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Formulating (Dis)Ability: Discursive Construction of Cochlear Implant Satisfaction

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Introduction

This chapter focuses on how Hard of Hearing people discursively construct cochlear implants (CIs) as a desirable hearing assistive device. In Deaf studies, CIs have been criticized as an invention which carries phonocentric hegemony, colonizing deaf people, holding a negative ontology of deafness, and undermining Deaf culture (e.g., Campbell, 2009; Valente, 2011). While many Deaf communities believe their demands have been neglected in the development of CIs (Blume, 2010), some have argued that Hard of Hearing people played an active and important role in the research and development of CIs (Mills, 2011). That is, it has been suggested by some that the feedback acquired from

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Hard of Hearing people was and perhaps still is an important reason for why technicians devote resources to the development of CIs. However, such claims conflict with the concerns shared within Deaf communities about CIs. For instance, within Deaf studies, it has been noted that Hard of Hearing people engaged with CIs technology can be harmed by phonocentric products, especially when the effects of CIs do not meet their expectations (see Valente, 2011, for an example of this argument).

A notable volume of quantitative studies has focused on studying the mental state of users' satisfaction with CIs. Some qualitative studies have adopted a self-narrative approach to examine the ways in which Hard of Hearing people make sense of CIs (e.g., Rembar et al., 2009). Yet, few have studied how CIs become positioned as a satisfying assistive technology in social interaction. In this chapter, I present a study that used a discursive psychology approach to studying conversations among three Hard of Hearing adults in Taiwan about the use of different hearing assistive devices. Specifically, this chapter draws upon Critical Discursive Psychology (CDP) (Wetherell & Edley, 1999) to explore how hearing assistive devices, such as CIs, were positioned and normalized in talk, highlighting how the discourse produced and sustained an ideology of audism and the medical model of disability more broadly.

More particularly, this chapter is organized as follows. First, I locate the discussion about CI satisfaction in relation to previous quantitative studies and point out why a qualitative approach is needed. Second, I illustrate how a discursive psychology approach to CI satisfaction is important in and generative for disability/Deaf studies, specifically as many Deaf studies scholars have argued that CIs function to colonize deaf bodies. Then, I explain the core concepts of CDP that I used in my analysis of the data. I aim to illustrate how these analytic concepts are useful in understanding the conversational patterns of discussing hearing aids (HAs) and CIs, as well as HA users and CI users.

Literature Review

As spoken language speakers with 'hearing loss', Hard of Hearing people are rarely considered legitimate spoken language owners, particularly

within a context wherein deafness is treated as a bodily impairment in need of rehabilitation (Olaussen, 2010). The ideology which follows such a medical perspective is often referred to as ‘audism’; that is, a hegemonic belief that “one is superior based on one’s ability to hear or to behave in the manner of one who hears” (Humphries, 1977, p. 12). In pursuit of spoken language, some Hard of Hearing people seek out hearing assistive devices.

When Hindhede (2011) explored the identity management of people who were diagnosed with hearing loss during adulthood, she found that people held contradictory ideological positions about HAs. For HA users, the very nature of using HAs signified their ‘not-so-severe’ hearing loss in which they could still be assimilated with the hearing culture through the HA assistance; however, wearing HAs also indexed “a particular life-style (disabled)” (p. 182). Hindhede argued, as people with post-lingual hearing loss were not born with deafness, “if they choose to relinquish their able bodied identity they have to accept an identity as Other” (p. 182).

In contrast to HAs which have commonly been inextricably linked to ‘shamefulness’ or stigma (David & Werner, 2016), CIs have emerged as a technology that has commonly been positioned within popularized discourse as ‘really’ curing hearing loss (Campbell, 2009; Lin, 2019; Mauldin, 2016). Rather than amplifying sounds, CIs are a more complicated (and notably quite expensive) technology. An internal portion of the device is surgically implanted under an individual’s skin, which is composed of a receiver and a group of electrodes that are connected to the cochlea. An external portion of the device processes sounds, transforms sounds into electronic signals, and transmits them to the internal portion. Since CIs were commodified in the late 1970s (Garud & Rappa, 1994), CIs have become a new option for Hard of Hearing people to ‘retrieve’ sounds.

Studies on CI satisfaction have been conducted to determine whether CI users are satisfied with the assistance of CIs. These studies have generally been quantitative in scope and focused on measuring participants’ psychological state. For example, Kou et al. (1994) reported that 85% of CI users were satisfied with CIs, and most of the users would recommend the device to others. Other researchers noted, however, that the

satisfaction had a poor correlation with non-self-reported variables, such as sentence recognition accuracy (Zwolan et al., 1995). More recently, research findings have continued to suggest that the majority of CI users are highly satisfied or happy with the CIs, and that such a mental state was not observed relevant to the speech recognition ability or preserved hearing loss (Erixon & Rask-Andersen, 2015; Kobosko et al., 2015). Research has also shown that in Israel, Hard of Hearing adolescents, even if they are not CI users, held positive attitudes toward CIs because they are exposed to CI users and have awareness about the effects of CIs (Most et al., 2007). However, these quantitative studies failed to uncover the social processes whereby Hard of Hearing people (regardless of hearing assistive devices) become aligned with this technology. It is not clear how these general positive attitudes toward CIs emerge among Hard of Hearing people at micro, everyday level. In addition, the previous studies also leave an unanswered question regarding how CI users might be satisfied with CI assistance even if they did not receive audiological benefits from CIs.

In this chapter, I aim to make visible the discursive processes in which CIs become positioned as a desirable technology that functions well for Hard of Hearing people. My study was geographically located in Taiwan; thus, of relevance to this work is the place of CIs in that particular context. Specifically, CIs were introduced in Taiwan in the 1980s. In line with the aforementioned trend of CI satisfaction studies, related research has been conducted in Taiwan and has argued that “most implant users stated that receiving a CI was a correct decision” (Liu et al., 2009, p. 25). As Hard of Hearing advocacy groups pressured the legislators to include CIs in Taiwan’s National Health Insurance (NHI), the costs of CIs have been covered by NHI since 2017.

