The Influence of Reading Bilingual Newspapers on Readability in Ethnic Chinese Descendant Readers: A Case Study with the Seattle Chinese Times

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Abstract

The Influence of Reading Bilingual Newspapers on Readability in Ethnic Chinese Descendant Readers: A Case Study with the *Seattle Chinese Times*

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The author conducted a case study to explore the influence of reading the *Seattle Chinese Times* on ethnic Chinese descendant readers’ reading ability. Four interviewers carried out Qualitative Reading Inventory-5 (QRI-5), reading habits questionnaires, and personal interview questions. Analysis finds reading the bilingual newspaper is conducive to improvement in the areas of reading comprehensibility and vocabulary, while impeding these readers’ spelling development. This difference can be accounted for by readers habitually start by reading the news in Chinese first and then continue on to read the English news. In this manner, readers involuntarily employ residual reading habits of recognizing the shape of Chinese characters when transitioning to reading English news, instead of attending to the letter-sound relationship, which is important for spelling ability. The result indicates that reading the bilingual newspapers as a pastime can benefit minority populations’ vocabulary and comprehension ability, but barely result in much of a positive influence in spelling.
Introduction

The Asian-American population is the fastest-growing ethnic population in the United States. In 2010, 5.6% of the total U.S. population self-reported as Asians, a 45% increase from 2000. In comparison, the total U.S. population grew by 9.7%, from 281.4 million in 2000 to 308.7 million in 2010. Among Asian-American subgroups, the Chinese-American group was the largest, with 3.3 million members compared to the larger category, Asian-Americans, which total 14 million. Chinese is the third most common language spoken at home after English and Spanish in the U.S., with at least 2 million speakers, which comprises 4.5% of all non-English language speakers (Hoeffel, M. E., Rastogi, S., Kim, O. M, & Shahid, H., 2012). When we narrow our focus to just Washington State, we can see that the Chinese population ranks among the top five Asian American populations in the large metro areas of Seattle, Tacoma, and Bellevue (Figure 1, Hoeffel et al, 2012).

Washington State consists of 7.2% Asians, which makes it fifth in Chinese populations in the United States after California, Hawaii, New Jersey, and New York (Hoeffel, M. E. et al., 2012). Allen Van Cranebrock (1995) indicates, “Asian, together with Pacific Islanders, constitute the largest minority population in Seattle, accounting for 12% of the city’s 525,000 residents. Their numbers are growing in nearby smaller cities and suburbs as well (Cranebrock, Allen Van, 1995, para. 8)” Among the Seattle Asian population, Chinese immigrants represent the largest proportion of ethnic minority group in Seattle. Chinese immigrants are the largest population of Asians in the metro areas in Washington State, totaling 0.1 million Chinese-Americans concentrated in Seattle, Tacoma, and Bellevue (The Greater Seattle Datasheet, 2011). The International District has traditionally served as a reception area for waves of Asian immigrants. Known as Chinatown (Hou, J. & Tanner, A., 2002), this area has the largest Chinese population in Washington State.
However, at least half of Chinese-Americans in the United States have difficulty using English, according to the 2011 U.S. Census Bureau (Ryan, Camille, 2013). Due to the discrepancy in the language systems of English and Chinese, Chinese immigrants are at a tremendous disadvantage in terms of gaining English fluency when compared to other immigrants whose native languages share English’s alphabetic language system (Perfetti, C. A., Liu, Y., & Tan, L. H., 2002). When populations of Chinese immigrants increase in an area, it is important to explore their reading ability and reading habits, as those measures are correlated to Chinese immigrants’ acculturation; the degree of immigrants’ reading ability is pertinent to their acculturation to mainstream culture in the United States (Jia, Gottardo, Koh, Chen, & Pasquarella, 2014). Without assistance in attaining English skills, their English deficiency results in marginalized of these populations. Without the necessary fluency, they cannot acculturate to American society. Reading the bilingual newspaper is one of the most
important recreational activities among Chinese immigrants. Reading the free bilingual newspaper is one of pathways for them to gain exposure to English. Awareness of the culture’s reading habits along with the reading strategies they use during this activity is indispensable knowledge for those who wish to assist Chinese immigrant adolescents with their reading ability.

There are various newspapers targeting Chinese immigrants in the greater Seattle area, including newspapers published solely in Chinese such as Seattle Chinese Post, Washington Chinese Post, The China Press, and Asia Today. There is still one newspaper, the Seattle Chinese Times, which provides both Chinese and English news and articles. Most of the newspapers listed above are available at no charge and placed on the shelves of Asian supermarkets, restaurants, and art galleries in the International District, where customers can readily pick them up. Through interviewing four ethnic Chinese descendants currently living in the Washington State, who regularly read the Seattle Chinese Times, this article reveals their reading habits and reading strategies employed, and how those impact and their reading ability in English. The utmost target is to explore whether reading the bilingual newspaper—the Seattle Chinese Times—influences ethnic Chinese immigrant descendants’ reading ability, in which case the bilingual newspaper would be considered a tool for indirectly improving Chinese immigrants’ English.

**Background**

According to the U.S. Census Bureau, at least 50% of Chinese-Americans cannot speak English “very well.” In addition, only 25% of Chinese-Americans speak English “well,” 25% of Chinese-Americans speak English “not well,” and nearly 10% Chinese speak English “not at all” (Figure 2, Ryan, Camille, 2013). Many immigrant adolescents—and Chinese immigrants are no exception—have mentioned general barriers to acculturation include being unable to
communicate with people outside of their native culture (McBrien, 2005). Evidence shows that oral language ability—speed, prosody, and accuracy—plays a critical role in Chinese English learners’ reading performance and skills (Gottardo, Yan, Siegel, & Wade-Woolley, 2001). Additionally, immigrants’ reading ability is correlated to their cultural adaptation to the mainstream culture and society they currently live in, so that people with deficient language skills in their new countries suffer from high levels of alienation (Jia et al., 2014; Nicassio, 1983). Bridging immigrants’ English gap will assist them with acculturation to the U.S.

