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Exploring Attrition and Linguistic Shifts: The Impact of COVID-19 and Anti-Asian
Discrimination on the East and Southeast Asian Diaspora

by

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Abstract

This thesis investigates the complex interplay of language and identity among speakers of East Asian and Southeast Asian languages in the United States, within the context of the COVID-19 pandemic and the concurrent rise in anti-Asian hate. The study adopts a mixed-methods approach to delve into these complexities, guided by three research questions exploring changes in language use since the onset of the pandemic, changes in perspective on language identity since the onset of the pandemic, and the effect of geopolitical climate, specifically the rise in Asian hate, on language use and perspective on language identity. The qualitative methodology employed in this study allowed us to capture a diverse range of language experiences. We found that the geopolitical context, marked by the COVID-19 pandemic and associated xenophobia, has significantly shaped language use among individuals. The pandemic led to increased family interaction, which in turn led to augmented use of HLs among some participants. Despite the rise in anti-Asian hate, there was a notable increase in cultural pride and community solidarity. At the same time, experiences of discrimination, bias, and hate crimes significantly influenced language use and feelings toward the HL. Some participants reported having to minimize or hide their identity, which distanced them from their HL. Yet, despite these adversities, the desire to pass on HL remains strong, highlighting the enduring importance of language as a facilitator of cultural connections. Taken together, the results shed light on the complex ways in which the current geopolitical context is both promoting and discouraging heritage language maintenance among East Asian and Southeast Asian language speakers in the US.

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Introduction

Overview

This thesis aims to explore the intricate dynamics of language use and identity among speakers of East Asian and Southeast Asian languages in the United States. The backdrop of this study is the COVID-19 pandemic and the concurrent rise in anti-Asian hate, both recent geopolitical events that have a high potential to significantly influence the sociolinguistic landscape. Language, as a fundamental aspect of human identity, is deeply intertwined with one's social experiences and perceptions. It is not merely a tool for communication, but also a reflection of cultural heritage, personal history, and social identity. However, in the face of societal pressures and geopolitical changes, language use and attitudes can undergo significant shifts. In the United States, speakers of Asian languages have found themselves at the intersection of these shifts. This study aims to investigate potential shifts in language use, experiences, and feelings of bilingual speakers of Asian languages in the United States in the current geopolitical context.

This research is motivated by broader interests in the dynamics of language use and identity among bilingual speakers. The research objective of this line of work is to investigate contextual factors that could potentially promote or discourage usage of one's native language among bilingual speakers, and consequently affect heritage-language (HL) maintenance across generations. These factors can include societal pressures such as pressure to assimilate into a predominantly English-speaking environment, shifts in language status due to geopolitical events or societal trends, and—relatedly—experiences of discrimination or bias that may discourage the use of one's native language. In this scenario, language status pertains to the relative prestige, influence, and perceived value of a specific language within a particular society or community.

Effects of Language Status and Experiences of Discrimination on HL Maintenance

Within the context of the United States, there is a pressure to assimilate, leading to a trade-off of one's heritage language for English (Deng, 2023; Pew Research Center, 2004). This pressure over time would presumably reduce proficiency in the heritage language. In the current geopolitical context, marked by the COVID-19 pandemic and the rise in anti-Asian sentiment, speakers of East and Southeast Asian languages could be experiencing shifts in language status and, relatedly, increased experiences of discrimination and bias, that could create even more pressure to assimilate. For instance, the process of assimilation has been linked to emotions of betrayal and distress among Asian American young adults. Despite their integration into the host culture, they continue to face racial and ethnic discrimination, as well as structural inequality (Park et al., 2013). However, it's worth noting that assimilation can have positive effects in certain areas, such as encouraging help-seeking behaviors (Miller et al., 2013). In navigating the delicate balance between cultural preservation and societal expectations, East Asian and Southeast Asian individuals grapple with the multifaceted impact of assimilation.

In the broader context of Heritage Language Maintenance (HLM), several dynamic and interrelated factors have been identified that shape outcomes. These factors include language status, community advice, and parent beliefs, as found in Jasmine Loeung's (2023) thesis. Among speakers of different heritage languages in the U.S., there may be differences in how they view their language and its status in society. For example, in the study by Zhang & Slaughter-Defoe (2009) it was noted that parents often perceive Mandarin, the official language of China, as more prestigious compared to other Chinese dialects. This perception could be attributed to its widespread use and recognition, both within and outside China. The importance of bilingualism, particularly fluency in Chinese and English, was highlighted by another parent

(Wu, 2005). This parent emphasized that such linguistic proficiency could be a significant advantage in the job market, equating it to an additional skill that enhances employability. Furthermore, parents were observed to have a profound sense of pride in their language and culture, viewing them as intrinsically connected. They believe that language is not just a means of communication, but also a bridge to their cultural roots and homeland where many of their relatives still reside. Kang (2013) further elaborates on families' desire to keep the heritage language intact for potential future opportunities, such as employment or family visits to Korea.

Contrarily, speakers of non-Asian languages, such as Spanish speakers, have reported more negative experiences. A mother expressed her preference for an English-only institution for her young son, influenced by the prevailing anti-immigrant sentiment in the U.S. (Scott, 2011). Additionally, Suarez (2002) found that Spanish families predominantly use English at home, around 90% of the time, believing that their children's experiences would improve if their home language aligned with their school language (p. 523). Another article highlighted that many educational institutions give immigrant children the distinct impression that only English is acceptable, discouraging the use of Spanish (Moses, 2000). This can lead to children feeling their native language is undesirable, fostering a sense of embarrassment when they use it. Despite Spanish-speaking families expressing a desire to raise bilingual children, the lack of resources and bilingual programs often make this goal seem unattainable. As noted by Li and Renn (2018), parents have voiced concerns about the scarcity of bilingual programs. One parent, comparing their situation to their relatives' children in Chicago who are fluent bilingual speakers due to a local program, expressed disappointment at the lack of similar programs in their area. However, even when such programs are available, some parents are deterred from participating due to their immigration status, largely influenced by Trump's immigration policies, which have

disrupted attendance at public schools (Callister et al., 2019). The disparities between Asian language speakers versus Spanish speakers accentuate how bilinguals' experiences can differ widely depending on the societal status of their HL.

Additionally, racially charged rhetoric can contribute to a phenomenon known as 'linguistic racism' (Roth-Gordon, 2023). This form of discrimination involves the use of language as a tool to marginalize and stigmatize certain racial or ethnic groups. In the context of heritage languages, linguistic racism can have a detrimental impact on an individual's perception of their languages. They can cause individuals to feel negative emotions, such as shame and guilt, making them ashamed of speaking their home language, which throughout several generations could result in language loss (May, 2023).

Language Attrition for Speakers of East Asian and Southeast Asian Languages

Different languages have unique structures. For instance, Mandarin, a tonal language, has four distinct tones (tone 1- high flat; tone 2- rising; tone 3- dipping; tone 4- falling), each with a different pitch contour. The syllable "yi" can mean "doctor (yi1)," "aunt (yi2)," "chair (yi3)," or "meaning (yi4)," depending on what tone was used. On the other hand, Japanese, a pitch-accent language, uses pitch patterns at the word level rather than at the syllable level, which also contributes to the semantic meaning of a word. In English, the meaning of a word does not depend on the pitch of one's voice, so one could say something with a rising or falling pitch, and both times they would be referring to the same thing. It is the tune assigned that conveys different meanings. Attrition is particularly impactful when considering the unique features of tonal and pitch-accent languages, which are prevalent among East Asian and Southeast Asian languages. These languages use the pitch of a word to distinguish its semantic meaning. Semantic meaning refers to the meaning of words and sentences based on their context

and usage. The richness and complexity of how pitch is used in these languages add a distinctive dimension to communication. The shift to a non-tonal, non-pitch-accent language like English can present challenges. Without the need to distinguish meaning through pitch, there may be a tendency to neglect this aspect of speech. This could potentially make it more difficult to re-learn or maintain the tonal or pitch-accent aspects of the heritage language.

The literature has shown that individuals are experiencing a decline in their proficiency in their native languages. One factor contributing to this decline is the exposure to a non-tonal second language (L2), like English, which could lead to tone attrition in the native language (L1), like Mandarin (Deng, 2023). Quantitative research, including eye-tracking studies by Quam and Creel (2017b; see also Elkinton, 2019), has shown a decline in the ability to utilize lexical tone information in Mandarin speakers who predominantly use English. This decline has been attributed to reduced use of Mandarin with increasing English exposure. Qualitative research has highlighted perceptions of low language status and experiences of discrimination and bias as potential contributors to a pressure to assimilate, as indicated by Zhang and Slaughter-Defoe (2009).

