ker *ke tama ji-dong le. zhongyu nimabi kaowanle. wo gaokao na qitian, ta gaokao zhiqian qitian bushi fangjia ma. wo na qitian* ***te*** *tama tuifei, tiantian dou zaijia chouyan. zaijia chouyan sha dou bu gan, jiu* ***te*** *tui, jiu tiantian zaijia jiu xiang, wocao, nima you de kaoshi you de kaoshi zhen tama fan. zuihou kaode hai couhe. na ni ya wenzong kao* DUOSHAO fenr *ya?*

Character:

这种事儿不是你妈说嘛，应该。有什么可打的呀，你孩子的路自己走呗，这有什么可打的呀？以后愿穷愿富，管忒多了这就是。我是谈恋爱，我爸妈没管我。考试，我爸妈没管我。我他妈高考那一年，考完第一天，我说回家，家里没人儿，一人儿没有。我爸妈都不知道我高考完了。俩

人儿一人儿没回家，就我他妈在楼梯坐了一小时，等第二天接着考。然后他妈不是原来丫那个说什么写完最后一科儿都没有预想中的激动，我说去你妈，我写完最后一科儿可他妈激动了。终于你妈逼考完了。我高考那七天——他高考之前七天不是放假嘛——我那七天特他妈颓废，天天都在家抽烟，在家抽烟啥都不干。就特颓，就天天在家就想，我操，你妈又得考试又得考试真他妈烦。最后考的还凑合。那你丫文综考多少分儿呀?

Translation:

Surely your mum should be the one who is mad at you. Why were you (and your dad) even fighting? Kids should be able to make their own decisions, why fight about it? They cannot control what you want to do, they should really mind their own business. My parents don't care about who I am dating or how I am doing in my exams. When I was taking the college-entrance exams, I decided to go home after the first day of exams and no one was at home. My parents didn't even know when I finished my exams so no one came home, and I had to sit on the staircase outside for an hour. I just went back to school next day for more exams. Others say that they didn't feel as relieved as they had expected after the exams but I felt super relieved afterwards. I was so depressed before the exams when they gave us a week off and all I did was smoking at home. I was so depressed. I would be thinking how come there were so many exams all day. But I did fine in my exams. How did you do in your humanities exam?

In the second extract, there are 14 Beijing Mandarin tokens (neutral tone = 2; classifier omission = 2; intensifier *te* = 2; *erhua* = 8) which were all produced using the respective local variant. As can be seen from the two extracts, there is a sharp contrast in Matt's use of local features and this is triggered by changes in the context where the two narratives occurred. Specifically, the narratives were directed at different interlocutors (a researcher from outside of the community versus a close friend who shares many life experiences). The topics were also different: the discussion on future career is likely to be more formal than complaining about parents and exams. Extract (2) is one of the narratives in which Matt showed a high use of local features, and together with extract (1), they demonstrate that speakers use a wide range of linguistic features to facilitate a style

shift.

Related to casualness, all four Beijing Mandarin features also seem to be representative of the vernacular status of Beijing Mandarin and this is shown in different ways for different features. For example, two of the key connotations of a vernacular—masculinity and localness—are found in all four features. Masculinity, shown in gender differences across styles, can be seen in all variables especially in *erhua* and neutral tone. Localness, on the other hand, is closely related to students' programme choice/future career path and aspiration. Students who are likely to become teachers and those with low aspiration are more attracted to a local identity as mentioned before, and we observe these patterns in all variables.

Other than these shared meanings, individual variables are also associated with various other characteristics. Non-standardness is one of the most significant connotations emerged in the analysis. In comparison to neutral tone and *erhua* which also exist in the standard language, classifier omission and intensifier *te* were disfavoured in careful settings. The patterns for classifier omission, as seen in Table 5.4, Figure 5.4 and Figure 5.5, show that participants limit their use of non-standard omission in careful settings but shift to a much higher use when in casual speech.

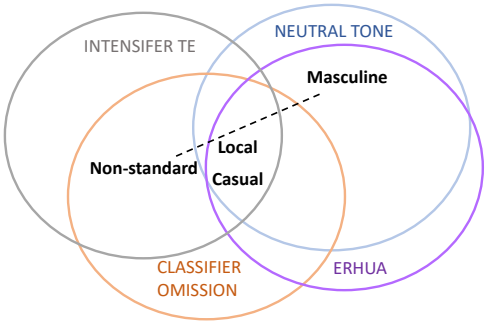


Figure 7.5: Indexical field for four Beijing Mandarin features

Figure 7.5 shows an attempt to map out some of the meanings Beijing Mandarin features potentially index, according to the findings of the current study. This is by no means a complete indexical field for the variables nor Beijing Mandarin, and these associations are context-dependent like most indexical meanings. Different features' indexical field and social

meanings are indicated by different colours. As can be seen, 'local' and 'casual' are at the core of this indexical field for four vernacular Beijing Mandarin features while 'non-standard' and 'masculine' are less central. The dotted line linking non-standard and masculine indicates that the two are closely associated (e.g., in classifier omission), yet a connection to one does not automatically invoke an association to the other (e.g., neutral tone is connected to masculine but not non-standard).

Overall, the findings from the stylistic variation further illustrate the nature of Beijing Mandarin as a vernacular variety used in Beijing. In Zhang's (2005) study on business managers, Beijing Mandarin's vernacular status has allowed the state managers, especially the male managers, to explore their local identity. It is also the emphasis on localness that made the yuppies turn to full tone—a non-Beijing feature—to separate themselves from the local managers.

In the style analysis, I have focused on gender and aspiration and found that several Beijing Mandarin features mirror some classic patterns between social factors and style often seen in Labovian sociolinguistic research. To illustrate, *erhua*, as a stereotypical Beijing feature, shows a bigger contrast between men and women than neutral tone does, and this is consistent with its status of an established vernacular linguistic feature. Additionally, the social and stylistic stratification of classifier omission (Figures 5.4 and 5.5) again shows how the use of a vernacular and non-standard feature is conditioned by social group membership and style at the same time. Finally, it is important to recognise the significance of the confirmation of social and stylistic stratification found here: by using data in a non-Western language from a society undergoing vast social changes, I demonstrate that similar social stratifications are also present in the modern Chinese society.

The use of two different types of data—interviews and self-recordings—in this project also poses challenges for future variationist research. As pointed out above, intensifier *te* showed little stylistic variation in the interview data across careful and casual settings; however, when we included self-recordings, it became clear that *te* also conveys casualness. The findings here are in line with recent critiques on the traditional interview-focused methods in variation studies (Schilling, 2014) and argue for a mixed-methods approach in future variationist studies.

## 7.2 Constructing Personae in Beijing Mandarin

Results from the previous chapters suggested that vernacularity is at the core of Beijing Mandarin as a variety. Zhang (2005) draws on the notion of enregisterment (Agha, 2005) and argues that Beijing Mandarin is an enregistered dialect, similar to Pittsburghese in Johnstone et al.'s (2006) work. In particular, Zhang (2005, 2008) discuss the use of Beijing Mandarin features in indexing localness and authenticity, and in constructing culturally-specific personae. In my project, participants also link certain language use, such as the cultural icon of a typical Beijinger I have mentioned earlier, who is considered casual, street-wise, and masculine.

In this section, I aim to show how Beijing Mandarin speakers employ different features from the local enregistered dialect, drawing on different cultural personae, to construct identity suitable for themselves regarding their masculinity, aspiration, and/or career path. Another aim of this personae analysis is to offer some insights from a more micro analytic perspective to understand individuals' style and repertoire. As argued by Eckert (2016, p.81), in theorising linguistic variation, we need to connect 'local stylistic practice' with its macrosocial patterns.

In the following sections, I present three individuals (Harry, Clare and Cat) who showed different combinations in their use of the four Beijing Mandarin variable across their interviews and self-recordings. The three individuals presented here are included as representative of three different personae observed in the current dataset.

### 7.2.1 Harry: a typical Beijinger

I begin with the persona of a typical male Beijinger—Harry—and his use of the four variables—neutral tone, classifier omission, intensifier *te*, and *erhua*. Harry was a fourth-year student of Japanese at BMU. He came from a middle middle class background and was one of the students with low aspiration.

As one of my participants, Matt, who is also friends with Harry, said to me in an interview, Harry is a 'typical *hutongchuanzi*' because of 'the tone of his speech'. The term '*hutongchuanzi*', translated as 'alley saunterer' in Zhang's (2005) work, used to refer to a native Beijinger who wonders around the alleyways of Beijing, waiting for things to happen. With the urbanisation in Beijing since the 1990s, very few alleyways have survived

commercialisation and even fewer native Beijingers can afford to live and wander around the old city. For many of my participants who grew up witnessing the large-scale urbanisation, the image of an alley saunterer has become less negative, and the term is used more or less to refer to a extremely vernacular-sounding native Beijinger, as Matt has done in the above example.

Harry's identity brings together two cultural stereotypes: first, he is a vernacular-sounding local Beijinger who is very comfortable with his masculinity; and second, he lacks the ambition regarding his career and wants to lead a simple life ('*xiaorizi*'), which I have discussed in Section 2.2.2 in Chapter 2. His masculinity is displayed in Exact (7) and (8) in Section 5.4.3, Chapter 5, where he shows some typical male behaviours—swearing, disliking academic life, and using homophobic remarks towards a course-mate. His lack of aspiration can be seen from his attitude toward future careers. During his interview, Harry told me that he had just quitted his intern-ship since he 'just didn't want to do it any more' and all he did while on the job was 'sitting there staring at the screen' and 'chatting to colleagues when the boss wasn't paying attention'. Moreover, in his self-recording, he mentioned the possibility of collecting rent on his parents' spare flat for a living after graduation to his friend, seen in Extract (1) below.

(1) Harry: Collecting rent
Character:
操，但我爸不同意呀。我操，我爸他们。我在跟我爸说呢，我说，“我看，你们俩都他妈挣钱，那我在那儿收租得了。”挣点儿钱，我他妈挣点儿什么压岁儿钱。
Translation:
Fuck, but my dad said no. Fucking both of my parents. I was saying to my dad, I said, 'look, you two both fucking have jobs, just let me have the rent.' So I can make some money, it'll be like getting fucking money from the red envelops during Chinese New Year.

Figure 7.6 shows his use of four variables. His localness in speech is shown by the high frequency of the local variants across the board. In fact, he used the local variants 10% to 20% more frequently than the whole dataset on average. He also conforms to the traditional gender roles and thinks that he should provide for the family. As for aspiration, which is linked to the two non-standard features—classifier omission and intensifier

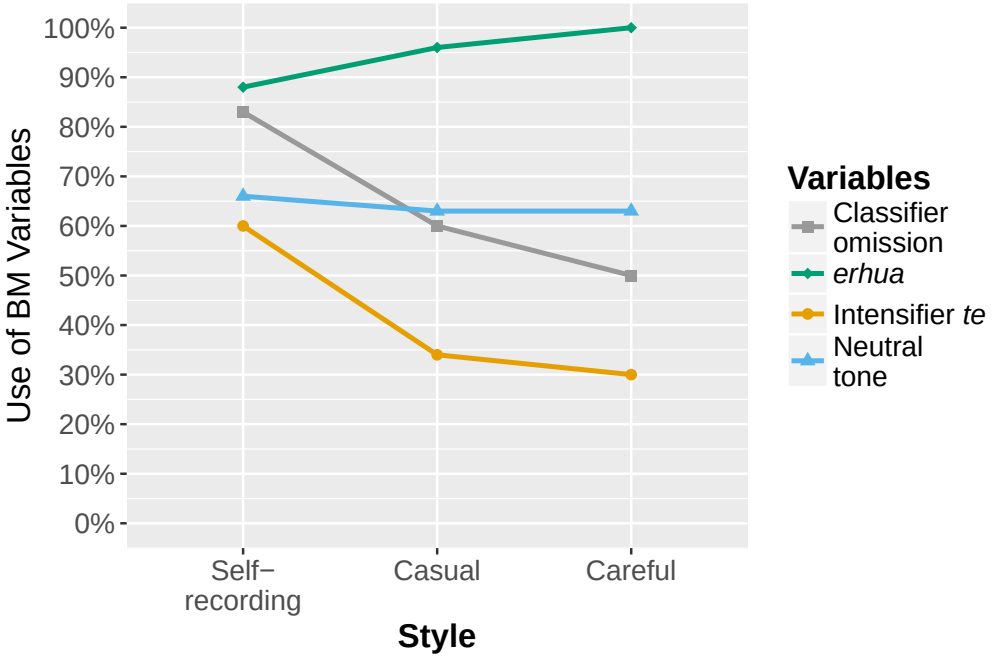


Figure 7.6: Use of Beijing Mandarin variables across styles for Harry

*te*—it is worth mentioning that he did not 'switch off' the non-standard vernacular at all. He used *te* and classifier omission around 40% and 50% of the time respectively, even in careful interview style. Interestingly, Harry showed little style-shifting in neutral tone and *erhua*, suggesting that the frequent use of these two typical vernacular features is part of his speech style regardless of formality.

### 7.2.2 Clare: an upwardly-mobile Beijinger

The next participant—Clare—is at the opposite end of the spectrum in terms of aspiration. Clare came from a lower middle class family. Her father was a retired mechanic while her mother worked full-time as a saleswoman. Perhaps because of her background, Clare is one of the most upwardly-mobile students in my data, judging from both her score on the aspiration scale and the content of our conversations. She studied Chinese at BCU and was very involved with the student union and societies in her school. In fact, she was the first student introduced to me by a teacher from the school when I first approached BCU to recruit participants because the teacher thought Clare was an 'enthusiastic and helpful' student. Apart from activities within BCU, Clare also secured an internship in a national media company at the time of our interview, half a year before her graduation. Moreover, in our interview, she mentioned that she would also take the qualifying exams to become a Chinese teacher in primary school. Clare

is highly motivated and seems to have a plan for her future career. She explained her motivation behind it to me in the interview:

(3) Clare: Future career
Character:
如果你去学校当一个老师，你可能一辈子都只能是个老师。然后我就在想说，我要不要试试别的。我爸我妈一样，过小日子那种。但我、我挺虚荣,我挺要那名儿。
Translation:
If I become a teacher, I will be stuck in a school forever, so why don't I give it a try and do something more than teaching? My parents have lived their lives in a simple way, but I don't want that. Call me materialistic but I want the title.

Interestingly, in the second sentence from extract (3), Clare directly contrasted herself with those like Harry who settle for a simple life ('*xiaorizi*') instead of working hard to achieve a higher goal. It is important to clarify that the meaning of localness and high aspiration do not contradict each other in the use of Beijing Mandarin variables. Although people with low aspiration is more likely to be associated with a local identity, those with high aspiration can also identify with a Beijing identity. The linguistic differences between these two groups are mostly likely seen in the use of variables primarily indexing non-standardness, such as, classifier omission, as shown in the indexical field for Beijing Mandarin in Figure 7.5 in Section 7.1.4.

Figure 7.7 plots Clare's use of all four features across styles. With regard to the use of neutral tone and *erhua*, Clare and Harry are similar in two ways. First, both of them used the local variants frequently and their rates of *erhua* were higher than those for neutral tone. Secondly, they both showed a lack of stylistic variation for these two features.

In comparison to Harry, Clare also used neutral tone and *erhua* less frequently and this, I argue, is an indication of the masculinity associated with established vernacular features. Being a language student, Clare was also drawn to a local identity, yet she did not, and perhaps could not, use an extremely-local style since these two variables also convey masculinity. And this could explain the differences between Clare and Harry.

Additionally, the contrast in future aspiration between Clare and Harry can be found in their overall frequencies of the local features, as shown in

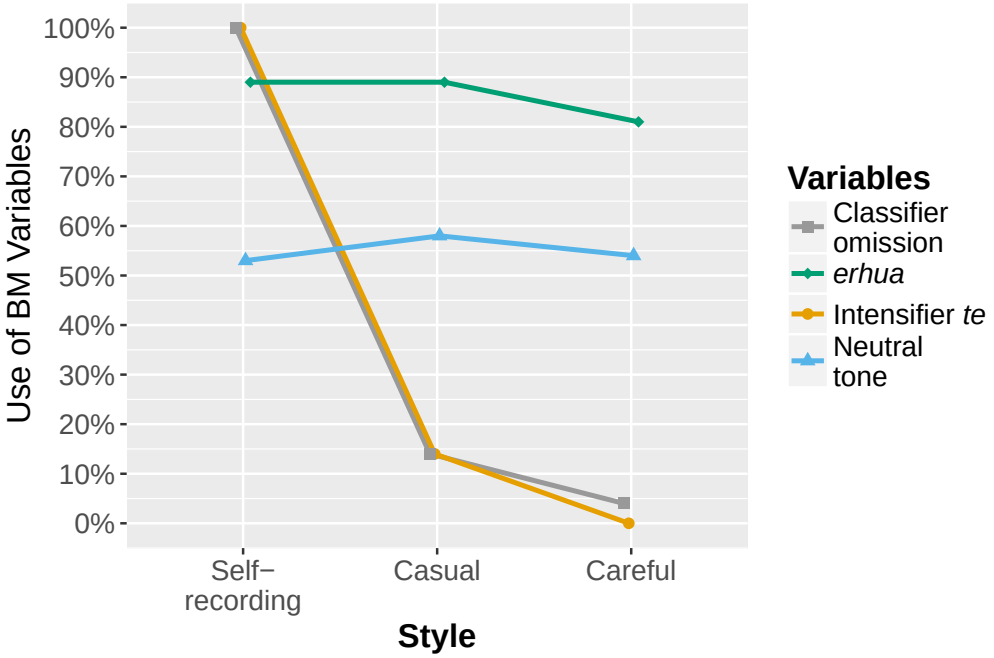


Figure 7.7: Use of Beijing Mandarin variables across styles for Clare

Figure 7.7. We observe a sharp decline in the use of both classifier omission and intensifier *te* from interview style to self-recordings. Clare, unlike Harry, limited her use of classifier omission to less than 5% and stopped omitting classifiers entirely in careful interview style. Her use of these two non-standard features increased to 100% in self-recordings, displaying a much bigger style-shifting across settings. This is consistent with the casualness and non-standardness associated with the variables, that is, A decrease in the use of non-standard features in formal settings reflects Clare's high aspiration and the efforts she has made to avoid sounding non-standard and inappropriate for the context.