![English-Speaking Ability for the Top Ten Languages: 2011](image)

Source: U.S. Census Bureau, 2011 American Community Survey.

Figure 2. English-speaking ability for the top ten languages: 2011

To improve reading and comprehension ability, Chinese immigrants need to confront the challenge of the dissimilarities between the logographic and alphabetic system of Chinese and English respectively. This is because reading is a process of recognizing the words, sentences, and convention of a specific language. Chinese language is based on a logographic writing system, which is in sharp contrast to alphabetic systems. Chinese language relies upon its
graphic units of independent ordered stroke sequences from left to right, top to bottom, and even inside and out; In contrast, English, as an alphabetic system, relies upon units composed of graphemes (Perfetti et al., 2002). To comprehend the English articles, Chinese immigrants need to code-switch in order to transition to English from Chinese. Code-switching is “an umbrella term that includes any linguistic alternations within or beyond a sentence (Ge, 2007, p. 10).” When reading the bilingual newspaper, the support of their first language lessens the difficulty Chinese immigrants experience with code-switching between two distinctly different language systems. The bilingual newspaper is a medium which provides the texts written in both the first language (L1) and the second language (L2) to Chinese immigrants.

One of several free Chinese-English newspapers in Washington State, the Seattle Chinese Times, connects ethnic Chinese descendants to news about American culture, economy, and society, while also supplying Chinese news. The Seattle Chinese Times publishes weekly Chinese-English editions in the Greater Seattle area, distributed through the International District of Seattle, Shoreline, Northgate, Lynnwood, Edmonds, Bellevue, Factoria, Redmond, Renton, Kent, Federal Way, Pierce County, Tacoma, and Portland, Oregon (“About Us,” n.d.), where there are high concentrations of Chinese immigrants (US Census Bureau, 2011). Based on the data from the Seattle Chinese Times, a 10,000 strong weekly circulation is delivered to prime businesses and residential locations in the Puget Sound Region, which is centered in Seattle and consists of nine counties, two urban center cities, and four satellite cities (Scigliano & Thompson, 2000). Annually, 520,000 newspapers are printed. The Seattle Chinese Times views their mission to “deliver news and entertainment to our community” and “support our state, support our Chinese and Asian Community, promote our culture, and maintain a quality media for our readers and advertisers” (“About Us,” n.d.). Aside from delivering the weekly news to ethnic Chinese descendents, the most conspicuous and characteric feature of the Seattle Chinese Times is that
the paper publishes news and articles in both English and traditional Chinese. This provides the ethnic Chinese descendants readers an opportunity to read the English news in the bilingual newspaper.

**Research Questions**

Thus, the present study was designed to answer the following questions. First, what are readers’ reading habits while reading the bilingual newspaper? Do experiences of reading the bilingual newspaper positively add value to their reading ability in terms of vocabulary, spelling, word identification, oral language, and reading comprehension? In particular, what kinds of reading strategies do they usually use when they reading the English news in the bilingual newspaper? Second, what is the distribution of the regular readers of the bilingual newspaper in the assessment of spelling, word identification, oral reading, vocabulary, and comprehension? Do any common characteristics exist among the distribution of these readers’ assessment? What is the relationship between these readers’ reading ability and its reading habits? Third, does a pattern of reading process exist when readers are asked to ‘speak out their thoughts’ using read-aloud when reading the news in English in the *Seattle Chinese Times*? More specifically, what reading patterns can be observed in the *Seattle Chinese Times* readers? Furthermore, if ethnic Chinese readers were asked to read the bilingual newspaper as a mean of improving their reading ability, would that more be beneficial to their English reading ability than simply reading the bilingual newspaper as either a pastime or way to know weekly news? To my knowledge, this combination of the bilingual newspaper readers’ reading habits, investigation of reading strategies readers use, and the thinking-aloud process of adolescent ethnic Chinese readers has not been used to investigate the impact of the reading ability of ethnic Chinese readers of the bilingual newspaper in previous studies.
Literature Review

Use of the Newspaper and Bilingual Newspaper

The English newspaper is viewed as a valuable instructional tool in teaching reading. The newspaper comes in handy to students and readers of all ages; it is “available in all communities, inexpensive, current, and deals with a wide variety of topics” (Rupley, 1976, p. 1). Relevant research can be traced back to 1972, when Whisler suggested that the newspaper was a resourceful teaching material offering an abundance of interest reading materials for reading teachers, so that they can “adapt the articles, columns, and ads into reading materials for her own unique teaching situation” (Whisler, 1972, p. 1). Wilson and Barnes (Wilson & Barnes, 1975, p. 5) indicate that various teaching methods utilize the newspaper for teaching reading strategies in both elementary and secondary grades, and deem the newspaper as an examination of affective behavior in relation to reading. Newspapers help maintain reading enjoyment to motivate learning and help readers weave meaning from the newspaper on their own. Garrett (1994) employs the newspaper as a tool to create instructional activities, and uses it to help students analyze media messages. Further yet, the newspaper has been viewed as a medium to aid students’ reading difficulties, including easing the problems of reading comprehension, improving reading skills, motivating student reading incentives (Barth, 1975; Johnson, 1973; Salama, 1974), and as an effective way to improve minority students and English language learners’ overall reading ability (Olivares, 1993).