Pandemic and Current Rise in Anti-Asian Hate

Anecdotal evidence led us to suspect that the landscape of language use and attitudes underwent a significant shift with the advent of the COVID-19 pandemic. This period has been characterized by an alarming increase in anti-Asian sentiment and hate crimes (Smolinski, 2021). Hate crimes against individuals of Asian descent rose by 76% in 2020, and over the three years since the onset of COVID-19, hate crimes against victims of Asian descent rose by 224% across 21 cities (Sonnenberg, 2022). This surge in xenophobia, exacerbated by racially charged statements such as the labeling of the coronavirus as the “China virus” by former President

Donald Trump (Rahman, 2021; Yam, 2020a), has profound implications for the Asian community. For instance, it can lead to a subconscious belief among members of majority culture that Asian Americans are “perpetual foreigners,” creating an environment where Asian communities may feel unsafe or unwelcome (Yam, 2020b). Racially charged rhetoric can contribute to a phenomenon known as ‘linguistic racism’ (Roth-Gordon, 2023). This form of discrimination involves the use of language as a tool to marginalize and stigmatize certain racial or ethnic groups. In the context of heritage languages, linguistic racism can have a detrimental impact on an individual’s perception of their languages. They can cause individuals to feel negative emotions, such as shame and guilt, making them ashamed of speaking their home language, which throughout several generations could result in language loss (May, 2023). More than 11,400 hate incidents against Asian Americans were reported across the United States between March 2020 and March 2022 (Rios, 2022). Experiences of linguistic racism can lead speakers of minoritized languages to avoid speaking their languages, resulting in language loss over generations (May, 2023). Given this link between societal attitudes and HL maintenance, the steep increase in anti-Asian hate since March 2020 necessitates an update to the existing literature on HLM, particularly in the context of Asian languages.

The societal changes brought about by the pandemic and the rise in anti-Asian sentiment likely have a multifaceted impact on HLM. It’s important to note that these impacts are likely not mutually exclusive but can coexist within the same community and even within the same individual. On one hand, the rise in anti-Asian sentiment may lead to an increased sense of cultural pride and a desire to maintain one’s heritage language as a form of resistance and affirmation of identity (Elokour et al., 2021). On the other hand, heightened xenophobia may also result in individuals distancing themselves from their heritage language due to their fear of

discrimination (Nawaz & Norris, 2023). This can also negatively influence one's decision about passing their heritage language on to their children (Montrul, 2010).

The COVID-19 pandemic has also brought about significant changes in our lifestyles and environments, altering the dynamics of social interaction and access to resources for HLM. Thus, in addition to potential positive and negative impacts of the rise in anti-Asian sentiment on HL maintenance, there are likely impacts of general pandemic-related changes in lifestyle and environment on HL use and maintenance. For instance, quarantine measures and social distancing protocols have limited face-to-face interactions, a crucial factor in language use and maintenance. This has particularly affected individuals who were quarantined with primarily English-speaking individuals, thereby reducing their exposure to and use of their HL. The shift to remote learning and work has also influenced language use patterns. A study found that children whose parents read to them often and limited their screen time were more likely to have significant improvements in vocabulary acquisition during lockdown (Kartushina et al., 2022). However, this was not the case for all, as not everyone had equal access to digital resources or conducive learning environments at home (Terada, 2020). Moreover, the pandemic has affected heritage language schools as they face challenges in operating capacities (McCabe et al., 2022). As detailed in Loeung's (2023) thesis, the role of community support in facilitating the transmission of heritage languages from parents to children has been highlighted in various studies (Reese & Goldenberg, 2008; Zhu et al., 2020). Communities with abundant resources provide a supportive environment for parents to teach their children the heritage language (Zhu et al., 2020), whereas, in communities where such support is scarce, parents often find it challenging to maintain the heritage language as the prevailing dominant culture tends to overshadow it (G.-L. Lee & Gupta, 2020).

The intersection of the COVID-19 pandemic and the rise in anti-Asian sentiment has likely significantly influenced HLM. This new reality necessitates updated research to accurately capture these changes. A clear and accurate characterization of maintenance of East and Southeast Asian HLMs in the current geopolitical context can inform strategies to support HLM amidst these challenges. The preservation and continuation of diverse linguistic and cultural heritages are integral to the identity and resilience of communities, further emphasizing the urgency of this investigation.

Current Study

In light of COVID-19 and recent developments, the study aims to delve into the complexities of potential shifts in language use, experiences, and feelings among Asian and Asian American communities from East Asia and Southeast Asia. By adopting a mixed-methods approach, the study seeks to provide a more nuanced understanding of how recent geopolitical events and acts of discrimination are influencing language use. Language status, which evolves over time, serves as a motivating factor for conducting this study at this particular juncture (Nguyen et al., 2020). Although the study is based on a limited set of questions and participants, the urgency of the findings and the identified gap in the literature, particularly around examining language usage within the context of the COVID-19 pandemic, justify the timely publication of these initial findings.

This study was guided by three research questions:

1. For speakers of East Asian and Southeast Asian languages in the United States, how has language use changed since the onset of the COVID-19 pandemic?
2. For speakers of East Asian and Southeast Asian languages in the United States, how have perspectives on language identity changed since the onset of the COVID-19 pandemic?

3. What effect does the geopolitical climate, specifically the rise in Asian hate, have on language use and perspectives on language identity for speakers of East Asian and Southeast Asian languages in the United States?

These research questions were developed to begin to characterize the intricate dynamics that influence language use and identity among East Asian and Southeast Asian communities in the United States.

Hypotheses

The existing literature on factors that promote and discourage heritage-language maintenance in the US (see Loeung, 2023, for a review) informs two contrasting predictions for the effects of the pandemic and the rise in anti-Asian sentiment on the use of East Asian and Southeast Asian languages. First, escalating anti-Asian sentiment in the US since the onset of the COVID-19 pandemic could deter the use of Asian languages among heritage speakers. Conversely, the surge in anti-Asian sentiment could trigger a counteractive response, reinforcing the significance of community solidarity and strong cultural identity, which could potentially lead to an increase in the use of Asian languages.

Methods

Participants

The study was conducted in accordance with the guidelines set forth by the Portland State University Institutional Review Board and with the ethical research standards outlined in the Declaration of Helsinki. Recruitment was open from October through November and utilized methods such as flyers and word-of-mouth. The study recruited Asians or Asian Americans with an East Asian and/or Southeast Asian background (or ancestry in those regions). The study aimed to understand the experiences of groups that were suspected to be targeted by racist or

xenophobic attacks or bias. Anecdotal evidence suggested that US citizens with ancestry from East Asian and/or Southeast Asian countries other than China were also being targeted during the recent rise in anti-Asian bias (Cabral, 2021). Therefore, the recruitment was designed to be inclusive in capturing the experiences of those affected by this rise in anti-Asian hate.

While the experiences of South Asians (e.g. those with ancestry in India, Bangladesh, Afghanistan, and Pakistan) are undoubtedly important to characterize, they were not included in this study. This decision was based on the premise that experiences with discrimination might pattern somewhat different for these groups due to varying geopolitical contexts. The Census Bureau has grappled with uncertainty regarding the racial identity of South Asians in the United States. Over the past century, individuals of South Asian origin have been classified under different labels, including “Hindu,” “White,” “Other,” and “Asian” (Morning, 2001). Therefore the focus of this study was on East Asian and/or Southeast Asian communities, where the impact of rhetoric like “China virus” by former President Donald Trump (Rahman, 2021) was suspected to be more pronounced. The participant pool was therefore expanded to recruit individuals from a variety of countries/regions, including but not limited to China, Korea, Japan, Taiwan, Hong Kong, Thailand, the Philippines, Singapore, Malaysia, and Vietnam. While English monolinguals with East Asian and/or Southeast Asian ancestry were invited to participate, all participants who enrolled in the study spoke at least one Asian HL.

A total of 29 participants, ranging in age from 19 to 29 years ($M = 21.97$, $SD = 2.37$), were surveyed. The participants were bilingual or multilingual, with proficiency in English and at least one of several heritage languages. The most reported heritage languages were Mandarin (10 participants), Vietnamese (5 participants), and Tagalog (5 participants). The remaining nine participants reported proficiency in various other heritage languages. Among the participants, 19

reported English as their most proficient language, followed by their respective heritage language. A detailed breakdown of the participants' language proficiency is provided in Table 1. The sample included slightly more female participants ($n = 16$) than male participants ($n = 13$). To prioritize gender inclusivity in research, additional gender categories were offered in our forms. This approach ensures that our research is representative and inclusive of all gender identities, however, all participants identified as either male or female.