### 7.2.3 Cat: a non-local Beijinger

In contrast with the two individuals already discussed, the last persona is quite unique. Both Harry and Clare showed language use closely related to localness: for Harry, being a typical Beijinger—masculine and vernacular-sounding is a big part of his identity. Clare separates herself from people with low aspiration yet still maintains a high use of vernacular Beijing features as they are essential for her local identity as a language teacher. For Cat, the third individual I present here, however, localness is not at the core of her identity.

First and foremost, Cat is not a language student like the other two. She studied television production at BMU and had a middle middle class

background. She was also in her last year of study when I interviewed her, as with the other two students.

Possibly due to the fact that she studied journalism which put less emphasis on a local identity, Cat was one of the participants who seemed to be less local. To illustrate, Cat is aware of the prescriptive standard in *Putonghua* and has taken the *Putonghua* pronunciation test. She also takes pride in the fact that her *Putonghua* is 'very standard'—as I have shown in the extract on *Putonghua* Pronunciation Test in Section 4.5.3, Chapter 4. Moreover, it seems that she does not care for the privileges Beijingers get for being locals in the capital city. In short, although Cat was as prepared for and enthusiastic about her future career as Clare, she did not affiliate herself with a local identity.

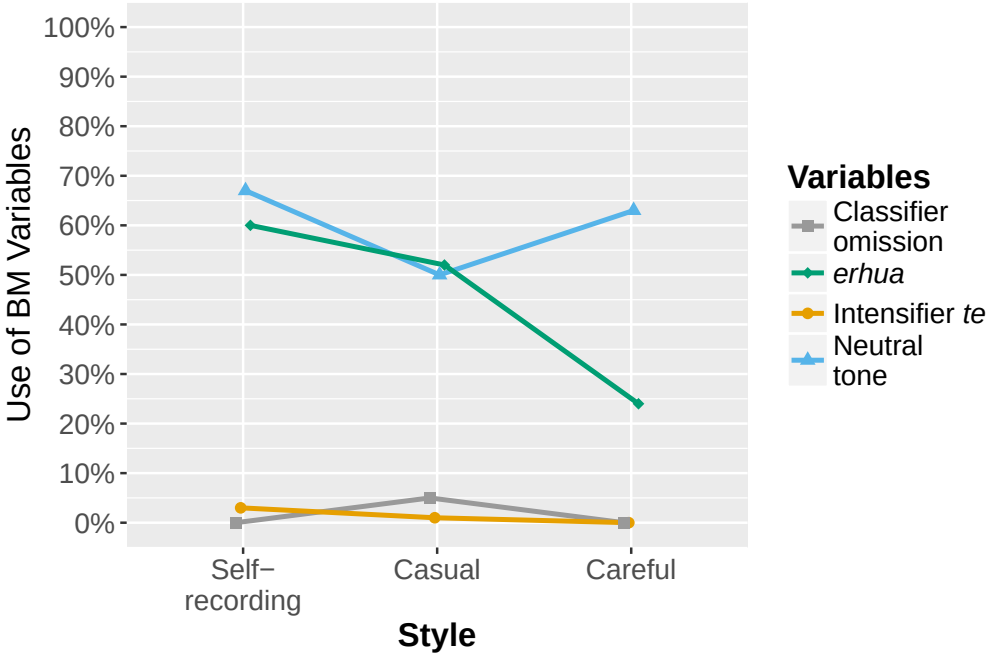


Figure 7.8: Use of Beijing Mandarin variables across styles for Cat

If we turn to Figure 7.8 where her use of the four Beijing variables is shown, we first observe a lower frequency of the local variants for all variables. In particular, Cat shows very limited use of classifier omission and intensifier *te*, which are both local and non-standard features. Since she has no need to be local or non-standard, she seems to be avoiding using them in her speech. In addition, although the use of neutral tone showed little stylistic variation in her speech, Cat shifted to a lower use of *erhua* in formal settings. I argue that this is caused by the different awareness levels towards these two stereotypical features. Specifically, as I have shown in Section 7.5, speakers are more aware of *erhua* than of neutral

tone; therefore, it is possible that Cat made a conscious decision to control her use of *erhua* but not neutral tone so that her speech would appear to be more standard.

Nonetheless, I have shown how the four Beijing Mandarin features can be used by someone like Cat who does not share a local identity with the others. It seems that speakers are capable of using suitable linguistic features to construct the persona consistent with their own identity, even though they might not be explicitly aware of the variables and their linguistic and social implication.

## 7.3 Summary

This chapter offered an analysis of the stylistic variation and linguistic repertoire observed in the current corpus, focusing on the three main linguistic variables and an additional phonetic variable—*erhua*. I have presented results both on a macro level—multivariate modelling results and patterning within and across different social groups—and on a micro level where three types of personae are discussed.

As summarised in Figure 7.5 in Section 7.1.4, these four Beijing Mandarin features are closely related to meanings including localness, masculinity, non-standardness and casualness. In the construction of the personae that fit individuals' identities, speakers have assumed the agentive role to engage in briolage of different features. By using the different features and the meanings associated with them, individuals in my project are found to construct identities using the local vernacular features.

The findings in this chapter are consistent with the vernacular status of Beijing Mandarin and show that various social meanings are associated with this enregistered variety of Mandarin dialect in Beijing. More importantly, we have found similar social and stylistic stratifications in Beijing Mandarin which mirrors classic patterns in traditional sociolinguistic studies, supporting the application of sociolinguistic theories developed in English-speaking Western societies in non-Western societies and languages.

# Chapter 8

# Conclusion

## 8.1 Review of Findings

In this thesis, I described and analysed variation in the use of four different local features in Beijing Mandarin in the speech of 21 young native Beijingers. Drawing on key notions in sociolinguistics, I proposed that these linguistic features in Beijing Mandarin indeed differ from each other in their social meanings, and this enables Beijing Mandarin speakers to employ variables indexing relevant social meanings in constructing their local and professional identities.

Although often considered a stereotypical feature of Beijing Mandarin by both native speakers and linguists, neutral tone showed great variability in the perceived standard and actual use for different speakers, and this points to the complex nature of this variable. The quantitative results indicated that neutral tone is conditioned by various linguistic factors including lexical tone, preceding tone, following tone, syllable structure and position, and grammatical function of the host word. We also observed an interaction between word class and structure significantly influencing the use of neutralisation. Regarding social meaning, I suggested that neutralisation is not non-standard, yet is directly linked to a type of male masculinity typical to Beijing. As gender was found to interact with students' future career path, I further argued that neutralisation is associated with localness/Beijingness, as demonstrated by the quantitative and qualitative analyses.

For classifier omission, no significant influence of the morpho-syntactic variables I have coded was found in the quantitative analysis. The three significant linguistic factors affecting the use of classifier omission—tone of classifier, preceding tone, and following noun syllable structure—were

all phonetic/phonological. The linguistic constraints, together with the distribution of classifier omission tokens studied in the corpus, suggested that classifier omission might be the result of grammaticalisation in Beijing Mandarin. More explicitly, classifier omission could be caused by the *yi* + *ge* structure taking on the meaning of indefiniteness, as suggested by Tao (2006) and Wu (2005). Different from neutral tone, classifier omission is strongly related to non-standardness and localness, as shown in the quantitative results. Perhaps surprisingly, the feature conveys masculinity through the mediation of both localness and non-standardness among the participants.

Linguistic factors found to have an effect on the use of intensifier *te* included the type and function of the modified structure. A lack of significant influence from all social factors included—gender, programme, and aspiration—was observed in the multivariate analysis for this relatively-unestablished Beijing Mandarin feature. Further qualitative and quantitative data were included to show intensifier *te*'s potential association with non-standardness, and related to that, localness.

All three Beijing features are thus related to a local identity which I discussed in Chapter 2. Since these three variables are from the local dialect, it is unsurprising to see that they convey vernacularity to various degrees. It is more interesting that we observe different social meanings for different features. In Chapter 7, I explored the different meanings in terms of speech style and repertoire while adding an additional variable—*erhua*—which is even more stereotypical and noticeable for Beijingers. Results from this chapter suggested that Beijing Mandarin features showed an increase in frequency in the casual local register than in the more formal interview register, and that they are also associated with casualness. Finally, I presented three individuals with different local identities including a typical male Beijinger (Harry), a highly-aspirational local Beijinger (Clare) and a non-local Beijinger (Cat). A closer look into their stylistic repertoires provided us with information about how speakers vary the use of different features with different indexical meanings to construct their identities.

In summary, the current thesis employs a range of data collection and analysis methods to investigate variation and social meaning in a under-researched variety in a society undergoing tremendous social changes. Recall that in the beginning of Chapter 1, I asked three sets of research questions: the findings I have outlined above first enrich our general understanding of variation in Beijing Mandarin and the linguistic constraints of language variation. Furthermore, although the contemporary Chinese

society is seen as less stratified than many Western societies where sociolinguistic theories are based, I found a familiar gender pattern in Beijing Mandarin. This thesis also contributes to our sociolinguistic understanding of Beijing Mandarin and the social meaning—localness, non-standardness, masculinity, casualness—associated with specific variables as well as the variety itself.

## 8.2 Theoretical Contribution

Apart from its contribution towards the understanding of the specific linguistic features investigated here, Beijing Mandarin and Chinese language in general, this thesis also makes several theoretical contributions to the study of language variation.

First, in analysing the three main variables, I revisited the popular taxonomy of variables in terms of the level of awareness, that is, categorising linguistic features into indicators, markers, and stereotypes based on their general awareness (Labov, 1972a). As I have argued Chapter 7, the stylistic variation across different participants suggests that such a generalisation of linguistic variables based solely on level of awareness needs to be reconsidered in sociolinguistics, especially in stylistic variation.

Additionally and related to the first point, I provide further evidence in this study to challenge the widely-debated formality-based definition of style in traditional Labovian framework. To illustrate, we observed a wide range of individual variability across different styles in participants' use of different variables, and this lack of uniformity potentially indicates that we need a more nuanced way to study style.

Finally, although the four features investigated in this study are all associated with vernacularity, individual variability was seen across the board. The individual differences in the use of the two established, stereotypical features—neutral tone and *erhua*—as well as the lack of style-shifting in the analysis of individuals' stylistic repertoire indicate that language change might be under way in Beijing.

## 8.3 Limitations and Future Directions

This thesis makes a contribution to the broad topic of language variation and change by using mixed methods in both data collection and analysis to examine a wide range of linguistic features in an under-researched language

variety. There are, of course, limitations to the current project and future research is needed to address them. In this section, I discuss the limitations and propose some possible directions for future research.

Because of the time limit for fieldwork in this project, I conducted a semi-ethnography to ensure that I could collect the amount of speech data needed for later analyses in a short amount of time. I have covered the advantages and disadvantages of a semi-ethnography in Section 3.2; however, as an outsider of the community this project is based on, a more thorough ethnography would have helped me better understand my participants' social and linguistic practices . Additionally, one of the goals of this study is to investigate speech styles and stylistic variation in Beijing Mandarin and I have attempted to achieve this by including self-recordings as a more casual speech style. Since only 10 out of 21 participants provided me with self-recordings, I was not able to conduct a full analysis on the two types of data regarding the variables' linguistic and social constraints as well as their stylistic variation. In the future, a more comprehensive corpus with both interviews and self-recordings from all participants would undoubtedly make the analysis more complete and help us understand the similarities and differences across styles regarding linguistic and social factors.

Moreover, due to the constraints on time and space, this thesis has not been able to uncover all of the potential patterns in language variation found in the data. First, although I have included *erhua* in the final analysis chapter, a full analysis on this well-known Beijing Mandarin feature would aid our understanding of the social meaning of Beijing Mandarin. So one of the future directions is to revisit the data and conduct a full analysis on *erhua* which incorporates relevant linguistic, social, and stylistic constraints. This would also allow a more direct comparison with the existing studies on the same feature (e.g. Zhang, 2005, 2008, 2016) and potentially an update on the use of *erhua*.

As I have mentioned in Chapter 4 (Section 4.2), an acoustic analysis of neutral tone is beyond the scope of this study. In the future, an acoustic analysis on both phonetic variables — neutral tone and *erhua* — is needed to provide us with a full picture of these features which are well-known yet under-researched in variationist sociolinguistics. By using natural speech collected from fieldwork, the acoustic analysis of these two features will also further highlight the potential differences between lab-generated speech and natural speech as previously observed in Tseng (1981).

Another direction for future studies would be to involve perception data. Until recently, variationist studies tend to focus on language production

rather than language perception despite that the latter is a key aspect of language use and variation (cf. Campbell-Kibler, 2006; Thomas, 2002). In particular, for under-studied varieties such as Beijing Mandarin, much can be learned by employing perceptual methods to the study of variation. In my own MA thesis (Zhao, 2012), I conducted a matched-guise test on Chinese speakers' attitudes towards Beijing Mandarin and standard Chinese and argued that Beijing Mandarin could be gaining prestige. As part of the current project, I have also collected perception data from Beijing Mandarin speakers (Zhao, 2016), though the results were not included in this thesis. On of my next steps is to revisit the perception data and to link the perception of Beijing Mandarin to its production among my participants. In general, more perceptual studies are needed regarding the use of different variables in Beijing Mandarin. Only by combining production with perception, can we arrive at a full understanding of speakers' motivation behind language use.

In addition, due to the number of variables involved in this project, both the number of participants and the amount of data from each participant were relatively limited, and more large-scale studies are needed to confirm and/or challenge the findings of this study. By large-scale, I refer to both the quantitative numbers and the qualitative scope of future studies. Quantitatively, future investigations would benefit from a larger number of participants, variables, and linguistic and social factors, as I have mentioned above. Qualitatively, many of the social factors could be expanded to incorporate more socio-economic attributes relevant to China and Beijing. Some possible directions include studying a wider range of social classes, including recent graduates who are also young professionals into the sample, and/or looking at native Beijinger and non-natives.

Lastly, as China and Chinese languages attract more and more international attention, it is important to broaden the scope of our research to include cities other than Beijing in order to fully grasp the impact of social changes on the Chinese language. I chose Beijing as my fieldwork site as it is representative of the economically-developed areas in China; however, other cities experiencing the tension between globalisation and local identity can and should also be considered as fieldwork sites. For instance, it would be interesting to compare Beijing with Shanghai, which is the most economically developed city in China. Another way is to study languages used in less economically advanced places and these comparisons will no doubt uncover more interesting linguistic patterns in the Chinese society. A thorough understanding of the effects of social structures on language

variation and change can only be achieved through studying the interactions between different local political and economic cultures and language use.

# Appendix A

# Interview Questions

## A.1 Demography

1. What is your name? Where and when were you born? Describe where it is and what it was/is like.

2. How long have you been living in Beijing? Have you lived in other places, where and how long were you there for? Why? How was the experience?

3. Do you like living in Beijing? Why or why not? Do you want to stay here (after graduation)? Why?

4. Which university/college are you at? What degree/programme are you doing? Where is the campus/university?

## A.2 School

1. Why did you choose to study this in the current university/college? Was it your first choice? Why? Did you come here purely because of your grades? How did you do in your entrance exams? Did your parents help you in deciding a school and/or a programme? Describe what happened when you first learnt that you had got in.

2. What do you like and dislike about being a student/studying this course/in this school? Tell me more about the reputation of your subject, campus, and/or university.

3. What is your university like? Is it busy or quiet? Do you have more boys or girls in the whole university? How about in your year/programme?

4. What course do you study? What is it about?

5. Is it more practical or theoretical? Do you have a lot of coursework/exams? What modules do you have to take? Describe your favourite module? Least favourite one?