Theorizing Disability

For Deaf studies, the promotion of CIs can be understood as being ideologically oriented, supported by an oralist ‘cyborgization’ and serving to colonize deafened bodies (Valente, 2011). From this perspective, the oralist cyborgization reproduces the audist (ableist) body image that

implies that all Hard of Hearing people should strive to behave more 'hearing-like.' Such social engineering also commercializes hearing abilities. In this way, some Hard of Hearing people may devote time, effort, body, and sizable amounts of money to the reproduction of an abled, hearing-like body. When hearing becomes a commodity, the responsibility for 'overcoming disabilities' is individualized and positioned as simply being a personal choice between assistive devices (Mitchell & Snyder, 2015). Such psychologized and individualized perspectives can be criticized for taking part in the neoliberalization of 'normalizing' disabled people (Mitchell & Snyder, 2015). That is, even things such as CI satisfaction studies become part of the cyborgization process, individualizing the formulation of a mental life wherein abledness or disabledness reproduces the audist hegemony embedded within a medical model.

Nevertheless, the empirically observed effects of satisfaction about CIs should not be negated. From the perspective of CDP, it is inadequate to point out that people can be complicit in the reproduction of ableist ideology; instead, we must acknowledge how people 'do' abled identities in their everyday lives. For instance, responding to the discussion about how people with intellectual disabilities are presumably innocent of their own disabilities due to parents' "fictional identity building," Rapley et al. (1998) argued that people with intellectual disabilities actually strategize 'passing' to disavow their disabled identities in talk (Goffman, 1963). That is, like other identity categories, disabled identities are fluid and dynamic. It is thus problematic to presume that disabled people are overwhelmingly devoured by the ableist ideology and thereby display no to little agency in pursuit of embracing their "toxic identities" (Rapley et al., 1998, p. 814).

Unlike traditional cognitive psychologists seeing individual psychology as isolated and invisible systems (Wetherell, 2007), Wetherell (2015) put emphasis on "affective practice" as a social practice, "an ongoing flow [...] of forming and changing body-scapes, *qualia* (subjective states), and actions constantly shifting in response to the changing context" (p. 147). That is, even relatively stable mental states of an individual are "continually customized and reworked according to the situation, and demonstrate the 'could be otherwise' logic of practice"

(p. 147). In line with this strand of thought, this chapter focuses on how CI users' satisfaction with their hearing assistive device is continually reworked, reproduced, and reshaped in talk. Through analyzing the conversation among three Hard of Hearing participants, I illustrate how CI satisfaction becomes normalized in interaction.

Methodological Approach: Critical Discursive Psychology

[w]hat it means to be a person, the formulation of an internal life, an identity and a way of being in the world develop as external public dialogue moves inside to form the 'voices of the mind' [...]

(Wetherell & Edley, 1999, p. 337)

CDP is a "loose grouping" of discursive psychologists who do not limit their data analysis to conversation analysis but combine macro and micro discourse approaches (Wetherell, 2007, p. 665) that critically examine what traditional psychologists do (Parker, 2015). Psychology is not culture-free; thus, it is dangerous to consider individual mental systems bounded and commensurable across social situations. Against this backdrop, within CDP, it is assumed that language does not function as a transparent mirror that neutrally reflects one's mental states. Instead, CDP focuses on how discourse per se can be a social practice that makes visible and has practical consequences for one's mental life (Wetherell & Potter, 1988).

Lying at the heart of CDP are several analytical concepts, including 'interpretative repertoires,' 'ideological dilemmas,' and 'subject positions' (Potter & Wetherell, 1987). To examine contesting ideologies that characterize HAs and CIs, I took up the notions of 'interpretative repertoires' (IRs) and 'subject positions' in this study.

Specifically, IRs emphasize "inconsistencies and differences in discourse are differences between relatively internally consistent, bounded language units" (Wetherell & Potter, 1988, p. 172). The concept of IRs locates "recognizable routine of arguments, descriptions

and evaluations found in people's talk" (Seymour-Smith, 2017, p. 309). To identify these routines is not to argue people use regular and systemic ways to discuss things. Instead, this is to highlight inconsistencies within those different routines shared by the same group of people (Edley, 2001; Potter & Wetherell, 1987; Wetherell, 1996). Wetherell and Potter (1988) noted that the way people interact should not be examined within a de-contextualized social vacuum, but rather studied in relation to how it was produced in situ. Further, it is important to acknowledge that individuals shift across different IRs in their everyday interactions. Culturally available IRs can be opposing, debating, and grounded in ideology. When IRs clash, a crisis may emerge, for example. For instance, Wetherell (1996) observed how young British women admire a thin body but simultaneously claim that one should not desire a thin body simply because of social pressure. The repertoire of *natural body* is then developed to resolve this dilemma by de-socializing and naturalizing the health benefits of dieting, which for feminists, can be dangerous for women.

'Imaginary positions,' that is, subject positions that are conventionalized, is the other analytic concept I took up in this study (Wetherell & Edley, 1999). While IRs concern routinized ways of talking about a certain topic (e.g., body shape), imaginary positions are conventional ideals that people cite in talk to construct their own subject positions. By 'imaginary,' it does not mean a subject position is purely individually imagined. In contrast, such a term captures a pattern of identification formulated in social interactions where interactants take on a specific appearance of the self that is conventional in the social world. Just like how IRs are coherent discursive units, by taking up imaginary positions, individuals self-position as stable, coherent, and complete characters; that is, as if an individual psychology were composed of a single homogeneous personality (Wetherell & Edley, 1999). For example, men have been observed discursively taking up heroic, ordinary, or rebellious positions when talking about their gender role (Wetherell & Edley, 1999). For Wetherell and Edley, to identify imaginary positions is to acknowledge that:

...[t]here is a multiplicity of hegemonic sense-making relevant to the construction of masculinity identities, [...] Sense-making is complex,

contradictory and full of competing claims and dilemmas [...] It is not sufficient to say, for example, that hegemonic masculinity is reproduced because men conform to social norms. We need a more elaborated account of what we mean by 'norms' and of the process of 'take-up' of those norms. (p. 351)

Notably, in this chapter, I adopted the concept of IRs to explore how Hard of Hearing people who participated in a focus group discussed different hearing assistive devices. I also borrowed the concept of imaginary positions to analyze how Hard of Hearing people as users of these devices projected themselves in relation to different subject positions.