Table 1. Languages reported

Language 1:	Language 2:	Additional languages:
English (19) Mandarin (10)	English (10) Mandarin (5) Vietnamese (5) Tagalog (5) Cantonese (1) Lao (1) Japanese (1) Taishanese (1)	Japanese (8) Spanish (7) French (6) Korean (5) Taiwanese (4) Kapampangan (2) Cantonese (1) Vietnamese (1) Shandong Dialect (1) Shanghainese (1)

The qualitative survey was conducted concurrently with a quantitative eye-tracking study of Mandarin word recognition (Elkinton, 2019; Elkinton et al., 2020). The eye-tracking study specifically recruited Mandarin-English bilinguals. 3 of the 29 participants participated in the eye-tracking study before filling out the qualitative survey. Due to this more targeted recruitment venue, as well as the honors student's (A.L) Mandarin-speaking background and recruitment from her social network, Mandarin-speaking participants were more heavily presented in our sample than other language groups. Of the 29 participants, 15 spoke Mandarin as a first or second language, compared to the next most represented languages, Vietnamese and Tagalog, which each had 5 participants.

Procedures

In the context of the ongoing recovery from the COVID-19 pandemic, the survey was designed to be both accessible and feasible for participants. This was achieved by offering the option to complete the survey remotely via virtual meetings on Zoom or an equivalent platform. This approach not only catered to the participants' convenience but also ensured their safety during these challenging times.

Out of the 29 participants, the vast majority (27) opted for the remote option, with only 2 participants filling out the survey in person, as they were also participating in the eye-tracking portion. The survey was conducted either through screen-sharing or remote screen control, based on the participant's preference. This method allowed research assistants to observe the participants in real time as they completed the survey. This ensured that participants fully understood each question, thereby encouraging thoughtful and detailed responses instead of brief, one-word answers. Importantly, this remote approach also expanded the geographical reach of the study. Participants from other states could partake, thereby adding more diverse profiles to the study. The inclusion of participants from various states allows for a broader understanding of the experiences and perspectives of Asian communities across different regions. This diversity can reveal regional variations in experiences and attitudes, thereby enriching the study's findings and enhancing its relevance to a wider population.

The entire form was split into four portions: initial demographics questions, the Bilingual Dominance Scale (BDS; Dunn & Fox Tree, 2009), additional language background information, and the qualitative questions. Participants were first asked about their gender, which hand they use to write with, their race and ethnic identities, years of college education completed, diagnoses of learning impairments, and any medical history or language and cognitive abilities

that are important to document. These questions were also included before the BDS in the Quam and Creel studies (2017a, 2017b). There is also a section that asks participants to list in detail all the languages they know or have studied from most to least proficient and to indicate the age at which they were first exposed to each. They are then asked to rank their proficiency in speaking, listening, writing, and reading for each language using a scale of 1-10.

Next, the BDS is a questionnaire consisting of 12 closed-ended questions specifically designed to assess language dominance in bilingual individuals (Dunn & Fox Tree, 2009). It collects information on a variety of factors that influence language dominance, such as age of acquisition, comfort in a language, schooling in a language, language use, and loss of fluency. The questions ask the participant to reflect on the ages they first started learning and using each language, how comfortable an individual feels when speaking, listening, reading, and writing, and their preferences for using one language over another in different contexts. Following the instructions from Dunn & Fox Tree (2009), different questions were awarded 3-5 points depending on the participant's response. A composite score was then derived by subtracting the fluency score of English from the heritage language. A negative score meant the participant was considered English-dominant, a positive score meant more dominant in their listed heritage language, and a score close to zero indicated that the participant was a balanced bilingual. Participants were not shown the scoring information.

Following the BDS were seven additional questions asking about language use. Participants were asked to approximate the percentage of time during an average day they used each language. They are asked to include all languages, where they were living at the time, and to document age ranges where the percentage changes. For example, a participant may have used Mandarin 100% and English 0% from ages 0-3 years old while living in Shanghai, China, but

have that change to Mandarin 50% and English 50% from ages 3-5% once they moved to the U.S. The other 6 questions were Likert-type questions measuring how well participants rated their language abilities on various tasks, such as speaking with bilinguals who know the same language they do (scale of 1-7), substituting words while speaking with bilinguals (scale of 1-5), and reading text messages and/or emails (scale 1-5). Questions of this nature are frequently encountered in studies evaluating bilingual proficiency (Marian et al., 2007). These responses were available for comparison to those obtained from the BDS.

While the study was primarily a qualitative survey, we were also interested in quantifying the potential effects of language dominance on experiences with and feelings about language. To this end, two quantitative measures of language background that have been used in prior work as proxies for language dominance (Quam & Creel, 2017a, 2017b) were extracted from the survey responses. The first was Mandarin dominance according to the BDS, derived by subtracting the fluency score of the heritage language from English. The second was the age of arrival in an English-speaking country. The age of arrival was recorded as 0 for those who were born in the U.S. or a U.S. territory. One participant, who was born in the U.S. but moved to an Asian country at age 1 and returned at age 6, was recorded as 6. As in prior work (Quam & Creel, 2017a, 2017b), these two measures were highly correlated. Pearson's correlation coefficient between age of arrival and BDS score was found to be 0.8073 ($p = <0.0001$), indicating a strong positive correlation between the two variables. Therefore, age of arrival and BDS score were combined into a single variable via principal components analysis (PCA). PCA is a statistical procedure that summarizes large tables into a smaller set of indices that are easier to visualize and analyze.

The final portion of the form is the qualitative survey designed to gather in-depth information about the language use and experiences of a bilingual individual, particularly in the context of the COVID-19 pandemic (refer to Table A1 of the Appendix). It consists of 8 open-ended questions that explore various aspects of language, such as changes in use since the pandemic, the experience of bias or discrimination related to language use, and the impact of hate-crime events on the individual and/or their community. The survey explores external factors such as societal changes and personal experiences, both of which can provide nuanced insights that might not be evident through quantitative measures alone. It can highlight the emotional and psychological impacts of these experiences on the participants. For instance, one question asks if language use has changed since the pandemic's onset and if there was a need for participants to hide or show their bilingual abilities, revealing how external factors can influence identity and language use. Another question inquires if the pandemic has affected motivation to maintain or improve languages, providing insights into how global events may impact language maintenance. Certain questions also explore experiences of bias, discrimination, or hate crimes related to language use during the pandemic, shedding light on societal pressures faced by bilingual individuals from Asian or Asian American communities.

Qualitative Coding

Qualitative coding was used to systematically organize and categorize the data, making it possible to identify themes, patterns, and relationships (Fereday & Muir-Cochrane, 2006). Coding helps transform non-numerical and unstructured data into a meaningful format that can be more easily interpreted. This method is particularly effective for understanding survey data because it allows for the exploration of the underlying reasons and meanings attached to the responses, providing a depth of understanding that quantitative data often lacks.

In this study, we adopted a method of qualitative coding that was outlined in Jasmine Loeung's (2023) thesis. This process was facilitated using Taguette, a free open-source Qualitative Data Analysis Software (QDAS) developed by Rampin & Rampin (2021). The coding process was conducted in two main stages: a top-down approach followed by a bottom-up approach. In the top-down approach, we created a set of preliminary codes based on the research questions and the survey questions. This approach was guided by our research questions and the specific areas we aimed to explore, such as the changes in language use and attitudes toward language. Following this, we conducted pilot coding for the first ten participants. This is where the bottom-up approach came into play. We refined our code set based on the pilot coding, noting any recurring or unique responses in the codebook. For instance, we added codes for "cultural identity" after noticing this theme emerging from the participant responses.

In addition, three questions from the qualitative survey were selected for further analysis. The responses to these questions varied in their interpretation and focus, making it difficult to simply attach one code. For example, question 5 asked: "If you are a parent or plan to be one in the future, has the pandemic affected your feelings about speaking English vs. your other language with your (future) children?" Some participants responded by indicating their intention to pass on or not pass on the language, while others responded by describing how the pandemic has affected their feelings. Similarly, questions 6 and 7 asked about experiences with negative bias, discrimination, and/or hate crime events. The responses to these questions also differed in their reference and content. This iterative process of coding ensured that our code set accurately represented the survey responses. The final four themes were identified: (1) language use, (2) feelings toward language, (3) identity, and (4) experiences of bias, discrimination, and/or hate crime. In total, 19 subthemes were initially nested within the 4 themes. By following this

method, we ensured a systematic and comprehensive analysis of the data, enabling us to derive meaningful insights.