6. What is your typical school day like? Describe it.

7. Do you commute to university? Or do you live on your own or live in halls? How do you like it?

## A.3 Peers

1. What are your friends from university like? Are they your roommates, course mates, or people from clubs and societies? How did you get to know each other?

2. (Optional) Do you have friends from other campuses? How did you meet each other?

3. Tell me about one or two of your best friends, what do they study? And where are they from? Why do you like hanging out with them? Describe what you do when you are with them.

4. Is there any subgroups in the school? What are they? Are you a member of any group? What is it that makes you a member of a certain group?

5. Are there many local students in the university? Where are they from? How about students from elsewhere? How can you tell if they are local or not? What is it like in your class/programme?

## A.4 Leisure

1. Do you have a lot of free time during your time at university? When is the busiest time for you? How about other students/friends?

2. Do you spend your free time on your own? What do you enjoy doing? Describe your biggest hobby and why you enjoy it.

3. What are the places you have travelled to? When? And with whom? Any advice if I ever want to visit there?

4. Do you also spend time with your friends? Family? What are the places you normally go near campus/home/etc.?

## A.5 Career

1. Do you have any exams/dissertation left before graduation? Are you planning to do anything else?
2. Do you want to do another degree after graduation? Why? And if yes, in what subject?
3. Have you applied for any internship? What is it?
4. What part-time jobs have you had in the past years? Describe what you did in these jobs.
5. What is your ideal career after graduation? Why do you want to do that? How hard is it to get there? Tell me what kind of preparation you have been doing/planning to do?
6. What kind of job do graduates with your degree usually get? Do you want to do that as well? Why/why not?
7. What do your family think of your plan after graduation? Do they support you whatever you decide, or do they have their own plans for you? What do you think about these options?
8. Regarding your career, where do you see yourself in 5 years? How about in 10 years? How much money do you want to make in the process?

## A.6 Family and Childhood

1. Where is your family from? Your parents? hometown? What was/is it like?
2. Do they still live in the same area? What has changed over the past 10 to 20 years? If not, where have they moved? When and Why? How is the neighbourhood like?
3. Do you live with your family now? Where do you live? Do you like living with your family or do you prefer to live in halls/on your own?

4. What do your parents do? How old are they? What are they like?

5. Others always say it is hard to communicate with parents, what do you think? Do you spend a lot of time with your parents/siblings? What do you do when you are together?

6. Do you have any siblings? What about them? Tell me more about the good and bad side of having siblings.

## A.7 Changes in Local Environment/Culture

1. The smog in Beijing is very bad now and people all wear facemasks on the street. Do you do this? What do you think about this? What was it like when you were young? Were there sandstorms years ago? Describe the worst weather you have experienced.

2. Think about when you first started university, what was the surrounding like? What are the physical changes near the campus (e.g. new buildings)? In the city? For example, buildings, streets, subways? How about weather? And people?

3. Has anything changed in these 3-4 years? What changed? How did you notice them? Do you have any idea why this is the case?

4. How about yourself? Have you changed in any way after being in university in 4 years? Did your goal in life/career change? Did your personality change? Why and how?

## A.8 Language

1. Do you speak any dialect? What is it? When and how did you learn it? Can you describe what the dialect is like?

2. Do you think Beijing Mandarin and MSC is the same? Are they similar? What are the differences if there is any? Can you tell if someone is speaking one or the other with you?

3. Do you like the way people from Beijing sound? What do you like about it? What don't you like about it? What do you think about girls with strong Beijing accent? And boys?

4. Do you know any other dialects (Beijing and other regions)? What are they? What are the differences between your dialect/BM and them?

5. Do you speak in the same way as your friends and family? What?s the difference? Why?

6. How local you sound when you are at home? How about when you are talking to your lecturers/managers at work? If differently, why?

7. Have you been speaking like this all your life? Or has it changed over time? What was it like when you were in primary/secondary school? Why?

8. What other language do you speak? How often do you speak them?

# Appendix B

# Interview Questions (Chinese Version)

## B.1 个人情况

1. 姓名? 何时在哪儿出生?
2. 在北京居住了多久了? 在其他城市长住过吗? 大概多久? 为什么去?
3. 你喜欢住在北京吗? 原因呢? 毕业后想继续留在北京吗? 为什么呢?
4. 你的专业? 所属的院系? 具体校区位置?

## B.2 学校

1. 介绍一下你的校区? 人多吗? 还是比较安静? 男女生比例如何? 你的专业呢?
2. 你的专业主要学什么? 核心课程? 实习实践?
3. 你的专业是比较实用还是理论的? 作业和考试多吗? 你都修过什么课? 最喜欢的? 最不喜欢的?
4. 你一般在学校都做什么? 描述下比较典型的一天
5. 为什么选联大这个专业? 是自己的主意还是家长帮助选的? 讲讲对于做学生/读本专业/上联大有什么喜欢跟不喜欢的方面?
6. 走读还是住校? 住家里还是自己出去租房? 相比之下比较倾向于哪种?

## B.3 同学

1. 你的朋友是什么样的? 他们是你室友? 同学? 社团的人? 你们都是怎么认识的?
2. 你认识其他校区的人吗? 怎么认识的?
3. 描述下一两个你大学最好的朋友 他们是学什么的? 他们是哪儿人? 为什么喜欢跟他们玩?
4. 学校里有扎堆儿的现象吗? 小团体? 都是些什么人? 怎么看出来的? 你觉得自己属于哪个? 为什么这么觉得?
5. 学校北京人多吗? 都是哪里的? 外地的呢? 怎么能看出来?

## B.4 课余活动

1. 课余自由时间多吗? 最忙的时候? 其他系的人呢? 你的朋友们的?
2. 课余是自己玩呢还是跟朋友一起? 你们都喜欢去哪里? 做什么? 会跟家人一起吗? 跟家人一起又会去哪儿? 做什么?
3. 附近有什么好吃的好玩的? 食堂宿舍条件怎么样? 最不喜欢的方面?

## B.5 职业

1. 毕业前还有课吗? 考试呢? 论文呢? 其他还有什么安排?
2. 开始实习了吗? 具体做什么?
3. 毕业还要继续深造吗? 为什么? 去哪儿读什么专业?
4. 本专业一般就业方向? 你的目标也是这些职业吗? 为什么?
5. 你心目中的理想职业是什么? 你觉得到达那一步难吗?
6. 你家人怎么看? 支持你吗? 还是另有安排? 为什么呢?
7. 5年后你的目标? 10年呢?

## B.6 家庭成长

1. 你家人是哪里的? 描述下过去跟现在的概况?
2. 他们还住在那儿吗? 过去一二十年有什么变化? 若搬家了 何时搬去哪里了? 为什么搬呢? 新家的环境有什么不同?
3. 你现在住在家里吗? 住哪儿呢? 你喜欢住家里还是宿舍或者自己单独住?
4. 你父母的职业? 年龄? 也是北京人吗? 哪里人?
5. 有兄弟姐妹吗? 他们多大了? 做什么的?
6. 小时候最喜欢玩的游戏
7. 跟父母兄弟姐妹相处时间多吗? 见面都做什么呢?
8. 一般如何联系包括父母在内的亲属? 见面还是电话短信网络? 跟小时候有什么不同吗? 小时候是怎么样的?
9. 跟家人在一起的时候 做的事有什么不同吗? 不同在哪里? 你喜欢过去的方式还是现在的? 为什么呢?

## B.7 环境变化

1. 刚入校的时候 附近的环境是怎么样的? 现在学校附近有什么变化? 整个北京呢? 楼房 街道 地铁等等? 天气跟环境呢? 人们呢?
2. 你为什么注意到这些变化了? 你觉得变化的原因是什么?
3. 自己也变了吗? 在学校读了四年书最大的变化是什么? 人生或者职业目标变了吗? 性格呢? 变成什么样了? 为什么?

## B.8 语言

1. 你会讲方言吗? 什么方言? 什么时候怎么学会的? 描述下你的方言特征?
2. 北京话跟普通话一样吗? 相似吗? 差别在哪儿? 你能听出差别吗?
3. 你喜欢北京人说话的感觉吗? 喜欢或不喜欢哪里?
4. 你还知道其他方言吗? 都知道哪些? 你觉得他们跟北京话/你的方言差在哪里?

5. 你跟家人朋友说话一样吗? 有什么差别? 为什么?
6. 在家的时候会说方言还是普通话? 跟辅导员或者导师或者实习的上司说话呢? 为什么?
7. 你说话的方式从小到大都一样吗? 还是有所改变? 上小学跟中学的时候有什么不同? 为什么呢?
8. 会说什么外语? 使用频率?

# Appendix C

# Participant Recruitment Materials

## C.1 Information Sheet


Language Variation and Social Identity in Beijing
Information for Participants

We would like to invite you to be part of this research project, if you would like to. You should only agree to take part if you want to; it is entirely up to you. If you choose not to take part there won?t be any disadvantages for you and you will hear no more about it. Please read the following information carefully before you decide to take part; this will tell you why the research is being done and what you will be asked to do if you take part. Please ask if there is anything that is not clear or if you would like more information.

If you decide to take part you will be asked to sign the attached form to say that you agree.

You are still free to withdraw at any time and without giving a reason.

The current study is part of a doctoral dissertation in sociolinguistics. The aim of this study is to investigate language use and social identity in Beijing. As a participant of the research, you will first be interviewed by the researcher about general topics related to family life, university experience, and future career plans. You may also be asked to record your own formal

and informal conversations with different groups of people without the researcher present. Recording devices and/or instructions will be provided in such cases. The second part of the study will involve you participating in an experiment during which you will answer several questions according to recordings played to you. The experiment takes about 20 minutes.

Your interview and conversations will be transcribed and short segments may be used anonymously in academic publications only. Also, if you agree, your voice, in the form of recorded audio extracts with all identifying information removed, may also be played during academic presentations.

Your participation in this project is completely confidential. You will not be identified on any project-related materials, nor will any identifying information about you be used. Your participation in this project is completely voluntary. You can withdraw from the project at any time before, during or after your participation. You have the right to hear the recording of your participation and to request that any or all of the research materials pertaining to your participation be returned or destroyed. Your participation in this project poses no emotional, financial, or physical risk beyond those encountered in everyday life. You will also receive no direct benefit or compensation for your participation except for reasonable travelling costs.

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

If you have any questions or concerns about the manner in which the study was conducted please, in the first instance, contact the researcher responsible for the study:

Researcher: Hui Zhao (hui.zhao@qmul.ac.uk)
Supervisor: Dr. Devyani Sharma (d.sharma@qmul.ac.uk)
If this is unsuccessful, or not appropriate, please contact the Secretary at the Ethics of Research Committee, Queen Mary University of London (research-ethics@qmul.ac.uk).

## C.2 Information Sheet (Chinese Version)


伦敦大学玛丽皇后学院
北京市语言变异及社会身份认同研究
项目介绍

很荣幸的邀请您参与北京市语言变异及社会身份认同研究。 您的参与是自愿的，您完全可以在阅读此介绍后决定不参与到本项目中。
在签字同意参与本研究前，请认真阅读本介绍。介绍主要包括本项目的研究目的及您作为参与者的参与内容。如果您对此有疑问，请咨询研究员。
如果您同意参与本研究，您将需要签署一份书面同意书。即使在那之后，您仍可以在研究进行期间的任何时候无需任何理由退出本次研究。

本项目是一项社会语言学博士论文研究，旨在研究北京市语言使用及社会身份认同情况。作为参与者，您将接受研究员的访问并被录音。访问内容主要包括您的家庭情况，学生生活及职业规划。您还可能需要自行录下自己与两组（个）不同人的正式及非正式谈话。研究员将不会在这些谈话现场出现，但会为您提供录音设备和（或）技术帮助。本项研究的后半部分主要包括一项大约20分钟长的试验。试验中，您将会听到一些录音并需要根据录音回答问题。

访问录音及个人录音材料会由研究员转录为文字，其中一些片段可能会被用于学术论文发表，您的身份仍然会被严格保密。如果您同意，您的声音片段也可能会被用来在学术会议上播放，所有涉及到您个人信息的细节将被数字处理掉，以保护您的隐私。

您的参与记录是完全保密的，您的真实信息将不会出现在任何记录中，也不会被用于数据分析。您的参与也完全是自愿的，无论是参与前、中或后，您都可以退出实验。您将有权听到自己的录音，并要求相关材料被归还给您或销毁。

您的参与不会对您产生任何精神上、金钱上和身体上的额外风险。除去合理的差旅开销报销，您将不会收到任何直接收益或补偿。

请您自行决定是否参加此次研究，若您自愿参与，您可以保留此项目介绍。您将需要额外签署一份书面同意书。
若您对本研究有任何疑问或顾虑，请首先与负责本研究的研究员联系：

研究员：赵慧/Hui Zhao (hui.zhao@qmul.ac.uk)
导师：Dr. Devyani Sharma (d.sharma@qmul.ac.uk)
如果通过以上方式，问题仍不能得到解决，请联系玛丽皇后学院研究伦理委员会秘书长 (research-ethics@qmul.ac.uk).

## C.3 Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.
Title of Study: Language variation and social identity in Beijing
Queen Mary Ethics of Research Committee Ref: QMREC1362a

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part.
If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

*I understand that if I decide at any other time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately.*

*I consent to the processing of my personal information for the purposes of this research study as described in the information sheet. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.*

**Participant's Statement:** I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.
Signed: _____ Date: _____

**Investigator's Statement:** I _____ confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the volunteer.
Signed: _____ Date: _____

## C.4 Consent Form (Chinese Version)


伦敦大学玛丽皇后学院
参与研究同意书
在您签字同意前，请认真阅读附上的项目介绍及研究员的口头解释。
课题名称：北京市语言变异及社会身份认同研究
玛丽皇后学院研究伦理委员会备案编号： QMREC1362a

首先，感谢您对此研究的兴趣。在您同意参与此研究之前，研究员有义务向您解释相关信息。
若您对项目介绍或口头解释有任何疑问，请在签署同意书之前向研究员提出。您可以保留一份此同意书的副本，以供日后参考。

我已被告知，无论是参与此项研究项目前、中或后，我仍然可以通知研究员并完全退出此项研究。
我同意提供相关个人信息以协助此项研究的进行。我已被告知所有相关信息将被按照《1988年数据保护法案》保密处理。

参与者声明：
我 _____ 同意参加此项研究，并且已被告知此项项目的相关信息。我已仔细阅读过以上文本及附带的项目介绍，我确认我理解参与此项研究的步骤及内容。
签名：_____ 日期：_____

研究员声明：
我 _____ 已告知参与者本项研究的目的，要求及潜在危险。
签名：_____ 日期：_____

## C.5 Payment Confirmation Form


Queen Mary University of London
Language variation and social identity in Beijing
Payment Confirmation

The person named below has agreed to participate in:

Language variation and social identity in Beijing
Queen Mary Ethics of Research Committee Ref: QMREC1362a

And has received a travel reimbursement of the amount of 30 CNY.

Print name: _____
Participant's signature: _____
Investigator's signature: _____
Date:_____

## C.6 Payment Confirmation Form (Chinese Version)


伦敦大学玛丽皇后学院
北京市语言变异及社会身份认同研究
补助费说明

以下人员已参与:

"北京市语言变异及社会身份认同研究"
研究伦理委员会备案编号: QMREC1362a

并收到人民币30元补助费。

参与者姓名: _____
参与者签名: _____
研究员签名: _____
日期: _____

## C.7 Survey

### C.7.1 Language Use

1. Within the two sets of recordings, what is the difference between the two sentences in the same set?

2. Please indicate whether the following language use is characteristic of BM (on a 5-point scale):

   (a) Using 'one (*yi*) + noun' instead of 'one (*yi*) + classifier + noun'.
   e.g. *wo you yi* (CL) *pengyou*. 'I have a friend.'

   (b) Not differentiating retroflex affricatives/fricative zh/ch/sh (/tʂ/, /tʰʂ/, and/ʂ/) with alveolar affricatives/fricative z/c/s (/ts/, /tʰs/, and /s/).
   e.g. *si* (/si/, meaning 'four') and *shi* (/ʂi/, meaning 'yes') sound similar.

   (c) Using *te* to express 'very'.
   e.g. *tianqi te hao*. For 'the weather is very nice'.

   (d) Not distinguishing nasal /n/ and lateral /l/.
   e.g. *liu* (/liu̯/, a surname) and *niu* (/niu̯/, 'ox') sound the same.

   (e) Using neutral tone in syllables that are stressed in MSC.

### C.7.2 Demography

1. Age

2. Gender

3. Occupation

4. If student, provide your current/most recent part-time job and/or internship

5. Education level (choose from list):
   None; Primary school, junior high school, senior high school, undergraduate, postgraduate

6. Which district/county do you currently live in (choose from list of all district in Beijing)?

7. Which district/county is your home (i.e. where your parents/family live) in (if different) (choose from list of all district in Beijing)?

