

# Sociolinguistics of pathologized speech: A case of deaf and hard-of-hearing speakers of Taiwan Mandarin

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## Abstract

Speakers of pathologized speech have not received much attention from sociolinguists. This article explores the stylistic practices of deaf and hard-of-hearing (DHH) people who demonstrate pathologized variants. This article adopts minimal pair reading and story reading to elicit various stylistic practices, as part of a larger project that aims to describe and empower DHH speech. Results show that DHH speakers who have experiences of medicalization are also the ones who consider learning the speech of hearing people necessary. A portion of these speakers embody their ideological stance—converging towards hearing speech—in the minimal pair reading.

## KEYWORDS

ableism, clinical sociolinguistics, disability, pathologized speakers, Taiwan

## 摘要

語言特徵遭到病理化的說話者一直沒有得到社會語言學者的關注。此文章探討展現病理化語言特徵之聽損者的語言風格實踐。作為賦權聽損者口語計畫的一部分，此文章採用最小對立組合朗讀以及故事朗讀兩種方法，辨認出不同的風格轉變類型。結果顯示，有過語言治療經驗的聽損者認為學習聽人的語言形式有其必要，而當中只有一部分的人在最小對立組合朗讀任務中透過語言風格轉換體現這樣的立場。

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## 1 | INTRODUCTION

Third Wave variationist research has explored how speakers and signers are highly agentive in employing linguistic resources to (re)construct social identities relevant to social class, ethnicity, region, sexuality, or other culturally specific categorizations (Eckert, 2012). However, among the major sociodemographic categories, disability has received little attention from sociolinguists. Especially for people with speech-language disorders, highly language-relevant identities have not fallen within the range of agentive speakers studied by sociolinguists (Douglas-Cowie & Cowie, 1988). This awkward situation may be related to the division of academic labor between sociolinguistics and speech-language pathology (SLP). Since First Wave variationist sociolinguistics emerged in the 1960s, sociolinguists have countered the deficit model, in which nonstandard varieties were once regarded as naturally inferior (Heller & McElhinny, 2017). However, a variation that is related to pathology still seems to be considered as being entirely explained by that pathology, rather than being a site for sociolinguistic meaning-making. Nevertheless, for sociolinguistics, any seemingly free variation typically invites a social explanation to uncover the ‘*orderly heterogeneity*’ underlying the variation (Weinreich et al., 1968, p. 100). Hence, variants observed within pathologized speech should not be exempted from such a sociolinguistic explanation.

The current study focuses on the spoken language variation of Mandarin within the deaf and hard-of-hearing (DHH) communities in Taiwan. Since the 1980s, the concept of ‘inclusive education’ has significantly changed the Taiwanese educational landscape (Wu, 2007). The number of students with disabilities studying at ordinary schools has increased by 14.8% between 2008 and 2017, whereas at schools of special education (including deaf schools), the number of students has decreased by 13.4% (Ministry of Education, 2018). While Taiwan Sign Language (TSL) has become one of the *de jure* national languages since 2019, the oralist ideology is still predominant, considering acquiring spoken language as a priority. For many hearing people, TSL is not a cultural or identity marker of DHH communities (Liu et al., 2014); instead, TSL is often seen as an *alternative* to spoken language that DHH people have no choice but to use.

Oralism is also observed at deaf schools. For example, in a deaf teacher's self-study (Yuan, 2008), he describes how some hearing teachers at a deaf school where he served as an intern teacher had poor TSL proficiency and often failed to communicate with TSL-signing teachers and students. It is then not surprising that students at deaf schools perceived orally educated DHH people as having a more desirable identity concerning deafness (Ann, 2003). The hegemony with which hearing people dominate, restructure, and exercise authority over deaf communities is referred to as *audism* (Lane, 1992).

The hegemony of audism not only leads to how oralism is practiced at deaf schools but also frames hearing people's lifestyles as superior ways of living, including their way of speaking. What comes with it is a prescriptivist language ideology imposed upon DHH speakers. As hearing people are always deemed as the authentic users of spoken language, there is little ideological space for DHH speech variation to be considered comparable to other sociolinguistic variation.

The current research explores how DHH speakers *style* themselves through linguistic practices, in particular when they have the opportunity to challenge audism and are also highly conscious of their speech production in reading tasks. DHH speakers are invited to participate in a project that explicitly aims to precisely describe DHH speech as it occurs in reality. Participants fully understand that this project records DHH speech in such a way that hearing people can learn to recognize it, thus empowering DHH speech as a legitimate variety on an equal footing with other dialects, sociolects, or ethnolects. With this information, this article explores how DHH speakers invoke various stylistic practices in the reading tasks in response to the stated aim of linguistic descriptivism.

## 2 | READING TASKS IN THIS STUDY

### 2.1 | Reading as a social activity

Before applying reading tasks to participants, researchers must recognize how *reading aloud* as a social activity is practiced in the *habitus* of the community with which they are working (Bourdieu, 1977; also see Gafter, 2016). For the DHH speakers in the current research who have received speech-language therapy, reading aloud is a highly medicalized activity. The DHH speakers are conscious of the expectation that they converge toward (standard) hearing speech. They are also aware that if they produce non-hearing variants, they may receive negative and ableist evaluations from hearing listeners (Cowie & Douglas-Cowie, 1992; Freeman, 2018).