Before the official coding of the data, a round of reliability coding was conducted on the first three participants. This was done to assess the consistency with which the two coders could apply the 19 subthemes to the data. The method used for this process was documented by Campbell et al. (2013) and O'Connor & Joffe (2020), which aids in calculating interrater reliability (IRR)—the proportion of coding agreements over the total number of agreements and disagreements combined. Following the precedent set by Loeung (2023) in her thesis, the honors student (A.L.) first coded the initial three participants and bracketed the coded text. Subsequently, the faculty advisor (Dr. Quam) independently coded the bracketed sections. The results were then compared, and any discrepancies or areas of confusion were resolved through discussion.

As Campbell et al. (2013) noted, there is no universally accepted benchmark for what constitutes a satisfactory level of agreement among coders. However, the literature does provide some guidance. Hodson (1999) suggests that a correlation between coders of 79% ensures a reasonably high level of reliability. Similarly, Fahy (2001) indicates that a coder's reliability ranging from 70-94% is considered satisfactory to outstanding in his examination of conference dialogue transcripts. Taking these insights into account, a benchmark of 70% was adopted, a choice that was guided by the methodology employed by Loeung (2023) in her research to maintain uniformity in the methodology. After one round of reliability coding, the initial criterion of 70% was met by achieving an IRR of 79%. Based on the results of the reliability coding, minor changes were made to the codes and procedure, mainly to clarify the wording of

the codes and to ensure that all research questions were being addressed with minimal overlap or ambiguity between codes.

Qualitative Content Analysis

In the analysis of the survey responses, a comprehensive approach was adopted using qualitative content analysis. This method aids in understanding a phenomenon and its context within the text by systemically categorizing, coding, and identifying themes or patterns (Hsieh & Shannon, 2005). A unique aspect of this study was the decision to code every single response, rather than selecting the most relevant ones that spoke to the research questions. This decision was driven by two key factors. First off, with 29 participants and 8 questions, it was feasible to double-code all responses. This comprehensive approach ensures that no potentially valuable data is overlooked. Secondly, coding all responses enabled some quantitative analysis of the data. For example, it was possible to count up the number of instances where the participants responded in a particular way, as reported in Table 2. The entire data set was first double-coded by the author (A.L.) and Dr. Quam. Following this, a total of 17 discrepant codes were identified and placed into a separate document for further discussion. Of these, 12 were resolved, while 5 were highlighted to be emphasized in the results section due to the ambiguity of the response and the difficulty of categorizing it under one specific code. At the outset, 19 subthemes were identified. However, it became evident that participants interpreted the questions differently. For example, some participants focused on passing on the HL, while others focused on the pandemic's impact on their desire to pass on. To address this concern and capture all responses accurately, 9 additional subthemes were created. After this detailed categorization, a total of 28 subthemes were identified. This rigorous and comprehensive approach to coding ensured a thorough analysis of the data, providing a rich understanding of the survey responses.

Results

Participant Demographics

Of the 29 participants, 18 (62%) reported a loss of fluency in their heritage languages, as assessed by question 11 (refer to Table A1 in the Appendix), one of the seven additional questions on language use that followed the BDS in our questionnaire. The average age at which this fluency was reported to be lost was 14.33 years ($SD = 5.01$). The languages in which fluency was lost included Mandarin (7), Tagalog (2), English (2), Cantonese (2), and one each in Japanese, Kapampangan, Lao, Taiwanese, and Vietnamese. Participants' age of arrival in an English-speaking country varied widely from birth to 17 years, with an average age of 6 years ($SD = 6$). The Bilingual Dominance Scale (BDS) composite scores were derived by subtracting the fluency score of the heritage language from English, with a more positive score indicating heritage language dominance, a negative score indicating English dominance, and a score around zero indicating a balanced bilingual. BDS composite scores ranged from -26 to 15.5, with an average score of -5.79 ($SD = 11.33$). This suggests that our sample is slightly English-dominant. Eighteen participants demonstrated English dominance (BDS score greater than -5) and 8 individuals exhibited dominance in their heritage language (BDS score greater than 5). The remaining participants had a score within five of zero both ways. A Principal Component Analysis (PCA) was conducted using the SPSS Statistics software on the age of arrival and BDS scores. The PCA scores ranged from -1.61 to 1.67 (PCA is centered around zero).

The results of the qualitative survey are elaborated in the subsequent sections. These sections dive into the four main themes that emerged from the qualitative coding and content analysis of the responses provided by all 29 participants. These themes include (1) language use, (2) feelings toward language, (3) identity, and (4) experiences of bias, discrimination, and/or hate

crime. These themes and their specific subthemes were designed to address the research questions (see Current Study of Introduction), and also match emergent subthemes in the data. We coded the data using a larger set of finely differentiated tags within each theme to facilitate quantitative counts of the number of instances a participant reported positive vs. negative impacts of the pandemic on HL. Table 1 outlines the themes, subthemes, and the number of codes identified in this process. However, in the ensuing sections, qualitative analyses collapse distinctions between some of these subthemes for the sake of drawing broader connections within each theme.

The discrepancy in the total number of instances of each subtheme noted in Table 2 (which may not sum up to the total of 29 participants) arises from the fact that each participant's response, or portions of it, could address multiple subthemes. For instance, one participant reported, "No, work and living environment hasn't really changed that much...however, you can argue that I used Mandarin less because there were less gatherings or opportunities to use." In this case, the first part of the response was coded as no change in HL use since the pandemic, while the second part would be coded as decrease in HL use since the pandemic. Such overlapping or multifaceted responses contribute to the variation observed in the instances across subthemes. Instead of having to choose only one subtheme per quote, by coding as instances, the quotes could be dissected and assigned multiple subthemes to capture more nuanced details, e.g., that some aspects of a participant's language use changed while others remained unchanged.

Table 2. *Themes and subthemes identified, with the number of instances*

Theme	Subtheme	Number of Codes Identified
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1. Language use	a. Increase in HL use since the pandemic	18
	b. Decrease in HL use since the pandemic	5
	c. No change in HL use since the pandemic	23
	d. Change or no change in English use	14
	e. Change or no change in use of other languages	5
	f. Heritage language use in context	5
2. Feelings toward language	a. Increase in positive feelings toward HL	1
	b. No change in feelings toward HL	17
	c. Increase in HL prioritization and/or maintenance	13
	d. Decrease in HL prioritization and/or maintenance	3
	e. No change in prioritization and/or maintenance of HL	14
3. Identity	a. Celebrating identity and/or appreciating culture	8
	b. Minimizing and/or hiding identity	16
	c. Increased desire to pass on HL to children	6
	d. Decreased desire to pass on HL to children	1
	e. No change: want to pass on HL to children	16
	f. No change: don't want to pass on HL to children	1
	g. No change, unspecified	3
	h. Not planning on being a parent	2
4. Experiences of bias, discrimination, and/or hate crime	a. Instances of microaggression, bias, and/or discrimination	
	1) Experienced themselves	9
	2) Experienced by family/friends	2
	3) Nothing reported	18
	b. Instances of bullying, harassment, abuse, and hate crime	
	1) Experienced themselves	8
	2) Experienced by family/friends	1
	3) Reported in the news	9
	4) Nothing reported	6
	c. Heightened anxiety	9

Language Use

Changes in HL Use

This section presents the findings from questions 2 and 4 of the qualitative survey (refer to Table A1 in the Appendix), which aimed to evaluate changes in HL use during or since the pandemic. Responses were categorized into three groups: an increase in HL use, a decrease, and no change.

An increase in HL use was reported 18 times in the dataset (across the 29 participants answering the two questions). This increase was often attributed to the increased amount of time spent at home with family due to the pandemic. This change in environment often necessitated more frequent communication in their HL with family members. For instance, one participant shared that "...the pandemic caused me to spend most of my time at home, where I primarily speak Mandarin with my family. I felt that I needed to ... speak Mandarin because I didn't want to be excluded from the Mandarin conversations." Similarly, another participant reported increased use of Vietnamese "due to spending more time at home and needing to use it to communicate with my parents." Furthermore, a subset of participants also emphasized the importance of HL proficiency given that parents or elderly relatives were monolingual in the HL, and HL proficiency fostered connections with their family and friends.

