EXPLORING THE RELATIONSHIP BETWEEN ELECTRONIC LITERACY AND HERITAGE LANGUAGE MAINTENANCE

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ABSTRACT

This paper focuses on the electronic literacy practices of two Korean-American heritage language learners who manage Korean weblogs. Online users deliberately alter standard forms of written language and play with symbols, characters, and words to economize typing effort, mimic oral language, or convey qualities of their linguistic identity such as gender, age, and emotional states. However, little is known about the impact of computer-mediated nonstandard language use on heritage learners' linguistic development. Through in-depth case studies of two siblings, the study examines the linguistic and pragmatic practices of these learners online and the perceived effects of non-standard forms of computer-mediated language on their heritage language development and maintenance. The data show that electronic literacy practices provide authentic opportunities to use the language and support the development of a social network of Korean speakers, which results in greater sociopsychological attachment to the Korean language and culture. The informants report that the deviant language forms found in e-texts enable them to engage in online interactions without the pressures of having to spell the words correctly. However, they express frustrations in not being able to distinguish between correct and non-standard forms of the language, which appear to be affecting their offline language use.

INTRODUCTION

The potential of computers and technology to assist individuals in their efforts to maintain and develop proficiency in their heritage language is powerful. According to Wallraff (2000), "the Internet is capable of helping immigrants everywhere to remain proficient in their first language and also to stay current with what is going on back home" (p. 61). Although a growing number of studies have examined how technology can be used to record and preserve indigenous languages for revitalization efforts (Buszard-Welcher, 2001; Warschauer, 2000; Villa, 2002), little attention has been given to the effects of electronic literacy and online communication on heritage language learners. This study focuses on Korean electronic literacy practices in a popular Korean weblog and the effects of such practices on the language maintenance efforts of two Korean-American heritage language speakers.

THE KOREAN CONTEXT

The Republic of Korea has one of the fastest-growing cybercommunities in the world. According to the Korea Network Information Center, over 63% of the entire South Korean population are Internet users, and 95% of individuals in the 6-29 age bracket report using it on a daily basis. Internet sites that enable users to create "personal spaces" to share and document their changing lives and keep connected with people they know are immensely popular among Koreans. A case in point is "Cyworld," an upgraded blog that features chatting, commentaries, pictures, music, a guest book, avatars and links to other homepages prompting users to network with their friends, family, and colleagues. As of August 2005, there are over 11 million Cyworld registered users.

Participation in online forums such as Cyworld engages its members in a social process of learning through shared practices, internally constructed membership, and the formation of personal and group identities (Holmes &

Myerhoff, 1999). Members are involved in a community of practice, where a group of people who come together around a joint enterprise develop common beliefs, values, and ways of doing things, which all influence the ways in which members communicate with one another (Eckert, 2000; Wenger, 1998).

New forms of expression are constantly being negotiated and shared among online users, making it difficult to keep current with the changing face of electronic text. Computer-mediated communication is unique in that, despite its similarities to oral speech, it invites substantial deregulation effects on communication, which can foster the use of creative, non-standard language play (Sproull & Kiesler, 1986). Studies have documented non-standard[1] uses of language in online interactions (a) to mark certain individual characteristics such as provincial dialects, social class, gender, age, and/or personality traits, (b) to economize typing efforts, and/or (c) to mimic spoken language (Barnes, 2003; Herring, 2001; Song, 2002; Sproull & Kiesler, 1986). For example, Su (2004) found an emergent mock Taiwanese accent among Internet users as a form of language play to jointly construct "a young, lively, congenial, and witty presence" (p. 61). Androutsopoulos (2000) also revealed that non-standard orthography in online fan media texts was representative of spoken language and purely graphemic modifications, which are used to serve as contextualization cues and cues of subcultural positioning.

Although all natural languages inevitably change over time, drastic deviances from standard language ranging from non-standard orthography and incorrect grammar to unfamiliar lexical items and symbols have brought forth great concern about the preservation of standard orthography, grammar, and pragmatic uses of the Korean language (Choi, 2003; Kim, 2005; Park, 1989). Educators across grade levels in Korea are reporting that students display electronic textual features in their school work: they have difficulty with spelling and with the proper word spacing used to delineate word boundaries due to non-standard ways of Internet language use, which flout conventional norms of literacy practices (Ahn, 2000; Choi, 2003; Kim, 2005; Noh, 2000). For young children and Korean as foreign/second language learners who have not fully acquired literacy in the language, exposure to electronic texts may have adverse effects on their language development. However, Meskill, Mossop, and Bates (1999) state that "children in the age of electronic text are developing unique skills and strategies for inventing novel forms of understanding these texts that are quite often independent of formal instructional ('school') literacy training" (p. 4), thus, highlighting the positive ways in which the development of electronic texts can benefit students' cognitive flexibility and skills.

CHARACTERISTICS OF KOREAN INTERNET LANGUAGE

Hangul, the South Korean national alphabet, was developed over five centuries ago and is the only alphabet completely native to East Asia (Lee & Ramsey, 2000). There are 24 basic Hangul letters: 14 consonants (ㄱ = *k*, ㄴ= *n*, ㄷ = *t*, ㄹ = *l*, ㅁ = *m*, ㅂ = *p*, ㅅ= *s*, ㅇ = *ø* or –*ng*, ㅈ = *c*, ㅊ = *ch*, ㅋ = *kh*, ㅌ = *th*, ㅍ = *ph*, ㅎ = *h)*; 10 vowels (ㅏ = *a*, ㅑ = *ya*, ㅓ = *e*, ㅕ = *ye*, ㅗ = *o*, ㅛ = *yo*, ㅜ = *wu*, ㅠ = *yu*, ㅡ = *u*, ㅣ = *i)*; and 16 additional complex symbols which include 5 consonants (ㄲ = *kk*, ㄸ = *tt*, ㅃ = *pp*, ㅆ = *ss*, ㅉ = *cc*) and 11 vowels (ㅐ = *ay,* ㅒ = *yay,* ㅔ = *ey,* ㅖ = *yey,* ㅘ = *wa,* ㅙ = *way,* ㅚ= *oy,* ㅝ = *we,* ㅞ = *wey,* ㅟ = *wi,* ㅢ = *uy)*. Hangul orthography groups these basic letters into syllables to create words, as shown in (1).[2] The consonants written on the bottom of the syllable, such as 'ㅁ' in (1b), are called *patchim*.