8. Which district/county did you grow up in (if different) (choose from list of all district in Beijing)?

9. Places lived for more than 6 months and how long

10. Dialects you can speak:

    (a) Frequency (choose from: 80% and over; 50% - 79 %; 20% - 49%; 19% and under)

    (b) Fluency (choose from: advanced, intermediate, elementary)

    (c) With whom do you speak them?

11. Do you think you have an accent when speaking MSC?
    If yes, what is it? And why?

### C.7.3 Social Groups

1. Father

    (a) Age

    (b) Hometown (choose from list of all districts in Beijing and provinces in China)

    (c) (Former) Occupation

    (d) Education level (choose from list):
    None; Primary school, junior high school, senior high school, undergraduate, postgraduate

2. Mother

    (a) Age

    (b) Hometown (choose from list of all districts in Beijing and provinces in China)

    (c) (Former) Occupation

    (d) Education level (choose from list):
    None; Primary school, junior high school, senior high school, undergraduate, postgraduate

3. Percentage of Beijingers among friends who you keep contact with?

4. Percentage of Beijingers among classmates and teachers at school?
5. Percentage of Beijingers among colleagues at work?

### C.7.4 Career

In choosing your career, how important are the following factors to you: (on a 5-point scale)

1. To stay in Beijing
2. To earn a lot of money
3. To have a high social status
4. To have long-term career prospects
5. To have stability/security so that I can balance between work and personal life
6. To do what I'm interested in doing
7. To do what my parents/family would like me to do
8. To do something similar to what my peers are planning to do

### C.7.5 Comments and Contact Information

## C.8 Survey (Chinese Version)

### C.8.1 语言使用

1. 请判断以下用法是否属于北京话:

   (a) 说“一+名词”而不是“一+量词+名词”，例如：我有一朋友。

   (b) 平舌z/c/s与翘舌音zh/ch/sh不分，例如：“四”与“是”发音接近。

   (c) 说“特”而不是“很”，例如：天气特好。

   (d) 鼻音n与边音l不分，例如：“刘”与“牛”发音相似。

   (e) 与普通话相比，用更多轻声词。

### C.8.2 个人信息

1. 年龄
2. 性别
3. 职业
4. 若为学生，请填写目前或最近的兼职或实习职位:
5. 若为学生，请选择或填写所在学校:
6. 您的教育程度:
   文盲; 小学, 初中, 高中, 本科, 研究生
7. 您现住的城市及地区:
8. 您家（或父母家）所在的城市及地区:
9. 您小时候居住的城市及地区 （如不同于以上地址）:
10. 您曾在哪些城市常住过（6个月以上）？分别住了多久?
11. 您会讲哪些方言？分别的使用频率和熟练程度:

    (a) 频率 (80%以上; 50%至79%; 20%至49%; 19%以下)

(b) 熟练程度 (熟练, 中等, 初级)

12. 您认为自己的普通话有口音吗?
若有，是什么口音? 您认为原因是什么?

### C.8.3 生活交际

1. 父亲的情况
   (a) 年龄
   (b) 家乡
   (c) 职业
   (d) 教育程度:
   文盲; 小学, 初中, 高中, 本科, 研究生
2. 母亲的情况
   (a) 年龄
   (b) 家乡
   (c) 职业
   (d) 教育程度:
   文盲; 小学, 初中, 高中, 本科, 研究生
3. 在您经常保持联系的朋友中，北京人的比例占? (80%以上; 50%至79%; 20%至49%; 19%以下)
4. 您在学校中接触到的同学老师中，北京人的比例占? (80%以上; 50%至79%; 20%至49%; 19%以下)
5. 您在工作中接触到的同事领导中，北京人的比例占? (80%以上; 50%至79%; 20%至49%; 19%以下)

### C.8.4 职业规划

在选择职业时,以下各项对你有多重要?

1. 留在北京
2. 高收入
3. 社会地位高
4. 长期职业发展前景好

5. 工作稳定，有时间精力放在私人生活上

6. 做自己感兴趣的事

7. 顺从父母或家人的意愿

8. 和朋友同学们从事类似的工作

### C.8.5 意见建议及联系方式

# Appendix D

# Neutral Tone Word Lists

## D.1 Obligatory Neutral Tone Words

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 不在乎 | 凑合 | 东家 | 二性子 | 福气 | 公公 | 厚道 | 交情 | 口袋 |
| 买卖 | 女婿 | 便宜 | 亲家 | 热闹 | 上司 | 跳蚤 | 位置 | 瞎子 |
| 丈人 | 别扭 | 刺猬 | 东西 | 耳朵 | 风筝 | 关系 | 合同 | 叫唤 |
| 利索 | 冒失 | 奴才 | 婆家 | 勤快 | 认识 | 世故 | 唾沫 | 委屈 |
| 衙门 | 丈夫 | 包子 | 差事 | 动弹 | 告诉 | 后头 | 姐夫 | 客气 |
| 名堂 | 娘家 | 屁股 | 拳头 | 事情 | 土包子 | 娃娃 | 秀气 | 衣服 |
| 包涵 | 柴火 | 动静 | 姑夫 | 含糊 | 嫁妆 | 快活 | 力气 | 名字 |
| 朋友 | 欺负 | 似的 | 太太 | 尾巴 | 稀罕 | 衣裳 | 作坊 | 包袱 |
| 嘟囔 | 姑娘 | 和尚 | 家伙 | 窟窿 | 喇叭 | 媒人 | 念头 | 漂亮 |
| 使唤 | 头发 | 挖苦 | 笑话 | 运气 | 嘴巴 | 巴掌 | 窗户 | 地方 |
| 护士 | 戒指 | 阔气 | 喇嘛 | 明白 | 暖和 | 牌楼 | 亲戚 | 商量 |
| 晚上 | 行李 | 钥匙 | 在乎 | 帮手 | 苍蝇 | 地道 | 寡妇 | 核桃 |
| 帘子 | 木匠 | 疟疾 | 盘算 | 实在 | 挑剔 | 稳当 | 谢谢 | 鸭子 |
| 扁担 | 裁缝 | 多么 | 工夫 | 活泼 | 架势 | 懒得 | 模糊 | 能耐 |
| 少爷 | 特务 | 休息 | 丫头 | 字号 | 把子 | 财主 | 大夫 | 干事 |
| 精神 | 溜达 | 眉毛 | 脑子 | 岁数 | 铁匠 | 兄弟 | 云彩 | 帐篷 |
| 大师傅 | 怪物 | 狐狸 | 结实 | 痢疾 | 眯缝 | 脑袋 | 师傅 | 先生 |
| 庄稼 | 拨弄 | 大方 | 故事 | 皇上 | 结巴 | 篱笆 | 码头 | 难为 |
| 吓唬 | 冤枉 | 张罗 | 本事 | 大爷 | 甘蔗 | 盒子 | 脊梁 | 粮食 |
| 思量 | 喜欢 | 吆喝 | 怎么 | 棒槌 | 对付 | 疙瘩 | 糊涂 | 街坊 |
| 苗条 | 扫帚 | 媳妇 | 哑巴 | 扎实 | 比方 | 对头 | 罐头 | 红火 |
| 老人家 | 蘑菇 | 拾掇 | 小子 | 妖精 | 折腾 | 爸爸 | 弟兄 | 胳膊 |
| 记号 | 老婆 | 迷糊 | 收成 | 小气 | 应酬 | 招呼 | 白净 | 打发 |
| 胡萝卜 | 记性 | 老子 | 门道 | 收拾 | 心思 | 意思 | 招牌 | 簸箕 |
| 规矩 | 蛤蟆 | 老实 | 面子 | 时候 | 星星 | 月亮 | 指甲 | 补丁 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 跟头 | 行当 | 老爷 | 馒头 | 烧饼 | 消息 | 月饼 | 早上 | 部分 |
| 闺女 | 萝卜 | 马虎 | 爽快 | 猩猩 | 眼睛 | 枕头 | 鼻子 | 打算 |
| 骆驼 | 麻利 | 牲口 | 相声 | 秧歌 | 栅栏 | 打量 | 鬼子 | 连累 |
| 麻烦 | 生意 | 下巴 | 状元 | 提防 | 疏忽 | 下巴颏 | 琢磨 | 灯笼 |
| 乡下 | 直性子 | 点心 | 石榴 | 眨巴 | 答应 | 算计 | 知识 | 耷拉 |
| 祖宗 | 耽搁 | 舒服 | 自在 | 耽误 | 首饰 | 芝麻 | 胆子 | 转悠 |
| 道士 | 队伍 | 苗头 | 累赘 | 见识 | 胡琴 | 膏药 | 打听 | 打扮 |
| 客人 | 凉快 | 胭脂 | 困难 | 秀才 | 利落 | 主意 | 念叨 | 畜生 |
| 清楚 | 官司 | 妥当 | 机灵 | 壮实 | 脾气 | 火候 | 拜把子 | 养活 |
| 姑姑 | 师父 | 打点 | 高粱 | 石匠 | 舒坦 | 豆腐 | | |

## D.2 Optional Neutral Tone Words

### D.2.1 Recommended Neutral Tone Words

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 报复 | 月季 | 东边 | 分寸 | 估量 | 伙食 | 价钱 | 看见 | 伶俐 |
| 卖弄 | 挪动 | 遇见 | 亲事 | 任务 | 书记 | 体谅 | 味道 | 修行 |
| 义气 | 值得 | 报应 | 干粮 | 地下 | 分量 | 公家 | 和气 | 家具 |
| 考究 | 冷清 | 埋伏 | 难处 | 排场 | 俏皮 | 势力 | 体面 | 外面 |
| 喜鹊 | 匀称 | 周到 | 抱怨 | 尺寸 | 多少 | 反正 | 公平 | 喉咙 |
| 忌讳 | 苦头 | 力量 | 摸索 | 南瓜 | 撇开 | 情形 | 孙女 | 徒弟 |
| 围裙 | 小姐 | 搭讪 | 嘱咐 | 摆弄 | 成分 | 大人 | 夫人 | 公道 |
| 好处 | 机会 | 客人 | 拉拢 | 棉花 | 泥鳅 | 泼辣 | 敲打 | 尸首 |
| 态度 | 小心 | 夜里 | 志气 | 鼻涕 | 抽屉 | 黄瓜 | 扶手 | 功劳 |
| 害处 | 机器 | 会计 | 理事 | 母亲 | 琵琶 | 瞧见 | 手巾 | 提拔 |
| 心里 | 妖怪 | 折磨 | 别人 | 残疾 | 底细 | 服侍 | 告示 | 恍惚 |
| 缰绳 | 琉璃 | 毛病 | 破绽 | 气氛 | 洒脱 | 替换 | 想法 | 已经 |
| 指头 | 别致 | 聪明 | 当铺 | 翻腾 | 工钱 | 活动 | 老鼠 | 没有 |
| 篇幅 | 轻巧 | 生日 | 痛快 | 新鲜 | 烟囱 | 早晨 | 把手 | 诚实 |
| 得罪 | 费用 | 恭维 | 滑稽 | 褒贬 | 露水 | 牡丹 | 葡萄 | 神仙 |
| 透亮 | 意见 | 照应 | 报酬 | 错误 | 懂得 | 风水 | 感激 | 祸害 |
| 讲究 | 牢骚 | 玫瑰 | 魄力 | 神气 | 通融 | 晓得 | 愿意 | 照顾 |
| 摆布 | 长处 | 点缀 | 凤凰 | 格式 | 花费 | 近视 | 邻居 | 眉目 |
| 喷嚏 | 算盘 | 太监 | 薪水 | 摇晃 | 知道 | 摆设 | 刺激 | 短处 |
| 父亲 | 跟前 | 荒唐 | 门面 | 牌坊 | 说法 | 太阳 | 西瓜 | 樱桃 |
| 糟蹋 | 本钱 | 答复 | 过去 | 荷包 | 菩萨 | 身份 | 烟囱 | 证人 |
| 玻璃 | 道理 | 益处 | 行家 | 用处 | 资格 | 白天 | 惦记 | 干净 |

### D.2.2 Optional Neutral Tone Words

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 熬头 | 不是 | 伺候 | 倒腾 | 二乎 | 佛爷 | 估摸 | 划拉 |
| 奉承 | 假惺惺 | 似乎 | 二五眼 | 啪啦 | 便利 | 了得 | 下处 |
| 亏得 | 乐和 | 乜斜 | 内人 | 藕荷 | 劈柴 | 俏头 | 人性 |
| 停当 | 乌拉 | 下作 | 严实 | 丈母娘 | 伯伯 | 凑搭 | 兜兜 |
| 分付 | 光润 | 厚实 | 军师 | 亏空 | 乱腾 | 名仕派 | 呢子 |
| 勤谨 | 人性 | 丧气 | 听见 | 乌涂 | 下场 | 丫巴 | 主任 |
| 出岔子 | 刀螂 | 二拇指 | 发送 | 光溜 | 号子 | 叽咕 | 口头 |
| 名气 | 哪个 | 姘头 | 千斤 | 仁义 | 伤耗 | 嚏喷 | 外气 |
| 丫鬟 | 争竞 | 便当 | 出息 | 叨叨 | 恶心 | 吩咐 | 光滑 |

响动 合计 俗气 屈枉 出溜 女人 作践 利息
唧咕 口条 亮堂 妹夫 哪吒 平复 屈戌 揉搓
土地 外甥 下水 佣钱 作兴 保人 出挑 叨唠
公母俩 后生 唧哝 口气 冷战 密实 囔囔 平正
日头 傻气 土气 外道 些个 冤家 作料 八哥
叨登 妇道 刮打扁 呼噜 奸细 口音 利害 弥撒
扑扇 情分 染坊 势利 土腥气 忘性 刑法 匀停
冰激凌 出落 哆嗦 富余 刽子手 呼扇 娇嫩 口风
忙合 年下 扑棱 情面 柔和 势派 堂客 悟性
匀兑 侄女 北瓜 刺挠 嘀咕 富态 勾当 和弄
利钱 抹搭 年月 扑腾 掐巴 热乎 叔伯 填补
娇气 文气 哈哈 受用 敷衍 枪手 吃食 牛气
响声 匀净 侧棱 变通 刺痒 鹌鹑 府上 勾搭
娇贵 吭哧 力巴 摩挲 扭捏 扒拉 曲蟮 热和
抬举 望子 喜钱 匀和 侧歪 吧唧 吃喝 嘟哝
跟脚 哈喇 家什 坷垃 劳动 木犀 扭搭 扒搂
热火 失闪 梯己 肮脏 喧腾 匀实 做作 吧嗒
嘟噜 方丈 告送 哈喇子 家当 夸奖 咧咧 梦见
披散 气性 肉头 寿数 淘换 汪子 学生 匀溜
做派 唠叨 学生 尽自 胎气 咕哝 尿泡 风光
备不住 吵吵 地窖子 方向 呱唧 哈巴狗 就合 孔雀
棉子 男人 拍打 气数 认得 寿星 笤帚 温和
印色 兆头 奔头 喳喳 垫补 福分 呱嗒 哈欠
宽绰 唆 毛估 碾子 排子车 清亮 软和 少相
王八 寻思 圆全 再不 巴不得 差使 堆房 肥实
哼哼 忌妒 开发 喽罗 毛毛虫 腻味 枇杷 秋天
调停 王爷 小姑子 夜叉 准头 巴巴结结 慈姑 多会
咕唧 哼唧 急赤白脸 开通 噜苏 毛糙 腻烦 蹭蹬
翘棱 多咱 炮仗 抽打 闹腾 扁食 黏糊 扒拉
屎壳郎 调和 瓦匠 小学生 夜猫子 周正 巴结 抽冷子
风头 咕嘟 回回 惊醒 开销 懒怠 毛躁 闹哄
苣荬菜 属相 调理 窝囊 小月 夜间 咂摸 憋闷
多嫌 饭食 咕噜 坏处 拘挛 快当 拉巴 牧师
疲塌 蛐蛐 山药 贴补 窝憋 心事 央告 坐位
抽搭 多早晚 咕容 寒毛 拘泥 扣头 拉手 磨烦
皮匠 起开 山里红 趿拉 窝棚 悬乎 姨夫 妯娌
插关 大伯子 嘎巴 寒碜 挤咕 框框 拉扯 磨蹭
皮实 大发 扫听 忽闪 莴苣 看望 月钱 茅厕
起火 师爷 纹缕 显摆 引子 庄家 扳手 插口