Bilingual newspapers are different from the monolingual mainstream newspapers or tabloid newspapers because they accommodate dual languages and cover minority figures and issues in newspapers. Bilingual newspapers are deemed as a textual medium for primary English users to recognize minorities, and simultaneously an opportunity for minorities to revalue their heritage language (Escalante, 1990). Escalante (1990) indicates that the
publication of the bilingual newspaper on campus serves as a vehicle of language acquisition for non-minorities interested in minority language, also enables ethnic students to value their dual linguistic abilities. Bilingual newspapers also serve as educational reading materials to assist marginalized immigrants to acculturate to the existing mainstream culture. In Israel, the publication of the Hebrew-Amharic-Tigrigna newspaper is under the sponsorship of the Ministry of Education in order to assist the Ethiopian immigrants with their acculturation into Israeli society, while simultaneously strengthening their cultural and language heritage (Baratz, Reingold, & Abuhatzira, 2012). Bilingual newspapers have been deemed not only a local news outlet, but also a medium to intensify minorities’ openness to acceptance of life and inclusion in their existing society. However, few studies have paid attention to the influence of bilingual newspapers on English language learners (ELLs) or non-primary English users, who read bilingual newspapers frequently in their living environment, and are at the same time often expected to read better.

**The Impact of L1 on English Language Learners**

Whether or not the first language (L1) is available to assist with second language (L2) acquisition for English language learners and their reading ability has been debated for years. Much research has already been conducted in the area of L1 interference or assistance with acquisition of the second language. Dulay (1982) explains the interference aspect of the L1 because of the tendency to automatically transfer the surface structure of the first language onto the surface of the target second language. Irujo (1986) provides data indicating that the use of knowledge of ELLs’ first language interferes with their comprehension and idiom processing of the second language. Evidence provided by Bhela (1999) shows the negative effects of L1 on the syntactic structure of a written task of a second language learners. Many researchers provide data indicating that the first language is an impediment to second language learners (Færch & Kasper, 1983; John B. Carroll, John Bissell, 1964; Rod Ellis,
Evidence of the positive consequence of the L1 on the L2 is also found; bilingual students who are successful English readers use their first language to support their English efforts (Allan & Miller, 2005). Ernst-Slavit, Moore, and Maloney (2002) find that the research from the 1980s to 1990s confirm that the more a first language is used as a support vehicle, combined with appropriate second language development, the more ELLs achieve academic success in the second language. According to Bernhardt (1993), L1 literacy is a significant component in the second language reading; the more literate L2 learners are, the higher probability they will use L1 reading strategies while dealing with L2 reading tasks.

Two relevant hypotheses are proposed with regard to the relationship of first and second language acquisition in general. The interdependence hypothesis proposed by Cummins (1978, 1979) intends to account for correlations between L1 and L2 reading ability. The hypothesis indicates that L1 and L2 reading skills share a “common-core proficiency” that the literacy skills in L2 are partly transferred from the prior development of and exposure to literacy skills in L1. The other hypothesis, the threshold hypothesis, proposed by Clarke (1979), indicates that certain amount of L2 language control, ‘language ceiling,’ is required prior to the transition of reading strategies from L1 through L2 can possibly occur. Below the language ceiling, transfer of L1 reading skills to L2 does not occur, which is the so-called ‘short-circuited.’ The two hypotheses indicate that the ability of L1 transferred to L2 can occur with the promise that learners’ L2 ability have already achieved the threshold. Based on these hypotheses, this present study explores the extent to which ethnic Chinese readers’ reading strategies and thinking processes when reading the English news in the Seattle Chinese Times are influenced by the Chinese news, as well as whether or not L1 brings about positive consequences on readers’ reading ability throughout reading the bilingual newspaper, when the readers’ L2 ability passes the threshold already.
Methodology

Participants

The researcher held one-on-one structured interviews with four ethnic Chinese adolescent readers of the Seattle Chinese Times in Washington State. First, participants completed questionnaires so that the researcher could discern their reading habits of the Seattle Chinese Times. Next, each participant went through a reading habits interview with the researcher. The interview questions were designed to know their reading habits of the bilingual newspaper when reading the English news of the Seattle Chinese Times, as well as their responses regarding whether reading the bilingual texts benefit their reading ability in four facets: spelling, word identification, vocabulary, oral language, and comprehension. Specifically, interview questions were designed to further understand how ethnic Chinese readers read English articles and news in the bilingual newspaper, what strategies they would use when they have difficulty in comprehending the articles, and whether or not they would reference the L2 articles for assistance. Third, each of them completed individual assessment using the Qualitative Reading Inventory-5 reading assessment (Lauren Leslie & JoAnne Schudt Caldwell, 2011), informal Vocabulary Assessment (Massey, 2015), Words Their Way Spelling Inventory (Donald R Bear, 2000).

A random sampling method was used for finding the interview participants. First, an advertisement titled “UW Graduate Student Needs Participants to Join the Bilingual Reading Experience Interview and Reading Ability Assessment” was posted in Chinese in the Seattle Chinese Times. Simultaneously, this posting was electronically posted on the Facebook group named “Seattle Used Stuffs Exchange Forum,” where target populations are Chinese speakers in the greater Seattle area. The advertisement and posting stated the qualification for the qualified participants: (1) Qualified participants are readers who habitually read the bilingual
newspaper *Seattle Chinese Times*; (2) Qualified participants are Ethnic Chinese descendants who finished a K-12 education in China (including Hong Kong) or Taiwan; (3) Qualified participants possess a Bachelor’s degree in order to ensure they have basic English ability; and (4) Qualified participants are 20 years old or older. (5) Qualified participants are currently living in the United States. Participants also understand that the total length of time of the background questionnaires, interviews, and reading assessment was one-and-a-half to two hours. In order to protect participants’ privacy and maintain confidentiality, all names of participants are replaced with pseudonyms.