(1) a.   ㄴ + ㅏ   ㅁ+ㅜ = 나무
        n + a   m+wu = namwu
        'tree'

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b. ㅂ +ㅗ+ ㅁ = 봄
    p + o + m = pom
    'spring'

Korean is structurally different from English in a number of ways. First of all, the basic syntactic structure is Subject-Object-Verb rather than Subject-Verb-Object as in English. Secondly, Korean is an agglutinative language, which means that grammatical particles are attached to the end of nouns to indicate its function in the sentence, as well as to the end of verbs to indicate speech levels (i.e., honorifics), mood, and tense, as shown in (2). Moreover, modern Korean writing requires spacing between words, unlike traditional Korean writing systems, and particles are considered to be part of the word. For example, *agi-ka* in (2a) would be one word and the space would follow -*ka*. However, spacing causes much confusion among language learners, because it is not always clear whether a particular syllable is a particle or a separate word (see Sohn (1999) for further discussion on spacing).

(2) a. agi-*ka*   kwiyep-*ta*.
         baby-[SUBJ marker]   cute (descriptive verb)-[present, plain form]
         'The baby is cute.'

     b. agi-*lul*   cal   tolpo-*ass-eyo*.
         Baby-[OBJ marker]   well   look after-[past, polite form].
         'The baby was well taken care of.'

In the case of phonology, Korean also differs from English in that there are no labio-dental sounds (e.g., *f* or *v*), no interdental sounds (e.g., *th*), and no voicing distinctions as in *p* and *b*. Instead, Korean differentiates between the obstruents with a three-way contrast between lax sounds, reinforced sounds, and aspirated sounds (e.g., *tal* 'moon,' *ttal* 'daughter,' and *thal* 'mask,' respectively). Also, Korean consonants in syllable-final (coda) position are not released in articulation. For example, *aph* 'front' is pronounced [ap] with a complete closure. Because Korean consonants are not pronounced with a release in the final position, the distinctions between stops, fricatives, and affricates are neutralized. For example, in oral speech, *patchims* such as ㅅ ,ㅈ,ㅊ, and ㄷ are all phonetically pronounced as a [t]. Furthermore, adjacent sounds can undergo assimilation. For instance, when a stop sound like ㄱ occurs before a nasal sound like ㅁ as in 국물 (*kwuk-mwul* 'broth'), the stop becomes nasalized and is pronounced *kwung-mul*. These examples show the difficulties that morphophonemic orthography causes due to the discrepancies between the way the syllables are spelled following the invariable phonemic shape of each morpheme and the way in which they are pronounced, which often does not reflect the actual spelling of the word (for further explanation on the linguistic structure of Korean, please refer to Lee & Ramsey (2000) and Sohn (1999)).

The Korean Language Research Institute, in addition to a handful of independent scholars, has analyzed characteristics of Korean Internet language (Ahn, 2000; Kim & Ra, 2003; Lee, 2004; Noh, 2000; Song, 2002). They discovered many forms that were unique to online language use. In particular, they found that non-standard orthography was used as a means to condense the time and effort of typing and to mark individual and collective identity within online groups. Some of the more common characteristics have been described by Kim and Ra (2003), Noh (2000), and Song (2002) as follows:

Table 1. Common features of Korean Online Language Use

Features	Prototypical Examples	Explanations
Contraction of phonemes	Contraction after omission of the middle vowels: 설 = 서울 sel = se wul 'Seoul' Contraction by deleting syllables: 즐겜 = 즐거운 게임 cul keym = cul ke wun key im 'fun game'	Contraction is the most common form. Shortening the word or expression saves time in writing and typing online.
Omissions	Omission of consonant cluster in the first syllable: 갈까 = 가까 Galkka = gakka 'Shall we go?'	Weak sounds are omitted between phonemes for economy in typing.
Addition	Addition of extra consonant in the last letter: 궁금해용 = 궁금해요 kwung kum hay yong = kwung kum hay yo 'I'm curious'	Consonant clusters are added to the end syllable to express special characteristics of oral speech, such as personality markers or to soften expression. The nasalized sound of *o* expresses a sense of cuteness.
	그래염 = 그래요 ku lay yem = ku lay yo 'I agree'	Adding a nasalized ㅁ gives the feeling of softness and mildness.
	그런데 = 그런데여 gurunde = gurendeyeh 'but'	Syllables are elongated in some cases to represent a more feminine style by adding a vowel to the last syllable
Phonological Approximation	추카 = 축하 chwu kha = chwuk ha 'congratulation/celebration'	Online users write the words as they would pronounce them orally without adhering to its morphophonemic orthography.
New Lexical Additions	허걱! he kek (onomatopoeia expressing surprise)	New lexical items that are used to represent certain emotions or styles unique to online users.

Emoticons	ㅜ.ㅜ, ㅠ.ㅠ, T_T, !_! = crying face (-.-)(-.-)(-.-) = looking around	Emoticons bring softness and pleasantness to computer mediated communication that can easily become rigid. Also, they assist in expressing feelings that words alone can seldom describe.
Morphological Creativity	Mixing with words of foreign origin: 송방 = 노래방 song pang = no lay pang 'karaoke' Use of numerals: 8282 = 빨리빨리 phal I phal I = ppal li ppal li 'hurry' Distortion of Basic (C+V+C): Syllable Forms ㄱㅅㄱㅅ = 감사 감사 kam sa kam sa 'thank you'	Numbers and foreign words and symbols are used as a form of language play, but also as a means to economize typing. Such forms have become conventionalized among online users from particular groups.

HERITAGE LANGUAGE MAINTENANCE AND THE INTERNET

In the case of Korean-American heritage language speakers, who are experiencing one of the fastest heritage language attrition rates (Au & Oh, In press; Lopez, 1996), the Internet provides many possibilities for learners to gain exposure to the language and maintain ties with Korean speakers. Meskill et al. (1999) describe electronic texts as "an environment that invites free form creativity, experimentation, bricolage, and discovery; a place where intuitiveness, risk taking, working through ambiguities and the like, engage" (p. 4). Such a context is likely to provide a fertile ground for language learning to happen. The social constructivist paradigm (Lantolf, 2000; Lantolf & Appel, 1994; Vygotsky, 1978), which places social interaction at the core of second language learning, provides a foundation for understanding how electronic literacy practices within online communities can contribute to language maintenance and development. Learning is most effectively achieved within a community of practice, where there are "networks of people who engage in similar activities and learn from each other in the process" (Warschauer, 2003, p. 120). That is, learners become active agents engaged in co-constructing their own learning by observing, imitating, experimenting, modeling, and providing and receiving feedback from one another.