嘎巴 忽悠 挤对 犒劳 捞摸 米汤 盘缠 轻易
踢腾 纹路 歇息 志向 把势 撮合 大学生 嘎渣
接头 狂气 来头 腼腆 盘费 轻省 摔打 踢蹬
消停 摇撼 扎挣 拌和 撺弄 大意 蛛蛛 慌张
来往 苜蓿 盼头 颧骨 数落 铜匠 蜈蚣 相公
找头 拜拜 撺掇 大拇哥 圪节 憨厚 揪揪 看法
笸箩 齐全 斯文 雾凇 絮叨 油水 找寻 拨拉
大拇指 夹肢窝 晃悠 搅和 进深 来路 茉莉 铃铛
烙铁 操持 齐截 晃荡 抓挠 蚂蚱 孤拐 爷们
时令 絮烦 油葫芦 找补 拨浪鼓 春上 大王 姑父
搅混 隔断 棱缝 蔓菁 贫气 时气 细发 油裙
摆子 瓷实 大约摸 姑爷 横是 教训 磕巴 灵便
配合 时辰 细条 烟火 抓髻 播弄 眵目糊 定规
横竖 景致 磕打 烂糊 蚂螂 配搭 是的 腥气
折扣 板实 程度 定钱 祟祟 欢实 江湖 磕碰
迷惑 铺家 晌午 虾米 爷们 招惹 标致 稠糊
鞋匠 当家子 行头 苦处 粗拉 松散 矫情 缠磨
干了 活便 浇头 空钟 牢稳 迷瞪 铺摊 松动
牙口 指望 槟榔 粗实 待承 干哕 活泛 煎饼
牢靠 门神 铺衬 松快 邪行 牙碜 搌布 比画
德行 干巴 活计 犄角 靠山 爱人 门路 陪客
锡匠 犹疑 支使 比试 粗鲁 打吵子 干松 活计
碌碡 面筋 陪房 水灵 锡 用人 支吾 比量
打喳喳 归着 活路 祭祀 笼头 颟顸 陪送 烧锅
痒痒 支撑 波棱盖 脆生 打手 归置 滑溜 精灵
类乎 打整 支派 熟识 老公 缓醒 灌肠 掂量
马子 飘悠 烧麦 鲜亮 砚台 支棱 疤瘌 船家
敢情 火烧 糨糊 粒子 麻刀 飘洒 熟烫 硬实
罢了 船钱 打磨 敢自 皇历 紧着 罗锅 麻秸
硬朗 早起 背静 茶钱 抖搂 柜上 糊弄 绝户
麻麻亮 瘦溜 硬棒 杂和菜 荸荠 车钱 掂对 棺材
缴裹 老娘 省得 硬气 杂和面 薄荷 醋心 掂掇
胡同 脚后跟 老相 神甫 约会 杂碎 被卧 错处
造化 胡噜 脚钱 老鸹 私房 约莫 正经 辈分
长虫 避讳 症候 芫荽 舍得 舒展 蚰蜒 站住
提溜 甘露 花哨 舅母 肋条 秫秸 腰身 汁水
长里 搭头 管教 花消 节下 莲蓬 素净 芋头
霸道 颤悠 敦实 糕干 葫芦 节气 菱角 耍把
直溜 靶自 馋和 斗箕 胳肢 虎势 节骨眼 落得

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 药性气 | 真是 | 饽饽 | 斗篷 | 胳臂 | 蛤巴 | 芥末 | 落花生 |
| 营生 | 真格的 | 滴水 | 虼蚤 | 行市 | 蒺藜 | 螺蛳 | 芍药 |
| 租钱 | 滴答 | 蛤蜊 | 行道 | 见不得 | 趔趄 | 试探 | 衙役 |
| 点子 | 蝈蝈 | 衡量 | 讲就 | 辘轳 | 说和 | 衣胞 | 章程 |
| 袼褙 | 豪横 | 近乎 | 辘辘 | 说头 | 笊篱 | 点补 | 裹腿 |
| 近便 | 邋遢 | 说辞 | 要是 | 糌粑 | 端相 | 轱辘 | 还是 |
| 里脊 | 说道 | 言语 | 糟践 | 端详 | 辜负 | 身量 | 进项 |
| 赏钱 | 运动 | 紫花 | 答理 | 过年 | 馄饨 | 酒钱 | 阑干 |
| 运道 | 罪过 | 褡包 | 逛荡 | 魂灵 | 间量 | 零散 | 随和 |
| 茁实 | 褡裢 | 锅饼 | 黑下 | 饥荒 | 零碎 | 顺当 | 雅致 |
| 调调 | 隔扇 | 黑咕隆咚 | 骄气 | 顺溜 | 颜色 | 装裹 | 逗弄 |
| 鸡子 | 鹦哥 | 这些 | 道人 | 骨朵 | 造作 | 道行 | 骨碌 |
| 道道 | 鼓捣 | 针眼 | 都督 | 针线 | 顶针 | 针脚 | 阎王 |
| 点拨 | 踝子骨 | | | | | | |

## D.3 Forbidden Neutral Tone Words

### D.3.1 Dictionary Words

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 傲气 | 不至于 | 冲突 | 丁香 | 二流子 | 乖乖 | 后天 | 交道 | 亏待 |
| 冷孤丁 | 命令 | 南瓜 | 僻静 | 人物 | 世道 | 体贴 | 倭瓜 | 下贱 |
| 业务 | 丈人 | 爱惜 | 冰凌 | 典故 | 恩典 | 分析 | 光景 | 后来 |
| 俊俏 | 吝惜 | 埋怨 | 女儿 | 勤务 | 容易 | 世面 | 天平 | 围屏 |
| 习气 | 义务 | 主顾 | 宝贝 | 参谋 | 冬天 | 富裕 | 功名 | 呼哧 |
| 吉利 | 刊物 | 履历 | 摩托 | 妞妞 | 平和 | 气候 | 书籍 | 乡亲 |
| 匀整 | 争持 | 布置 | 吹打 | 冬瓜 | 废物 | 咖喱 | 哼哧 | 唧筒 |
| 口供 | 柳罐 | 明晰 | 年份 | 平展 | 气力 | 事故 | 威风 | 乡间 |
| 厌烦 | 仗恃 | 弊病 | 吹鼓手 | 叮嘱 | 扶持 | 固执 | 囫囵 | 家务 |
| 口水 | 流气 | 模样 | 年成 | 平整 | 气味 | 唢呐 | 头人 | 文凭 |
| 信用 | 应承 | 作为 | 扮相 | 常识 | 姑息 | 寒噤 | 家眷 | 宽裕 |
| 目录 | 年景 | 批评 | 气息 | 嗜好 | 头领 | 温存 | 兴致 | 影壁 |
| 制度 | 把戏 | 成全 | 大概齐 | 繁殖 | 寒战 | 寂寞 | 宽贷 | 理由 |
| 目的 | 年纪 | 圣人 | 托付 | 温暾 | 夏天 | 意味 | 周济 | 把持 |
| 成绩 | 店家 | 风凉 | 寒食 | 将军 | 控制 | 瘰疬 | 磨坊 | 泥巴 |
| 皮肤 | 气派 | 圣明 | 托生 | 物件 | 嫌疑 | 在意 | 把握 | 揣摩 |
| 弹弓 | 风气 | 干部 | 户口 | 技术 | 瞌睡 | 练习 | 秘书 | 泥胎 |
| 泉眼 | 声音 | 托盘 | 物质 | 孝敬 | 愿望 | 姿势 | 把柄 | 操行 |
| 待遇 | 风瘫 | 擀面杖 | 户籍 | 救星 | 胯骨 | 老成 | 面目 | 螃蟹 |
| 清明 | 奢侈 | 替身 | 维持 | 孝顺 | 字据 | 报复 | 春天 | 饭量 |
| 攻击 | 欢腾 | 救济 | 阔绰 | 老气 | 面积 | 碾坊 | 秋千 | 实惠 |
| 甜面酱 | 误会 | 懈怠 | 月经 | 庄户 | 报应 | 次序 | 担待 | 根基 |
| 汗毛 | 教育 | 魁伟 | 联系 | 面糊 | 能干 | 手势 | 藤萝 | 戏弄 |
| 油坊 | 捉弄 | 抱怨 | 沉着 | 桂花 | 痕迹 | 斤两 | 魁梧 | 良心 |
| 腻虫 | 迁就 | 手气 | 旋风 | 油炸鬼 | 捉摸 | 抱负 | 测验 | 澄沙 |
| 泔水 | 豁亮 | 景气 | 螺丝 | 钱粮 | 手艺 | 通条 | 细致 | 洋气 |
| 支应 | 摆弄 | 猜度 | 灯草 | 规模 | 贿赂 | 精明 | 路数 | 齐整 |
| 捎带 | 题目 | 支持 | 本分 | 脆骨 | 端正 | 过失 | 精致 | 连累 |
| 损失 | 西番莲 | 焰火 | 整齐 | 本领 | 臭虫 | 端量 | 锅盔 | 纪律 |
| 搜索 | 贤惠 | 犹豫 | 斟酌 | 绑腿 | 茶房 | 董事 | 顾虑 | 经验 |
| 零碎 | 搜罗 | 雪里红 | 玉米 | 灶王爷 | 编制 | 茶汤 | 高明 | 计较 |
| 鹭鸶 | 施展 | 香椿 | 用项 | 秩序 | 编辑 | 财神 | 较量 | 龙头 |
| 是非 | 疑惑 | 组织 | 鼻涕 | 迟疑 | 金针 | 龙王 | 松香 | 研究 |
| 自然 | 陈设 | 阶级 | 水晶 | 缘分 | 至于 | 韭菜 | 熟习 | 艺术 |
| 蜘蛛 | 熟悉 | 英雄 | 足迹 | 猞猁 | 要不 | 生气 | 生疏 | 神灵 |

试验 闪失

### D.3.2 Corpus Words

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 但是 | 就是 | 感觉 | 现在 | 这边 | 按照 | 倒饬 | 白菜 | 悖悖 |
| 被窝 | 比划 | 便宜 | 病人 | 不价 | 材料 | 吃唤 | 动换 | 动物 |
| 多儿 | 功夫 | 姑母 | 姑女 | 海边 | 合乎 | 后边 | 花生 | 教文 |
| 接触 | 挤兑 | 家里 | 建筑 | 灵泛 | 罗嗦 | 起来 | 牵扯 | 前边 |
| 塞上 | 上边 | 丝瓜 | 伺候 | 宽敞 | 姥爷 | 里边 | 里面 | 提拉 |
| 提搂 | 跳腾 | 外边 | 亡人 | 忘记 | 西边 | 喜兴 | 下边 | 先头 |
| 限度 | 消楚 | 心成 | 性质 | 愿愈 | 医生 | 医务 | 长处 | 值当 |
| 质童 | 办法 | 北京人 | 倒是 | 方面 | 饭钱 | 翻译 | 分开 | 根据 |
| 估计 | 基本上 | 街道 | 肯定 | 马上 | 那样 | 年龄 | 上半年 | 甚至 |
| 事务所 | 事业 | 适应 | 天气 | 外地 | 外企 | 下半年 | 项目 | 现代化 |
| 希腊 | 一样 | 意义 | 这样 | 转变 | 状况 | 专业 | 志愿 | 意向 |
| 意愿 | 严格 | 比较 | 元宵 | 设计 | 兴趣 | 希望 | 真正 | 主要 |
| 考虑 | 工作 | 体制 | 规定 | 前途 | 事务 | 造诣 | 限制 | 政治 |
| 计划 | 束缚 | 乐器 | 概念 | 解释 | 建设 | 网站 | 放弃 | 生涯 |
| 装备 | 质量 | 去年 | 好像 | 云南 | 左边 | 心态 | 自由 | 印度 |
| 条件 | 效用 | 变数 | 动作 | 区别 | 科目 | 感情 | 方便 | 记忆 |
| 干脆 | 激情 | 这份 | 尊重 | 综艺 | 岗位 | 反应 | 期待 | 气愤 |
| 压抑 | 变化 | 顺义 | 看待 | 规律 | 掰饬 | 销路 | 偏僻 | 价值 |
| 理论 | 意志 | 灌输 | 作用 | 会议 | 怪异 | 局势 | 鄙视 | 顺序 |
| 素质 | 反映 | 感受 | 响应 | 顺利 | 宣传 | 开放 | 出生 | 客户 |
| 滋润 | 正确 | 迅速 | 亮丽 | 幸运 | 密度 | 重要 | 官员 | 企业 |
| 地位 | 模型 | 利益 | 战略 | 创造 | 流行 | 设备 | 进度 | 印象 |
| 电视台 | 经济 | 铁路 | 骄傲 | 上进心 | 悠闲 | 浪漫 | 引荐 | 本地人 |
| 奋斗 | 珍惜 | 坚持 | 支部 | 生活 | 问题 | 崇文 | 锻炼 | 评价 |
| 准备 | 人员 | 关联 | 碰见 | 明天 | 补助 | 对待 | | |

## D.4 Neutral Tone Survey

**轻声调查**

首先，谢谢你帮我做这个问卷！

关于轻声的用法，普通话水平测试和相关教材都有比较严格的规定（比如某个词必须轻声），我想问问看你对以下一些词在标准普通话中是否轻声的了解程度，以及你自己在日常说话时是怎么使用轻声的。所谓日常说话的正式程度,大概指跟一般朋友对话时候,介于特别随意的北京话和特别正式的普通话之间的那种程度。

问卷的目的是看你的想法和用法，所以没有正误之分，只要按照自己的想法选就好了！请不要搜索这些词是不是需要轻声.

| | | | | |
|---|---|---|---|---|
| 成绩 | 分析 | 冬天 | 宣传 | 事业 |
| 名字 | 月亮 | 欺负 | 瓶子 | 星星 |
| 已经 | 多少 | 反正 | 白天 | 看见 |
| 方向 | 要是 | 感觉 | 程度 | 这边儿 |

1. 普通话标准对很多词应不应该轻声,以及轻声的频率有所规定，根据你所了解的轻声规则(不了解也没关系,凭直觉即可)，请对以上20个词在标准普通话中,是否被规定必读/常读/可读/禁读轻声作出判断（轻声的均为最后一个字）

2. 以上20个词，就你自己日常的说话习惯(即跟一般朋友对话时的介于北京话和普通话之间的正式程度),请选择你轻声的使用情况(全都轻声/可轻可不轻/从不轻声)(轻声的均为最后一个字)

3. 姓名：

# Appendix E

# *erhua* Word Lists

## E.1 Interview

| Pinyin | Character | Word Class | Translation |
|---|---|---|---|
| nabian | 那边 | pn. | ‘there’ |
| libian | 里边 | pn. | ‘libian’ |
| zhebian | 这边 | pn. | ‘here’ |
| youdian | 有点 | adv. | ‘a bit’ |
| shi | 事 | n. | ‘matter’ |
| fen | 分 | n. | ‘point’ |
| ben | 本 | cl. | ‘classifier’ |
| fa | 法 | n. | ‘method’ |
| fangmian | 方面 | n. | ‘aspect’ |
| dianying | 电影 | n. | ‘film’ |
| shangban | 上班 | v. | ‘(go to) work’ |
| quan | 圈 | n. | ‘circle’ |
| zhengge | 整个 | adj. | ‘whole, total’ |
| zheng | 证 | n. | ‘certificate’ |
| zi | 字 | n. | ‘character, writing’ |
| duan | 段 | cl. | ‘classifier’ |
| hutong | 胡同 | n. | ‘alleyway’ |
| fen | 份 | cl. | ‘classifier’ |
| houbian | 后边 | pn. | ‘behind’ |

## E.2 Self Recordings

| Pinyin | Character | Word Class | Translation |
|---|---|---|---|
| youdian | 有点 | adv. | ‘slightly’ |
| zheyang | 这样 | pn. | ‘this’ |
| nabian | 那边 | pn. | ‘there’ |
| libian | 里边 | pn. | ‘inside’ |
| houbian | 后边 | pn. | ‘behind’ |
| huo | 活 | n. | ‘labour, job’ |
| fen | 份 | cl. | ‘classifier’ |
| houmian | 后面 | pn. | ‘behind’ |
| qianmian | 前面 | pn. | ‘front’ |
| quan | 圈 | n. | ‘circle’ |
| chuan | 串 | cl. | ‘classifier’ |
| ping | 瓶 | n. | ‘bottle’ |
| sheng | 声 | n. | ‘sound, noise’ |
| jian | 件 | cl. | ‘classifier’ |
| ming | 名 | n. | ‘name, title’ |
| tiao | 条 | n. | ‘stripe’ |
| wan | 碗 | cl. | ‘classifier’ |
| shangban | 上班 | v. | ‘(go to) work’ |
| xiaban | 下班 | v. | ‘get off work’ |
| qiu | 球 | n. | ‘ball’ |