Methods

The data included in this chapter was drawn from a larger ethnographic study of disability in cultural geography (Wan, 2016). The ethnographic fieldwork was conducted in Taipei from June 2014 to October 2014. Xiao-kun was my primary participant and introduced me to her two friends. All three individuals became participants within my larger ethnographic study (see Table 7.1 for a description). They were all individuals with post-lingual hearing loss, which is defined as gaining hearing loss after the acquisition of speech and language. Xiao-kun was a unilateral CI user during my data collection. After my fieldwork was completed, she participated in a medical project and became a bilateral CI user.

Table 7.1 Participant description

Participant pseudonyms	Hearing assistive device	Reported audiological status
Xiao-kun (40s, female)	Combined use of a hearing aid and a cochlear implant	Profound hearing loss (with her CI turned off), mild hearing loss (with her CI turned on)
Shu-lun (50s, female)	Bilateral HAs	Mild hearing loss
Sakura (60s, female)	Bilateral HAs	Profound hearing loss

Within this chapter, the data transcribed came from an audio-recorded focus group with the three participants. The focus group was semi-structured (see the appendix for the protocol). The focus group, which lasted 2 hours, was completed on June 24, 2014 with Xiao-kun, Shu-lun and Sakura participating.

Data Analysis and Overview of Findings Structure

After transcribing the 2-hour focus group, which was conducted in Mandarin, I categorized the topics within the transcript. While transcripts were translated into English for the purposes of publication, I analyzed the original, Mandarin text. Specifically, I only focused on the parts of the focus group where the three participants directly addressed their hearing assistive devices. In addition, a modified Jefferson transcription system (Jefferson, 2004) was adopted to represent the content of conversation as well as the ways the content was expressed.

In alignment with discursive psychology, this analysis was data-driven. That is, no preconceived assumptions were imposed on the data. Instead, I was informed by the data through ‘unmotivated looking,’ which is generally thought of as the process whereby a researcher engages with the data and discovers new understandings of social actions by an open examination of talk (Hutchby & Wooffitt, 2008). One of my participants—Xiao-kun—was the only CI user in the analyzed conversation. Her use of CI differentiated her from the other two participants, who were both HA users. Thus, I attended in particular to a spontaneous discussion about their hearing assistive devices, as a clear routinized pattern of discussing HA and CI could be observed. The first part of the findings section is thus focused on exploring how the participants evoke recognizable routines of talking about different devices (i.e., identifying IRs). Also, when the participants talked about technologies, they did not simply address these material objects but also related themselves to their devices. Thus, imaginary positions were visible within the data, specifically related to how they constructed their subjectivities in relation to the material as well as the social world.

In the second part of the findings, I present my analysis of how Xiaokun worked at the level of discourse to convince the other two HA users, as well as me (a hearing researcher), of the effects of CIs, actively ‘performing’ the material differences between her satisfying CI and her unsatisfying HA. This scene echoes Wetherell’s (2015) emphasis on affective practice as “a field of open and flexible patterns,” where “the order in these patterns is emergent from the changing interrelationships and entanglements between the constituent social, cultural, biological and material parts of the broader field” (p. 147). A social model of disability has been sometimes critiqued for neglecting the materially/biologically felt impairment as an important aspect of disabled people’s lives (Shakespeare, 2010). It would be a shaky argument if researchers see the empirically observed satisfaction from using CIs as mostly a product formulated in language. As Hall (2000) has put it, if researchers exclude the biological fact that people’s bodies are different, it will be very difficult for disability studies to respond to issues faced by the people they are working with. Thus, in the second part of the findings, I show how the different hearing assistive devices as material objects also become positioned as parts of the discursive practice that contributes to the ongoing construction of CIs as a satisfying technology.

Findings

The first part of this section depicts how my three participants collaboratively talk about the differences between HA and CI and how imaginary positions concerning users of HAs and users of CIs are developed in talk. The second part explores how the discursive construction of the two imaginary positions can be further materially performed, which strengthens the subject positioning of Hard of Hearing people as users abled or disabled by different devices.

1. Identifying interpretative repertoires

a. *Non-hearing-like repertoire for HAs*

During the focus group with Xiao-kun, Shu-lun, and Sakura, they spontaneously began a conversation about HAs. As a HA user, Shu-lun, who mostly relied on lipreading, shared her experiences about the inconvenience of using HAs.

Extract 1. (SL: Shu-lun, SK: Sakura)

1. SL: 神經性的傷害喔
Speaking of neurological damage
2. 你戴了助聽器以後喔
when you put on hearing aids
3. 你只是把聲音放大
you only amplify the sounds
4. 你沒有辦法辨別
You can't distinguish ((the sounds))
5. 我現在閉上眼睛
Now I close my eyes
6. 喔，我聽到聲音了
Oh, I heard a sound
7. 那是什麼聲音呢(.)你沒有辦法辨別
What's that sound(.)You can't tell
8. 你閉上眼睛的時候(.)你閉上眼睛你聽到聲音的時候
When you ((researcher)) close your eyes(.)When you close your eyes and hear some sound
9. 你就知道
You know that
10. 啊，有人用力摔門
Ah, someone slammed shut the door
11. 啊，有撞擊(.)關車門(.)或物體掉落
Ah, it's a bang(.)A car door is shut down(.)or a bump
12. 但我們只聽到聲音
But we can only hear the sounds
13. 但是我們沒有辦法辨別
Yet we can't identify those sounds
14. SK: >對對對對對<
>Yes yes yes yes yes<

In Extract 1, an ineffective HA was highlighted in contrast with the researcher's hearing body ("you" in lines 8–11). Sakura's successive 'yes' functioned to emphasize how Hard of Hearing people seem to share a *non-hearing-like repertoire* against the functions of HAs. Here, the participants made explicit their shared social understanding about what functions a hearing body has and therefore what functions a HA device lacks. For Shu-lun and Sakura, HA users were positioned as still disabled because they cannot hear most of the sounds that hearing people hear. Disability in this sense was oriented to as naturally produced by the ineffective technological device. As such, one was positioned as not being disabled by the social environment but the ineffectual technology.

b. *Shameful HA repertoire*

In addition to the poor functions of HA, Xiao-kun mentioned how she considered HAs a shameful object, highlighting how her identity was stigmatized in public.