With computers, the learning environment extends beyond concrete boundaries to connect with others in the world, allowing learners to communicate directly with native speakers for a genuine purpose (Kern, 1995). In other words, links provided by technology provide learners with the opportunities to interact and negotiate meaning through authentic tasks with the culture of the target language and the practices of the community (Egbert, Chao, & Hanson-Smith, 1999; Kung, 2002). Recently, many scholars have turned to social network theory to understand the mechanisms of language maintenance (De Bot & Stoessel, 2002; King, 2000; Wei, 2000). This model posits that the more visible and vital the community of speakers, the more likely for individuals to want to become members of such a social network. Vibrant social networks of speakers offer access to more opportunities to use the language for

meaningful communication. Technology and online communities provide an alternative way to find and create social networks that can elevate the vitality of a group.

The seminal work of Miller and Slater (2000), which examined the role of the Internet in the lives of Trinidadians and diasporic Trinidadians, identified "the internet as a place to hang around that constituted a most obvious natural affinity to Trini-ness" (p. 89). The Internet allows for what Miller and Slater (2000) call the expansion of realization (i.e., a means of enacting new representations of one's identity and culture) and expansive potential (i.e., the possibilities of expanding connections that allow one to picture a novel image of what one could be). In other words, the Internet helps communities to come closer to a realization of who they really are and provides the means to reestablish local communities, which have been hindered by physical distance. Furthermore, the Internet serves as an effective medium for students' cultural exploration and expression. Warschauer (2000) found that interacting in cyberspace provided, for example, Hawaiian students with an opportunity to explore and strengthen their sense of individual and collective Hawaiian identity.

According to Villa (2002), computers cannot become a surrogate for one generation of minority language speakers passing that version to subsequent generations. The teaching of a language and its intergenerational transmission depends on individuals' dedication and will both transmit and learn the heritage tongue (Warschauer, 2000). Computers can only support language maintenance and teaching efforts by providing access to authentic materials and opportunities to practice the language for authentic purposes.

METHODOLOGY

Procedures

As part of a larger study examining the influences of popular culture and the Internet on heritage language maintenance, I met two informants, who reported being active participants in what was one of the most popular websites in Korea at the time, http://www.cyworld.com. Interested in how these individuals were interacting with the unique features of online Korean electronic text, I contacted the siblings to inquire about their willingness to participate in a series of interviews regarding how and why they participate in Cyworld and what effects their involvement had on their heritage language maintenance and development. Both informants agreed to participate in this exploratory study and also consented to my use of screen shots of their Cyworld pages for research and publication purposes.

With technological advancements making it easier for researchers to examine the lives of others, Scollon and Levine (2004) raise questions about the rights of academic researchers in relationship to and in negotiation with research participants and stress the importance of heightened sensitivity to protect the interests and rights of those being studied. Various precautions were taken in this study to protect the participants' privacy and anonymity. No identifiable images and names of the informants were used, and all excerpts of the collected data were sent to the participants for their review and consent. Furthermore, as I was explaining the procedures and the rights of the informants as participants in the study, I specifically inquired about their feelings toward using their language practices in Cyworld as public research data. Both informants stated that they felt comfortable sharing the information with others, because the content of their postings was about aspects of their life that they did not deem to be private. The format of Cyworld allows strangers to visit their sites, view the contents of their sites, and leave messages for them requesting the establishment of a friendship link, unless the authors of the weblogs restrict access to those within their closest personal circles. In spite of the protection mechanism that prevents unauthorized strangers from viewing their content, the informants still viewed the content as public information. They stated that they would not post personal information that they do not want to share with others on this venue, because it is not an anonymous forum. The majority of their postings had to do with factual information about daily events.

Over three months, I interviewed each informant about their linguistic biographies, their online practices, their proficiency in Korean, and their perceptions of the effects of Korean electronic text on their heritage language learning process. The interviews were conducted over three sessions which lasted approximately two hours each. The informants also gave permission to log onto their sites to observe their activities in Cyworld, where I retrieved screen shots of their activities. Each retrieval was emailed back to the informants to ask for confirmation that it could be used for research purposes. The informants were consulted throughout the analytic and writing processes to check for accuracy in my interpretation and representation of their views. The interviews were conducted in English, although each of the informants incorporated some Korean into their speech to explain their language use. Approximately thirty screen shots were recorded for analysis.

Both informants described and demonstrated how they use their personal Cyworld blogs (see Figure 1). The informants explained that the most attractive features of this site were its user friendliness, the fact that the services were free of charge, and the vast number of members connected in Cyworld. On the left of the screen in Figure 1, a menu of the weblog organized by topics such as diary, friends, family, etc., appears, and, on the right, there is a tab menu that organizes the site by function such as photo album, discussion board, profile, guest book, and so forth. Pictures and favorite music are also easily incorporated to personalize the site.
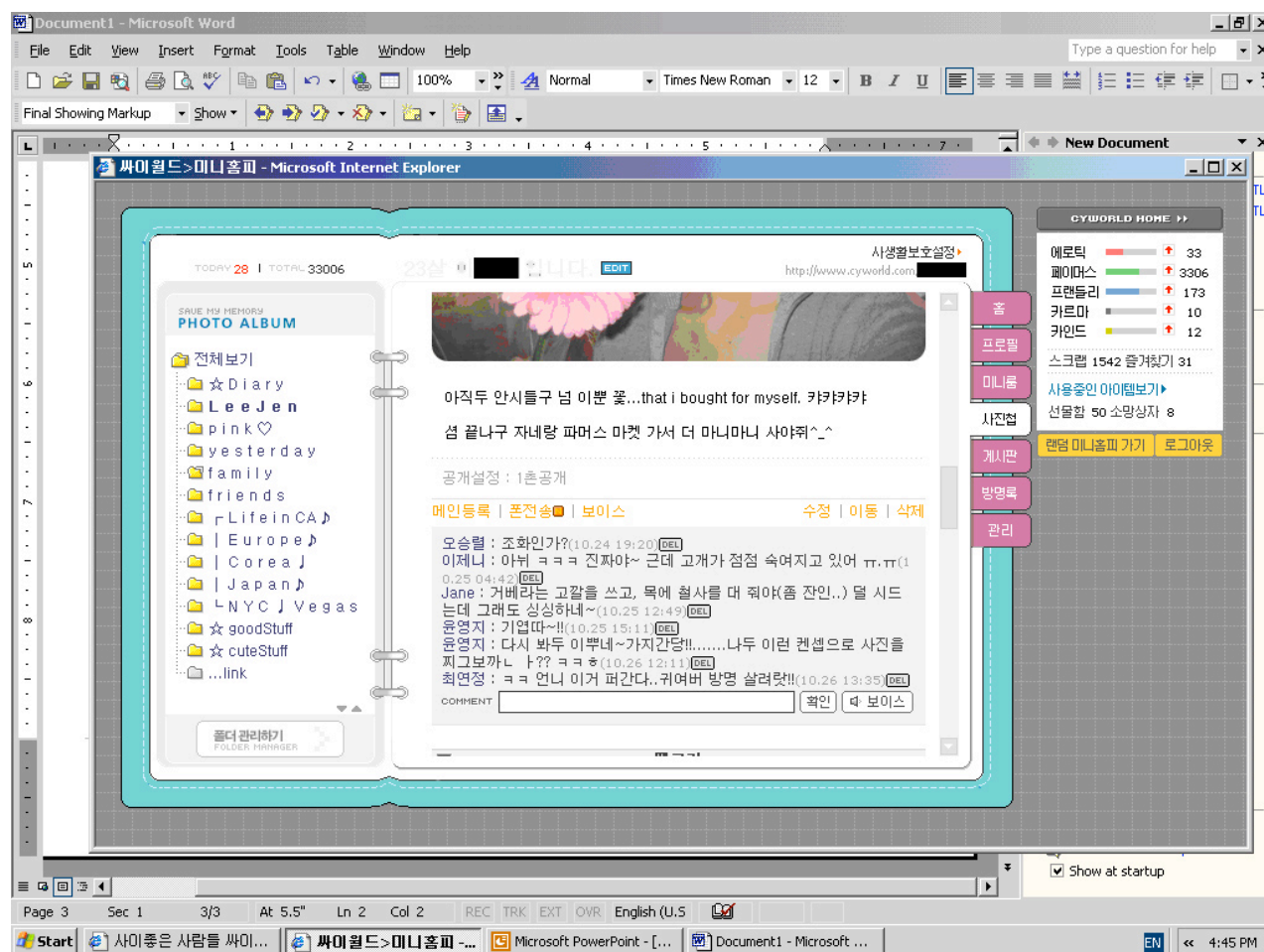