A decline in the use of the HL since the onset of the pandemic was reported five times in the dataset. This decrease was attributed to fewer social gatherings and a lack of individuals who spoke the same language in their immediate environment. Participants noted that they used their HL less because "...there were less gatherings or opportunities to use [Mandarin]", and "...there weren't any people around me who speak the same language [Lao]." For instance, one participant

with a biracial and bicultural background who resided with their American parent during the pandemic noted a significant reduction in their HL usage due to the absence of other HL speakers (including the parent who speaks the HL)¹. This participant also observed that their linguistic habits had become Westernized, and they had unexpectedly developed an accent in the HL that was not previously present. They also noted a decrease in the frequency of code-switching, the practice of alternating between two or more languages or language varieties in a single conversation, when speaking English. Importantly, it is worth noting that while the number of responses reporting decline in HL use is fewer than the number reporting increased HL use, cases where individuals minimized or concealed their identity by speaking the HL less in public spaces were coded using a separate subtheme, and these responses were numerous (16 instances). Taken together, these two subthemes suggest there are many instances of people using their HL more as well as using it less. However, we see more evidence of individuals intentionally reducing usage due to safety concerns during the pandemic (16) than naturally adjusting their use based on lifestyle habits (5).

There were 23 responses in which participants reported no significant change in their HL usage since the pandemic. Participants stated that since they were already bilingual, their language use remained largely context-dependent. One participant illustrated this by stating, “I continued to use English for school/work and then used Mandarin with my family and friends who spoke it. I didn't really notice switching my use due to the pandemic. It mostly came down to which people understood what language.” This sentiment of unchanged language use was echoed by many participants, who attributed it to the stability of their work and living environments during the pandemic. For instance, one participant who habitually used Mandarin to communicate with their

¹ For anonymity, we intentionally omitted the mention of the HL since we only had one biracial participant.

parents and friends via text or call reported that the pandemic did not significantly disrupt this routine. Another participant elaborated, "...I already predominantly used English outside of home and used Tagalog more at home, the status quo of my language use was never really changed." This suggests that for many bilingual individuals, their language use patterns were already well established in their daily lives and remained resilient in the context of the pandemic.

Changes in Use of English and/or Other Languages

In response to questions 2 and 4 of the qualitative survey (refer to Table A1 in the Appendix), some participants addressed changes in their use of English or additional languages. Despite the questions being designed to assess HL use, many participants, given their extensive language backgrounds, reflected on their usage of English as well as other languages they were proficient in. 14 responses addressed English usage and five addressed other languages.

Most of the participants documented that their English use remained the same since they still had to attend classes or go to work. One participant reported a positive change in their English language use, as they noted an improvement in their English skills after securing a part-time job during the pandemic. However, several participants whose first language was not English reported more negative impacts. For instance, one participant started to use English less because they were staying at home most of the time. One individual detailed, "I feel like it changed and it became harder to socialize and practice my English speaking since I am not obligated to speak English besides Kapampangan." Another mentioned, "As for English, I feel like my skills is declining,

sometimes I stutter or don't know the word I need to communicate most of the time and therefore I take longer to think.”²

In addition to changes in English usage, participants also reported changes in their proficiency in other languages. Many participants were motivated to learn other languages, with some highlighting Korean and Japanese, due to their prevalence in popular media during the pandemic. One participant noted, “My Japanese improved since I had more time to stay home and watch Anime.” Yet not all changes were positive. One participant reflected on their declining Spanish skills due to lack of practice since graduating high school. They found themselves “using mostly English and not really speaking Spanish so I don't really use that skill anymore because I don't have the confidence to have a conversation with someone using it.” This was also seen in another participant’s response, who expressed regret over not improving their Spanish skills during high school.

Heritage Language Use in Context

Within this study, specific instances emerged where a participants’ language use was intricately tied to the context in which they found themselves. These responses did not neatly align with the subthemes of either increased or decreased HL use. Instead, they revealed fluctuations influenced by situational factors. Given the richness of participants’ detailed reasoning behind their language choices, a separate section was warranted to explore these variations. By delving into these context-dependent patterns, a deeper insight was gained into the dynamic interplay between language and real-world context.

² It is uncertain whether the participant’s reported speech difficulties reflect the clinical condition of stuttering or simply refer to an attrition-related increase in disfluencies.

Five such instances were identified in the dataset. During or since the pandemic, participants became more attuned to the context in which they chose to use a language. For example, they would “spend more effort to speak Mandarin with my family and friends that understood English but spoke primarily Mandarin and vice versa.” One participant highlighted their limited fluency in their HL and their parents’ limited fluency in English behind their choice of language when communicating. They stated, “I speak Cantonese with my parents at home. However, sometimes I also speak English with my parents at home. Most of the time, however, it is Cantonese since my parents cannot understand English as well as they can understand Cantonese. At the same time, my Cantonese is limited and sometimes I will have to substitute using English for Cantonese since I am not fluent. I also find it frustrating sometimes that I cannot express myself because they do not understand the English word, and at the same time, I do not know the Chinese-Cantonese word.” Other participants simply found it more practical to speak English instead of dealing with the inconveniences of switching languages. These participants felt more comfortable speaking their HL only at specific settings or events, such as Asian grocery stores or celebratory festivals. This code highlights the diverse experiences and strategies of multilingual individuals in navigating their linguistic environments. It also highlights the pivotal role that cultural and community gatherings play in promoting HL use, which can encourage HL maintenance over time.

Feelings Toward Language

Feelings Toward HL

Participants shared feelings about their HL in response to question 8 of the qualitative survey (refer to Table A1 in the Appendix). Unlike previous questions that focused on individual experiences and perspectives, this question aimed to capture community-level changes since the onset of the pandemic in language preference, social norms and expectations, media representation,

and perceptions of English versus heritage language. The responses were categorized into two groups: an increase in positive feelings toward HL and no change in feelings toward HL. During coding, there were no instances of an increase in negative feelings toward HL identified, so this subtheme was not included in the analyses.

Only one participant listed an increase in community-level positive feelings about their HL since the onset of the pandemic. They noted that “people value Mandarin more now and it can bring you great job opportunities.” This participant asserted that while proficiency in English is crucial in the US, being bilingual would place one on “the path to success.” There were, however, seventeen instances of participants reporting no change in feelings toward their HL.³ Many of the participants simply stated that the pandemic had not significantly impacted their feelings regarding their HL. Two participants highlighted that this may have been due to the people they were surrounded by, with one stating, “Most of my friends are Korean and we still speak Korean on campus,” while the other stated, “Most people I talked to speaks Chinese and we don’t speak English together.” The stability in sentiments suggest that, for many, the pandemic did not alter their relationship with their HL.

Changes in Prioritization and/or Maintenance of HL

Question 3 of the qualitative survey (refer to Table A1 in the Appendix) was designed to capture the pandemic’s influence on an individual’s motivation and capacity to sustain or enhance their language proficiency or fluency. The question was worded to enable participants to report changes in prioritization or maintenance of all languages in which the participant is proficient. Nevertheless, the constructed subthemes primarily concentrate on the prioritization and/or

³ Based on the quotes, we were unable to differentiate between positive feelings that didn’t change versus negative feelings that didn’t change. It was hard to interpret many of the responses due to how short they were.

maintenance of heritage languages, as these were our primary interest and are likely to be most affected by the pandemic and the geopolitical context. The responses were classified into three categories: an increase, decrease, or no change in prioritization and/or maintenance of HL.

There were only three noted instances of a decrease in prioritization and/or maintenance of the HL. One participant expressed a diminished motivation to practice writing in Mandarin, likely due to the complexity of Mandarin characters, but also because writing in Mandarin is not a common priority in everyday use. Another participant felt a sense of discouragement over the last two years, suggesting a decrease in their efforts to maintain their (Vietnamese) language skills. A particularly poignant case was that of a participant who experienced a loss of motivation to keep up with their HL (Japanese) following the passing of a close family member whom they used to converse with solely in that language. This situation was further exacerbated by the pandemic, which left them without anyone to practice the language with, especially since traveling back to that country was not possible. Despite representing a minority within the survey responses, these cases highlight the diverse impacts of the pandemic on HL maintenance.

There were 13 instances of participants reporting an *increase* in their prioritization and/or maintenance of HL. A couple of participants attributed this shift to heightened exposure to the HL since the onset of the pandemic. This exposure manifested in various forms, including increased usage of the language in conversation and engagement with media in the HL. One participant found renewed motivation to learn Cantonese during the pandemic through their multilingual friends, stating that the “idea of being able to communicate with them in that language [was] very inspiring.” Another participant was motivated to enhance their proficiency due to witnessing the adverse treatment of individuals facing a language barrier. Working in a setting where being bilingual could benefit patients from the same linguistic background, they felt that “the changes in

the socio-political environment that transpired during the first year or two of the pandemic” underscored the importance of improving their Vietnamese language skills to support their community. Similarly, another participant was driven to improve their language skills to “speak out for others who may have trouble with translation or language barriers.” Many of the participants also echoed the sentiment that preserving their heritage language fostered a deeper connection to their culture. For one participant, their HL (Mandarin) served as the sole medium of communication with older family members. Another participant expressed a desire to better articulate their emotions to their family when speaking in their HL (Vietnamese).