Extract 2. (XK: Xiao-kun, SK: Sakura, SL: Shu-lun)

1. **XK:** 還沒有戴電子耳的時候
Before I use CI
2. 我戴助聽器
I used HA
3. 我覺得很自卑
and I felt very self-abased
4. 因為我是十八歲十九歲聽力慢慢下降的
My hearing worsened when I was about 18 or 19 years old
5. 那個醫生就說要戴助聽器
My doctor asked me to use HA
6. 沒有辦法(.)沒救了
No other solution(.) It's a hopeless situation
7. 我就一直哭一直哭
I kept crying and crying
8. 我不喜歡戴
I didn't like wearing it
9. 戴上去沒有一小時(.)拿下來
I used it for less than an hour(.) I took it off

10. 戴上[一小時]
I put it on [for another hour]
11. SK: [怕人家看到!]
[You're afraid that others ↑saw it]
12. XK: >對對對<
>yes yes yes<
13. 所以就一直遮住啊
so I always covered it
14. 當時我是在幼稚園上班
I was working in a kindergarten then
15. 然後小朋友很多啊
There were so many children
16. 叫老師啊老師什麼什麼
They called me a teacher
17. 然後怕他們看到助聽器(.)就很內疚
I was afraid they would see my HA(.)I felt guilty
18. 就把他遮住
so I covered it
19. 有的時候戴上去(.)一個小時就拿下來
Sometimes after wearing it (.) for an hour I took it off
20. 就真的很自卑(.)到說
I was so self-abased (.)that
21. 助聽器很丟臉
(I thought)) HA was a shame
22. 我會這樣想
I did think in this way

In Extract 2, Xiao-kun echoes Shu-lun's narrative of HAs, describing her life as a HA user before she used CI. Different from the *non-hearing-like repertoire*, Xiao-kun involves a *repertoire of shameful HA*, in which HAs become a shame for her body that symbolizes her hearing loss. Working in a kindergarten, although she was not a teacher, the children addressed her as 'teacher' (in Taiwan, students are expected to call all teachers 'teacher'). In lines 15–17, Xiao-kun implied that kindergarten teachers, as role models for children, should not be seen wearing devices that embody their hearing loss. In her narrative, HAs become an object that may undermine the social relation between her, whom the students believed to be a teacher, and those hearing students. The conversation

in Extract 2 was no longer just about the material effects of HAs but about the stigma presumably embedded within HAs. Sakura's interruption (line 12) made visible how this IR was shared among HA users in talk, discursively reinforcing the *shameful position* of a HA user. I argue, however, that this IR is dangerous, in that it links the stigma related to hearing loss as being a result of the 'wrong' assistive device rather than a product of social discrimination.

c. *Hearing body repertoire* for CI

Different from HAs, CIs seemed to give Xiao-kun some degree of confidence, though CIs actually appear even more obvious. When Xiao-kun discussed her CI, she emphasized the hearing-like body that CIs can seemingly produce.

Extract 3a. (XK: Xiao-kun)

1. XK: 我如果在外面(.)我有戴電子耳,
If I'm not home(.)and I put the CI on,
2. 我就可以跟人家溝通
I am able to communicate with others

Extract 3a is not connected to Extract 2, but the former happens after the latter. After the three participants talked about HAs, they moved on to the topic of CIs. As shown in Extracts 1 and 2, the imaginary position of HA users was formulated as a shameful and disabled position. In Extract 3a, Xiao-kun explicitly commented that if she uses her CI, she can communicate with hearing people. I named this IR a *hearing body repertoire* of CIs, in contrast to the *non-hearing-like repertoire* of HA. Within this narrative, one is not abled by any friendly social environment but by an effectual technology. The emphasis on the hearing ability introduced by CIs formulates an imaginary position of abledness. Within such a constructed coherent character, even if CIs have some weak points, they are discursively transformed into positive aspects of the device.

Extract 3b. (XK: Xiao-kun)

1. XK: 但是有時候下雨
But sometimes when it's rainy
2. 我們這個是不能碰到水
Our [My] CI isn't waterproof
3. 這個要機器要三十萬
This machine costs me three hundred thousand ((New Taiwan Dollars))
4. 就要去保重他
so I need to treasure and protect it
5. 有的時候騎摩托車，我會戴這個
Sometimes when I drive a scooter, I wear it
6. 有的時候不會戴
but sometimes I don't wear it
7. 沒戴的時候
One time when I didn't wear it
8. 人家在問
Someone asked me
9. 欸小姐，那個什麼路什麼路怎麼走 (.hhhhhhhhhhh)
Hi Miss, how to get to blabla road (.hhhhhhhhhhh)
10. 我就這樣，什麼路什麼路怎麼走
I responded in this way, ((she represented the situation))
what road do you want to go to
11. 啊我就想說-我想說幫助人家好嘛
I thought- I thought it's good to help others
12. 看一次嘴型
I read the lips
13. 你再講一次好不好
Can you say that again
14. 那個什麼什麼路
blabla road
15. 不行欸，聽不懂
No, I didn't understand
16. 我沒有跟他說我聽不懂
I didn't tell that person I didn't understand
17. 就說，對不起，你可以再講一次嗎
I just said, sorry, can you say that again
18. 好，什麼什麼什麼路
OK, blabla road
19. 對不起，我不知道餒 (hhh)
Sorry, I don't know (hhh)

In Extract 3b, while Xiao-kun noted the limitations of her CIs, she did not negatively frame them. According to Xiao-kun, the CI is fragile, so it should be protected; the CI is expensive, so it should be treasured. The failure to communicate with strangers, in her narrative, was due to her ineffective HA rather than the inconvenient non-waterproof CI (note that Xiao-kun uses both HA and CI, so when she does not wear her CI, she relies on only her HA). Xiao-kun's laughter (lines 9 and 19) perhaps showed that this experience shared in Extract 3b is not treated as any tragic story like in Extract 2 but a humorous story that stems from protecting her CI. Within this imaginary positioning, CI users are rendered as an optimistic character, empowering them to deal with any failure to communicate with humor.