Figure 1. Sample screenshot of Cyworld

The interviews were transcribed and the Korean responses were translated into English. Using an inductive thematic analysis approach (Strauss & Corbin, 1998), the data were reviewed for conceptual themes that depict the nature of

the informants' comments. The case studies of two heritage language participants of Cyworld will be presented in three sections: (a) motivations for online participation; (b) the linguistic and pragmatic conventions of Korean online literacy practices among friends; and (c) the effects of such participation on heritage language learners' language development and the learners' perceptions of proficiency.

Informant Descriptions

Jendy[3]

Jendy is a 23-year-old female undergraduate student in her senior year at a university in California. Currently, she resides in an area where there is a small, but growing Korean population. The majority of her friends at school are other Korean-American students. She was born in Seattle, but grew up in Saipan, a U.S. territory, until she was 15 years old. In Saipan, she attended an international school where the medium of instruction was in English. English was also the language of the wider society. However, her social network of friends mainly consisted of other Koreans who had recently immigrated from Korea. Jendy reports that in Saipan, Korean was used for most social purposes and English was only used in class and other school-related activities. She learned how to read and write in Korean from being exposed to the Korean alphabet through the books that her parents would bring back from their frequent trips to Korea. At 15, she moved with her sisters to a small community in central California where she had minimal contact with other Koreans. She soon became much more comfortable and fluent in English and the dominant language among her siblings and peers was English during her high school years.

For academic purposes, Jendy states that she is much more proficient in English because she has never received formal education in Korean. She explained that she cannot write academic reports or essays in Korean and has difficulty reading technical books and classical literature, but has no problem reading or writing informal and personal messages or letters. Jendy first started using the Internet two years ago to create personal sites for social networking purposes. She originally learned about another site that had similar features from a friend in Korea; however, when that particular site started to charge their users about a year and a half ago, she transferred over to Cyworld. She logs on daily to see who has visited her site and to go to her friends' and families' sites to view their current postings.

I had several opportunities to converse with her in Korean. As a native speaker of Korean, I assessed her pronunciation and intonation patterns to be near native-like. She was also familiar with popular phrases and vocabulary currently used among Korean young adults and was conversationally very fluent. However, she had some difficulty with proper usage of honorifics and did not use any formal academic language in Korean during our interactions. Her oral proficiency showed sufficient structural accuracy and vocabulary which would enable her to participate effectively in most conversational situations. She also demonstrated native-like proficiency in English, although she had a distinct accent, which she claims is the product of the English she learned in Saipan. Assuming that she would be more fluent in English as is typically the case of heritage language learners, I initiated the conversation in English. Once we became more comfortable with one another, she started to code-switch, interweaving Korean phrases and words as she was responding to my interview questions. I also had the opportunity to observe her typing comments onto her blog and to hear her read aloud excerpts from her blog. Her typing and reading skills in Korean were very fluent, and it was evident that she has had much practice in both skills.

Lizzy

Lizzy is a 19-year-old sophomore at a small college in central California, where there are hardly any other Koreans. She mainly associates with other Asian Americans at her school. She was born in Seattle, but moved to Saipan when she was two years old. She grew up with two older sisters, who were proficient in English by the time she started to produce her first words. In contrast to her older sisters, who were only exposed to Korean before they started school, Lizzy heard both Korean and English in the home; however, Korean was the main language of communication

between her parents and the children. When Lizzy started school, there were many Korean children who were English-dominant speakers in Saipan. Although she was conversationally proficient in Korean, she stated that outside of the home, she used English. Her mother taught her the Korean alphabet by teaching her to read the Korean Bible when she was 9 years old. Since then, she has had no other form of instruction to develop her Korean proficiency.

She moved with her sisters to a small town in central California when she was in junior high school. Soon, her sisters began to use more English, and the only source of Korean input was from her parents, who traveled back and forth from Saipan. She feels that her Korean proficiency started to deteriorate at that point. She explains:

> Basically, to tell you the truth, I'm more comfortable in English than in Korean, because since I came to college, there are no Koreans around me that I can talk to or they all speak English, so it's harder for me to be exposed to Korean … basically I'm one of the Koreans who's considered to be good in Korean. (L)

In order to help Lizzy regain her fluency in Korean, her parents require her to speak in Korean to them. She realizes that her Korean proficiency needs to be further developed, and says:

> I've always wanted to improve my Korean, but I've never thought about taking a Korean class, because my school doesn't offer Korean or any other Asian language except for Japanese. Also, I think that I can do it by myself by doing the same routine like talking to my parents, reading the Bible in Korean, reading books that I've read in English in Korean. If I make an effort, I can do it by myself. (L)

For Lizzy, maintaining Korean was a matter of the degree of effort she puts into the process. She describes her oral fluency in Korean to be "okay". She has been going to Korea every summer since she started college, and states:

> But every year, it seems like I've been getting worse and worse. Whenever I go [back to Korea], my friends tell me, your Korean got worse. (L)

She commented that her friends in Korea told her during her last visit that she sounded like she was literally translating from English when she spoke Korean. She claims to be least proficient in her writing skills, especially in terms of spelling, word spacing, and grammar.