# Appendix F

# Integrated Regression Model Output

## F.1 Neutral Tone

| | Estimate | Std. Error | Z value | *p*-value |
|---|---|---|---|---|
| (Intercept) 0.97 | 0.14 | 6.83 | **<0.001** | |
| Function - Independent | -0.35 | 0.15 | -2.30 | **0.021** |
| Function - Modifying | -0.483 | 0.09 | -5.41 | **<0.001** |
| Preceding Tone - 1 | -0.95 | 0.09 | -10.08 | **<0.001** |
| Preceding Tone - 2 | -1.06 | 0.12 | -9.18 | **<0.001** |
| Preceding Tone - 3 | -0.42 | 0.11 | -3.92 | **<0.001** |
| Following Tone - 1 | 0.46 | 0.14 | 3.34 | **<0.001** |
| Following Tone - 2 | 0.48 | 0.13 | 3.67 | **<0.001** |
| Following Tone - 3 | 0.05 | 0.13 | 0.38 | 0.703 |
| Following Tone - 4 | 0.21 | 0.12 | 1.79 | 0.073 |
| Following Tone - Pause | 0.04 | 0.12 | 0.31 | 0.757 |
| Syllable - Polysyllabic Final | 0.73 | 0.64 | 1.14 | 0.253 |
| Syllable - Non-Final | -0.04 | 0.48 | -0.08 | 0.939 |
| Gender - Female | -0.26 | 0.12 | -2.12 | **0.034** |
| Use - Recommended | 0.61 | 0.11 | 5.35 | **<0.001** |
| Use - Optional | 0.26 | 0.1 | 2.73 | **0.006** |
| Word Class - Verbal:Word Structure - Phrase | 0.69 | 0.51 | 1.34 | 0.179 |
| Word Class - Functional:Word Structure - Phrase | 2.35 | 0.73 | 3.24 | **0.001** |
| Word Class - Nominal:Word Structure - Phrase | 0.86 | 0.43 | 1.99 | **0.047** |
| Word Class - Verbal:Word Structure - Affixation | 0.25 | 0.36 | 0.69 | 0.493 |
| Word Class - Functional:Word Structure - Affixation | 1.54 | 0.4 | 3.86 | **<0.001** |
| Word Class - Nominal:Word Structure - Affixation | 0.13 | 0.2 | 0.66 | 0.507 |
| Word Class - Verbal:Word Structure - Compound | 1.8 | 0.27 | 6.69 | **<0.001** |
| Word Class - Functional:Word Structure - Compound | 1.84 | 0.56 | 3.3 | **<0.001** |
| Word Class - Nominal:Word Structure - Compound | 0.11 | 0.17 | 0.64 | 0.522 |
| Word Class - Verbal:Word Structure - Simple | 0.12 | 0.09 | 1.25 | 0.213 |
| Word Class - Functional:Word Structure - Simple | 0.93 | 0.13 | 7.37 | **<0.001** |

(Continued on next page)

| | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|
| Tone - 1:Syllable - Disyllabic Final | -1.46 | 0.12 | -12.71 | **<0.001** |
| Tone - 2:Syllable - Disyllabic Final | -1.47 | 0.11 | -13.37 | **<0.001** |
| Tone - 3:Syllable - Disyllabic Final | -1.22 | 0.17 | -7.3 | **<0.001** |
| Tone - 1:Syllable - Polysyllabic Final | -1.91 | 0.82 | -2.32 | **0.020** |
| Tone - 2:Syllable - Polysyllabic Final | -1.38 | 0.63 | -2.18 | **0.029** |
| Tone - 1:Syllable - Non-Final | 0.27 | 0.78 | 0.34 | 0.734 |
| Tone - 2:Syllable - Non-Final | -1.91 | 0.92 | -2.09 | **0.037** |
| Tone - 3:Syllable - Non-Final | 12.2 | 441.37 | 0.03 | 0.978 |
| Gender- Male:Programme - Language | -0.39 | 0.15 | -2.68 | **0.007** |
| Gender - Female:Programme - Language | 0.01 | 0.13 | 0.07 | 0.942 |
| Gender - Male:Programme - Business | -0.25 | 0.11 | -2.24 | **0.025** |
| Gender - Female:Programme - Business | -0.22 | 0.12 | -1.81 | 0.07 |
| N: 4206; Random effects: Participant (21); Log likelihood: -2466.0 | | | | |

## F.2 Classifier Omission

| | Estimate | Std. Error | Z value | $p$-value |
|---|---|---|---|---|
| (Intercept) | -6.01 | 1.52 | -3.95 | **<0.001** |
| Preceding Tone - pause | -1.95 | 0.7203 | -2.71 | **0.007** |
| Preceding Tone - 2 | -1.25 | 0.6358 | -1.96 | **0.05** |
| Preceding Tone - neutral tone | -1.17 | 0.3940 | -2.99 | **0.003** |
| Preceding Tone - 3 | -0.16 | 0.3605 | -0.54 | 0.587 |
| Preceding Tone - 4 | -0.47 | 0.3924 | -1.20 | 0.23 |
| Tone of Classifier - 2 | -14.94 | 2640.18 | -0.01 | 0.995 |
| Tone of Classifier - 3 | -14.77 | 1944.47 | -0.01 | 0.994 |
| Tone of Classifier - 4 | 2 | 1.18 | 1.69 | 0.0914 |
| Following Noun - Monosyllabic | 0.28 | 0.33 | 0.86 | 0.392 |
| Following Noun - Disyllabic | 0.73 | 0.25 | 2.87 | **0.004** |
| Aspiration - Low | 2.32 | 0.76 | 3.04 | **0.002** |
| Programme - Journalism | -0.12 | 0.99 | -0.12 | 0.903 |
| Programme - Language | 1.68 | 0.71 | 2.37 | **0.018** |
| Gender - Female:Programme - Business:Aspiration - High | 2.49 | 1.07 | 2.33 | **0.02** |
| Gender - Male:Programme - Business:Aspiration - High | 2.26 | 1.18 | 1.92 | 0.055 |
| Gender - Female:Programme - Journalism:Aspiration - High | 0.75 | 1.37 | 0.55 | 0.585 |
| Gender - Male:Programme - Journalism:Aspiration - High | -14.51 | 1956.08 | -0.01 | 0.994 |
| Gender - Female:Programme - Language:Aspiration - High | 0.77 | 0.82 | 0.94 | 0.349 |
| Gender - Female:Programme - Business:Aspiration - Low | -0.62 | 0.82 | -0.75 | 0.452 |
| Gender - Female:Programme - Journalism:Aspiration - Low | 0.3 | 1.12 | 0.27 | 0.786 |
| Gender - Female:Programme - Language:Aspiration - Low | -3.22 | 1.34 | -2.4 | **0.016** |
| N: 4206; Random effects: Participant (21); Log likelihood: -285.9 | | | | |

# Appendix G

# Token Distribution for Intensifier *te*

## G.1 Linguistic Factors

| Factor | Structure | | | Function | | |
|---|---|---|---|---|---|---|
| Level | Verb | Adjective | Phrase | Modifying | Core | Independent |
| Token count | 23/196 | 55/991 | 7/75 | 35/407 | 47/688 | 3/167 |

# References


Agha, A. (2003). The social life of cultural value. *Language & Communication*, 23(3-4):231–273. Lang Commun.

Agha, A. (2005). Voice, footing, enregisterment. *Journal of Linguistic Anthropology*, 15(1):38–59.

Agha, A. (2007). *Language and Social Relations*. Studies in the Social and Cultural Foundations of Language. Cambridge University Press.

Aijón Oliva, M. Á. and Serrano, M. J. (2012). Towards a comprehensive view of variation in language: The absolute variable. *Language & Communication*, 32(1):80–94.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5):469–480.

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, 1(2):68–73.

Auer, P. (2011). Dialect vs. standard: A typology of scenarios in europe. In Kortmann, B. and van der Auwera, J., editors, *The languages and linguistics of Europe: A comprehensive guide.*, pages 485–500. Berlin/New York: De Gruyter Mouton.

Babel, A. M. (2016). Silence as control: Shame and self-consciousness in sociolinguistic positioning. In Babel, A. M., editor, *Awareness and Control in Sociolinguistic Research*, pages 200–227. Cambridge University Press.

Bai, L. (2006). Graduate unemployment: Dilemmas and challenges in china's move to mass higher education. *The China Quarterly*, 185:128.

Bao, Z. (1999). *The structure of tone*. Oxford University Press, Oxford.

Baran, D. M. (2007). *Linguistic practice, social identity, and ideology: Mandarin variation in a Taipei County high school (China, Taiwan)*. PhD thesis, Harvard University, Cambridge, MA.

Baran, D. M. (2014). Linguistic practice and identity work: Variation in taiwan mandarin at a taipei county high school. *Journal of Sociolinguistics*, 18(1):32–59.

Barlow, T. (1991). Theorizing woman: Funu, guojia, jiating [chinese women, chinese state, chinese family]. *Genders*, pages 132–160.

Bates, D., Mächler, M., Bolker, B., and Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67(1):1–48.

Becker, K. (2013). The sociolinguistic interview. In Mallinson, C., Childs, B., and Herk, G. V., editors, *Data Collection in Sociolinguistics*, chapter 6, pages 99–100. Routledge.

Bell, A. (1984). Language style as audience design. *Language in Society*, 13(2):145–204.

Bell, A. (2001). Back in style: reworking audience design. In Eckert, P. and Rickford, J. R., editors, *Style and Sociolinguistic Variation*, chapter 9, pages 139–169. Cambridge University Press.

Benor, S. B. (2001). The learned/t/: phonological variation in orthodox jewish english. *Penn Working Papers in Linguistics: Selected Papers from NWAV 2000*, pages 1–16.

Biber, D. and Finegan, E. (1994). *Sociolinguistic perspectives on register*. Oxford University Press.

Bigham, D. S. (2012). Emerging adulthood in sociolinguistics. *Linguistics and Language Compass*, 6(8):533–544.

Bloomfield, L. (1984). *Language*. University of Chicago.

BMBS (2016). Beijing statistical yearbook 2016.

BMBS (2017). Per-capita disposable income for permanent residents for first quarter 2017. Beijing Municipal Bureau of Statistics and NBS Survey Office in Beijing.

Boersma, P. and Weenink, D. (2016). Praat: doing phonetics by computer (version 6.0.20).

Brown, K. (2013). *Contemporary China*. Contemporary states and societies. Palgrave Macmillan, Basingstoke. Includes bibliographical references and index.

Bucholtz, M. (2001). The whiteness of nerds: Superstandard english and racial markedness. *Journal of Linguistic Anthropology*, 11(1):84–100.

Bucholtz, M. (2004). Styles and stereotypes: The linguistic negotiation of identity among laotian american youth. *Pragmatics*, 14(2/3):127–148.

Bybee, J. (2006). *Frequency of Use and the Organization of Language*. Oxford University Press.

Campbell-Kibler, K. (2006). *Listener perceptions of sociolinguistic variables: The case of (ING)*. PhD thesis, Stanford University, Stanford.

Chan, W.-K. and Lu, S. (2011). Graduate unemployment and the emergence of ant tribe: A social policy perspective. *journal of Public Administration*, 4(3):146–182.

Chao, Y. R. (1968). *A grammar of spoken Chinese*. University of California Press, Berkeley.

Chao, Y. R. (2002). *zhaoyuanren yuyanxue lunwen ji [Linguistic Essays by Yuen Ren Chao]*. Beijing: Commercial Press.

Chao, Y. R. and Dil, A. S. (1976). *Aspects of Chinese sociolinguistics : essays*. Stanford University Press, Stanford.

Chappell, W. (2016). On the social perception of intervocalic /s/ voicing in costa rican spanish. *Language Variation and Change*, 28(3):357–378.

Chen, E. (2016). "power femininity" and popular women's magazines in china. *International Journal of Communication*, 10(0):2831–2852.

Chen, H. (2007). Qingsheng de biaozhong ying tongyiguifan - zaitan putonghua shuiping ceshe de xindu wenti. *Hainan Shifan Daxue Xuebao (Shehui Kexue Ban)*, 02:120–123.

Chen, M. Y. (2000). *Tone sandhi: Patterns across Chinese dialects*, volume 92. Cambridge University Press.

Chen, P. (1999). *Modern Chinese : history and sociolinguistics*. Cambridge University Press, Cambridge, U.K. ; New York, NY.

Chen, Q. (2006). *Jin dai Han yu cheng du fu ci yan jiu*. Ba Shu shu she, Chengdu.

Chen, S. (1986). Beijinghua "ni" "nin" shiyong guilu chutan. *Yuwen Yanjiu*, 03:24–31.

Chen, W. (1992). *A brief Guide to Beijing Traditional Culture*. Beijing: Beijing Yanshan Press.

Cheshire, J. (1982). *Variation in an English dialect: A sociolinguistic study*. Cambridge University Press, Cambridge.

Cheshire, J. (1997). Linguistic variation and social function. In Coupland, N. and Jaworski, A., editors, *Sociolinguistics: A Reader*, pages 185–198. Macmillan Education UK, London.

Cheshire, J. and Fox, S. (2009). Was/were variation: A perspective from london. *Language Variation and Change*, 21(01):1.

Childs, C. (2016). Canny good, or quite canny? *English World-Wide*, 37(3):238–266.

China (2000). Law of the people's republic of china on the standard spoken and written chinese language.

Chinese Academy of Sciences (1977). *Xian dai han yu ci dian [Contemporary Chinese Dictionary]*. Commercial Press, Hong Kong.

Coates, J. (1998). *Language and Gender: A Reader*. Wiley.

Coates, J. and Cameron, D. (1989). *Women in Their Speech Communities: New Perspectives on Language and Sex*. Studies in Language and Linguistics. Longman.

Consortium for Language Teaching and Learning (2017). Dialects of mandarin and southern chinese.

Consortium for Language Teaching and Learning (n.d.). Maps of languages and dialects of china. Retrieved from: `https://www.dartmouth.edu/~chinese/maps/map4.html`.

Coupland, N. (1980). Style-shifting in a cardiff work-setting. *Language in Society*, 9(01):1.

Coupland, N. (1985). 'hark, hark, the lark': Social motivations for phonological style-shifting. *Language & Communication*, 5(3):153 – 171.

DeFrancis, J. (1984). *The Chinese language : fact and fantasy*. University of Hawaii Press, Honolulu.

Dian, L. (2014). Graduate employment in china: Current trends and issues. *Chinese Education & Society*, 47(6):3–11.

Dickson, V. and Hall-Lew, L. (2017). Class, gender, and rhoticity: The social stratification of non-prevocalic /r/ in edinburgh speech. *Journal of English Linguistics*, 45(3):229–259.

Dong, X. (2004). Beijinghua mingci duanyu qian yangping 'yi' de yufahua qingxiang. In Wu, F. and Hong, B., editors, *yufahua yu yufa yanjiu*, pages 167–170. Beijing: Commercial Press.

Drager, K. (2009). *A sociophonetic ethnography of Selwyn Girls' High*. PhD thesis, University of Canterbury, Canterbury, NZ.

Du, Y. (1993). Beijing hua zhong de 'yi + ming'. *zhongguo yuwen*, 2:142.

Duanmu, S. (1990). *A formal study of syllable, tone, stress and domain in Chinese languages*. PhD thesis, Massachusetts Institute of Technology.

Duanmu, S. (2007). *The phonology of standard Chinese*. Oxford University Press, second edition edition.

Eckert, P. (1988). Adolescent social structure and the spread of linguistic change. *Language in Society*, 17(2):183–207. Lang Soc.

Eckert, P. (1989a). *Jocks and burnouts: Social categories and identity in the high school*. Teachers College Press, New York, NY.

Eckert, P. (1989b). The whole woman: Sex and gender differences in variation. *Language variation and change*, 1(03):245–267.

Eckert, P. (2003). Language and adolescent peer groups. *Journal of Language and Social Psychology*, 22(1):112–118. J Lang Soc Psychol.

Eckert, P. (2004). Variation and a sense of place. In Fought, C., editor, *Sociolinguistic Variation: Critical Reflections*, pages 107–120. Cambridge University Press.

Eckert, P. (2008). Variation and the indexical field. *Journal of Sociolinguistics*, 12(4):453–476.

Eckert, P. (2012). Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation. *Annual Review of Anthropology*, 41:87–100. Annu Rev Anthropol.

Eckert, P. (2016). Variation, meaning and social change. In Coupland, N., editor, *Sociolinguistics: Theoretical Debates*, pages 68–85. Cambridge University Press.

Eckert, P. and McConnell-Ginet, S. (1992). Think practically and look locally - language and gender as community-based practice. *Annual Review of Anthropology*, 21:461–490. Annu Rev Anthropol.

Fang, Q. (2013). Contrastive analysis of degree adverbs between taiwanese mandarin and mandarin chinese. *Tcsol Studies*, 3:58–65.

Fromkin, V. (1978). *Tone : a linguistic survey*. Academic Press, New York ; London.

Fu, Q. (2014). Comparison of the adverbs of degree of dialect of three regions in the north. *Journal of Tianjin Vocational Institutes*, 16(7):51–55.

Gao, H. H. (2010). A study of swedish speakers' learning of chinese noun classifiers. *Nordic Journal of Linguistics*, 33(2):197–229.

Gao, S. (2017). The sociolinguistics of globalizing china. *Language and Linguistics Compass*, 11(6):e12245–n/a. e12245 LNCO-0674.R1.

Gao, Z. (2008). Gender discrimination in chinese recruitment advertisements: A content analysis. *Journal of Asia-Pacific Business*, 9(4):395–418.

General Office of Beijing Municipal People's Government (2016). Trial regulations on the point-based system for aquiring permanent beijing resident permits. Retrieved from: `http://zhengce.beijing.gov.cn/library/192/33/50/46/438657/79206/`.

Giles, H. and Powesland, P. F. (1975). *Speech style and social evaluation*. Academic Press, New York, NY.