Lin (2019) reported that a major statement against CIs within the Taiwanese Deaf community is to highlight the risks of a CI surgery compared to the benefits of using CIs. When CI's functions seem limited in face of the high risks, the legitimacy of having and using a CI is challenged. I interpret such discourse as evoking a *not cost-effective CI repertoire*, meaning the advantages of having a CI are not worth the risks and costs. Xiao-kun downplayed such an IR when she emphasized the high value of CIs. Humor, as evidenced by her laughter, was introduced to frame the story and perhaps marks the awkward and sensitive nature of the situation being described.

The three participants, thus, invoked a *non-hearing-like repertoire* and *shameful repertoire* when they discussed HAs. In contrast, CIs were only discussed through the *hearing body repertoire*, although CIs per se can also be 'shameful' (considering its appearance) and not cost-effective (considering its restrictions). When the inadequacy of CIs surfaced in the conversation, the abled position of CI users was implicitly threatened, thereby eroding the claims of an optimistic position of CI users. Throughout Extracts 1–3, the imaginary position of HA users was crafted as being disabled, shameful, and self-abased. In contrast, CI users were constructed as people who live an abled and happy life. As Sakura and Shu-lun were not CI users, when Xiao-kun elaborated on her experiences of using CIs, they only listened to her rather than offering a shared (or even counter) perspective. Ultimately, downplaying these IRs (e.g., *not cost-effective CI repertoire*) functioned to maintain the coherency of such imaginary positions.

2. Normalizing imaginary position

To trace how people stabilize and normalize discussing CIs and CI users, it is not adequate to look only at linguistic practices. Rather, it is important to attend to non-linguistic elements involved in the psycho-discursive practices as well. Durrheim and Dixon (2005) noted that in discursive psychology “references to any reality outside talk are treated with suspicion” (p. 451). However, in psycho-discursive practices that involve topics about bodies, it is difficult (and perhaps inappropriate) to ignore relevant embodied experiences; that is, the materiality of the prosthesis.

In this study, just as the focus group came to an end, Xiao-kun looked at the interview protocol and offered something to make visible the differences between HAs and CIs.

Extract 4a. (XK: Xiao-kun, SL: Shu-lun, SK: Sakura, R: researcher)

1. **XK:** ↑啊, 你唸唸唸唸唸
 ↑AH, you >READ READ READ READ READ< ((the consent form))
2. 唸啊, 你唸唸唸唸唸
 READ, you >read read read read read< ((the consent form))
3. 可以(.)很標準嗎?
 Can you(.)read ((the consent form)) in a standard way?
4. 來你來
 Come on
5. **SL:** 我看過啦
 I've read it
6. **XK:** 唸(.) [唸啊]
 Read(.) [read it]
7. **SK:** [唸]出來
 [Read] it out
8. 唸出來
 Read it out
9. **XK:** 唸
 Read
10. **SK:** 欸欸, 講出來
 HEY HEY, say it out

11. XK: 唸出來
Read it out
12. SK: 嘿，唸出來
Yes, read it out
13. SU: 親愛的 [女士先生您好]
Dear [ladies and gentlemen]
14. XK: [>你看他講得很標準<]
 [>You can see her speech is very standard<]
15. 他都不會 [緊-]
 She is not [ner-]
16. SK: [繼續]續
 [MOVE] ON
17. R: 講得很好啊
 She read it very well
18. XK: 他都不會緊張
 She is not nervous

In Extract 4a, Xiao-kun's loud and high-pitched 'ab' marked or emphasized a relevant idea that is subsequently shared (line 1). This can be seen as the start of a new speech event, in which she managed to normalize the imaginary positioning of different assistive devices. She asked Shu-lun to read the consent form. The study's consent form then became a semiotic resource within the interaction. Shu-lun, however, did not follow what was going on (line 5). After another seven lines of repeated requests (lines 6–12), in line 13, Su-lun followed the directive and read out loud the very first sentence on the consent form—'Dear ladies and gentlemen'. Nevertheless, right after, Shu-lun read out only one word ('Dear'), Xiao-kun invited me to agree with her observation; that is, that Shu-lun had a standard accent (line 14). While Sakura interrupted Xiao-kun's expression of her observation (line 16), Xiao-kun moved to complete the sentence (line 18). Rather than responding to my observation, she did not respond to my observation but her own uncompleted sentence (line 16). That is, what Shu-lun pronounces is not particularly important here, as Xiao-kun simply wanted an utterance from Shu-lun that she could build upon to introduce a reference point. That reference point was: Shu-lun performs well with her spoken language. Why did she generate such a reference point? In Extract 4b, which followed Extract 4a,

Xiao-kun, building upon Shu-lun's presumably standard accent, made visible how non-standard her accent was when she turned off her CI.

Extract 4b

1. **XK:** 我念-我念很慢,
I read- I read very slowly,
2. 因為我還要去聽我的聲音
because I need to listen to my own voice
3. **SK:** 妳會去聽妳的聲音?
Do you listen to your own voice?
4. **XK:** 對, 妳們聽看看我把電子耳關掉
Right, have a listen to me when I turn off my CI
5. 我把電子耳關掉就開助聽器
I'm turning the CI off and only with the HA turned on
6. 我現在就抓不到
Now I can't catch ((the sound))
7. 只有開這邊
only with this side((HA))
8. 因為我助聽器也聽不好
because I can't hear well with my HA
9. **SK:** 等一下, 我問妳妳為什麼要-
Wait, why do you need-
10. **XK:** 等一下妳等我打開妳再講
Talk to me later when I turn on ((the CI))
11. **SK:** ㄟ喔ㄟ
LOKE

In Extract 4b, the abled position of CI users is again discursively constructed. Xiao-kun downplayed the possible link between an abled position and HA user by requiring Sakura not to talk to her when she only has her HA on. Instead, Sakura could only talk to Xiao-kun again after Xiao-kun turned on her CI. Here then emerges a robust contrast between an disabled position of a HA user and the abled position of a CI user.

In line 1, Xiao-kun described her low reading rate, positioning it as resulting from the failure to listen to her own voice when switching to HA mode. Here, I suggest that a *non-hearing-like repertoire* of HAs was evoked. This was further evidenced when Xiao-kun was positioned as someone who failed to read the consent form as 'perfectly' as Shu-lun,

as she needed the assistance of CI to invoke an abled position. Notably, as Xiao-kun was about to perform the differences between CIs and HAs, in line 3, Sakura interrupted Xiao-kun and questioned the mechanism of hearing-speaking interactions. Xiao-kun, while answering 'yes' to Sakura, turned off her CI to signal a bodily transformation. The very move to turn off the CI was itself a central action within the discursive practice, inviting the other interactants not to speak to her.