**Design**

Participants were asked to fill in the “*Seattle Chinese Times* Reading Habits Questionnaire” (See Appendix A), and then to complete the “*Seattle Chinese Times* Reading Habits Interview Questions” (See Appendix B). Next, participants were assessed using the Qualitative Reading Inventory to measure their word identification, oral language, and reading comprehension. Then they proceeded to do the spelling assessment excerpted from the Word Their Way Spelling Inventory. Next, the researcher gave the participant one picture to assess their vocabulary ability. Participants were asked to try their best to describe the pictures as many as words as possible.

**Measures**

*Self-report Influence of Seattle Chinese Times on Reading Habits Questionnaire*. This Reading habit interview question was geared toward realizing ethnic Chinese readers’ reading habits of the *Seattle Chinese Times* through quantitative methods, and their perception regarding whether or not reading the *Seattle Chinese Times* benefits their reading ability (See Appendix A).

*Seattle Chines Times Reading Habits Interview Question*. This interview question aimed for having participants speak out their reading habits and sequence when reading the *Seattle
Additionally, the interview followed after participants finished filling out the Self report Influence of Seattle Chinese Times on Reading Habits Questionnaire, so that readers were able to air their opinions and reasons regarding whether or not reading the Seattle Chinese Times influence their reading ability (See Appendix B).

Vocabulary Knowledge Vocabulary Knowledge Assessment was utilized from the handout of Dr. Dixie D. Massey in the Reading Endorsement Program in the University of Washington. The participants looked at one picture each time and tried their best to describe the picture, and then spoke out what the picture was. Participants were encouraged to use as much as vocabulary as they could to describe the pictures.

Spelling. Spelling was measured using the Spelling Inventory Feature Guide in Word Their Way (Bear et al., 2000, p. 322). Although participants had at least a bachelor’s degree the researcher did not know their actual spelling ability, thus, they were asked to attend all levels, from primary, elementary, through upper level. If the researcher found that the participant had difficulty in completing the assigned level, the researcher would switch to the lower level than the level participant was originally assigned. During the spelling assessment, participants had to write down the words that the researcher read aloud; the words were sequenced by difficulty from sample features to complicated derivational patterns in relation with spelling stages.

Automatic Word Identification. Word identification task was adapted from the Qualitative Reading Inventory-5 (Leslie & Caldwell, 2011). Participants were presented with printed words, organized by level from pre-primer I to high school. The result showed which independent level of automatic word identification that the individual participant fell on.

Oral Reading. Oral reading was measured using the Oral Reading Miscues from the Qualitative Reading Inventory-5 (Leslie & Caldwell, 2011). Participants were shown an informational article titled “Immigration—Part I” adapted from the Qualitative Reading
Inventory-5 (Leslie & Caldwell, 2011). The researcher marked any miscues the participants made, such as substitution, omission, insertion, self-correction, reversal, and punctuation ignored. The researcher counted oral reading rate through Words per Minute (WPM) and Correct Words per Minute (CWPM).

Reading Comprehension. Reading Comprehension was measured through “without look-backs” and “with look-backs” using the Qualitative Reading Inventory-5. Considering not exactly knowing participants’ reading level, participants were required to read two passages: “Immigration—Part I” at the upper middle school level, and “World War I” at the high school level.

Results

1. Participants' Reading Ability

Word Identification. The four participants hit the independent level on the high school word list. Coincidentally they all scored 90 out of 100; in other words, each of their total number correct on the high school word identification was 18 out of 20 words. The words they were incapable of pronouncing include ‘hereditary,’ ‘nucleic,’ ‘liberate,’ ‘enzyme,’ ‘retrovirus,’ ‘opulence,’ and ‘armistice,’ which are deemed words having multiple and longer syllables and affixes.

Upper Level Spelling Inventory. As shown in the table 1 ‘Detailed Result of Spelling Assessment,’ participants scored full points in reduced vowels in unaccented syllables in the third stage, the derivational relations. In later phases of the derivational relations section, however, one of them only got 50% of correct answers in features of assimilated prefixes. Another got 57% of correct answers in features of Greek and Latin elements. Although they had significantly high scores in the first part of derivational relations stage, table 1 suggests that: one of them (Christine) was still within the syllables and affixes stage; the other three participants were in the within word pattern stage. Table 1 shows that the spelling ability of
participants does not follow the literacy development in the spelling: from the within word pattern, syllables and affixes, and through derivational relations. Participants scored high in the first stage of the derivational relations; however, they may attain lower scores in later features of Greek and Latin elements, and assimilated prefixes, as well as made more spelling errors in the previous two stages.

**Vocabulary.** None of the four participants used Tier 3 words to describe the picture provided. Three of them used one to two Tier 2 words to illustrate the picture, and 150 to 200 words to describe the picture, except for the second participant, Christine. She used four Tier 2 words and uttered over 300 words when describing what the picture was.

**Oral Reading.** According to the guideline of QRI-5, the following deviation from the assigned texts were counted as miscues: insertions, omissions, substitutions, reversals, and self-corrections. Meaning-change miscues were judged more strictly in case the participants’ level were overestimated (Lauren Leslie & JoAnne Schudt Caldwell, 2011, p. 62, 63). Though miscues were counted as strictly as possible, as shown in table 2 ‘Total Accuracy’ and ‘Total Acceptability,’ participants still scored high. They all reach the independent level in the both item. As shown in Table 2, four participants’ oral reading score fall within ranges of the oral reading rate at instructional level—105 to 189 Words per minute (WPM) on the expository text “Immigration—Part 1” of the upper middle school section.