In a neoliberalized ableist society, medical interventions including speech-language therapy have been framed as tools that disabled persons can rely on to ‘overcome’ disabilities (Mitchell & Snyder, 2015; also see Jones, 1997). Disability becomes purely a medical situation, rather than a social situation about oppression. The responsibility for not living a negatively disabled life is individualized. It is not unexpected that DHH people have little agency in not attending speech-language therapy and pursuing the goal of ‘sounding hearing-like’.

The study recruited participants living in Taipei between December 2018 and January 2019. All speak Mandarin as their dominant language and have never studied at deaf schools. The five participants (Table 1) discussed in this article produce multiple pathologized phonetic variants during the reading tasks. Among the five participants, four have experiences of speech-language therapy, and they all believe that DHH people should converge toward hearing speech.

Peiyu, Zuo-Zuo, and A-Wei do not have positive experiences concerning reading. Peiyu states that her speech-language therapist was unsuccessful in teaching her hearing speech, so she finds it really effortful to produce a hearing-like speech (what she describes as ‘serious speech’). Instead, if the conveyed information is not important, Peiyu uses what she describes as ‘careless speech’. Zuo-Zuo states that he received private speech-language therapy for 6 years. He is the only participant who reports growing up in an upper-middle-class family and being able to afford expensive private therapy. However, reading seems a stressful activity for him. During the interview, Zuo-Zuo sighed frequently and appeared uninterested in the reading tasks. A-Wei states that he was nervous about participating in this study because significant time had elapsed since he had performed a reading task.

In contrast, Xiao-Lu appeared comfortable with reading tasks. She was accompanied to the interview by her mother, who is a speech-language therapist. When Xiao-Lu did the reading tasks, her mother laughed. Xiao-Lu then paused and also laughed. They both found Xiao-Lu's pronunciation interesting in a positive way.

**TABLE 1** Participants discussed in this article

Participants	Self-reported social background		
	Gender	Year of birth	Social class
Peiyu	Female	2000	Middle
Zuo-Zuo	Male	1982	Upper-middle
Hua	Female	1994	Lower-middle
Xiao-Lu	Female	1987	Middle
A-Wei	Male	1989	Middle

## 2.2 | Minimal pair reading

In minimal pair reading (MPR), speakers are required to pronounce word pairs, in which the two words in the pair differ by only one phoneme. Labov (1972, p. 103) indicates that the phonemic distinction observed in MPR can be ‘*fanciful, archaic, or mythical*’. MPR does not always elicit a socially prescribed standard speech from speakers. How speakers respond to MPR can be a site where sociolinguists can observe the agentive nature of linguistic practices.

The current study invites participants to read 10 minimal pairs aloud (see Appendix 1). Five of the pairs are fillers. This article analyzes stylistic shifts in the other five minimal pairs (Table 2). This study only considers consonant substitution, deletion, or addition as pathologized variants. All words are monosyllabic. The main orthographic system is *Zhuyin*, the phonetic symbol for Mandarin used in Taiwan. Chinese characters are in parentheses. Here, *Zhuyin* serves the purpose of eliciting the highest awareness of one's own pronunciation. As the main tool of phonics teaching in elementary education, *Zhuyin* carries the prescriptivist ideology of standard language. In speech-language therapy, therapists rely heavily on *Zhuyin* to teach their clients how to produce prescriptive sounds. Reading *Zhuyin* aloud for DHH communities is a social practice in which learners engage with both the prescriptive ideology and the experience of medicalization.

The consonants selected for analysis are affricates /tʂ<sup>h</sup>/, /tʂ/, /tʂʅ/, and /tʂ<sup>h</sup>/ and sibilant fricatives /ʃ/ and /s/, which speech-language therapists report as more difficult for DHH speakers to realize in hearing ways. The hearing variants of these consonants are located in the higher sound frequency range; thereby for DHH speakers, it is not easy to perceive the acoustic differences among these phones. The articulatory differences among these sounds are also not as visually identifiable as those among others, for example bilabial plosives, and labiodental fricatives. Analyzing how DHH speakers pronounce these difficult consonants tells us how they respond to the idea of converging toward hearing speech when it is arduous in nature.

The first set of minimal pairs includes socially meaningful minimal pairs (SMMPs), where speakers read aloud a retroflex first and then its alveolar counterpart (i.e. the retroflex–alveolar phonemic contrast). This phonemic contrast is undergoing a merging process and is therefore socially meaningful. Taiwan Mandarin has seen a process of neutralization between alveolars ([s], [tʂ], [tʂ<sup>h</sup>]), and their retroflex counterparts ([ʃ], [tʂʅ], and [tʂ<sup>h</sup>ʅ]), in the direction of the alveolar. From the perspective of social perception, a complete alveolar–retroflex merger is, however, not socially favored, as it indexes lower education level (Brubaker, 2012). In reading registers, Taiwan Mandarin speakers are observed hypercorrecting alveolars as retroflexes (Chung, 2006), meaning that presenting the phonemic contrast indexes standardness.