Lizzy's sisters first introduced her to the world of online Korean through Cyworld a year and a half ago so that they could communicate with her on a regular basis. Currently, one sister lives in Korea and the other sister attends college 150 miles away from where she lives. She reports her participation to be irregular, but frequent:

> In some weeks, I'm really into it, the next three weeks I'm like school, school, school. I use it [cyworld] a lot even through I don't upload new messages. I go and read what every one else is up to. You want to catch up with your friends, see what they're doing. (L)

During our conversations, Lizzy communicated mainly in English and appeared to be very comfortable expressing herself in English. In contrast to Jendy, who stated that code-switching was the most comfortable way to express herself, there were only a few instances when Lizzy code-switched, stating that it has always been very difficult for her to go back and forth between Korean and English. According to the siblings, Jendy possesses greater proficiency in Korean than Lizzy. Jendy describes her sister's proficiency in the following way: "My sister, she's not really good at it. She speaks it but sometimes she speaks like a mom's style. She sounds like an *ajumma* ('older married woman'), you know, how Korean Americans sound exactly like their mothers (laugh)." From my interactions with Lizzy, it was evident that she possessed enough proficiency in Korean to be able to converse in simple informal situations, but appeared much more comfortable speaking in English than in Korean. Her reading aloud skills and

typing skills in Korean were not as fluent as Jendy's. She was slow and careful in her typing and often had to backspace to retype what she had written.

The following sections will present the results of the content analysis of the interview data. The data will be organized into why and how Cyworld is used for the purposes of heritage language maintenance and learning; heritage language learners' perspectives on the linguistic and pragmatic conventions of Korean electronic literacy practices; and the perceived effects of electronic literacy on heritage language maintenance.

Motivations for Online Participation

In light of Warschauer's (2000) argument that one possible role of technology may be to increase the will of individuals to develop and maintain their heritage language proficiency, participation in Cyworld appears to have provided the incentive and the opportunities to keep both Jendy and Lizzy connected with the language. Both informants were situated in an environment where there were limited opportunities to interact in Korean. They were also mindful of how the lack of a vibrant community of Korean speakers was a determining factor in their shift to English. However, through Cyworld, they state that they were able to create and broaden their social network of Korean speakers in an easily accessible way:

> I found my elementary friends that I knew when I was 6 in Korea, and so I guess that is the advantage … connecting with all these people, even people that you don't know, people you know you can find. I got to know new people … they would come to my page … people would come randomly, see my page and then ask to be my friend. (J)

Jendy's Korean social network grew from 5-6 friends to 40 close acquaintances, of whom one third are monolingual Korean speakers. In contrast, Lizzy, who was not as comfortable and literate in Korean, limited her interactions to her siblings and her friends who have returned to Korea. By interacting with those people that are close to her and know her well, it seems that Lizzy created a safe place where she could experiment with language without being "judged" about her abilities, intelligence, or character. Through Cyworld, her social circle of Korean speakers increased from 2-3 to 15-20.

Jendy saw the online forum as the ideal opportunity to experiment with language. As an adult, it may be somewhat face threatening to openly admit lack of knowledge about something that one is expected to know. The wide range of creativity accommodated by electronic literacy seems to alleviate the pressure for these two individuals to produce the correct forms of the language. They expressed that they could make errors and still save face:

> In one way, it's a practical means of connecting with people, learning vocabulary, but on another level, it's more psychological. It's an awesome tool to try out language without being accountable, or seeming like you're illiterate, or… it gives me the freedom to do it because you won't be embarrassed whether it's right or wrong … like most of the Korean-American group, they don't speak Korean because they have a funny accent. Most of the time, it's because they're embarrassed, they don't like to be exposed … but through the internet, it gives you the freedom not to be embarrassed or have the pride, you know it helps, I think. (J)

> They would be like hmmm … what is that one? I would say it's my way of doing things, then I take it as a laugh and never use it again. But I would never admit that it was wrong. It really helps you protect your 자존심 (*caconsim* 'pride'), you don't have to admit that you're wrong. (L)

Cyworld also provided a rich forum to keep connected with popular Korean culture, including popular expressions, current fashion trends, as well as links to popular movies, television shows, celebrity news, and popular music. Both Lizzy and Jendy mentioned that Korean pop culture is becoming widely known not only among Korean Americans, but among other Asian groups as well. They claimed that they felt obliged to keep up with current news, because they were seen as the 'experts' on Korean-related topics in their local communities:

> Also I tend to go looking into more the things about Korean actors and actresses. A lot of Chinese here are so interested in Korean and Korean singers and actresses, so they ask me about them all the time so I have to keep up with the current stuff. I feel obligated to look into it and know about it. (L)

> So anything that you would be interested in there would be someone that would be interested too in Cyworld, you can kind of communicate like 주고 받고 (*cwuko patko* 'give and take') …. My friends always ask me about Korean music and celebrities and it's easy enough in Cyworld to read about the latest scoop on things. (J)

Sites such as Cyworld provide individuals with a personal space to exchange information about their lives and a forum to explore one's connections to the language and culture. Lizzy and Jendy seem to have control over what information they access, the connections they make, and the language they use. The degree to which they engage and attach themselves to the language and culture appears to be a function of how central "Koreanness" is positioned as a marker of their identity. According to them, Lizzy and Jendy's decision to participate in Cyworld was in part to be able to closely identify as Korean and also to gain the sociopsychological support from members of the social network that keep their connection to their "Koreanness" alive.