**Comprehension.** Participants were less industrious in trying to answer correctly in the upper middle school section, compared to the high school level. Additionally, their level jumped significantly when they looked back at the text, and then answered again. Two of the participants, Christine and Jacky, comprehension level jumped from frustration level through independent level when allowed to look back to the text of high school level.
Table 1. Detailed Result of Spelling Inventory

<table>
<thead>
<tr>
<th></th>
<th>Within Word Pattern</th>
<th>Syllables and Affixes</th>
<th>Derivational Relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blends and Digraphs</td>
<td>Vowels</td>
<td>Complex Consonants</td>
</tr>
<tr>
<td>Jessica</td>
<td>4/5</td>
<td>8/9</td>
<td>6/7</td>
</tr>
<tr>
<td>Christine</td>
<td>5/5</td>
<td>8/9</td>
<td>7/7</td>
</tr>
<tr>
<td>Nancy</td>
<td>4/5</td>
<td>7/9</td>
<td>6/7</td>
</tr>
<tr>
<td>Jacky</td>
<td>4/5</td>
<td>7/9</td>
<td>6/7</td>
</tr>
</tbody>
</table>

(Number of correct answers out of subtotal questions)

<table>
<thead>
<tr>
<th></th>
<th>Within Word Pattern</th>
<th>Syllables and Affixes</th>
<th>Derivational Relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blends and Digraphs</td>
<td>Vowels</td>
<td>Complex Consonants</td>
</tr>
<tr>
<td>Jessica</td>
<td>80%</td>
<td>88%</td>
<td>85%</td>
</tr>
<tr>
<td>Christine</td>
<td>100%</td>
<td>88%</td>
<td>100%</td>
</tr>
<tr>
<td>Nancy</td>
<td>80%</td>
<td>77%</td>
<td>85%</td>
</tr>
<tr>
<td>Jacky</td>
<td>80%</td>
<td>77%</td>
<td>85%</td>
</tr>
</tbody>
</table>

(A percentage of correct answer)
Table 2. Summary of Word Identification, Spelling, Informal Vocabulary Assessment, and Oral Reading Assessment

<table>
<thead>
<tr>
<th></th>
<th>QRI Word Identification</th>
<th>Words Their Way Spelling Inventory</th>
<th>Informal Vocabulary Assessment</th>
<th>QRI Oral Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total words</td>
<td>Total Accuracy</td>
<td>Total Acceptability</td>
</tr>
<tr>
<td>Jessica</td>
<td>high school independent level</td>
<td>within word pattern stage, but score full points in the derivational relations stage</td>
<td>188</td>
<td>1: comfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tier II words</td>
<td>Tier III words</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Christine</td>
<td>high school independent level</td>
<td>within syllables and affixes stage</td>
<td>357</td>
<td>4: decoration, adorable, suicide, crisis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tier II words</td>
<td>Tier III words</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Nancy</td>
<td>high school independent level</td>
<td>within word pattern stage, but scores higher 26 out of 27</td>
<td>153</td>
<td>2: demonstrate, comfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tier II words</td>
<td>Tier III words</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Jacky</td>
<td>high school independent level</td>
<td>within word pattern stage</td>
<td>185</td>
<td>1: pensive</td>
</tr>
</tbody>
</table>


Table 3. Summary of Comprehension Assessment

<table>
<thead>
<tr>
<th></th>
<th>QRI Comprehension</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Without Look-Backs</td>
<td>With Look-Backs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>Middle School</td>
<td>High School</td>
<td>Middle School</td>
<td></td>
</tr>
<tr>
<td>Jessica</td>
<td>instructional level (4/5 explicit correct, 4/5 implicit correct)</td>
<td>frustration level (2/5 explicit correct, 4/5 implicit correct)</td>
<td>instructional level (4/5 explicit correct, 4/5 implicit correct)</td>
<td>instructional level (3/5 explicit correct, 4/5 implicit correct)</td>
<td></td>
</tr>
<tr>
<td>Christine</td>
<td>frustration level (2/5 explicit correct, 2/5 implicit correct)</td>
<td>frustration level (2/5 explicit correct, 4/5 implicit correct)</td>
<td>independent level (5/5 explicit correct, 5/5 implicit correct)</td>
<td>independent level (4/5 explicit correct, 5/5 implicit correct)</td>
<td></td>
</tr>
<tr>
<td>Nancy</td>
<td>instructional level (3/5 explicit correct, 4/5 implicit correct)</td>
<td>instructional level (4/5 explicit correct, 4/5 implicit correct)</td>
<td>independent level (5/5 explicit correct, 4/5 implicit correct)</td>
<td>independent level (5/5 explicit correct, 4/5 implicit correct)</td>
<td></td>
</tr>
<tr>
<td>Jacky</td>
<td>frustration level (1/5 explicit correct, 2/5 implicit correct)</td>
<td>instructional level (4/5 explicit correct, 4/5 implicit correct)</td>
<td>independent level (5/5 explicit correct, 5/5 implicit correct)</td>
<td>independent level (5/5 explicit correct, 5/5 implicit correct)</td>
<td></td>
</tr>
</tbody>
</table>
2. **Self-report Influence of Seattle Chinese Times on Reading Habits Questionnaire**

The target populations of the *Seattle Chinese Times* are people who drop by the Asian-style supermarkets or restaurants frequently and pick up the free newspaper on the newspaper shelf almost each week. The bilingual newspaper was deemed as a pastime for them; this phenomenon could be suggested by both the result of the questionnaire and their response during the interview. It also could be showed by Table 4, which suggests one out of four participants spent ‘very much’ time on reading it, one of them spent ‘somewhat’ time on it, and one of them spent ‘little’ time on it. It is noteworthy that though these regular readers spent different amounts of time reading the *Seattle Chinese Times*, three of them considered themselves to be able to comprehend the context of the newspaper in English at least the ‘much’ level. Moreover, one of them thought reading the bilingual newspaper ‘a little’ made her English reading go smoothly; the other three participants checked ‘somewhat,’ ‘much,’ and ‘very much’ respectively.