Giles, H. and Smith, P. M. (1979). Accommodation theory: Optimal levels of convergence. In Giles, H. and Clair, R. N. S., editors, *Language and social psychology*, pages 45–65. Blackwell Oxford.

Giles, J., Park, A., and Zhang, J. (2005). What is china's true unemployment rate? *China Economic Review*, 16(2):149 – 170.

Gu, C. and Shen, J. (2003). Transformation of urban socio-spatial structure in socialist market economies: the case of beijing. *Habitat International*, 27(1):107–122.

Guo, F. and Iredale, R. (2004). The impact of hukou status on migrants' employment: Findings from the 1997 beijing migrant census. *The International Migration Review*, 38(2):709–731.

Guo, L. (2004). The relationship between putonghua and chinese dialects. In Zhou, M. and Sun, H., editors, *Language Policy in the People's Republic of China: Theory and Practice since 1949*, pages 45–54. Kluwer Academic Publishers, Boston. Language Policy.

Guy, G. R. (1988). Language and social class. In Newmeyer, F. J., editor, *Linguistics, the Cambridge survey*, pages 37–63. Cambridge University Press, Cambridge ; New York.

Halinski, R. S. and Feldt, L. S. (1970). The seletion of variables in multiple regression analysis. *Journal of Educational Measurement*, 7(3):151–157.

Hall-Lew, L. (2009). *Ethnicity and phonetic variation in a San Francisco neighborhood*. PhD thesis, Stanford University, Palo Alto, CA.

Halliday, M. A. K. (1978). *Language as social semiotic: The social interpretation of language and meaning*. London: Edward Arnold.

Han, H. (2007). Jiuye qishi heyi lizhiqizhuang? *Career Development*, 1:4–7.

Hao, J. (2012). Qiantan beijinghua kouyuzhongde danyinjie chengdufuci. *Modern Chinese*, 6:22–24.

Haugen, E. (1966). Dialect, language, nation1. *American Anthropologist*, 68(4):922–935.

Hazenberg, E. N. L. (2012). Language and identity practice: A sociolinguistic study of gender in ottawa, ontario. Master's thesis, Memorial University of Newfoundland.

He, J. (2004). *Putonghua Qingsheng Fenxi Yanjiu [On the distribution of the Neutral Tone in Standard Mandarin]*. PhD thesis, Shandong University, Jinan.

Helleseter, M. D., Kuhn, P., and Shen, K. (2016). Age and gender profiling in the chinese and mexican labor markets: Evidence from four job boards. Working Paper 22187, National Bureau of Economic Research.

Hong, Z. (2007). Numeral classifiers in mandarin chinese. *Journal of East Asian Linguistics*, 16(1):43–59.

Hsu, I. C. Y. I. C.-y. (c1983). *China without Mao : the search for a new order*. A Galaxy book. Oxford University Press, Oxford ; New York. T.p. dated: 1982.

Hu, M. (1986a). Beijnghua he putonghua (shang). *Yuwen Jianshe*, 03:47–50.

Hu, M. (1986b). Beijnghua he putonghua (xia). *Yuwen Jianshe*, 04:49–51.

Hu, M. (1987). *Beijing hua chu tan [A preliminary study of the dialect of Beijing]*. Commercial Press, Beijing.

Huang, C., Li, Y., and Li, Y. (2009). *The Syntax of Chinese*. Cambridge Syntax Guides. Cambridge University Press.

Huang, G. (2011). *Fuzhoushi Shangyechangsuo Yuyan Shiyong Yanjiu*. PhD thesis, Nanjing University, Nanjing.

Huang, J. (2003). shenglue yi he shenglue liangci. *Qinghai jiaoyu*, 11:22.

Hymes, D. (2003). *Foundations in sociolinguistics: An ethnographic approach*. Psychology Press.

Inoue, M. (2002). Gender, language, and modernity: Toward an effective history of japanese women's language. *American Ethnologist*, 29(2):392–422.

Inoue, M. (2006). *Vicarious Language: Gender and Linguistic Modernity in Japan*. Asia (Columbia University. East Asian Institute). University of California Press.

Ito, R. and Tagliamonte, S. (2003). Well weird, right dodgy, very strange, really cool: Layering and recycling in english intensifiers. *Language in Society*, 32(02):257–279.

Jing, S. (2002). *Xian dai Han yu qing sheng dong tai yan jiu [A dynamic study on the neutral tone in Modern Chinese]*. Ethnic Publishing House, Beijing.

Jing, Y. (2016). Urban migrants' social sercurity from a social stratification perspective: A case study of beijing. Master's thesis, Party School of the Central Comittee of CPC.

Johnstone, B. (2004). Place, globalization and linguistic variation. In Fought, C., editor, *Sociolinguistic Variation: Critical Reflections*, pages 65–83. Cambridge University Press.

Johnstone, B., Andrus, J., and Danielson, A. E. (2006). Mobility, indexicality, and the enregisterment of "pittsburghese". *Journal of English Linguistics*, 34(2):77–104.

Johnstone, B. and Kiesling, S. F. (2008). Indexicality and experience: Exploring the meanings of /aw/-monophthongization in pittsburgh. *Journal of Sociolinguistics*, 12(1):5–33.

Kiesling, S. (2007). Men, masculinities, and language. *Language and Linguistics Compass*, 1(6):653–673.

Kiesling, S. F. (1998). Men's identities and sociolinguistic variation: The case of fraternity men. *Journal of Sociolinguistics*, 2(1):69–99.

Kirkham, S. (2013). *Ethnicity, social practice and phonetic variation in a Sheffield secondary school*. PhD thesis, University of Sheffield.

Kirkham, S. (2015). Intersectionality and the social meanings of variation: Class, ethnicity, and social practice. *Language in Society*, 44(05):629–652.

Knee, S. and Van Herk, G. (2013). Stop and go (away): Linguistic consequences of non-local aspirations among small-town newfoundland youth. *Regional Language Studies... Newfoundland*, 24:31–42.

Kong, S. (2012). Adult english speakers' acquisition of chinese count-mass classifiers. *Journal of Chinese Linguistics*, 40(2):442–477.

Kristiansen, T. (2011). Attitudes, ideology and awareness. In Ruth Wodak, Barbara Johnstone, P. K., editor, *The SAGE Handbook of Sociolinguistics*, chapter 19, pages 265–278. SAGE Publications Ltd, London.

Kuhn, P. and Shen, K. (2015). Do employers prefer migrant workers? evidence from a chinese job board. *IZA Journal of Labor Economics*, 4(1):22.

Labov, W. (1963). The social motivation of a sound change. *WORD*, 19(3):273–309.

Labov, W. (1966a). The effect of social mobility on linguistic behavior. *Sociological Inquiry*, 36(2):186–203.

Labov, W. (1966b). *The social stratification of English in New York City*. Center for Applied Linguistics, Washington.

Labov, W. (1972a). *Sociolinguistic patterns*. University of Pennsylvania Press, Philadelphia, PA.

Labov, W. (1972b). Some principles of linguistic methodology. *Language in Society*, 1(01):97–120.

Labov, W. (1984). Field methods of the project on linguistic change and variation. In Baugh, J. and Sherzer, J., editors, *Language in use: Readings in sociolinguistics*, pages 28–53. Prentice-Hall, Englewood Cliffs, NJ.

Labov, W. (1997). The social stratification of (r) in new york city department stores. In Coupland, N. and Jaworski, A., editors, *Sociolinguistics: A Reader*, pages 168–178. Macmillan Education UK, London.

Labov, W. (2001). *Principles of linguistic change: social factors*, volume 2 of *Language in Society*. Blackwell, Oxford, UK; Cambridge, MA.

Labov, W. (2002). The anatomy of style-shifting style and sociolinguistic variation. In Eckert, P. and Rickford, J. R., editors, *Style and Sociolinguistic Variation*. Cambridge University Press, Cambridge. Web: http://dx.doi.org/10.1017/CBO9780511613258.006.

Labov, W. (2006). *The social stratification of English in New York city*. Cambridge University Press, 2nd edition edition.

Lakoff, R. T. (2004). *Language and Woman's Place: Text and Commentaries*. Studies in language and gender. Oxford University Press.

Le Page, R. B. and Tabouret-Keller, A. (1985). *Acts of identity: Creole-based approaches to ethnicity and language*. Cambridge University Press, Cambridge.

Lee, C. K. (2007). *Working in China [electronic resource] : ethnographies of labor and workplace transformation*. Routledge, London ; New York.

Lee, C. K. and Yang, G. (2007). *Re-envisioning the Chinese revolution : the politics and poetics of collective memories in reform China*. Woodrow Wilson Center Press ; Stanford University Press, Washington, D.C. Stanford, Calif.

Levon, E. (2014a). Categories, stereotypes, and the linguistic perception of sexuality. *Language in Society*, 43:539–566.

Levon, E. (2014b). Ethnography and recording interaction. In Podesva, R. J. and Sharma, D., editors, *Research methods in linguistics*, pages 195–215. Cambridge University Press, Cambridge.

Lewis, M. P., Simons, G. F., and Fennig, C. D., editors (2016). *Ethnologue: Languages of the World*. SIL International, Dallas, Texas:, 19th edition edition.

Li, C. (c2010). *China's emerging middle class : beyond economic transformation*. Brookings Institution Press, Washington, D.C. Includes bibliographical references (p. 359-372) and index.

Li, C. N. and Thompson, S. A. (1981). *Mandarin Chinese : a functional reference grammar*. University of California Press, Berkeley.

Li, G. (2005). Zhengshi qingsheng shuaituixianxiang chongxin shending qingshengci. *Zhenjiang Gaozhuan Xuebao*, 01:13–15.

Li, H. (2008). *Muyuwei Changshangfangyan de Qingshaonian dui Changshangfangyan he Putonghua de Yuyantaidu ji Shiyongqingkuang Diaocha [A survey of language attitude and language use of Changsha dialect and Putonghua among native Changsha dialect adolescent speakers]*. PhD thesis, Hunan Normal University, Changsha.

Li, K. (1997). Luelun hanyu shengdian de xingzhi, gongneng yu zuhe moshi. *Journal of Xiamen Univerisity*, 1:83–87.

Li, L., Dray-Novey, A., and Kong, H. (2008). *Beijing: From Imperial Capital to Olympic City*. St. Martin's Press.

Li, S. (2002). *Qingsheng de Xingcheng he Yunyong [The formation and utilization of the Neutral Tone]*. PhD thesis, Fujian Normal University, Fuzhou.

Li, T. and Zhang, J. (2010). What determines employment opportunity for college graduates in china after higher education reform? *China Economic Review*, 21(1):38 – 50.

Lin, H. (2001). *A grammar of Mandarin Chinese*. Number 344 in Languages of the world/Materials. Lincom Europa, Muenchen.

Lin, M. and Yan, J. (1980). Beijinghua qingsheng de shengxue xingzhi. *Fanyan*, 3:166–178.

Lin, T. (2000). *Putonghua he Beijinghua [Putonghua and Beijing Mandarin]*. Language and Culture Press, Beijing.

Lin, Y.-H. (1989). *Autosegmental treatment of segmental processes in Chinese phonology*. PhD thesis, The University of Texas at Austin.

Lin, Y.-H. (1993). Degenerate affixes and templatic constraints: Rime change in chinese. *Language*, 69(4):649–682.

Liu, F. (1997). Lidai lianmianzi yanjiu shuping. *Yuwen Yanjiu*, 2:33–37.

Liu, L. (2002). Ershi shiji hanyu qingsheng yanjiu zongshu. *Yuwen Yanjiu*, 3:43–47.

Liu, Dongqing; Cao, W. (2011). Beijinghua 'te'lei qingzhuang fangshi fuzcide lishi yanbian. *Journal of Beijing Institute of Technology (Social Sciences Edition)*, 13(5):137–141.

Liu, X. (2004). Beijinghua 'yi + ming' jieguo fenxin. *Zhongguo yuwen*, 1:36–39.

Louie, K. (2008). *The Cambridge companion to modern Chinese culture*. Cambridge companions to culture. Cambridge University Press, Cambridge, UK ; New York. Includes bibliographical references and index.

Lu, X. (2002). *Dangdai Zhongguo shehui jieceng yanjiu baogao*. Social Science Academic Press.

Lu, Y. (1995). *Putonghua de Qingsheng he Erhua [Neutral tone and Rhotacisation in Putonghua]*. Commercial Press, Beijing.

Lu, Y. (2001). *Qingsheng He Erhua*. Commercial Press.

Ma, Q. and Zhang, W. (2006). Beijingshi juzhu jiaoquhua fenbu tezheng jiqi yingxiang yinsu. *Geographical Research*, 25(1):121–131. Characteristics and factors analyses of suburbanization in Beijing.

Macaulay, R. (2002). Extremely interesting, very interesting, or only quite interesting? adverbs and social class. *Journal of Sociolinguistics*, 6(3):398–417.

Macaulay, R. K. (1977). *Languages social class and education: A Glasgow Study*. Edinburgh University Press.

Macaulay, R. K. S. (1976). Social class and language in glasgow. *Language in Society*, 5(2):173–188.

Maltz, D. N. and Borker, R. A. (1982). A cultural approach to male-female miscommunication. In Leila Monaghan, Jane E. Goodman, J. M. R., editor, *A cultural approach to interpersonal communication: Essential readings*, pages 168–185. Wiley Malden, MA.

Mills, S. and Mullany, L. (2011). *Language, Gender and Feminism: Theory, Methodology and Practice*. Taylor & Francis.

Milroy, J. and Milroy, L. (1978). Belfast: Change and variation in an urban vernacular. In Trudgill, P., editor, *Sociolinguistic patterns in British English*, volume 19, pages 19–36. Arnold, London.

Milroy, J. and Milroy, L. (1987). *Authority in language : investigating language prescription and standardisation*. London : Routledge & Kegan Paul, 1985 (1987[printing]).

Milroy, L. (1987). *Language and social networks*. Basil Blackwell, Oxford, 2nd edition.

Milroy, L. and Gordon, M. (2003). *Sociolinguistics: Method and interpretation*, volume 13. Blackwell, Oxford.

Ministry of Education and Institute of Applied Linguistics (2009). State language commission balanced corpus of modern chinese.

Ministry of Education of the People's Republic of China (2016a). Number of students in higher education institutions.

Ministry of Education of the People's Republic of China (2016b). Promotion rate of graduates of regular school by levels.

Moore, E. (2004). Sociolinguistic style: A multidimensional resource for shared identity creation. *Canadian Journal of Linguistics/Revue canadienne de linguistique*, 49(3-4):375–396.

Moore, E. (2012). The social life of style. *Language and Literature*, 21(1):66–83.

Moore, E. and Carter, P. (2015). Dialect contact and distinctiveness: The social meaning of language variation in an island community. *Journal of Sociolinguistics*, 19(1):3–36.

Moore, E. and Podesva, R. (2009). Style, indexicality, and the social meaning of tag questions. *Language in Society*, 38(4):447–485.

Nelson, L. J., Badger, S., and Wu, B. (2004). The influence of culture in emerging adulthood: Perspectives of chinese college students. *International Journal of Behavioral Development*, 28(1):26–36.

Norman, J. (1988). *Chinese*. Cambridge language surveys. Cambridge University Press, Cambridge, Cambridgeshire; New York.

Núñez Pertejo, P. and Palacios Martínez, I. M. (2014). That's absolutely crap, totally rubbish: The use of the intensifiers absolutely and totally in the spoken language of british adults and teenagers. *Functions of Language*, 21(2):210–237.

Ochs, E. (1992). Indexing gender. In Duranti, A. and Goodwin, C., editors, *Rethinking context: Language as an interactive phenomenon*, page 335. Cambridge University Press, Cambridge Cambridgeshire; New York.

Pei, P. (2008). *The Research of Modern Light Tone Chinese Characters and Interrelated Issues*. PhD thesis, Shanghai Normal University, Shanghai.

Peking University Admission Office (2014a). More than 4000 new undergraduate students joining peking university.

Peking University Admission Office (2014b). Student recruitment in beijng completed.

Peterson, G. (1994). State literacy ideologies and the transformation of rural china. *The Australian Journal of Chinese Affairs*, 32:95–120.

Pichler, H. (2010). Methods in discourse variation analysis: Reflections on the way forward. *Journal of Sociolinguistics*, 14(5):581–608.

Pichler, H. (2013). *The structure of discourse-pragmatic variation*, volume 13. John Benjamins Publishing.

Pierce, C. S. (1932). The icon, index, and symbol. In Weiss, C. H. P., editor, *Collected papers of Charles Sanders Pierce*, volume 2, pages 156–173. Harvard University Press.

Podesva, R. J. (2007). Phonation type as a stylistic variable: The use of falsetto in constructing a persona1. *Journal of Sociolinguistics*, 11(4):478–504.

Podesva, R. J. (2011). The california vowel shift and gay identity. *American Speech*, 86(1):32–51.

Podesva, R. J. and Chun, E. (2007). On indeterminacy in the social meaning of variation. Paper presented at New Ways of Analyzing Variation (NWAV) 36, Philadelphia.