SLP research has also indicated that alveolar/retroflex fricatives and affricates are unfriendly for DHH Mandarin speakers to acquire (Peng et al., 2004). It is also difficult for DHH speakers to acquire

**TABLE 2** Minimal pairs examined in this article

Set	Minimal pair	First word	Second word
1	a	/ʃa/	/sa/
	b	/tʂ <sup>h</sup> au/	/ts <sup>h</sup> au/
	c	/tʂau/	/tsau/
2	a	/ʃʅ/	/tʂʅ/
	b	/sʅ/	/ts <sup>h</sup> ʅ/

the alveolar–retroflex contrast. Speech-language therapists therefore devote more time to these sounds with their clients. According to the participants in the current research, most were still unable to perceive the acoustic difference in the alveolar–retroflex contrast, but they knew that they needed to realize the contrast in certain ways.

The second set includes ordinary minimal pairs (OMPs). Speakers read aloud a fricative first and then an affricate. For hearing people, a fricative and its homorganic affricate counterpart (e.g. [s] and [ts]; [ʃ] and [tʃ]) are two phonemes that are not in complementary distribution, and the contrast lacks any known macrosocial meaning in hearing society. Although this contrast is not socially meaningful, their difference is difficult for DHH speakers to perceive, thereby often being merged by DHH speakers (e.g. [s] may undergo affrication and become [ts] or [ts<sup>h</sup>]).

With the contrast between SMMPs and OMPs, how DHH speakers may respond differently to difficult phonemes with and without macrosocial indexicalities can be illustrated.

### 2.3 | Story reading

In this study, story reading (SR) serves as a technique by which variants of phonemes in a given speaker's repertoire are collected. To reduce the speaker's attention paid to speech (Labov, 1973), the story is not accompanied by the phonetic symbol. As Chinese characters are not phonograms, speech production in the SR can be considered less self-conscious than that elicited in the MPR. During the data inspection, the dominant variants of the investigated variables are found to vary based on the phonological environment in the SR. Thus, this article only looks at syllables where the target variables preceding the same phonemes in SR as they do in MPR (Table 3). The retroflex variant and its alveolar counterpart are not distinguished here, for it does not influence the analysis of MPR results.

Lin (2018) found that when reading difficult passages, Southern Chinese students studying in Beijing diverge from Beijing Mandarin and shift to their native accent. Lin (2018, p. 195) suggests this stylistic shift occurs because their cognitive resources are divided by their intense focus on the content of the passages (see Sharma, 2018). In the current study, this effect works in conjunction with the absence of phonetic symbols to elicit phonetic variants used in a speaker's less self-conscious speech style. The participants are asked to read aloud an ancient Chinese story about royalty (Appendix 2). It is confirmed that none of the speakers have heard this story, so speaker familiarity with the story is controlled. The speakers are then required to confirm that they know all Chinese characters included in the story before reading it aloud.

**TABLE 3** Number of syllables with target variables in the story reading

Variable	Phonological environment	Number of syllables
/ʃ/ or /s/	__/a/	5
	__/ɿ/ or /ɿ̃/	18
/tʃ/ or /ts/	__/a/	9
	__/ɿ/ or /ɿ̃/	8
/ts <sup>h</sup> / or /ts <sup>h</sup> /	__/a/	3
	__/ɿ/ or /ɿ̃/	3

## 2.4 | Defining stylistic shift

Considering the high inter-speaker variability among DHH speakers, this paper does not examine the social meaning of every single variant. Instead, it focuses on how speakers make more, less, or similar clinically defined effort in MPR, compared to their linguistic practice in SR. By comparing the variants shown in a speaker's SR and MPR practices, the different types of stylistic shifts can be identified.

A lack of stylistic shift between the two reading tasks is categorized as 'no stylistic shift'. For stylistic shifts, I categorized them by borrowing terms from the 'hyper and hypoarticulation theory' (Lindblom, 1990). The first category—'hyperarticulation'—means that speakers make a sound more distinct by applying greater attention to pronounce it. Hyperarticulation can serve various social purposes, such as demonstrating a higher level of involvement in interacting with their interlocutors by signaling stances (Freeman, 2014). The consonants that are more difficult for DHH speakers to acquire are considered to require more effort to produce (Peng et al., 2004; A > B means A is easier than B):

1. Among homorganic consonants, stops (e.g. [t]) > affricates (e.g. [ts]) > fricatives (e.g. [s]).
2. Using the same manner of articulation, alveolar consonants (e.g. [t], [t<sup>h</sup>]) > velar consonants (e.g. [k], [k<sup>h</sup>]).
3. Unaspirated consonants (e.g. [t]) > aspirated consonants (e.g. [t<sup>h</sup>]).

The other category is 'hypoarticulation', in which speakers adopt sounds that are easier for DHH speakers to realize.