When they were asked about their thoughts on how the bilingual newspaper benefits their spelling, word identification, vocabulary, oral reading, and comprehension ability, two of four participants thought it would be ‘much’ and ‘very much’ helpful in these four items. The other two participants held different point of view on this question. In spelling section, one participant considered it as ‘somewhat’ helpful. Another one thought it was just ‘a little’ beneficial to their spelling ability. In both word identification and vocabulary, two
participants simultaneously viewed reading the bilingual newspaper as beneficial to their
ability to identify words, so they checked the ‘very much’ item. In the oral reading section,
two participants thought reading the bilingual newspaper was ‘a little’ beneficial to oral
reading abilities. A noteworthy fact from Table 4 is that one participant checked ‘much,’ and
two participants checked ‘very much’ in the last question: “Do you think reading the bilingual
newspaper benefits your comprehension in English?” Three of them considered the activity
of reading the *Seattle Chinese Times* as beneficial to their reading comprehension ability.
Another participant also checked ‘a little,’ which means reading the *Seattle Chinese Times* is
more or less helpful to her comprehension ability. Furthermore, looking back to the fourth bar
along with its question in the chart: “How much you can comprehend when you read the
English articles in the bilingual news?,” there were also three participants who checked
‘much’ and ‘very much,’ and the other participant checked ‘somewhat.’ These two bars imply
that readers believe that reading the bilingual newspapers enhanced their comprehension
ability and they could comprehend the English articles in the bilingual newspaper. Most
important of all, none of participants checked ‘not at all’ in the questionnaire, which implies
readers believe that reading newspapers involuntarily positively influence their reading
ability in different facets.
Table 4. Readers’ Self-Report of Seattle Chinese Times on Reading Ability

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Much</th>
<th>Much</th>
<th>Somewhat</th>
<th>A Little</th>
<th>Not at All</th>
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</thead>
<tbody>
<tr>
<td>How much time you spend on reading the bilingual newspaper weekly?</td>
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<tr>
<td>How much time you spend on reading the bilingual newspaper in Chinese weekly?</td>
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<tr>
<td>How much time you spend on reading the bilingual newspaper in English weekly?</td>
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<tr>
<td>How much you can comprehend when you read the English articles?</td>
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<tr>
<td>Do you think the bilingual texts make you read much smoothly?</td>
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<tr>
<td>Do you think reading the bilingual newspaper benefits your spelling in English?</td>
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<tr>
<td>Do you think reading the bilingual newspaper benefits your word identification in English?</td>
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<td>Do you think reading the bilingual newspaper benefits your vocabulary in English?</td>
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<tr>
<td>Do you think reading the bilingual newspaper benefits your oral reading in English?</td>
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<tr>
<td>Do you think reading the bilingual newspaper benefits your comprehension in English?</td>
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</table>
3. Seattle Chinese Times Reading Habits Interview

The English articles accompanied by the similar Chinese articles become a bonus for ethnic Chinese readers of the Seattle Chinese Times. According to the result of the reading habits interview with participants, they thought that reading the bilingual newspaper benefitted their reading comprehension ability. In other words, readers considered reading the Seattle Chinese Times as beneficial to their reading comprehension ability ‘more or less.’ The activity of reading the Seattle Chinese Times could be either a pathway to know the weekly news, or a means to acquire English reading ability involuntarily. Jessica exemplified the reason why she thought reading the Seattle Chinese Times is beneficial to her English reading comprehension ability.

“I often picked up the Seattle Chinese Times from the restaurants or Uwajimaya in the International District every time I drop by there. Reading the Seattle Chinese Times is very beneficial to my comprehension ability. Because when I read an English news I don’t know, I can turn to other pages to find the similar news written in Chinese, so that I would know what the vocabulary means. Most of time, the thing which hampers my understanding on the English news is vocabulary, so after I look back the similar Chinese news, I can figure the word out. And, the more I read, I think the more fluent on my word identification, oral reading, and comprehension.’”
This reader not only acknowledged the positive influence of reading the *Seattle Chinese Times*, but also considered her comprehension ability improved during the bilingual newspaper reading process. Besides, she mentioned that she regards the bilingual newspapers to be English learning materials. For Jessica, reading the *Seattle Times* could be both a pastime and a learning activity that she can read for enjoyment. Jacky expressed the same thought that reading the *Seattle Chinese Times* benefits her reading ability. She mentioned:

“Sometimes my reading process of reading the English articles are hampered by the vocabulary I do not know, I either look around the similar Chinese counterparts to know what the vocabulary is about. Likewise, sometime I didn’t find the similar Chinese articles in the newspaper; instead, I look at the dictionary on my Iphone application, asking my husband, or at the context around the vocabulary to figure out what the vocabulary means.”

Jacky’s reading strategies for reading the English articles exemplifies the three other readers’ reading strategies while reading the *Seattle Chinese Times*. Nancy habitually looked at the English context around the unfamiliar vocabulary in order to figure it out. Jessica found the similar news in Chinese to comprehend the one written in English. As for Christine, though she often chose to skim it over, Christine mentioned that sometimes she asks her friend to explain the meaning of vocabulary. It is because “most often, I can’t understand the English news due to the unfamiliar vocabulary embedded in the article.” Christine also stated
“if he [my friend] is not beside me, and I was hampered by this word a lot of times, I would check the dictionary directly.” From readers’ conversation, it is noteworthy that readers connect the conception of whether or not they can comprehend the English news with whether or not they understand the vocabulary.