On the other hand, participation in Cyworld seems to carry a social stigma among Korean-American peers. Jendy and Lizzy report that other Korean Americans view "Cy-ing" (the act of using Cyworld) as "Fobby" behavior, and so they are categorized by their peers as FOBS. FOB is an acronym that stands for "Fresh Off the Boat," and in the social circles of young Korean Americans, it refers to displaying qualities that align one with being native Korean (e.g., speaking Korean, engaging in Korean-related activities such as watching Korean TV or using Korean-based Internet sites, and dressing in ways that are in style in Korea):

> … the more Korean you are in the group, people refer to you as a FOB. Before coming to college, there were barely any Koreans where I lived, so I spoke English all the time and it became more comfortable to speak in English, but when I got to college, they would label me as a FOB instantly because of the way I dressed and because my Korean was still better than the others. And so I started identifying myself more as a FOB and started hanging around other FOBS and now I feel like I'm learning more Korean than English and Korean has become more comfortable, because I'm interacting all the time in Korean. I feel like I'm better in Korean now than before. (J)

> I think because of society, it's really hard for second generation to be cultured. Then they will be categorized as a FOB. You're doing this [using cyworld], you're such a FOB and we don't wanna be categorized as a FOB. What my sister and I, what we have in common is like we have separate personalities, but we keep up with the Koreanness or keep up with all the traditional things, we don't care I mean if people say you're such a FOB. I don't care saying I'm cultured, but I get annoyed … but it's not that I care but when I talk to other people, they really got the most pain out of being called FOB. (L)

It was evident from their responses that overtly displaying characteristics and actions connected to "Fobby Koreanness" is not favorably viewed by their other Korean peers at school. Jendy seems to have made a decision to position herself as a FOB, because without Korean, she states that she sees herself as not having any cultural affiliation. Lizzy, on the other hand, could not take such a strong position, because she did not fully align herself with the Korean community due to her lack of proficiency in Korean. Moreover, Lizzy is situated in a social context and physical space where venues to align herself with the Korean community are rare, and thus, the need to express her Koreanness may not have been as great as Jendy's. Although Lizzy states that she does not care what others think, it was obvious that the negativity attached to the label caused her and her peers much pain. It seems quite possible that such social stigma, in addition to other social and personal constraints such as lack of Korean proficiency or interest, can hinder other heritage language learners from wanting to actively participate in Cyworld or other Korean-based sites.

HERITAGE LANGUAGE LEARNERS' ELECTRONIC LITERACY PRACTICES IN KOREAN

The informants reported that they use Internet language to express their personality and their emotions. By playing with the sentence endings and using emoticons as well as abbreviations, the writing process online has become more efficient for them. The flexibility of language forms found in electronic literacy practices opens opportunities for learners to experiment with language forms to creatively express themselves. Jaffe (2000) emphasizes the importance of considering the "creative use of nonstandard orthography in the affirmation of subcultural identity" (p. 499).

(3) Lizzy (10/20/04)

언냐[4]~~~[5] guess what~~~
ennya
'Older Sister~~~~ guess what~~~'

나 싸이 복귀**해쪄**.. ㅋㅋ ㅡ_ㅡ;;[6]
na ssai pokkwihayccye
'I started using Cyworld again'

지금 주희만나러 보스턴 쪽에 와있어~
cikum cwughuy mannale posuthen ccokey waisse
'I'm in Boston now to visit Juhee'

i even met joe, 완혁오빠
          wanhyuk oppa
'I even met joe, older brother Whanhyuk'

it feels really good to see my old friends

언니는 잘지내**구 이쪄**??^^[7]
enninun calcinaykwu iccye
'Hope all is well, sister'

Lizzy starts the message in (3) by shortening, 언니야 (*enniya* 'big sister') to 언냐 (*ennya*), which she claims was done to sound cute and feminine. She continues to use this tone by playing with the ending of the next sentence. Instead of using the standard spelling of 했어 (*haysse* 'to do'), she used the form 해쪄 (*hayccye*) as a phonological approximation of a young child's speech to sound cute (similar examples were found in Lee, 2004; Kim & Ra, 2003; Noh, 2000). The same strategy is repeated in the last line as well (e.g., 이쪄). Lizzy states that she would "be out of place and weird if you don't use Internet language because then you are not categorized as cool." She recalled that when she used to write 하 하하 (*ha ha ha*), her friends told her it was not cool and to use ㅋㅋㅋ (*k k k*) instead. Jendy further elaborates:

> You can kind of tell what kind of people they are by what kind of internet language they use. Although I use internet language, I wouldn't go way into the extremes I couldn't do 오파 (*opha* 'older brother'), for ,오빠 (*oppa*). 하이루 (*hailwu* 'hi') is kind of out of date, elementary school kids and junior high kids still use it. It sounds really gay. (J)

Jendy is much more articulate in her electronic text, where her sentences read fluently as if she were speaking orally. Her message in (4) also shows how she plays with the sentence endings such as 사야쥐 (*sayacwi* 'want to buy') for 사야지 (*sayaci*) to convey a tone of "cuteness" (Noh, 2000). She also uses phonological approximations of the conjunction 두 (*dwu* 'and') for 도 and 마니 마니(*mani mani* 'many many') for 많이 많이 (*manhi manhi*) as well as

contractions of 넘 (*num* 'very, too') for 너무 (*nemwu*) and섬(*syem* 'test') for 시험 (*si hem*), which are commonly found features in the electronic texts produced by native Korean speakers.

(4) Jendy (10/24/04)

아직**두** 안시들구 **넘** 이뿐꽃…
aciktwu ansitulkwu nem ippwun kkoch
'The pretty flower that hasn't wilted yet…'

that I bought for myself. 캬 캬 캬 캬
                                    kya kya kya kya
'that I bought for myself. (laugh)'

섬 끝나**구** 자네랑 파머스 마켓 가서
syem kkuthnakwu caneylang phamesu makheys kase
'After the test, let's go to the farmer's market.'

더 **마니 마니** 사야쥐
te manimani sayacwi
'I want to buy many many more [flowers].'

These examples were instances of deliberate deviations from the standard forms that conform to the writing norms of the online users in their groups. However, in other instances, the informants admitted to having difficulty deciphering which words were spelled correctly because the phonetic approximation of the spelling is so similar to the way they pronounce the words. For example, Jendy describes an error she found on her sister's site, which she claims was unintentional.

차를 붇는다 (*chalul pwutnunta* 'to pour tea' intended but used the word for 'swell up', which sounds the same phonetically), she didn't do it on purpose, she didn't know, there was no reason to spell it like this, it doesn't add any effect of shortening it in any way. Also, it doesn't make sense because this word means to swell up, to pour sounds similar but should be spelled, 붓는다 (*pwusnunta* 'to pour'). (J)

In describing her experiences with the Korean electronic text, Jendy goes on to say

I can tell that it is wrong. I can tell, but I'm used to it. Korean Americans who aren't used to it write awkwardly … that is kind of different from internet writing. Internet writing is different, but I think there are rules to it … you try to make it short and simple or make it sound a certain way … cute, feminine, tough, older. Korean-American writing when it is wrong, when you just try reading it , it sounds awkward like for 하구나 (*hakwuna* 'it is like') some Korean Americans would write it 하고나 (*hakona*), which doesn't sound as natural. (J)

Lizzy had a much more difficult time distinguishing between intentional Internet language use and errors. The examples shown in (5) are some instances where Lizzy thought she was using the proper spelling (as shown on the left side of the arrow), but were unintentional errors:

(5) a. 좋운 남자 → 좋은 남자
        cohwun namca   cohun namca
        'Good man'

b. 내가 않 이뿌면 →   내가 안 이쁘면
    naeka anh ippwuayen   naeka an ippumyen
    'if I am not pretty'

In examples (5a) and (5b), replacing the ㅡ (*e*) with ㅜ (*wu*) in 좋은 and 이쁘면 did not shorten the word or add any stylistic effects. English speakers have a very difficult time differentiating between the ㅡ and ㅜ sounds in Korean. Continued use of incorrect orthography raises concern from a language developmental perspective, in that the learner may not acquire a complete understanding of the spelling conventions if electronic texts are the only forms of literacy exposure (Gonzalez-Bueno, 1998; Noh, 2000). There needs to be some mechanism in place such as formal instruction that assists learners in understanding the differences between socioculturally acceptable uses of the language online and standard literacy practices offline. Example (5b) is also an instance of a form that native speakers would not use online. It is an unintentional error made by Lizzy, which is an assessment based on the fact that the use of the more complicated form of 않 (*anh* 'not') for 안 (*an*) did not shorten the word or add any stylistic effects since ㅎ is silent.

Although the informants claim that there is much liberty in writing styles and ways of spelling, there seem to be rules that distinguish intentional deviations from unintentional errors within electronic literacy practices. Similar to the characteristics of electronic literacies in English (Barnes, 2003; Herring, 2003; Murray, 1991; Gains, 1999; Song, 2002; Sproull & Keisler, 1986), deviations from standard forms in Korean electronic literacy practices are also motivated by one or all of the following: to truncate or abbreviate for economic purposes of typing, to produce conversational stylistic effects, and/or to mark one's membership by sharing in a secret code agreed upon within the smaller community of users.

There were also many instances where both English and Korean were used. Lizzy had many more postings that were completely in English in comparison to Jendy who hardly had any. When I inquired about when they used English and/or Korean, Jendy stated that it depended on the effect she is trying to produce and with whom she is corresponding. When she wants to represent herself online as a Korean American, she states that she uses both Korean and English. However, for Lizzy, English use was compensatory rather than an expression of textual stylistics:

> If I can't write it in Korean, it's so obvious that I write it in English, I think I wrote nearly everything in English. The title and little summary part, I write in Korean, but everyone would reply in Korean so I write back in Korean. It really depends what environment I'm in. (L)

As bilingual speakers, both Jendy and Lizzy strategically used their linguistic skills in the two languages not only to carve out a unique identity for themselves online, but also as a means of participating in Cyworld. The learners were aware of the norms and structures of electronic literacy practices and, within the boundaries of expectations, managed to find various ways to experiment with their language use as they develop their Korean proficiency.

EFFECTS OF HERITAGE ON LANGUAGE MAINTENANCE

When the informants were asked to reflect on how their participation in Cyworld had affected their heritage language maintenance process, they both commented that their participation in Cyworld led to ample opportunities to practice Korean, which resulted in improved proficiency. They acknowledged improvements in their writing abilities in terms of vocabulary acquisition and syntax as well as dexterity in their typing skills in both Korean and English. The informants' comments underscore the fact that being able to type in two languages is an important bilingual skill in our technological age. It requires cognitive flexibility and dexterity to automatically reposition the fingers on the keyboard as one code-mixes from English to Korean and vice versa.

Secondly, frequent engagement in electronic literacy practices also appears to have improved the informants' oral proficiency. Jendy states:

> By practicing and reading the phonetic ways that people write online, like the way I speak Korean has changed a little. People could always tell that I became so much better in Korean now. Like in fluency and like even understanding jokes, subtle jokes, I would see it a lot online and so I would be able to notice it and laugh and they would be like, you understand that? (laugh) …. You learn the flow of language when you read the internet Korean. I think that is better because that is important when you are speaking Korean. Nowadays speaking and that kind of thing is more important than being grammatically correct …. (J).

The features of orality commonly found in electronic texts seem to have assisted Jendy in developing more native-like pronunciation and fluency in her flow of speech. Jendy reported that other Korean speakers have told her that her oral speech has become much more fluent and natural since she started engaging in electronic literacy practices. Gonzalez-Bueno (1998) similarly found that students who took advantage of the opportunity afforded by the electronic medium developed conversation-like language, which was difficult to develop in class because of shyness or fear of making mistakes. Although the validity of Jendy's claim must be empirically tested, her report offers insights into the broad effects of electronic literacy on overall language development.

Thirdly, the informants' willingness to participate online was driven by the lowered inhibition they felt about exercising their literacy skills online. What they observed were forms of electronic text that deviated from the standard forms used by native speakers of Korean. They reported that it gave them courage to participate as a non-native speaker and the space to make errors without being branded as an illiterate or incompetent Korean speaker. Both Jendy and Lizzy positioned themselves among their local friends to be very Korean and highly proficient in Korean, and, thus, exposing the limitations of their proficiency was a face threatening act for them. However, as the following quotes indicate, the non-standard ways of language use by other native speakers served as a front for them to appear as if they were intentionally deviating from the standard conventions as is commonly practiced online:

> I would feel more comfortable because they would think I'm writing using Internet Language. For example, I don't know all the rules for proper spacing, but that's okay because the internet people take it as typos (laugh) and so there is room to make errors and still seem smart … like I could pass as a native speaker. (J)

> Most of the time its easier for me to write online because there is no pressure of having to write the proper spelling, because then I'm not embarrassed in front of my friends who are better in Korean. It's especially embarrassing when my friends that are younger than me correct me when I make a mistake. You feel more comfortable writing it because whenever you misspell something, you can say ooh it's because it's the internet or it's a typo. (L)

A learning strategy for the heritage learners online is to experiment with different ways of language use. They reported that they try out different expressions, words, and spellings, and then wait to see what the reaction is. If the reaction is negative or other users point out the inappropriateness of the usage, then it is not used again. On the other hand, if the other users appear to have understood the message, they continue to use the form.

Fourthly, the connection to friends and family provided a comfortable environment to receive explicit instruction or feedback on one's writing. Lizzy recollects her friend's attempt to help her learn Korean through the Internet:

> I had this one friend in Korea. He was about 4 years older than me. I would write to him online and he would always correct me in every single error. Some were errors but some were intentional misspellings and he corrected both. At first it was like oh c'mon, it was like nothing … I just started to become more aware of what I was typing. I think it was because he knew I wasn't exposed to Korean very much. He said

you know it's cool and funny to hear that [Lizzy's Korean internet language] but when you're older and you have kids, or when you're older and you have to talk professionally, he said it's just not very smart looking or intelligent so he started fixing me, grammar, nouns, verbs. (L)

At first, Lizzy stated that she was somewhat embarrassed by the public correction of her language use, but now as she thinks back, the explicit and immediate feedback helped her become more aware of her language use and her need to improve her proficiency. She suggests that heritage language speakers should openly ask for help and feedback from members of the social network. Because being corrected in a public domain may be face threatening, she recommends the use of the messenger function, which can privately send messages to one individual.