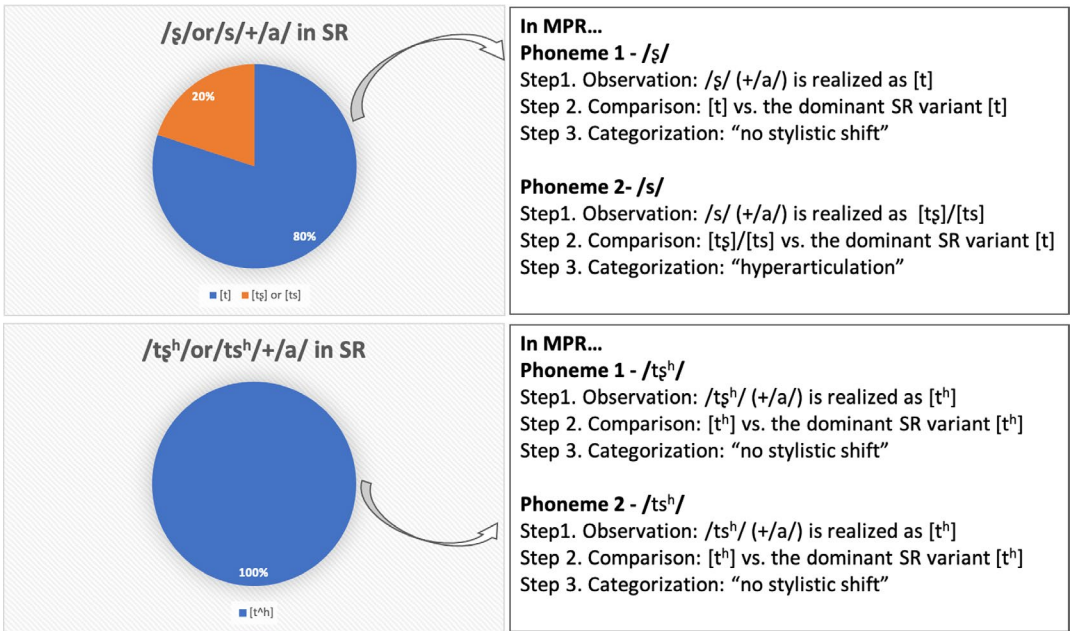
## 3 | RESULTS

The variants shown in MPR are compared to the dominant variants shown in SR. Three steps are involved in identifying a stylistic shift in MPR: first, observing which variant is adopted by the speaker to realize the phoneme in MPR; second, comparing the MPR variant to the dominant variant for the phoneme in the same phonological environment in the SR. Third, if a MPR variant is more difficult than the dominant SR variant, it is categorized as hyperarticulation; if it is the other way, it is considered hypoarticulation.

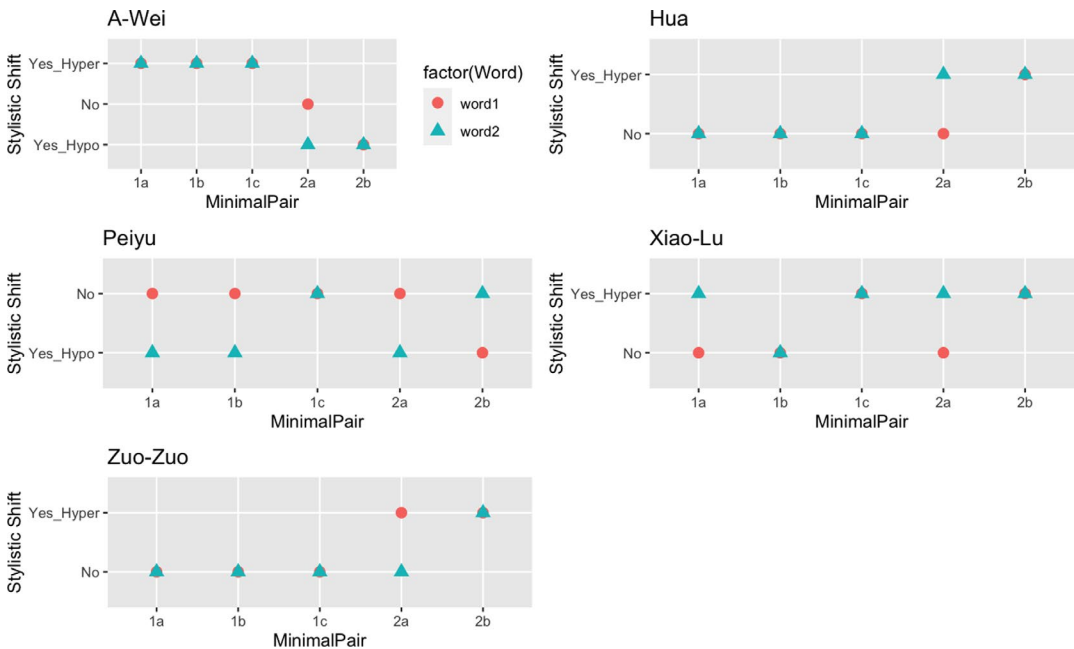
Taking the participant Xiao-Lu for example, Figure 1 demonstrates how stylistic shifts in MPR are identified. The pie charts present dominant variants in SR for retroflex or alveolar fricatives that are followed by /a/. The dominant variants are the alveolar stop [t] for /s/ or /s/ and [t<sup>h</sup>] for /tʂ<sup>h</sup>/ or /ts<sup>h</sup>/. Xiao-Lu realizes /s/ in the first word as [t], which means there is no stylistic shift involved; she instead realizes /s/ as a homorganic affricate counterpart, which compared to [t] is a more difficult sound for DHH speakers to produce, so this is categorized as hyperarticulation. For the other minimal pair, she realizes both words using the dominant SR variant [t<sup>h</sup>], meaning there is no stylistic shift involved.