When readers were asked about their thoughts on what they think the relationships between their reading habits and reading ability is, all readers said it was more or less be helpful. Jessica said, “The more I read, the more I exposure to English, and the higher frequency I could identify different words, and understand the meaning of vocabulary and news, and so as oral reading and spelling.” What Jessica mentions represents other readers’ thoughts. They considered although they read silently, it is still conducive to their oral reading. In addition, in terms of the reading strategies they mentioned above, they considered their habits definitely more or less benefit both vocabulary and comprehension. As for oral reading, they thought that this type of ability could be positively influenced by reading the news silently. They also thought that the more English news they read, they higher the possibility that they are capable of identifying words within the news. As for spelling ability, despite the fact that they admitted they would not pay rapt attention to each letter within the vocabulary on purpose, they still thought their habits of reading the Seattle Chinese Times bought about positive consequence in their reading ability. As Nancy said, “It’s helpful though I seldom pay attention to spelling when reading the English parts. What I usually do is
to understand what the news is, so I would not attend to spelling purposely. However, I still can learn spelling involuntarily.” In addition, readers were found to share on particular reading habits with regard to the Seattle Chinese Times. Readers prefer to read the articles written in Chinese first. In other words, these four readers all share a similar reading sequence: they read the news written in Chinese first, and then continue to read the English news. Nancy’s reading habits can exemplify it. She said:

“I always read the title written in the Chinese first in A1 section first, and look down to the English title to see if the English news is interesting. Most of time, I read the Chinese news in A1, then look at the title in English in the same section.”

Nancy’s opinion showed that readers of the Seattle Chinese Times chose to read the news written in their native language first, which they can read effortlessly. Readers habitually read news in their familiar language, traditional Chinese, first when they start reading.

**Discussion**

The results suggest that based on readers’ reading habits, reading the Seattle Chinese Times barely positively influences their spelling ability. The outcomes of spelling assessment contradict the result of Self-report Influence of Seattle Chinese Times on Reading Habits Questionnaire, and the Reading Habits Interview, which shows that their current reading habits of reading the Seattle Chinese Times may not benefit spelling ability. In the result of
the self-report questionnaire, four readers checked reading the bilingual newspaper at least ‘a little,’ ‘somewhat,’ or ‘very much’ benefit their spelling, which means that reading the Seattle Chinese Times at least ‘a little’ benefitted their spelling ability. In addition, in the reading habits interview, when they were asked to make clarification on why they think reading the Seattle Chinese Times benefit their spelling, they provided the similar answer, “the more English articles you read the newspaper, the much skilled you are in reading ability, spelling is no exception.” This sentence can be transferred into: “spelling is also related to the amount of the time you spend reading the English articles in the bilingual newspaper. The more time you spend reading the English news in the bilingual newspaper, and the higher frequency you are exposed to it, the more memorization of the spelling of words will stay on your brain.”

Though both reading and spelling are phonologically mediated (Bosman & Van Orden, 1997), these four readers’ spelling ability were barely reinforced by their reading habits: reading the Chinese news in the Seattle Chinese Times, then proceeding to read the English news.

Readers’ reading sequence for reading the Seattle Chinese Times are: they read the Chinese headline first in the A1 section, and read the content in detail; then they look down to read the title of the English news in A1. If the news interests them, they read it thoroughly. Habitually, they read the Seattle Chinese Times in this sequence. Their predisposition to reading the news in Chinese first is due to their affiliation with their native language.
However, this reading habit involuntarily causes readers to be less aware of the relationship between phoneme and grapheme, which constitute a vital role in spelling. In other words, readers viewed each Chinese character as an independent character; they habitually skim the shape of Chinese characters when reading the news and articles written in Chinese. Thus, they would not attend to the letter-sound relationship when reading the English news in the *Seattle Chinese Times*. When they read the Chinese news first, and then proceed to read the English news, this impedes their fluency when reading the English news. That is, they still ignore the grapheme-sound relationships, but rather view each English word as a chunk of sight words.

Their reading habits are highly influenced by their Chinese reading experience, which can be partly attributed to the disparity in the system between the two languages. As Wang, Koda, and Perfetti (2003) state, the characteristics of the Chinese language contrasts with an alphabetic system; the Chinese writing system does not possess the segmental structural that is basic to alphabetic writing. The lack of the segmental structure in the Chinese system means ethnic Chinese descendants are not aware of phoneme and syllables while reading English news. In addition, Chinese character pronunciation must be learned through rote memory of the association of visual character form and sound, occasionally with the aid of subcharacter units that are themselves real characters (Tan & Perfetti, 1998). In other words, the Chinese language system focuses on logo, icon, and morpheme, compared to English’s
emphasis of an alphabetic system, which allows larger units (syllable and word) to be assembled from letter-phoneme mapping (Wang et al., 2003). Readers of the *Seattle Chinese Times* who read the Chinese news first unconsciously transfer their Chinese reading tendency of memorizing the ‘shape’ and ‘form’ of characters, instead of noticing the relationship between the sound and spelling onto reading English words. Therefore, this reading habit would not bring about a positive impact on their spelling ability.

In spite of the hindrance to their spelling, reading the *Seattle Chinese Times* will benefit ethnic Chinese descendant readers’ vocabulary and comprehension. As shown on the Vocabulary Assessment, readers were able to use Tier 2 words and describe the assigned picture using over 150 vocabulary words, correspondent to their self-report, reading habits interview, and the strategies they used, which suggests that reading the *Seattle Chinese Times* is conducive to vocabulary abilities.

