# The effects of reading bilingual books on vocabulary learning

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### **Abstract**

This study investigated the effects of reading bilingual books on vocabulary learning. Eighty-two Chinese English as a foreign language (EFL) learners read different versions of the same text: English-only text, English text with target words glossed, English text followed by the Chinese text, and Chinese text followed by the English text. A pretest, immediate posttest, and delayed posttest were used to measure incidental vocabulary learning. The findings showed that (a) all four groups made significant gains in lexical knowledge, (b) those who read glossed text and bilingual text had significantly durable knowledge gain, (c) the participants who read glossed text or read the English version of the text before the Chinese version had significantly higher scores text in the immediate posttest than the participants who read the English-only text, and (d) the participants who read bilingual texts had significantly higher scores on the delayed posttest than those who read the English-only text.

*Keywords*: second language reading, bilingual reading, vocabulary learning, glossing, errorless learning, noticing hypothesis, desirable difficulties framework

The term bilingualism refers to the presence of two languages (Parker, 2006). Rudin (1996) defines bilingual literature as two languages together appearing with equal or similar weight, extent, and format. Bilingual books can be seen as a type of multicultural literature and can serve as authentic texts for students to learn vocabulary, collocation, and idiomatic expressions. Bilingual books are available in many languages (i.e., German, Turkish, Arabic, Romanian, Polish, Italian, Japanese), and are well accepted in English as a foreign language (EFL) countries such as China and Spain. The value of bilingual books for language learners is that the parallel versions of the text may allow readers to understand second language (L2) input that is beyond their current level. Moreover, through the inclusion of first language (L1)-L2 parallel versions, readers may access books that they are motivated to read. Thus, bilingual text may help L2 learners to encounter and potentially learn from a greater amount of L2 input. However, despite the widespread availability of bilingual books, there is very little research investigating their contributions to L2 learning.

In the field of L2 learning, reading is considered a major method of increasing the amount of target language input. Krashen (1989) claims reading to be essential input for L2 learners. For L2 learners, particularly those who are not in an English-speaking country, reading is one of the most accessible ways to receive large amounts of L2 input. Research reveals that engaging learners in reading can improve various aspects of proficiency (Elley & Mangubhai, 1983; Farran, Bingham & Matthews, 2012; Krashen, 1989), including vocabulary (Duff, Tomblin & Catts, 2015; Grabe & Stoller, 1997). Developing lexical knowledge is a long process with gains being acquired in small increments (Webb & Nation, 2017). Reaching the lexical thresholds associated with comprehension of written text is a key objective in the L2 learning process. However, one of the problems facing readers is the difficulty in finding appropriate L2 reading materials. Course books and graded readers offer dialogues and paragraphs to read. However, these are often written specifically for English as a second language (ESL) or EFL learners. Thus, they often sound unnatural or stilted (Gilmore, 2007). Texts written for native speakers of English, on the contrary, are too difficult for L2 learners at the beginning or intermediate levels to tackle. In order to find out the vocabulary size which is necessary to read and understand text, Nation (2006) developed fourteen 1,000-word frequency lists derived from the British National Corpus. He found that the first 1,000 most frequent word families provided 78% to 81% coverage, the second thousand provided 8% to 9%, and the third thousand provided 3% to 5% coverage of written texts. Coverage refers to the percentage of words that are likely to be known. That is, the percentage of words in a text or corpus that is covered by a certain amount of words. Thus, knowing the most frequent 1,000 word families would allow readers to know 78-81% of the words in written text. Nation concluded that to reach the 98% lexical coverage figure that is viewed as being most appropriate for adequate comprehension of written text (Hu & Nation, 2000; Schmitt, Jiang, & Grabe, 2011), knowledge of the most frequent 8,000–9,000 words is required. Achieving these vocabulary sizes and understanding text are therefore very challenging for L2 learners, especially for those in their early stages of language learning. One of the ways to enable L2 learners to read authentic materials is through adjunct aids such as L1 glosses and translation. Glossing is when text is enhanced by providing the L1 or L2 definitions of difficult words. Glosses and translation are common features of language teaching materials (Joyce, 1997). L1 translation is useful because it enables learners to read the text faster by saving the time that might be spent looking words up in a dictionary.