Next, in line 9, Sakura again cast doubt on the 'nature' of the proposed link between hearing ability and speaking proficiency. With her HA turned on, Xiao-kun interrupted Sakura and declined to answer any questions while her CI was turned off (line 10). In this way, Xiao-kun took up a disabled position. Sakura acknowledged Xiao-kun's request, with laughter embedded within the talk (line 11). The laughter perhaps marked her unfamiliarity or even discomfort with the hearing-speaking interaction that may undermine Xiao-kun's ability to communicate when the CI is off. This also potentially signaled Sakura's misalignment with the proposition that hearing-speaking interaction can be taken for granted.

Xiao-kun's two reading practices with the CI on and off did indeed sound different. To put it in briefly, with Mandarin as a tone language, Xiao-kun showed a wider pitch range with her falling tone, a tone category in which pitch drops from high frequencies to low frequencies. When she used her CI, the wider pitch range makes the falling tone more obvious. In contrast, she displayed a narrower pitch range with her falling tone when she only relied on her HA. From a technological perspective, CIs are believed to better identify sounds at higher sound frequencies. Therefore, it is understandable that when she used the CI, Xiao-kun made use of higher sound frequencies to produce a higher starting point of sound frequencies for the falling tone, thereby wider pitch range. However, it does not mean that CIs necessarily lead to clearer falling tones. It is Xiao-kun who opted to widen the pitch range, which illustrated how CIs can be different from HAs. Xiao-kun's performance of the linguistic differences shown by the two prostheses made visible the highly agentive ways that one might work with such prostheses. This discussion of these differences made visible in the next extract.

Extract 4c. (XK: Xiao-kun, SK: Sakura)

1. **XK:** 有差
They are different
2. **SK:** 為什麼
Why
3. **XK:** 因為我聽不到
Because I couldn't hear ((my own voice))
4. **SK:** 為什麼你要-你念(.)你知道怎麼念就好了
Why do you need- When you read(.)you only need to know how to read
5. 你為什麼要[聽得到]
Why do you need to [hear]
6. **XK:** [不是]
[No]
7. 助聽器我戴
When I wear HA
8. 我是110極重度
I have 110 dB profound hearing loss
9. **SK:** 我知道, 妳-妳-
I know, you- you
10. **XK:** 所以也就是說我這個電子耳是關掉
So that is, when my CI is off
11. 就等於(.)跟極重度的人是一樣的
I am like(.)people with profound hearing loss
12. 我開了就等於是輕度-輕度的障礙
When I turn it on, it is equal to mild- mild impairment
13. **Lí thiann-ū-bô?**
((Switched to Hokkien)) Do you understand?
14. **SK:** **Guá tsai**
((switched to Hokkien)) I know
15. 我知道啦(.)等於說妳關掉的時候
((switched to Mandarin))I know(.)It means when you turn it off
16. 妳完全都沒有聽到妳自己念的
you completely can't hear what you are reading

In Extract 4c, even though Sakura has witnessed the acoustic differences between the same speaker as a HA user and as a CI user, Sakura still questioned the link between hearing and speaking (line 2). That is, the linkage from using a prosthesis and an instant improvement in one's spoken language was not presumed or shared by the other Hard of Hearing participants. For Sakura (lines 4–5), a speaker has implicit linguistic knowledge about how to pronounce words, so one should be able to pronounce words accordingly without hearing their own voice. Next, Xiao-kun interrupted Sakura (line 6), framing the difference in relation to the degree of hearing loss (lines 7–8). This perhaps functioned to differentiate Sakura (with mild hearing loss) from herself (with profound hearing loss). That is, it was argued that it is not because Xiao-kun's experience was not shared by others but because Xiao-kun was different from the others in relation to her degree of hearing loss. Thus, it was implied that if a person shares the same degree of hearing loss, they would then potentially understand Xiao-kun. The legitimacy of Sakura's reasoning was dismissed or at least minimized by her lack of experience with profound hearing loss. Here, then, Xiao-kun built a case for the material effects of CIs.

From the perspective of stabilizing an imaginary position of CI users, disagreements in conversation may work against formulating a coherent character of CI users. From line 10 to 12, Xiao-kun again highlights the physical mechanisms in her performance of linguistic differences. And, in line 13, Xiao-kun switches to Taiwanese Hokkien, asking whether Sakura understands what she is talking about. This is not simply a question to a HA user who may not know how CIs work, but rather a question to Sakura as a person who lacks the knowledge to compete for the conversational floor with Xiao-kun. Sakura's first language is Taiwanese Hokkien, a stigmatized local language in Taiwan. Su (2009) pointed out that "instances of switching to Taiwanese [Hokkien] in a Mandarin-dominant passage almost overwhelmingly function [...] to highlight transitions or [changes] of footing" (p. 380). Footing is "the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance" (Goffman, 1981, p. 128). Here (line 13), Xiao-kun's code-switching to Taiwanese Hokkien

functions to shift both Xiao-kun's and Sakura's footing. Specifically, Xiao-kun's code-switching into Taiwanese Hokkien (to Sakura) occurred as she managed the relation between herself and a HA user, who was presumed to be unfamiliar with the hearing-speaking interaction in an advanced technology. The language which had already occupied a presumed low social status (i.e., Taiwanese Hokkien) was combined with her imaginary positioning of HA users. The psycho-discursive practices here thus reproduced both the symbolic hierarchy between HAs and CIs and that between a prestigious language and stigmatized language.

The two imaginary positions, abledness (for CI users) and disabledness (for HA users), are discursively constructed and stabilized in their collective interactive practices. When navigating the competing IRs and imaginary positions, people adopt conversational strategies, such as humor in the previous section or code-switching and floor-competing in this section, to solve the conflicts. With these discursive strategies, imaginary positions about users of different devices can be stabilized and normalized. The formulation of imaginary positions of abledness (for CI users) and disabledness (for HA users) is also built upon discursive practices that comprise not only language (i.e., IRs) but also the non-linguistic resources, including the material effects of the two assistive devices. Without those non-linguistic semiotic resources, Xiao-kun would not be able to perform and validate the difference between these different imaginary positions of device users. Imaginary positions are here beyond imaginations; as they are positioned to be true, rooted in a real material word.