Figure 2 is a visual illustration of the overall results. Only A-Wei invokes both hyperarticulation and hypoarticulation in MPR. The other participants only invoke either hyperarticulation or hypoarticulation, if there is a stylistic shift involved. Hua and Zuo-Zuo show a similar pattern of stylistic shift in which SMMPs do not receive stylistic shifts, but OMPs receive hyperarticulation. A-Wei and Xiao-Lu both show hyperarticulation for SMMPs, but they adopt different styles for OMPs. In contrast, Peiyu adopts hypoarticulation in four of the five minimal pairs.





**FIGURE 1** Demonstration of how a stylistic shift in minimal pair reading is identified [Colour figure can be viewed at wileyonlinelibrary.com]



**FIGURE 2** Styles adopted in minimal pair reading, identified in reference to the dominant variants shown in story reading [Colour figure can be viewed at wileyonlinelibrary.com]

### 3.1 | Peiyu

Table 4 presents Peiyu's realizations of the investigated phonemes, in specific phonological environments, in both SR and MPR. The column of dominant variant in SR shows the variant that accounts for the most SR syllables with the investigated variable. The column of variant used in MPR, in contrast, shows the variant that the speaker adopts to realize the variable in MPR. The stylistic shift identified by contrasting the SR variant and MPR variant is presented in the last column.

Peiyu adheres to 'serious speech' in her SR, in which the dominant variants are all hearing variants. In contrast, she switches to the style of 'careless speech' (her term) in the MPR. The only stylistic shift invoked is hypoarticulation.

### 3.2 | Zuo-Zuo

For SMMPs (Table 5), Zuo-Zuo does not invoke any stylistic shift. However, for OMPs, he invokes hyperarticulation for three phonemes. That is, a stylistic shift occurs when macrosocial meaning is absent in the phonemic contrasts. One may expect that as the only participant self-reporting growing up in an upper-middle-class family that can afford private speech-language therapy for years, Zuo-Zuo would converge toward hearing speech for socially meaningful pairs. Yet, Zuo-Zuo's stylistic practice here seems contracting such expectation.

### 3.3 | Xiao-Lu

Xiao-Lu does not invoke any hypoarticulative token in the MPR (Table 6). She frequently adopts hyperarticulated variants that she rarely uses in SR. That is, she clearly shifts to a hyperarticulative style. In particular, Xiao-Lu employs variants that apparently converge toward the hearing variants for SMMPs.

**TABLE 4** Peiyu's stylistic shift across tasks

	Phoneme	Dominant variant in SR	Variant used in MPR	Stylistic shift in MPR, compared to SR
SMMP 1a	/ʃ/ (+/a/)	[ʃ] or [s]	[ʃ] or [s]	No
	/s/ (+/a/)		[tʃ] or [ts]	Hypoarticulation
SMMP 1b	/tʃ <sup>h</sup> / (+/a/)	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	No
	/ts <sup>h</sup> / (+/a/)		[p <sup>h</sup> ]	Hypoarticulation
SMMP 1c	/tʃ/ (+/a/)	[tʃ] or [ts]	[tʃ] or [ts]	No
	/ts/ (+/a/)		[tʃ] or [ts]	No
OMP 2a	/ʃ/ (+approximant)	[ʃ] or [s]	[ʃ]	No
	/tʃ/ (+approximant)	[tʃ] or [ts]	deleted	Hypoarticulation
OMP 2b	/s/ (+approximant)	[ʃ] or [s]	deleted	Hypoarticulation
	/ts <sup>h</sup> / (+approximant)	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	No



**TABLE 5** Zuo-Zuo's stylistic shift across tasks

	Phoneme	Dominant variant in SR	Variant used in MPR	Stylistic shift in MPR, compared to SR
SMMP 1a	/ʃ/ (+/a/)	[t]	[t]	No
	/s/ (+/a/)		[t]	No
SMMP 1b	/tʃ <sup>h</sup> / (+/a/)	[t <sup>h</sup> ]	[t <sup>h</sup> ]	No
	/ts <sup>h</sup> / (+/a/)		[t <sup>h</sup> ]	No
SMMP 1c	/tʃ/ (+/a/)	[t]	[t]	No
	/ts/ (+/a/)		[t]	No
OMP 2a	/ʃ/ (+approximant)	[k]	[tʃ]	Hyperarticulation
	/tʃ/(+approximant)	[tʃ] or [ts]	[tʃ] or [ts]	No
OMP 2b	/s/(+approximant)	[k]	[tʃ] or [ts]	Hyperarticulation
	/ts <sup>h</sup> /(+approximant)	[k]	[s]	Hyperarticulation