Traditional monolingual newspapers published in English are overwhelmed with vocabulary and various conventions only employed by journalists (Bermejo, 2000) that are rarely found in either academic or general communication English studies, which make immigrants and non-native English speaker have difficulty comprehending the English news smoothly. The *Seattle Chinese Times* counteracts this type of negative reaction through publishing the bilingual newspaper, which include both languages, Chinese and English. Although the English news accounts for fewer sections of the paper, including the front page
(A1) and World News (A8), and Lifestyle (B1, B2, B3), its bilingual content provides non-primary English readers an alternative way to exposure themselves to English articles and news. In addition, the Seattle Chinese Times is characteristic of its bilingual layout that readers usually can access to the similar news written in Chinese when they have difficulty in comprehending the English article due to unfamiliar vocabulary or convention. Whether or not readers can comprehend the English news depends on whether or not they can figure out or infer the meaning of unfamiliar vocabulary in the English news. In other words, readers’ comprehension was hampered if they could not infer the meaning of vocabulary in the English news. For one reason, the English news is dispersed with various conventions and content vocabulary merely employed by journalist (Bermejo, 2000). For another reason, vocabulary plays an important role in comprehending the English texts so that vocabulary instruction is sorted into one of the 3 items into topic of comprehension by National Reading Panel (US, Health, & US, 2000, p.1-2).

Vocabulary knowledge is a critical feature of reading ability; most second language reading researchers agree that vocabulary development is a critical component of reading comprehension (McKeown & Curtis, 2014). Grabe (1991) takes newspaper written in second language as example to illustrate readers’ comprehension ability will be negative influenced if encountering unfamiliar vocabulary when reading the second language newspaper. He indicates, “Vocabulary and syntactic knowledge, on a very basic level, are obviously critical...
to reading. One needs only to pick up a newspaper in an unknown language to verify that background knowledge and predicting are severely constrained by the need to know vocabulary and structure (p.380).” According to the results aforementioned, if readers met unfamiliar vocabulary when reading the English news in the *Seattle Chinese Times*, they took the following steps: they either found the comparable Chinese article, checked the dictionary, looked around the context in the same or surrounding paragraph, or asked for assistance from friends, until they could infer the meaning of the vocabulary. With the look-backs of similar Chinese news in the same newspaper, the hindrance of convention and vocabulary often encountered in newspaper reading can be overcome for ethnic Chinese readers.

Readers’ memory of the vocabulary are reinforced too when they tried to read similar Chinese counterparts in order to figure out the vocabulary and the main idea of the English news. They read the unfamiliar vocabulary first in the English news, then inferred the meaning of vocabulary when they tried to read the similar Chinese news. Later, their memory of this vocabulary continued to be reinforced when they looked back to the original English news and looked around the context of the paragraph surrounding the vocabulary, in order to ensure the meaning of the vocabulary and what the main idea of the paragraph was.

In addition to vocabulary, it is noteworthy that the practice of the *Seattle Chinese Times*-publishing most English articles items alongside items written in Chinese on similar topics--benefits readers’ understanding of the English news too. This trait allows the readers to have
the opportunity to read a similar article twice in different languages. According to the QRI comprehension assessment, readers’ comprehension ability soared significantly through the practice of looking back the same English article again. Plus, four readers claimed that looking back to the Chinese articles to know what the main idea was conducive to their understanding of the English news which they originally had difficulty comprehending. The inference can be made that the English news makes more sense to them with the clarification of the similar Chinese news.

**Conclusion**

The *Seattle Chinese Times* plays an important role in providing ethnic Chinese descendants exposure to English articles while linking them into the Chinese community and weekly news about China, America, and the world through bilingual new stories. It also provides the English news and feature stories for its immigrant Chinese readers, while exposing readers to English. In this manner, Chinese immigrants are more likely to spend time reading the news written in English. However, the practice of reading the Chinese news prior to reading the English news barely positively influences readers’ spelling ability. The assistance of Chinese news articles on similar topics benefits Chinese immigrants’ vocabulary and comprehension of the English news. Thus, the bilingual newspapers can also be used as instructional materials for enhancing ethnic Chinese descendants’ vocabulary and comprehension ability.
References


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Appendix A Reading Habits of the Seattle Chinese Times

1. How much time you spend on reading the bilingual newspaper weekly? □ very much □ much □ some what □ a little □ not at all
2. How much time you spend on reading the bilingual newspaper in Chinese weekly? □ very much □ much □ some what □ a little □ not at all
3. How much time you spend on reading the bilingual newspaper in English weekly? □ very much □ much □ some what □ a little □ not at all
4. How much you can comprehend when you read the English articles? □ very much □ much □ some what □ a little □ not at all
5. Do you think the bilingual texts make you read much smoothly? □ very much □ much □ some what □ a little □ not at all
6. Do you think reading the bilingual newspaper benefits your spelling in English? □ very much □ much □ some what □ a little □ not at all
7. Do you think reading the bilingual newspaper benefits your word identification in English? □ very much □ much □ some what □ a little □ not at all
8. Do you think reading the bilingual newspaper benefits your vocabulary in English? □ very much □ much □ some what □ a little □ not at all
9. Do you think reading the bilingual newspaper benefits your oral reading in English? □ very much □ much □ some what □ a little □ not at all
10. Do you think reading the bilingual newspaper benefits your comprehension in English? □ very much □ much □ some what □ a little □ not at all
Appendix B Reading Habits of Interview Questions

1. Why do you think reading the bilingual newspaper ______ benefits your spelling in English?
2. Why do you think reading the bilingual newspaper ______ benefits your word identification in English?
3. Why do you think reading the bilingual newspaper ______ benefits your vocabulary in English?
4. Why do you think reading the bilingual newspaper ______ benefits your oral reading in English?
5. Why do you think reading the bilingual newspaper ______ benefits your comprehension in English?
6. Show your reading sequence when reading the bilingual newspaper.
7. Do you skim the English news or do close reading?
8. Talk about your reading habits when reading the bilingual newspaper.
9. What strategies do you use when you can’t comprehend the English articles?
10. Do you use the bilingual newspaper as a learning material. How?
   (Blanks from question one through five are filled in the answers participants provide in the Appendix A.)