There were 14 instances where participants reported no change in the prioritization and/or maintenance of their heritage languages. Many of the participants expressed a consistent desire to enhance their HL skills and stated that the pandemic did not alter this agenda. Several participants highlighted that their habitual use of HL at home remained unaffected by the pandemic. As one participant put it, “I would still use languages when needed,” while another similarly stated, “I learn language or use them when I need or want to.” A common thread among many of these responses was unchanged lifestyle during the pandemic for these participants, which consequently meant no significant shifts in their language prioritization and/or maintenance.

Identity

Celebrating Identity and/or Appreciating Culture

There were eight instances where participants expressed a profound appreciation for their culture and a deep affirmation of their personal identities. The limited number of instances does not diminish the emotional depth and awareness evident in their responses. One respondent shared their journey of self-realization and activism, asserting, “My initial step is to fight against

internalized white supremacy and internalized Sinophobia. Reclaim my identity and culture and elaborate on my identity and what it means to be an Asian woman living in different societies.” They elaborated, “Even though I may become a target for hate crimes, I refuse to be silenced and keep the traditional mentality of ‘endure/tolerate.’ I want to be proud and free.” A second participant noted a shift in societal attitudes following the debunking of prevalent COVID-19 myths (Bellamy-Walker, 2022; Le et al., 2020). They had observed a collective effort to “push against the boundaries of ‘whiteness’ and be more willing to accept others from different backgrounds.” This culminated in an enhanced sense of pride in their Filipino heritage, fostering increased discussions about language, cultural background, and personal identity within multifaceted settings. The third participant referenced the increased visibility of Chinese influencers on social-media platforms since the onset of the pandemic, which they found inspiring and heartwarming, especially given the increase in anti-Asian hate crimes. They pointed out, “There has been a lot of powerful and inspiring movements that have made me more proud and thus...want to indulge in my Chinese identity.” These responses highlight the participants’ resilience and pride in celebrating their identities within a sometimes-challenging broader culture.

Minimizing and/or Hiding Identity

In 16 instances, participants reported feeling compelled to minimize or conceal their cultural identity since the onset of the pandemic. One participant noted, “mostly in public, I would be more selective of which languages I use in case others hear.” This sentiment was noted by another participant who stated, “I did notice myself being more careful in public when speaking Mandarin since I saw that it could be dangerous to speak it in public.” The fear of being targeted was a common theme, with one respondent admitting, “I tend to speak Mandarin less because I was afraid that I might get bullied. There were people around that said something toward COVID

and how Chinese [people] started it.” Another participant expressed similar concerns, “I was cautious to not speak any other language than English in public” during the pandemic. Concerns about safety also led to concealing identity. One participant shared, “Personal safety and the safety of my family has influenced my use of Vietnamese outside of the Asian markets.” Since the first documented cases of the novel coronavirus SARS-CoV-2 occurred in Wuhan, China, the emphasis in public discourse on the virus’s apparent origins affected participants’ language use in public spaces. One participant confessed, “I used [Mandarin] less in public spaces because there was lots of public concern about the pandemic originating from China, and [I] didn’t want to be in an unsafe situation with someone who may have strong feelings about that.” A second participant also refrained from using Mandarin in public spaces due to fear of encountering bias. These responses reveal a pervasive sense of fear and caution among the participants about using their HL in public spaces in the context of the pandemic.

Passing on HL

Question 5 of the qualitative survey (refer to Table A1 in the Appendix) asked about the impact of the pandemic on participants’ feelings about speaking English versus their other language with their (future) children. Responses revealed a range of perspectives. The wording of this question asked participants about the impact of the pandemic on their feelings about speaking English with their (future) children. By focusing on the pandemic in a general context, rather than on the rise in anti-Asian hate specifically, the intention was to avoid biasing responses in a negative direction.

Six participants reported that the pandemic increased their desire to pass on their heritage language to their children. One participant noted, “The pandemic reinforced my feelings about teaching my future children Mandarin because I was more aware of my decreasing ability to speak

Mandarin.” Another participant said the pandemic increased their desire to pass on their HL because it “...made me realize how important it is for you to be proud of your culture and really stand up for yourself – meaning you speak your first language with pride with family, friends, and strangers.” These participants experienced the pandemic as a catalyst for reinforcing their cultural identity and hence their desire to pass on their heritage language to their children.

Only one participant reported a decreased desire to pass on their heritage language to their children due to the pandemic. They stated, “I used to want my children to be fluent in Japanese, but the pandemic, as well as other factors, made me feel more distant to Japan, and as a result, teaching the language became less of a priority.” This participant experienced a weakening of cultural ties to their heritage and a shift in their cultural identity, as they saw themselves identifying more as an Asian American instead of as a Japanese citizen.

Similarly, only one participant reported a lack of desire to pass on their heritage language to their children which was unchanged since the pandemic. They explained, “I’d want [my children] to know my partner’s language over mine [Lao] because I don’t know mine that well enough to teach them and have them be fluent.” This participant’s response suggests that proficiency in the heritage language and the ability to teach it effectively to children are significant factors in the decision to pass on HL. This participant’s response suggests that in a family context with multiple HLs, each parent’s language proficiency may affect the perceived utility and/or feasibility of passing on each HL.

There are 16 instances where participants reported that their desire to pass on their heritage language to their children had not changed since the onset of the pandemic. One participant encapsulated this sentiment by stating, “I don’t think the pandemic is something that would vastly change my thoughts. I always thought of passing down the language as part of my culture/tradition.

I would want my future children to grow up as bilinguals and hence would pass it down. Many others used similar phrasing such as “It’s an important part of my culture;” “[I want to pass on the language] so [my children] can better communicate with people of the same culture,” or “since that means they are still bearing their culture.” One participant poignantly stated, “I think it’s important to pass the language on, even if it’s broken Vietnamese. I don’t wanna contribute to the third-generation immigrant stereotype” of HL loss. This further highlights the importance of language as a cultural legacy and participants’ desire to resist assimilation pressures that can lead to HL attrition in immigrant families. It also reflects conscious efforts to challenge existing stereotypes about immigrants and trends of HL loss to ensure the continuity of their cultural heritage.

Experiences of Bias, Discrimination, and/or Hate Crime

Instances of Microaggression, Bias, and/or Discrimination

Responses to question 6 from the qualitative survey (refer to Table A1 in the Appendix) revealed a variety of experiences related to racism and discrimination among the participants that did not rise to the level of bullying or hate crimes. There were 9 instances of participants reporting a direct experience, 2 instances involving their family or friends, and 18 instances of nothing to report.

There were nine reported instances of personal experiences of racism or discrimination. These instances ranged from passive negative treatment and microaggressions to more overt acts of racism. For example, one participant reported “negative treatment and racism [that are] associated with Asian traits. In terms of treatment, a lot of it is mostly passive, but it’s a feeling I can get when in public.” Another participant experienced a derogatory incident where an

acquaintance blended their name into a double pun that referenced the person's name, an aspect of Chinese culture, and COVID (the specific insult is not reproduced here to maintain anonymity). Of the nine instances, two of them were noted to be indirect. For example, one participant reported, "...because news articles said COVID originated in Wuhan, China, there were some things that I have seen online and from around my high school community that was racist against those who spoke Chinese." Another participant expressed, "I only heard people talking about something that was racist, but it was not directed toward me." One participant mentioned that during the height of the pandemic, their family suffered microaggressions that made them, and their family feel unsafe.

In addition, only two participant reported instances of racism or discrimination experienced by their family or friends. The participant detailed, "... sometimes people will give my parents a harder time because they speak with an accent." Another participant reports that their friends were "called out due to their ethnicity", especially because of "the hateful rhetoric against Asians during the pandemic." Their friends were intentionally avoided in public spaces as others would think they were contagious and could spread the virus. There were 18 responses in which participants reported no experiences of racism or discrimination. This could be attributed to various factors such as limited social interactions due to the pandemic or being surrounded by individuals from their own cultural or linguistic backgrounds. As one participant pointed out, "During the pandemic, you didn't have to interact with that many people. A lot of stuff like DoorDash or whatnot was all done over an app." Another participant noted, "Most of the time I only hang out with people who speak Korean as well, so [the pandemic] didn't affect much." This suggests a potential buffering effect, where being in a supportive, culturally similar environment may provide some distance against experiences of racism.