**TABLE 6** Xiao-Lu's stylistic shift across tasks

	Phoneme	Dominant variant in SR	Variant used in MPR	Stylistic shift in MPR, compared to SR
SMMP 1a	/ʃ/ (+/a/)	[t]	[t]	No
	/s/ (+/a/)		[tʃ] or [ts]	Hyperarticulation
SMMP 1b	/tʃ <sup>h</sup> / (+/a/)	[t <sup>h</sup> ]	[t <sup>h</sup> ]	No
	/ts <sup>h</sup> / (+/a/)		[t <sup>h</sup> ]	No
SMMP 1c	/tʃ/ (+/a/)	[t]	[tʃ] or [ts]	Hyperarticulation
	/ts/ (+/a/)		[tʃ] or [ts]	Hyperarticulation
OMP 2a	/ʃ/ (+approximant)	[h]	[h]	No
	/tʃ/(+approximant)	[h] or deleted	[ʃ] or [s]	Hyperarticulation
OMP 2b	/s/(+approximant)	[h]	[ʃ] or [s]	Hyperarticulation
	/ts <sup>h</sup> /(+approximant)	[h]	[z]	Hyperarticulation

### 3.4 | A-Wei

For SMMPs, A-Wei shifts to hyperarticulation (Table 7). Compared to the dominant variants in A-Wei's repertoire, the variants used in the SMMPs are not only hyperarticulated but are also apparently convergent toward the hearing variants. Yet, for OMPs, A-Wei shifts to hypoarticulation. Between the two sets of minimal pairs, a clear stylistic contrast is evident.

### 3.5 | Hua

In the SMMPs (Table 8), Hua does not invoke a stylistic shift involving different consonants. For OMPs, Hua invokes hyperarticulation. In MP2a, Hua replaces the approximant in the second word as

**TABLE 7** A-Wei's stylistic shift across tasks

	Phoneme	Dominant variant in SR	Variant used in MPR	Stylistic shift in MPR, compared to SR
SMMP 1a	/ʃ/ (+/a/)	[k]	[tʃ] or [ts]	Hyperarticulation
	/s/ (+/a/)		[tʃ] or [ts]	Hyperarticulation
SMMP 1b	/tʃ <sup>h</sup> / (+/a/)	[k]	[t <sup>h</sup> ]	Hyperarticulation
	/ts <sup>h</sup> / (+/a/)		[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	Hyperarticulation
SMMP 1c	/tʃ/ (+/a/)	[k]	[tʃ] or [ts]	Hyperarticulation
	/ts/ (+/a/)		[tʃ] or [ts]	Hyperarticulation
OMP 2a	/ʃ/ (+approximant)	[ʃ] or [s]	[ʃ] or [s]	No
	/tʃ/ (+approximant)	[tʃ] or [ts]	deleted	Hypoarticulation
OMP 2b	/s/ (+approximant)	[ʃ] or [s]	deleted	Hypoarticulation
	/ts <sup>h</sup> / (+approximant)	[k]	deleted	Hypoarticulation

**TABLE 8** Hua's stylistic shift across tasks

	Phoneme	Dominant variant in SR	Variant used in MPR	Stylistic shift in MPR, compared to SR
SMMP 1a	/ʃ/ (+/a/)	[tʃ] or [ts]	[tʃ]	No
	/s/ (+/a/)		[ts]	No
SMMP 1b	/tʃ <sup>h</sup> / (+/a/)	[t <sup>h</sup> ]	[t <sup>h</sup> ]	No
	/ts <sup>h</sup> / (+/a/)		[t <sup>h</sup> ]	No
SMMP 1c	/tʃ/ (+/a/)	[tʃ] or [ts]	[tʃ] or [ts]	No
	/ts/ (+/a/)		[tʃ] or [ts]	No
OMP 2a	/ʃ/ (+approximant)	[tʃ] or [ts]	[tʃ] or [ts]	No
	/tʃ/ (+approximant)	[tʃ] or [ts]	[tʃ] or [ts] (+ [u])	Hyperarticulation
OMP 2b	/s/ (+approximant)	[tʃ] or [ts]	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	Hyperarticulation
	/ts <sup>h</sup> / (+approximant)	[tʃ <sup>h</sup> ] or [ts <sup>h</sup> ]	[ʃ] or [s]	Hyperarticulation

a high back vowel to dissimilate the second sound. The phonemic contrast between the two words is then presented. In MP2b, both sounds are hyperarticulated.

## 4 | DISCUSSION

Through the research design, the SR offers an overall picture of a speaker's stylistic repertoire, while the MPR elicits the speakers' high level of attention to their linguistic production. All participants, except Hua, received speech-language therapy, of which reading aloud was a part.