Discussion

Durrheim and Dixon (2005), when addressing the social psychology of racism, called for discursive psychologists to attend to the "embodied spatio-temporal practices" that co-constitutes race relations with linguistic practices in concrete contexts. Similarly, in my study, I oriented to this call in relation to disability, with the findings from this study illustrating how the materiality of hearing assistive devices are negotiated within discursive practices in which both linguistic and

non-linguistic ways. Specifically, CIs and HAs are recruited as semi-otic resources in psycho-discursive practices where users project their own imaginary positioning in relation to IRs of the devices. The ways of discussing the effects of the two devices were often binarized. That is, the imaginary positions concerning the users of these two devices were frequently dichotomized as abled and disabled people. The analyzed focus group, of course, was only a moment in these participants' daily lives. The psycho-discursive practices that formulate different imaginary positions concerning CI users and HA users, however, are certainly visible in other situations and contexts. They are resources or procedures called as 'personal order' (Wetherell, 2003) that can be referred to when these participants rework a formulated imaginary position.

Mauldin (2016) proposed the concept of "ambivalent medicalization" to address how individuals are simultaneously subject to and perhaps at times empowered by medicalization. She suggested that when discussing how mothers of Hard of Hearing children work with CI clinicians, the central tension of such ambivalence lies in between the "possibility of relief for parents through a promised narrative of overcoming deafness" (p. 161) and the high demand for their labor in exchange to 'properly' raise children in normalized and taken-for-granted ways. Mauldin found that mothers were frequently socialized to not feel ambivalent; they were trained to acknowledge the legitimacy of CI intervention. In this chapter, we see how the everyday meaning-making practices centered around CIs can be understood as perhaps being a laborious struggle to overcoming ambivalent medicalization. The struggles are made through the boundary-making processes between different assistive devices, different bodies and different imaginary positions. For instance, to resist ambivalent feelings (e.g., the inconvenience of nonwaterproofed CI), Xiao-kun's discursive practices dichotomized CIs and HAs, reinforcing her identity as a CI user via the psycho-discursively constructed optimistic and abled position in which ambivalence becomes seemingly absent. The abled and positive position of CI users becomes normalized in everyday talk, contributing to the formulation of CI satisfaction, not only for the user but also for other people who are involved in the conversation.

I argue that the linkage between a useful CI and an abled position of CI users is perpetuation of audism. In the analyzed conversations

in this chapter, the medical model of disability is implicitly leveraged to formulate an abled position of CI users and a disabled position of HA users. This can be dangerous; that is, treating disability as purely a product of a personal selection between different prostheses, instead of that which is produced in and through social, political, and biological realities. Here then, understandings of CI satisfaction are intermingled within one's ideological perspective what it means and looks like to be abled bodied. Indeed, individual psychology is never individual but "noisy, dialogical and distributed" (Wetherell, 2007, p. 664), and, in this study, the formulation of a positive orientation toward CI and negative orientation toward HA makes visible the ideological aura of ableism. In this way, "human variation" is solely approached as being a "deviation from some imagined perfection" (Sparrow, 2005, p. 138). The devaluation of social-cultural diversity embedded within such psycho-discursive practices is more than distinctions between a more perfect hearing body and a more impaired deafened body. Rather, it involves any social differentiation as discursive resources continually appropriate, reproduce, and even remake it.

Conclusions

Informed by CDP, this chapter uncovers how the empirically observed mental state of CI satisfaction in previous quantitative studies may be evidenced in social interactions for users of either HAs or CIs. In this chapter, I have adopted the CDP approach to identifying IRs that Hard of Hearing participants in a focus group interview involved when they discussed HAs and CIs. I have sought to illustrate how IRs concerning assistive devices can become powerful resources for sustaining and building a medical model of disability, contributing to the imaginary positioning of users of these devices. Disability thus becomes a medical situation instead of that which is always already embedded within social and political life. Within this medical model, Hard of Hearing people are often positioned as abled (to some extent) because they use CIs; they may become disabled thought when they use HAs. Further, and perhaps most significantly, I have also illustrated how conversational strategies

and non-linguistic resources are together involved in psycho-discursive practices where the effect of feeling satisfied by CIs is formulated. Importantly, what I hope to offer here is one example of how using CDP can make visible how these often taken-for-granted imaginary positions come to be.

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Appendix: Interview Protocol

1. You are classmates in Taiwan Sign Language (TSL) class. Why do you want to learn TSL? When do you use TSL or when do you expect yourself to use TSL?
2. What is your opinion about hearing people mixing signed language in their dance?
3. Xiao-kun mentioned she was mistaken for a foreigner because of her accent. Does any of you have a similar experience?
4. When you talk in public spheres, are you afraid that people might give you a sidelong glance? Or you just talk naturally?
5. If people you don't know talk to you, how do you usually react?
6. Do you have any experience of learning a foreign language? Why do you learn it?
7. Have you ever managed to "correct your pronunciation"?
8. Have you ever been treated in an unfriendly way because of issues related to oral communication?