Finally, the process of using electronic literacy practices to interact with a social network of Korean speakers nurtured and sustained the feeling of being connected to a wider community of Koreans, as was similarly found in Miller and Slater's (2000) study of diasporic Trinidadians. This was extremely important to both informants, because they were placed in a physical location that offered limited opportunities to use Korean.

If the Internet wasn't around, I wouldn't be speaking Korean at all, and I would be categorized as those people who don't speak Korean like half of my friends are categorized as twinkies …. It's just fun to know that you can actually talk to other Koreans any time you want to. (L)

… things like cyworld this is a way to connect to Korea and know what's going on, so I think if I didn't have the cyworld homepage or didn't do something like this, I would become more and more Americanized. Further I go away from these things, I would become more Americanized. (J)

The psychological connection and support from the wider online Korean community provided these informants with a strong sense of identity that was not available to them in their immediate surroundings. Their heightened sense of belonging to the Korean community was a main source of their willingness and desire to maintain and further develop their heritage language skills. This would not have been possible without the Internet for these two individuals.

Despite the positive influences of electronic literacy on the heritage language maintenance process, the informants also mentioned the potential downsides of electronic literacy on their language maintenance efforts. First of all, they both admitted to having increased confusion about correct and standard forms of the language, because they commonly see variations in spellings of the same word or phrase. For example, Lizzy states:

The 받침 (*patchim*) is so confusing, sometimes I can't tell whether it is right or wrong and also, even the words that I knew, sometimes I get confused because I see it the wrong way so often on line and when I try to write a letter to my parents, I get confused. (L)

Thus, heritage language learners may need additional support to help them distinguish between appropriate electronic text forms and standard forms of the Korean language. Support can come in several forms, such as explicit explanations of the ways in which certain words are used or spelled by the native speakers in the community, or by enrolling in language courses where the grammatical, lexical, and pragmatic explanations of language use are a part of the curriculum. The Internet can play a significant role in providing appropriate and effective contexts in which languages can be experimented with and practiced, which can facilitate the learning process. However, learners may further benefit from additional formal instruction that will help them understand the differences between online, playful language use and offline, formal literacy practices to be able to strategically utilize the linguistic and pragmatic norms of both online and offline communities.

Another difficult issue that Jendy has faced was the lack of quality control of language use and accountability of information presented online:

> One worry I have is that for those Korean Americans that are not too familiar with the Korean culture, Cyworld is open to all different kinds of people and things, and if they see something that turns them off, they might think that all Koreans are like that and get turned off from finding out more about Korea and learning Korean, but this can happen offline as well. (J)

Jendy's concerns are real in light of the adverse effects that certain materials might have on emergent heritage language learners who lack the experience or knowledge to filter through the information. Jendy explained that her Korean-American peers are quick to pass judgment about Koreans and Korea, and often formed stereotypes that did not reflect the reality of the situation. Further research is needed to examine the scope and nature of the effects of information attained online on the formation of attitudes and beliefs of heritage language learners toward their heritage culture and language. Although we need to find ways to maximize the benefits of technology on the maintenance process of heritage language learners, we also need to be cognizant of the possible pitfalls and dangers of its use.

CONCLUSION

With the reality of our current information age, our conceptualization of communicative competence and language proficiency among heritage language learners will need to be extended to include knowledge of the forms and norms of electronic literacy practices. In the cases of the informants in this study, electronic literacy practices enabled them to create social networks with other Korean speakers, which allowed these heritage language learners to practice and use their Korean for authentic purposes. Perhaps more importantly, such practices provided a means to connect with and to express their cultural identity. The sociopsychological support found in such networks was a major factor in shaping their desire and will to develop and maintain their heritage languages. The flexibility and creative means of expression commonly found in electronic literacy practices also lowered their inhibition about writing in Korean. Therefore, the lack of perceived pressure to produce correct spelling and forms of Korean gave these learners the confidence and space to experiment with and engage in literacy practices. The take up of such opportunities not only reinforced their language skills, it also provided the motivation to continue using and developing their language skills.

Opportunities to engage with other native speakers online on a regular basis provide an optimal language-learning environment from a sociocultural perspective. However, there are many individual and situational constraints that can shape the extent to which an individual can participate online in their heritage language. For example, proficiency in the language, willingness to invest in the time and effort to engage in online activities, and the initial knowledge of how, where, and with whom to engage online may be critical factors that govern whether one can participate in online communities. These factors are likely to play a significant role in the individual experiences of heritage language learners in their experiences interacting with electronic literacy.

In conclusion, electronic communication holds significant promise for heritage language development and maintenance. Engagement with Korean-based Internet sites continuously provides a forum and a goal to engage in purposeful communication, which may lead to increased literacy proficiency and greater attachment to the heritage language and culture. This case study of these two individuals was a starting point in examining the meaning and function of electronic literacy from the perspective of heritage language learners. However, the scope of this study did not cover aspects of actual language development and how the use of electronic literacy shapes its trajectory. Longitudinal studies on the developmental process of heritage languages in relation to the learners' involvement with electronic literacy are needed. Furthermore, future work needs to capture the diversity of heritage language learner experiences in developing and maintaining their heritage languages by attending to the personal, sociocultural, and political contexts and constraints that shape their interactions and motivations in engaging with electronic literacy through the Internet.

NOTES

1. "Standard" language refers to the prescribed forms and rules of pronunciation, grammar, lexicon, semantics, orthography, and language use that are taught in formal schooling.It is viewed as "educated" or "correct" speech by native speakers, and it is free from regional marking. "Non-standard" language refers to forms that deviate from the "standard" (Androutsopoulos, 2000).

2. Romanization of the Korean syllables follow the Yale transcription system.

3. The names of the informants are pseudonyms.

4. Bold font is used to highlight the specific word or phrase under discussion for the reader's convenience.

5. "~~~" is used to represent an elongation of the final sound of the word, which adds an effect of cuteness.

6. ㅋㅋ is used to represent the sound of laughter and the emoticon ㅡ_ㅡ;; is used to symbolize a sweating face to mean that something took a lot of effort to get done.

7. ^^ are the graphic representation for smiling eyes.

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