For Hua, due to a lack of medicalized experience, she assumes a completely different stance regarding the prescriptivism imposed on DHH speech. She does not think DHH people should conform

to hearing speech. Commenting on discrimination against DHH speech, she expresses her extreme anger toward people who adhere to the audist ideology:

'I just don't understand why my voice can be made fun of. Because I really don't know what the point is. [...] every single person has their accent. [...] I don't understand why a person's voice can be funny. Because they aren't telling a joke.' [我就不懂為什麼我的聲音要被人家笑欸,因為我真的不懂那個點在哪裡 [...] 我覺得每個人聲音都是獨一無二的 [...] 不明白一個人的聲音到底哪裡好笑,因為他講的不是笑話。]

Hua emphasizes the linguistic fact that every speaker, regardless of their audiological status, has an accent. Therefore, her deafness should not be highlighted as what leads to her accent. For Hua, any attempt to abnormalize DHH speech by hearing people is undermined. For minimal pairs whose macrosocial meanings are salient, it is likely that Hua invokes no stylistic shift to embody her reluctance to cater to the gaze of hearing people—sounding hearing-like.

The other participants adhered to the ideology that DHH people should speak like the hearing. They were also aware that this project aims to enable hearing people to become familiar with the voices of DHH speakers. It may be expected that they would converge toward hearing speech in MPR. This is true for A-Wei and Xiao-Lu. Xiao-Lu invokes hyperarticulation for both sets of minimal pairs. A-Wei only does so for the SMMP, which is understandable, as linguistic practices at the local level usually appropriate linguistic resources associated with social meanings at the macrosocial level (Eckert, 2012).

However, in the cases of Peiyu and Zuo-Zuo, the language ideology and stylistic practice are mismatched. Peiyu hypoarticulates both SMMPs and OMPs. Zuo-Zuo only applies hyperarticulation to the OMPs, but he does not do so for SMMPs, indicating that the lack of stylistic shift for SMMPs can be socially meaningful. By examining the metalinguistic comments of Peiyu and Zuo-Zuo, it is observed that although the two speakers perceive the necessity for DHH people to speak in hearing ways, they do not seem to believe that what DHH speakers do really matters in terms of promoting a change in society. At an ideological level, Peiyu argues that DHH speech will never be recognized by hearing people:

'They [the hearing] do not understand [DHH speech], and they do not want to understand [DHH speech] [...] no matter how diligently they [the DHH] are practicing [their speech], they are not accepted by the public. [...] Do DHH people need to correct their pronunciation? I think it is inevitable. [...] Before the societal mentality changes, you need to change first. Yes, and struggle to (\*laughter\*) announce to the world [that we can speak the language].' [就是不理解、不想理解 [...] 就導致這群人他們不管多努力在練習,還是沒有辦法被大眾接納 [...] 聽障者要不要矯正自己的發音?我覺得是難以避免的一件事情。就是在這個社會整體心態還沒有改變之前,自己先改變。對,然後努力地 [笑] 向世人宣達 (我們會說話) ]

Peiyu strongly emphasizes how the social structure matters. DHH people are passive regarding changes that occur to the 'societal mentality' of the hearing society. Although she emphasizes the importance of converging toward hearing speech, Peiyu also negates the existence of the agency that DHH speakers demonstrate in practicing spoken language. Her view implies that a speaker does not neglect to accommodate the expectation of their audience because they are consciously withholding an attempt to *be themselves*. Rather, they do not respond to the expectation of their audience because they think their audience does not care what they do. Likewise, Zuo-Zuo argues that:

‘Why do they [the hearing] know the accent of the indigenous people, the Japanese accent, or the Korean accent, but do not recognize [the accent of] we DHH people? This is simply because for you [the hearing], they [DHH people] cannot hear!’ [為什麼他們大家都是原住民或是日本話或是韓國腔調都認識。我們聾人(他們就)沒辦法認同。你是因為他們的耳朵聽不到而已啦!]

For Zuo-Zuo, the underlying reason for not recognizing DHH speech is not hearing people's lack of familiarity with DHH voices. Instead, hearing people do not recognize DHH speech because they discriminate against a non-normative audiological status. In both Peiyu's and Zuo-Zuo's comments, the individual agency to resist the hegemony of audism is much backgrounded.

In contrast, A-Wei, and Xiao-Lu both emphasized the role of the individual in negotiating with audism. Xiao-Lu believes that if DHH people remain determined in their attempts to communicate in spoken language with the hearing, the discrimination will eventually disappear. For A-Wei, although he believes that DHH speech must be intelligible for the hearing, he argues that DHH people do not need to waste too much time on it:

‘[you] only need to make most people understand you. If it is required to speak as fluently as ordinary people, it is weird, and it is impossible. [...] If the DHH are required to speak like the majority, it is unnecessary. Because it takes too much time [...] You [the DHH] should spend time doing the things you want to do. It's less a waste of time.’ [讓對方大多數的人聽得懂就可以了。如果要完全的話像一般人講到可以很流利, 我覺得很奇怪, 是不可能。如果要做到很像到那個像這樣像大多數講話的聲音是不需要, 因為要花太多的時間。要去花時間去做你想要的事情, 比較不會浪費時間。]

Notably, A-Wei's view contrasts with that of Peiyu, who perceives that the style-shifting of DHH speakers is ignored by the hearing society. For A-Wei, DHH people can ignore the expectations imposed on them by the hearing society.