Aside from the documented instances above, there were a handful of quotes that were not counted, as participant's reported discrimination, but didn't cite a change due to the pandemic. To differentiate these responses, they were pulled out separately. For instance, some participants pointed out that racism was a pre-existing issue that the pandemic merely highlighted in the media. As one participant put it, "I don't think the pandemic made any changes to discrimination. It was occurring regardless of the pandemic. I didn't think it was more apparent because of the pandemic." In addition, one participant shared, "I did experience some discrimination when I moved from Fiji at age 8," while another participant recalled their early experiences in America, saying, "during my first week [of] high school, my classmates laughed at my bad English." These quotes suggests that while the pandemic may have intensified certain forms of discrimination, it is ultimately a reflection of deeper, systemic issues and historical patterns of anti-Asian bias (Ford, 2024).

Instances of Bullying, Harassment, Abuse, and Hate Crime

Responses to question 7 of the qualitative survey (refer to Table A1 in the Appendix) revealed a disturbing pattern of experiences of bullying, harassment, abuse, and hate crimes related to race, ethnicity, or language. There were 8 instances of personal experiences, 1 incident involving family or friends, 9 cited instances from the news, and 6 instances of no such experience. While the question specifically asked whether participants had been personally affected or knew someone directly affected by hate-crime events due to their race, ethnicity, or language, many of the response detailed experiences of verbal abuse or harassment. Legally, a hate crime must meet specific criteria: it must be both a crime and committed based on the victim's identity, including but not limited to racial or ethnic identity. Unfortunately, incidents of abuse and harassment, while impactful, often fall outside the legal definition of hate crimes. These incidents, sometimes referred

to as ‘bias incidents,’ are not classified as crimes (Tessler et al., 2020). However, this section aims to capture the full spectrum of experiences that were shared in response to the question.

The personal accounts are particularly poignant, painting a vivid picture of the distress and fear caused by bias incidents that were tied to participants’ cultural heritage. One participant shared a direct experience of being verbally assaulted on the street, stating, “I have been yelled at with the F-word...I was just walking down the street and somebody drove by and yelled at me.” Another participant recounted an incident at their workplace that was tied to their race/ethnicity, where she was told shocking statements about Vietnam after having a customer continuously guess “where they were from.” One participant even had an older white man spit at them and their family while they were walking on the streets in March of 2022, while another participant shared, “I have heard people say racial slurs [and] cuss at people/my family.” Indirect instances of bias were also reported. One participant described being mocked for their English-speaking skills and being verbally abused due to their identity as an Asian male. These quotes serve as a stark reminder of the personal and societal impacts of these incidents.

One participant reported an instance of hate crimes involving their family or friends. One participant shared a particularly disturbing incident involving a Japanese teacher at their high school who was severely injured in a likely hate crime in the Chinatown of a United States metropolitan city.” There were nine instances where participants reported impacts of learning about hate crimes through the news and social media. As noted by one participant, “I did see a lot of instances on the news, and it was really terrifying. I think most of the ones shown on the news were in big cities like Chicago, New York, or LA.” Another participant shared that they felt hurt upon seeing news reports of someone from their community being targeted in hate crimes.

The participants who noted nothing kept their responses short, however, one participant did indicate that this could be because the neighborhood they lived in had quite a few Asians in the area and “was pretty nice.” This individual further elaborates that despite living in a multicultural and multilingual college campus environment, they have not observed any instances of derogatory remarks or hate speech. Another participant’s response reflected cross-community solidarity. Although they had not personally experienced a hate crime or bias incident, they shared that their friend, a member of the Black community, had been subjected to discriminatory practices.

Heightened Anxiety

This subtheme, while not directly queried by a specific survey question, emerged in our review of the data, as numerous participants indicated an escalation in anxiety attributable to the surge in anti-Asian sentiment during the pandemic. The emergent theme, termed “heightened anxiety,” was observed in a total of nine instances within the dataset. Many participants shared how their families or communities would advise them to be careful in public and avoid speaking their native languages to prevent attracting danger. For example, one participant stated, “My family was hypersensitive to the hate crimes against Asians during the pandemic, and saw being Asian and speaking Mandarin as a taboo that could attract danger.” Another participant expressed a similar concern, “During the pandemic, I was scared that such something dangerous could happen to me or a family member. Moreso [sic], for my parents since they owned a restaurant at the time.” Some other participants indicated that their non-Asian friends would not be able to relate to their feelings. As one participant put it, the pandemic “caused an increased level of situational stress about the state of the world that I think not many of my non-Asian friends could understand.”

These quotes accentuate the significant impact of the rise in anti-Asian hate on mental health, as well as a sense of belonging, for many participants.

Discussion

The results of this study demonstrate the intricate ways in which the pandemic and the escalation of anti-Asian sentiment in the US have profoundly influenced the use of and perspectives on east-Asian and southeast-Asian heritage languages. Responses spoke to four primary themes: (1) language use, (2) feelings toward language, (3) identity, and (4) experiences of bias, discrimination, and/or hate crime. The qualitative methodology employed in this study allowed us to capture a diverse range of language experiences. While the sample size of this study, comprising 29 participants, is relatively small, our sample still revealed both diversity and commonalities in participants' experiences. Taken together, the results shed light on the complex ways in which the current geopolitical context is both promoting and discouraging HL maintenance among east-Asian and southeast-Asian language speakers in the US.

The geopolitical context, particularly the COVID-19 pandemic and the associated rise in xenophobia and Asian hate, has significantly influenced the use of HL among individuals. As Gelman and Roberts (2017) suggest, language plays a crucial role in the transmission of culture, serving as a tool for resilience and cultural preservation. This is evident in the increase in HL use among some participants, who, amidst adversity, have clung to their cultural identity through language. Conversely, the work of Bleakley and Chin (2008) provides insight into the experiences of those who reported a decrease or no change in their HL use. Factors such as heightened anxiety, experiences of discrimination, or the need to minimize or hide their identity due to the rise in Asian hate, reflect the struggles of second-generation immigrants whose language use is influenced by their parents' English-language skills. Taken together, changes in

HL use can be seen as a reflection of the individuals' response to challenging circumstances, either as a form of cultural preservation or as a strategy for assimilation.

There was a portion of participants who reported an amplified sense of cultural pride and an increase in prioritization and/or maintenance of their HL. This suggests a form of resistance and resilience in the face of adversity, a testament to the strength and solidarity of these communities. However, many others reported having to minimize or hide their identity, distancing them from their HL. One study by Jennifer Chuang has found that AAPI youth during the COVID-19 pandemic have had to grapple with their identity, mental health, and external perceptions, hinting that the sense of belonging that was presumed to be a protective factor was not true (2022). This highlights the profound impact of the external environment on individual behaviors and attitudes. The experiences of discrimination, bias, and hate crimes, whether personally experienced or observed in the news, were reported by several participants. These experiences were not isolated incidents, but part of a larger pattern of systemic racism and xenophobia exacerbated by the pandemic. Coupled with the heightened anxiety reported by some participants, these experiences significantly influenced their use of HL and their feelings towards it.

Despite these challenges, the desire to pass on HL remained strong among most participants, with many already planning on passing their HL on regardless of the pandemic. This is consistent with previous studies that indicated the importance of language as a facilitator of cultural connections (Zhou et al., 2021). Some reported that the pandemic increased their desire to pass on the language, as they realized the importance of being able to communicate and not wanting their language to die off. This finding aligns with the research conducted by Ji et al. (2004), which emphasizes the intricate relationship between language and culture. Their study

suggests that language is not just a tool for communication but also a crucial component of cultural identity.