References

- Blume, S. (2010). *The artificial ear: Cochlear implants and the culture of deafness*. Rutgers University Press.
- Campbell, F. K. (2009). *Contours of ableism: The production of disability and abledness*. Palgrave Macmillan.
- David, D., & Werner, P. (2016). Stigma regarding hearing loss and hearing aids: A scoping review. *Stigma and Health, 1*(2), 59–71.
- Durrheim, K., & Dixon, J. (2005). Studying talk and embodied practices: Toward a psychology of materiality of ‘race relations’. *Journal of Community & Applied Social Psychology, 15*(6), 446–460.
- Edley, N. (2001). Analysing masculinity. In M. Wetherell, S. Taylor & S. J. Yates (Eds.), *Discourse as data: A guide for analysis*. The Open University.
- Erixon, E., & Rask-Andersen, H. (2015). Hearing and patient satisfaction among 19 patients who received implants intended for hybrid hearing: A two-year follow-up. *Ear and Hearing, 36*(5), 271–278.
- Garud, R., & Rappa, M. A. (1994). A socio-cognitive model of technology evolution: The case of cochlear implants. *Organization Science, 5*(3), 344–362.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Penguin.
- Goffman, E. (1981). *Forms of talk*. University of Pennsylvania Press.
- Hall, E. (2000). ‘Blood, brain and bones’: Taking the body seriously in the geography of health and impairment. *Area, 32*(1), 21–29.
- Hindhede, A. L. (2011). Negotiating hearing disability and hearing disabled identities. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 16*(2), 169–185.
- Humphries, T. (1977). *Communicating across cultures (deaf-hearing) and language learning* (Ph.D.). Union Institute and University.
- Hutchby, I., & Wooffitt, R. (2008). *Conversation analysis* (2nd edition). Polity Press.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lerner (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–31). John Benjamins.
- Kobosko, J., Jedrzejczak, W. W., Pilka, E., Pankowska, A., & Skarzynski, H. (2015). Satisfaction with Cochlear Implants in postlingually deaf adults and its nonaudiological predictors: Psychological distress, coping strategies, and self-esteem. *Ear and Hearing, 36*(5), 605–618.

- Kou, B. S., Shipp, D. B., & Nedzelski, J. M. (1994). Subjective benefits reported by adult nucleus 22-channel cochlear implant users. *The Journal of Otolaryngology*, 23(1), 8–14.
- Lin, W.-C. (2019, May 5). Tīngjué zhàng'ài de zàiyīliáohuà: Cóng réngōng diànziěr kànjiàn zhàng'ài rènzhī de biànciān [Re-medicalizing hearing impairment: Changes in attitudes of disability from the case of Cochlear Implant]. Paper presented at the 2019 Annual Conference of Taiwan Society for Disability Studies, Taipei, Taiwan.
- Liu, S.-Y., Liu, C.-J., Wang, N.-M., Kuo, Y. C., & Huang, K.-Y. (2009). Táiwan chénggrén diànziěr zhírùzhě zhī shíyòng xiànkàng diào chá [A questionnaire survey on adult Cochlear implant users in Taiwan]. *Journal of the Speech-Language-Hearing Association of Taiwan*, 22, 25–53.
- Mauldin, L. (2016). *Made to hear: Cochlear implants and raising deaf children*. University of Minnesota Press.
- Mills, M. (2011). Do signals have politics? Inscribing abilities in cochlear implants. In T. T. Pinch & K. Bijsterveld (Eds.), *The Oxford handbook of sound studies* (pp. 320–345). Oxford University Press.
- Mitchell, D. T., & Snyder, S. L. (2015). *The biopolitics of disability: Neoliberalism, able nationalism, and peripheral embodiment*. University of Michigan Press.
- Most, T., Wiesel, A., & Blitzer, T. (2007). Identity and attitudes towards cochlear implant among Deaf and Hard of Hearing adolescents. *Deafness & Education International*, 9(2), 68–82.
- Olaussen, I. (2010). *Disability, technology & politics: The entangled experience of being Hard of Hearing* (Ph.D). University of Oslo.
- Parker, I. (2015). *Critical discursive psychology* (Second edition.). Palgrave Macmillan.
- Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. Sage.
- Rapley, M., Kiernan, P., & Antaki, C. (1998). Invisible to themselves or negotiating identity? The interactional management of 'being intellectually disabled'. *Disability & Society*, 13(5), 807–827.
- Rembar, S., Lind, O., Arnesen, H., & Helvik, A. S. (2009). Effects of cochlear implants: A qualitative study. *Cochlear Implants International*, 10(4), 179–197.
- Shakespeare, T. (2010). The social model of disability. In L. J. Davis (Eds.), *The disability studies reader* (pp. 266–273). Routledge.
- Sparrow, R. (2005). Defending Deaf culture: The case of cochlear implants. *The Journal of Political Philosophy*, 13(2), 135–152.

- Seymour-Smith, S. (2017). Discursive psychology. *The Journal of Positive Psychology*, 12(3), 309–310.
- Su, H.-Y. (2009). Code-switching in managing a face-threatening communicative task: Footing and ambiguity in conversational interaction in Taiwan. *Journal of Pragmatics*, 41(2), 372–392.
- Valente, J. M. (2011). Cyborgization: Deaf education for young children in the Cochlear implantation era. *Qualitative Inquiry*, 17(7), 639–652.
- Wan, T.-L. (2016). Zhuǎn sheng/shēn shù: Táiwān tīngzhàngzhě de sàibógé, shēnfēn xiéshāng yǔ kōngjiānxìng [Transformation: Cyborg, identity negotiation and spatiality of hearing disabled people in Taiwan]. *Journal of Geographical Science*, 81, 1–26.
- Wetherell, M. (1996). Fear of fat: Interpretative repertoires and ideological dilemmas. In J. Maybin & N. Mercer (Eds.), *Using English: From conversation to canon. The English language series* (pp. 36–41). Routledge.
- Wetherell, M. (2003). Paranoia, ambivalence and discursive practices: Concepts of position and positioning in psychoanalysis and discursive psychology. In R. Harre & F. Moghaddam (Eds.), *The self and others: Positioning individuals and groups in personal, political and cultural contexts* (pp. 99–121). Praeger/Greenwood Publishers.
- Wetherell, M. (2007). A step too far: Discursive psychology, linguistic ethnography and questions of identity. *Journal of Sociolinguistics*, 11(5), 661–681.
- Wetherell, M. (2015). Trends in the turn to affect: A social psychological critique. *Body & Society*, 21(2), 139–166.
- Wetherell, M., & Edley, N. (1999). Negotiating hegemonic masculinity: Imaginary positions and psycho-discursive practices. *Feminism & Psychology*, 9(3), 335–356.
- Wetherell, M., & Potter, J. (1988). Discourse analysis and the identification of interpretative repertoires. In C. Antaki (Ed.), *Analysing everyday explanation: A casebook of methods* (pp. 168–183). Sage.
- Zwolan, T. A., Kileny, P. R., & Telian, S. A. (1995). Self-report of Cochlear implant use and satisfaction by prelingually deafened adults. *Ear and Hearing*, 17(3), 198–210.