I suggest that we understand the differences among these speakers concerning how individual agency is presented at ideological level through the concept of ‘*sociological consciousness*’, which represents ‘*the ability to conceive of connections between personal experiences and social structures and processes*’ (Dodsworth, 2008, p. 46). Dodsworth found that speakers who tend to downplay individual agency in their discourse do not tend to style their identity through associated linguistic resources.

Zuo-Zuo and Peiyu do not perceive individual social practices as powerful acts that can contribute to societal changes. By Peiyu's term, she only uses ‘careless speech’ when she finds it unnecessary for her to produce ‘serious speech’. Peiyu further explicitly points out that what DHH speakers do does not matter, for hearing people do not care about what DHH people do. Thus, in the highly self-conscious MPR, producing ‘serious speech’ in response to a project that aims to resist audism by familiarizing hearing people with DHH accents becomes unnecessary. It is likely that mediated by such sociological consciousness in their habitus, the two speakers do not embody their ideology that DHH speakers should conform to hearing speech through their linguistic practices in MPR.

In contrast, for speakers who foreground individual agency in their discourse, they tend to embody their identity through associated linguistic practices ‘*more zealously*’ and take ‘*greater advantage*’ of their symbolic power in linguistic practices (Dodsworth, 2008, p. 52). Xiao-Lu and A-Wei both highlight how DHH speakers have power or rights to make an impact (or not to make one) on the hearing-dominated society. Mediated by such agency-foregrounding sociological consciousness,

A-Wei embodies his proposition that DHH speakers should converge toward hearing speech through hyperarticulation in SMMPs, and Xiao-Lu also does so for OMPs.

## 5 | CONCLUSION

This paper highlights the need to situate pathologized speech communities within the scholarship of variationist sociolinguistics and demonstrates how sociolinguists can investigate speakers of pathologized speech as social agents who show stylistic variability across reading tasks. This paper finds that the different strategies of style-shifting adopted by DHH speakers might be mediated by how they internally model the relationship between individuals and a society that is dominated by the hegemonic ideology of audism.

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## DATA AVAILABILITY STATEMENT

Data not available due to ethical restrictions.

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## APPENDIX 1

### MINIMAL PAIRS

1. 請說ㄅㄨㄣ、(報) /ㄉㄨㄣ、(泡)
2. 請說ㄊㄨㄣ、(套) /ㄉㄨㄣ、(到)
3. 請說ㄎㄜ、(科) /ㄎㄜ、(歌)
4. 請說ㄐㄨㄣ、(交) /ㄐㄨㄣ、(敲)
5. 請說ㄩㄣ、(筓) /ㄩㄣ、(薩)
6. 請說ㄗㄨㄣ、(照) /ㄗㄨㄣ、(造)
7. 請說ㄕㄨㄣ、(吵) /ㄕㄨㄣ、(草)
8. 請說ㄒㄨㄣ、(吸) /ㄒㄨㄣ、(雞)
9. 請說ㄩㄣ、(師) /ㄩㄣ、(知)
10. 請說ㄘㄨㄣ、(私) /ㄘㄨㄣ、(疵)



## APPENDIX 2

## STORY READING

皇后母儀天下，地位尊崇，是後宮所有女子夢寐以求的地位，縱觀中國歷史上的皇后，有的很得皇帝喜歡；有的無寵，自始至終不得皇帝喜愛。然而，清朝卻有這麼一個皇后是因「斷髮」從此失寵，她就是烏拉那拉氏皇后。乾隆三十年，皇后睽違已久，陪伴乾隆皇帝和太後來到江南，二月初十是皇后生日，在途中乾隆還給皇后慶祝生日，一切都很和諧美好，然而乾隆皇帝一生都比較風流多情，據記載，乾隆皇帝深夜要登岸遊玩，沈溺酒肉女色，皇后極力勸諫，乾隆不僅沒有聽她的勸告，反而說她精神上有問題，悲憤至極的烏拉那拉在情急之下，剪了頭髮，而在滿族習俗中「斷髮」是非常忌諱的，只有在皇太后去世，或皇帝駕崩時，後宮妃嬪們才可以剪頭髮，可是乾隆此時還健在，烏拉那拉卻突然剪了頭髮，無疑是在詛咒乾隆，這一舉動徹底惹怒了皇帝，從此烏拉那拉便失去了恩寵，之後痛苦鬱鬱而終，死後甚至沒有以皇后國喪的禮儀操辦，入葬也沒有在乾隆的地宮，而是葬在了純惠貴妃地宮，一步錯步步錯。