Unexpected Findings

One unanticipated finding of significance was the substantial number of participants reporting increased family interaction during the pandemic, leading to augmented use of their HL. This factor emerged organically from the data and was not an initial focus of our study design. In addition, a celebration of culture in response to the escalation of hate crime events was observed. The need for solidarity amongst the Asian communities made participants more appreciative of their cultural identity and motivated them to exhibit this aspect of identity, exemplifying community resilience. The existing literature suggests that both positive and negative impacts of the pandemic and rise in anti-Asian sentiment on HL use can be predicted. Our study aligns with this literature, revealing a mix of positive and negative effects on HL use and maintenance. What stands out is the pronounced positive shift observed in several areas such as increase HL engagement, feelings with HL remaining stable, reinforcement of heritage identities, and an increase in proficiency and maintenance of HL. However, we also identified subthemes reflecting negative experiences such as decreased HL, minimizing or hiding identity, and heightened anxiety due to the pandemic. Interestingly, these positive subthemes echo findings from Lee et al. (2023). Discriminatory experiences were found to significantly impact overall well-being and racial identity development. Notably, one participant from Lee's study, who had faced discrimination in the Deep South, suggested that prior encounters with racial bias during the pandemic's early stages might have acted "protectively". This finding is consistent with how participants in our study noted racism as a pre-existing issue that was merely highlighted by the media during the pandemic and not necessarily something new that was occurring to the East Asian and Southeast Asian

community. More importantly, it highlights the potential for positive responses even in challenging circumstances, adding another layer of intricacy to the understanding of the impacts of geopolitical events on language use and identity.

Limitations & Future Directions

The present study, despite its small convenience sample, offers valuable insights into the multifaceted changes in language use and identity among bilingual speakers of Asian languages in the United States during COVID-19. Participants were recruited within a college-campus environment through flyers and word of mouth. The study recruitment time was limited to 2 months due to the study being conducted for an undergraduate honors thesis. The funding (National Institutes of Health funding for the URISE program) was limited—while it’s an external grant, it’s distributed across many students and their respective labs. It’s crucial to acknowledge that the sample size limits our ability to definitively link predictors to patterns of responses. Potential predictors extrapolated from the findings include the degree of affiliation to the cultural group and sense of belonging, with a stronger connection potentially fostering a greater inclination to maintain HL. Proficiency in HL versus English may also be a determinant, with higher proficiency potentially correlating with a stronger desire to maintain HL. Individuals with a predisposition to anxiety might also exhibit a propensity to diminish HL use in response to discrimination. The severity of discrimination experiences could also be influential. Anecdotal knowledge of others experiencing hate crimes might engender a desire to maintain HL, whereas personal experiences of significant negativity might exert a more chilling effect, leading to a decrease in HL use. Although the study was unable to explore these factors in detail, the trends that appear to come up in participants’ responses as detailed above suggest that these would be good topics for future research.

The initial questions 1-5 (refer to Table A1 in the Appendix) intentionally referred to the pandemic generally, rather than alluding specifically to discrimination, or hate crime events. This sequencing of questions was intended to prevent these negative aspects from influencing the initial responses and elicit non-biased responses. However, this could have inadvertently skewed responses towards the more neutral or positive experiences associated with the pandemic, such as staying at home more, spending more time with family, or having more free time than usual. Questions addressing the negative aspects of the pandemic were introduced towards the end of the survey. This sequencing of questions was intended to prevent these negative aspects from influencing the initial responses. However, is it possible that this structure resulted in a more positive response overall, as participants may have been primed to think about the neutral and positive aspects before considering the negative aspects. This potential bias should be considered when interpreting the results. Future research could consider varying the order of questions or using different phrasing to further investigate the impact of question wording and structure on participant responses.

Given that this was a university-based study, the sample was skewed towards young adults ($M = 21.97$). This may limit the generalizability of the findings to other age groups. The participants, many of whom were second-generation immigrants, reported their parents' influence on their decisions regarding language use and attitude. The parents are likely less proficient in English, so they are more likely to speak the heritage outside the home, making them more likely to be a target for discrimination. This aligns with the findings of Cox et al. (2021), who discussed the concept of 'Shared Language Erosion' and its impact on youth development. Their research indicates that third-generation immigrant children predominantly speak English at home, suggesting a less likely development of bilingual skills. Furthermore, the

phenomenon of Shared Language Erosion tends to be more evident in smaller and less established immigrant communities, where there are limited opportunities for children to develop and maintain their HL and for parents to formally learn English. Similarly, Toppelberg and Collins (2010) emphasized the interplay between language, culture, and adaptation in immigrant children. Their research revealed that second-generation immigrants are more prone to losing their first language, rather than maintaining bilingualism, due to the assimilative forces that encourage these children to quickly learn English. Given that most parents in these scenarios would likely be the immigrants, it can be assumed that their proficiency in HL would be higher due to greater exposure to the language. A study broadening the age of participants could potentially offer different perspectives on language use, further enriching our understanding of the dynamics of language use within immigrant families.

As this study was conducted at an urban university and recruited a convenience sample that comprised predominantly of college students, most participants were based either on campus or within the university community. This context, as highlighted by Barceló & Saez (2021), could have influenced the environmental and socioeconomic variables affecting the participants. It would be interesting to investigate whether non-university settings would yield different responses. For example, individuals living outside of university communities may face different societal pressures or have different opportunities for HL use. University communities often comprise a diverse population with various languages and cultures, whereas certain regions in the United States may be more homogenous. Universities also often provide resources to support multilingualism and cultural diversity (e.g., cultural resource centers; affinity groups) compared to a non-university setting. This would be another avenue for future research to explore.

In considering the demographics of the study sample, participants were predominantly from urban regions or what the CDC defines as urban clusters (Ratcliffe et al., 2016). Consequently, the experiences of individuals residing in rural areas are not adequately captured in this study, although rural health disparities is something observed within healthcare during the COVID-19 pandemic (Cyr et al., 2019) and can easily be observed for language use. Varying social networks and different access to media and technology can also impact access to educational resources, social media, or individuals that one may interact with online. Future work could investigate the hypothesis that individuals in rural areas may report fewer instances of discrimination or hate crime due to their location and thus may have differing attitudes towards HL use and maintenance. Furthermore, it's essential to recognize the economic privilege of most of the participants, who were predominantly college students. Participants had indicated the stability of their work and living environments during the pandemic to contribute to no changes in their HL use, which may not hold true for people who faced more significant economic impacts (Nicola et al., 2020). For a comprehensive understanding, future work should consider economic factors alongside linguistic and cultural aspects.

Conclusion

This study illuminates the profound influence of the pandemic and the rise of anti-Asian sentiment on the use and perspectives of East Asian and Southeast Asian heritage language speakers in the United States (Cabral, 2021; Rios, 2022). We find that the geopolitical context, marked by the COVID-19 pandemic and associated xenophobia, has significantly shaped language use among individuals. The pandemic led to increased family interaction, which in turn led to augmented use of HLs among some participants. Despite the rise in anti-Asian hate, there as a notable increase in cultural pride and community solidarity. At the same time, experiences

of discrimination, bias, and hate crimes significantly influenced language use and feelings toward the HL. Some participants reported having to minimize or hide their identity, which distanced them from their HL. Yet, despite these adversities, the desire to pass on HL remains strong, highlighting the enduring importance of language as a facilitator of cultural connections. The study's findings, derived from a sample of 29 participants, offer a unique lens through which to view the intricate dynamics of language use and identity in the face of global crises. The commonalities and shared experiences that emerged from the data highlight the collective impact of geopolitical events on the Asian community. In light of the above findings, the study emphasizes the importance of cultural ties, community solidarity, and preserving one's cultural identity, which can lead to the erosion of cultural diversity and the loss of valuable linguistic resources. Language loss is not just a loss of words, but a loss of unique ways of seeing and interpreting the world. Therefore, efforts to maintain HLs and counteract language loss are not only crucial for the individuals and communities involved, but also for the broader society, which benefits from the richness of linguistic and cultural diversity. Through the cultivation of community strength and determination, multiculturalism in the U.S. can be enriched, thereby fostering linguistic diversity even amidst challenging circumstances.

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Appendix A

Table A1

Qualitative survey questions

Question 1: Do you speak a language other than English at home?

Question 2: Has your language use changed since the beginning of the pandemic? Have you felt the need to show or hide your ability to speak your other language besides English? If so, what factors influenced this decision?

Question 3: Did the pandemic change your ability or motivation to prioritize maintaining or improving any of your languages? If so, please describe for each language.

Question 4: Since the beginning of the pandemic, have you noticed any changes in how you use English vs. your other language in different contexts (e.g., with family, friends, at work)? If so, please describe for both languages.

Question 5: If you are a parent or plan to be one in the future, has the pandemic affected your feelings about speaking English vs. your other language with your (future) children? Please provide details.

Question 6: Have you experienced negative bias or discrimination related to your language use during the pandemic? If so, in what ways?

Question 7: Have you been personally affected by hate-crime events due to your race, ethnicity, or language? Or do you know someone personally who has been directly affected? Please give whatever details you are comfortable sharing.

Question 8: Have you noticed any changes in how your community views use of English vs. the community language(s) since the pandemic began? If so, please describe.