Podesva, R. J., Roberts, S. J., and Campbell-Kibler, K. (2002). Sharing resources and indexing meanings in the production of gay styles. In Campbell-Kibler, K., Podesva, R. J., Roberts, S. J., and Wong, A., editors, *Language and Sexuality: Contesting Meaning in Theory and Practice*, pages 175–189. University of Chicago Press, Chicago.

Pun, N. (2005). *Made in China : women factory workers in a global workplace*. Duke University Press, Durham, N.C. ; London.

Putonghua Training and Testing Centre, State Language Commission of China (2004). *Pu tong hua shui ping ce shi shi shi gang yao*. Commercial Press, Beijing.

Qi, S. (2012). *Selective Correlations in Combining Degree Adverbs and Adjectives in Modern Mandarin Chinese*. PhD thesis, Peking University, Beijing.

Quist, P. (2008). Sociolinguistic approaches to multiethnolect: Language variety and stylistic practice. *International Journal of Bilingualism*, 12(1-2):43–61.

R Core Team (2016). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria.

Rampton, B. (1996). Youth, race, and resistance: a sociolinguistic perspective. *Linguistics and Education*, 8(2):159–173.

Rampton, B. (2006). *Language in Late Modernity: Interaction in an Urban School*. Studies in Interactional Sociolinguistics. Cambridge University Press.

Rampton, B. (2014). *Crossings: Language and Ethnicity Among Adolescents*. Encounters (St. Jerome Publishing). Taylor & Francis.

Rampton, B., Maybin, J., and Roberts, C. (2015). Theory and method in linguistic ethnography. In Copland, F., Shaw, S., and Snell, J., editors, *Linguistic Ethnography: Interdisciplinary Explorations*, pages 14–50. Palgrave Macmillan.

Rickford, J. R. (1986). The need for new approaches to social class analysis in sociolinguistics. *Language & Communication*, 6(3):215–221.

Rickford, J. R. (2014). Situation: Stylistic variation in sociolinguistic corpora and theory. *Language and Linguistics Compass*, 8(11):590–603.

Rickford, J. R. and McNair-Knox, F. (1994). Addressee-and topic-influenced style shift: A quantitative sociolinguistic study. In Biber, D. and Finegan, E., editors, *Sociolinguistic perspectives on register*, pages 235–76. Oxford University Press, New York.

Rohsenow, J. S. (2004). Fifty years of script and written language reform in the prc - the genesis of the language law of 2001. In Zhou, M. and Sun, H., editors, *Language Policy in the People's Republic of China: Theory and Practice since 1949*, pages 21–43. Kluwer Academic Publishers, Boston. Language Policy.

Rovira-Esteva, S. (2008). Chinese classification categories revisited. *Journal of Chinese Linguistics*, 36(1):106–120.

Sankoff, D. and Thibault, P. (1981). Weak complementarity: Tense and aspect in montreal french. In Johns, B. B. and Strong, D. R., editors, *Syntactic Change*, volume 25, pages 205–216. University of Michigan., Ann Arbor.

Savage, M. and Egerton, M. (1997). Social mobility, individual ability and the inheritance of class inequality. *Sociology*, 31(4):645–672.

Schilling, N. (2013). *Sociolinguistic fieldwork*. Cambridge University Press.

Schilling, N. (2014). Surveys and interviews. In Sharma, D. and Podesva, R. J., editors, *Research Methods in Linguistics*, chapter 6, pages 96–115. Cambridge University Press.

Schøning, S. and Møller, J. S. (2009). Self-recordings as a social activity. *Nordic Journal of Linguistics*, 32(Special Issue 02):245–269.

Sewell, W. H. and Shah, V. P. (1968). Social class, parental encouragement, and educational aspirations. *American Journal of Sociology*, 73(5):559–572.

Shaffer, M. A., Joplin, J. R., Bell, M. P., Lau, T., and Oguz, C. (2000). Gender discrimination and job-related outcomes: A cross-cultural comparison of working women in the united states and china. *Journal of Vocational Behavior*, 57(3):395 – 427.

Shanghai Xunhuan Info Tech Co. Ltd. (2017).

Sharma, D. (2005). Dialect stabilization and speaker awareness in non‘‘native varieties of english1. *Journal of Sociolinguistics*, 9(2):194–224.

Sharma, D. (2011). Style repertoire and social change in british asian english. *Journal of Sociolinguistics*, 15(4):464–492.

Shen, X.-n. S. (1990). *The prosody of Mandarin Chinese*. Number 118 in University of California publications in linguistics. University of California Press, Berkeley.

Shen, Y. and Shao, J. (1997). Shitan xianggang diqu putonghua jiaoxuezhong de “erhua” he “qingsheng” wenti. *Fangyan*, 03:169–173.

Shi, L. (2014). Research on integration of floating population in beijing. Master's thesis, Jilin University.

Shi, Y. (2001). Biao wuti xingzhuang de liangci de renzhi jichu. *Yuyan Jiaoxue yu Yanjiu*, 01:34–41.

Shi, Y. (2003). Hanyu de "shu" fanchou yu "youding" fanchou zhi guanxi. *Yuyan Yanjiu*, 23:40–50.

Shi, Y. and Li, N. (2001). *A History of Grammaticalization in Chinese*. Peking University Press.

Shirk, S. L. (2007). *China : fragile superpower*. Oxford University Press paperback. Oxford University Press, Oxford. "How China's internal politics could derail its peaceful rise"–Jacket.

Silverstein, M. (1976). Shifters, linguistic categories and cultural description. In Basso, K. H. and Selby, H. A., editors, *Meaning in anthropology*. University of New Mexico Press, Santa Fe, NM.

Silverstein, M. (2003). Indexical order and the dialectics of sociolinguistic life. *Language & Communication*, 23(3-4):193–229. Lang Commun.

Stenström, A.-B., Andersen, G., and Hasund, I. K. (2002). *Trends in teenage talk: Corpus compilation, analysis, and findings*. Number 8 in Studies in corpus linguistics. John Benjamins Publishing, Amsterdam; Philadelphia, PA.

Stuart-Smith, J. (2007). Empirical evidence for gendered speech production:/s/in glaswegian. In Cole, J. and Hualde, J., editors, *Laboratory Phonology 9*, Phonology and phonetics, pages 65–86. New York: Mouton de Gruyter.

Sun, C. (2006). *Chinese: A Linguistic Introduction*. Cambridge University Press, Cambridge.

Sun, L. (2014). Analysis of young white-collar gender wage gap: the case of beijing. mathesis, University of International Business and Economics.

Sun, X., Jiang, B., Wang, Y., and Qiao, L. (2007). Survey of the shanghai students' usage of common spoken chinese and shanghai dialect. *Yangtze River Academic*, 3:1–10.

Tagliamonte, S. (2012). *Variationist sociolinguistics : change, observation, interpretation*. Number 40 in Language in society. Wiley-Blackwell, Malden, MA.

Tagliamonte, S. and Roberts, C. (2005). So weird; so cool; so innovative: The use of intensifiers in the television series friends. *American Speech*, 80(3):280–300. Am Speech.

Tannen, D. (1995). The power of talk: Who gets heard and why. *Harvard Business Review*, 73(5):138–148.

Tao, L. (2006). Classifier loss and frozen tone in spoken beijing mandarin: the yi+ge phono-syntactic conspiracy. *Linguistics*, 44(1):91–133. ling.

Thomas, E. (2010). *Sociophonetics: An Introduction*. Palgrave Macmillan.

Thomas, E. R. (2002). Sociophonetic applications of speech perception experiments. *American Speech*, 77(2):115–147.

Tongzhou No. 4 Middle School (2012). Plan for the 15th national putonghua promotion week in tongzhou district. Retrived May 12, 2015 from: `http://www.tz4z.cn/mores.asp?ms_id=3680&ms_sort=23&ms_nsort=93&ms_nnsort=160`.

Trudgill, P. (1972). Sex, covert prestige and linguistic change in the urban british english of norwich. *Language in Society*, 1(02):179–195.

Trudgill, P. (1974). *The social differentiation of English in Norwich*. Cambridge University Press, London.

Tseng, C.-y. (1981). *An acoustic phonetic study on tones in Mandarin Chinese*. PhD thesis, Brown University.

Tseng, M. S. (1971). Social class, occupational aspiration, and other variables. *The Journal of Experimental Education*, 39(4):88–92.

Walker, A. (2014). *Crossing oceans with voices and ears: Second dialect acquisition and topic-based shifting in production and perception*. PhD thesis, The Ohio State University.

Walker, J. (2010). *Variation in Linguistic Systems*. Routledge.

Walker, J. A. (1995). The/r/-ful truth about african nova scotian english. In *Travail présenté à la conférence New Ways of Analyzing Variation (NWAVE). Université de Pennsylvanie*.

Walker, J. A. (2012). Form, function, and frequency in phonological variation. *Language Variation and Change*, 24(03):397–415.

Wang, J. (2004). Zhongguo gongsili gaodeng xuexiao xuefei shuiping yanjiu. *Journal of Southwest Jiaotong University*, 5(5):97–102.

Wang, M. (2005). Gender wage differences in china's urban labor market. *Economic Research Journal*, 12:35–44.

Wang, Q. (1999). *Putonghua Qinghengci Erhuaci Huibian*. Shanghai Education Press.

Wang, W. (2007). Woguo butong shourujiating zinv gaodengaodeng ruxuejihui chayi yanjiu. *Liaoning Education Research*, 5:12–16.

Waters, C. (2016). Practical strategies for elucidating discourse-pragmatic variation. In Pichler, H., editor, *Discourse-Pragmatic Variation and Change in English: New Methods and Insights*, pages 21–40. Cambridge University Press.

Wee, L.-H. and Li, M. (2015). Modern chinese phonology. In William S.-Y. Wang, a. C. S., editor, *The Oxford Handbook of Chinese Linguistics*, pages 474–489. Oxford University Press.

Weinreich, U., Labov, W., and Herzog, M. I. (1968). Empirical foundations for a theory of language change. In Lehmann, W. and Malkiel, Y., editors, *Directions for Historical Linguistics*. University of Texas Press, Austin.

Wikipedia (2018). Administrative divisions of beijing. Retrieved Jan 11. 2018, from: `https://upload.wikimedia.org/wikipedia/commons/thumb/2/25/ColorBeijingMapNew.png/450px-ColorBeijingMapNew.png`.

Wolfram, W. (1969). *A sociolinguistic description of Detroit Negro speech*. Number 5 in Urban language series. Center for Applied Linguistics, Washington.

Wolfson, N. (1976). Speech events and natural speech: some implications for sociolinguistic methodology. *Language in Society*, 5(02):189–209.

Wong, A. W.-m. and Hall-Lew, L. (2014). Regional variability and ethnic identity: Chinese americans in new york city and san francisco. *Language & Communication*, 35:27–42.

Woodhams, C., Lupton, B., and Xian, H. (2009). The persistence of gender discrimination in china - evidence from recruitment advertisements. *The International Journal of Human Resource Management*, 20(10):2084–2109.

Woolard, K. A. (1985). language variation and cultural hegemony: toward an integration of sociolinguistic and social theory. *American Ethnologist*, 12(4):738–748.

World Bank (2017). Annual gdp growth.

World Bank and Development Research Center of the State Council (2013). *China 2030 : Building a Modern, Harmonious, and Creative Society*. The World Bank, Washington, DC.

Wu, Y. (2005). Beijing hua yige ruohua de yuanyin. *yuyan yanjiu yu jiaoxue*, 2:63–67.

Wurm, S. A., Baumann, T., and Lee, M. W. (1988). Language atlas of china.

Xiao, R. and Tao, H. (2007). A corpus-based sociolinguistic study of amplifiers in british english. *Sociolinguistic Studies*, 1(2):241–273.

Xing, F. (2002). *Hanyu Yufa Sanbaiwen*. Commercial Press.

Xu, D. (2015). Gender differences in chinese speech communities. In Wang, W. S.-Y. and Sun, C., editors, *The Oxford Handbook of Chinese Linguistics*, pages 626–637. Oxford University Press.

Xu, S. (1979). Putonghua yuyin he beijing tuyin de jiexian. *Language Teaching and Linguistic Research*, pages 7–22.

Xu, S. (1990). *Beijing Tuyu Cidian [Dictionary of Vernacular Beijing Dialect]*. Beijing Publishing Group, Beijing.

Yang, D. (1994). *City wind of season: The cultural spirit of Beijing and Shanghai*. Beijing: Oriental Press.

Yang, M. M.-h. (1999). From gender erasure to gender difference: State feminism, consumer sexuality, and women's public sphere in china. In hui Yang, M. M., editor, *Spaces of Their Own: Women's Public Sphere in Transnational China*, pages 35–67. University of Minnesota Press.

Yang, R. (2001). *Common nouns, classifiers, and quantification in Chinese*. PhD thesis, Rutgers, The State University of New Jersey.

Yang, W. and Yan, F. (2017). The annihilation of femininity in mao's china: Gender inequality of sent-down youth during the cultural revolution. *China Information*, 31(1):63–83.

Yi, D. (2014). Understanding cueb's recruitment plan 2014.

Yikuaiqian (2017). A guide to racism in beijing. Retrieved from: `http://www.sohu.com/a/135593061_454708`.

Yip, Po-ching; Rimmington, D. (2003). *Chinese: A Comprehensive Grammar*. Routledge, London.

Yuan, X. (2007). *A Study on Disyllabic Neutral-tone Words in Putonghua*. PhD thesis, Hubei University, Wuhan.

Yue, Y. (2010). Beijinghua zhong "nixiang" de huayugongneng ji xianguan wenti tanxi. *Zhongguo Yuwen*, 2:124–134.

Zeng, X. (2004). *Bian ge zhong de jiu ye huan jing yu Zhongguo da xue sheng jiu ye*. Zhongguo jiu ye zhan lve bao gao 2004. Zhongguo ren min da xue chu ban she, Beijing, di 1 ban. edition. Includes bibliographical references.

Zhang, C. (2012). The relation between the development of general classifiers and the establishment of the category of numeral-classifiers in chinese. *Journal of Chinese Linguistics*, 40(2):307–321.

Zhang, H. (2007a). Numeral classifiers in mandarin chinese. *Journal of East Asian Linguistics*, 16(1):43–59.

Zhang, J. and Lu, X. (2013). Variability in chinese as a foreign language learners' development of the chinese numeral classifier system. *Modern Language Journal*, 97:46–60.

Zhang, Q. (2001). *Changing economy, changing market: A sociolinguistic study of Chinese yuppies*. PhD thesis, Stanford University, Stanford.

Zhang, Q. (2005). A chinese yuppie in beijing: Phonological variation and the construction of a new professional identity. *Language in Society*, 34(03):431–466.

Zhang, Q. (2007b). Cosmopolitanism and linguistic capital in china: Language, gender and the transition to a globalized market economy in beijing. In McElhinny, B. S., editor, *Words, worlds, and material girls: Language, gender, globalization*, pages 403–422. Mouton de Gruyter, Berlin; New York, NY.

Zhang, Q. (2008). Rhotacization and the 'beijing smooth operator': The social meaning of a linguistic variable1. *Journal of Sociolinguistics*, 12(2):201–222.

Zhang, X. (2016). Study on the correlation relationship between economic growth and income distribution margin of residents in beijing. mathesis, Beijing Jiaotong University.

Zhao, H. (2012). A language attitude survey of neutral tone variation in modern standard chinese. Master's thesis, Queen Mary University of London, London.

Zhao, H. (2016). Sociolinguistic salience and social meaning: Beijingers' perception of variation in Beijing Mandarin. Paper presented at Sociolinguistic Variation and Language Processing, Blacksburg.

Zhou, C. (2006). *Beijinghua Qingsheng, Erhua, Qingruzi de Bianyi Yanjiu [The variance research of Un-nuclear Tone, Erhua and Qingruzi in Beijing speech]*. PhD thesis, Beijing Language and Culture University, Beijing.

Zhou, L. (2014). The gendered job-hunting. mathesis, Beijing Foreign Studies Univeristy.

Zhou, M. and Ross, H. A. (2004). Introduction: The context of the theory and practice of china's language policy. In Zhou, M. and Sun, H., editors, *Language Policy in the People's Republic of China: Theory and Practice since 1949*, chapter 4, pages 1–18. Kluwer Academic Publishers, Boston.

Zhou, X. (2008). *Xiandai Hanyu Chengdufuci + xingrongci + de jiegoude duojiaodu kaocha*. PhD thesis, Central China Normal University.

Zhou, Y. (1998). *Beijing kouyu yufa: Cifa juan [A grammar of Spoken Beijing Mandarin: Lexicology]*. Language and Culture Press, Beijing.

Zhou, Y. (2002). *Xiandai Beijinghua Yanjiu [Research on Modern Beijing Mandarin]*. Beijing Normal University Press, Beijing.

Zhu, D. (1999). *Zhu Dexi Wenji*, volume 1. Commercial Press.