Relatively little is known about the contributions that reading bilingual books makes to L2 development. The aim of the present study is to determine the extent to which vocabulary can be learned through reading bilingual books. There are two secondary aims of the research. First, it looks at how the reading orders of bilingual text (reading L1 before L2, and reading L2 before L1) might contribute to vocabulary learning. Second, it also compares the effect of reading bilingual text and glossed text on vocabulary learning.

#### **Literature Review**

Why Study Bilingual Materials?

Bilingual texts are widely available and widely used in EFL contexts (Ernst-Slavit & Mulhern, 2003). Bilingual books are available in different genres and across different age groups in the

form of picture books or non-picture books in fiction or nonfiction. Popular novels are perhaps the most common type of bilingual text. However, bilingual social science readers and children readers are also gaining popularity in recent years. There are different publishers around the world providing bilingual reading materials in various languages. Parker (2006) mentioned that publishers in the United States are publishing more multicultural bilingual books. National companies, such as Scholastic, have published a large number of Spanish-English bilingual books. Smaller companies also publish bilingual books in other languages, such as Native American, French, Chinese, Japanese, and other languages from around the world. Bilingual Books publishing company, which is headquartered in Washington, publishes literature in more than 20 different languages. The Milet publishing company in Britain provides bilingual books with English and a wide range of languages such as Arabic, Farsi, German, Italian, Korean, and Spanish. In EFL countries, the value of bilingual books is more and more recognized. For example, the well-known Oxford Bookworms series are published in English-Chinese bilingual versions. English learners in China are encouraged to read bilingual books and use them as a language learning tool. One of the most widely used English course books in China, The New Concept English (Alexander et al., 1987), provides course articles in English and complete course article translations in Chinese. EFL learners can also learn with bilingual texts included in newspapers and subtitled TV programs. Two short extracts of bilingual text are shown in Appendix A. These are bilingual versions (Chinese-English, and French-English) of a page in Sir Arthur Conan Doyle's The Hound of the Baskervilles taken from bilingus.com, a site that provides bilingual versions of several well-known novels that are freely available in the public domain.

One of the key reasons why bilingual texts are common is that L2 learners are motivated to learn with bilingual texts. Research suggests that bilingual books are viewed positively by language learners, teachers, and even parents (Hu, Chen, & Li, 2012; Parker, 2006). Schon (2004) acknowledged the increase in publication of bilingual books. She reported that parents asked teachers and librarians for bilingual materials for their children; teachers who believed that bilingual books would assist students in learning the L2 also tended to introduce dual language materials to their students.

The difficulty of understanding a L2 text is likely to discourage further reading by some language learners, so bilingual books may serve as an enjoyable learning resource to use in language learning. Compared to English-only reading materials, bilingual books may be easier for L2 learners to read and comprehend. Hu et al. (2012) found that children responded positively to bilingual books as they participated in English learning activities. Results of the study indicated that participants became more engaged in reading activities when they read bilingual materials than when they read single language materials. Lichty (2002) reported that one reason for the popularity of bilingual books is that students who speak different languages can bridge their linguistic differences through bilingual books. Also, bilingual books can help to develop both L1 and L2 fluency by encouraging text-to-text translations by students and their families. The positive attitude towards bilingual books suggests that there may be potential for the reading of bilingual books to increase L2 vocabulary knowledge.

One potential problem of using bilingual books for language learning is the quality of translation. Schon (2004) expressed her concerns about the publication of bilingual books without the

support of research findings and input from bilingual educators. She noted that there are some poorly translated books and that over-translation and overly literal translation may lead to unnatural rather than typical language patterns in translated books and materials. Barrera, Quiroa, and Valdivia (2003) also stated similar opinions. Huang and Chen (2015) discussed the quality of bilingual texts from the perspective of authenticity, accuracy, and expressions in English-Chinese bilingual books. The study reviewed 31 bilingual books. They found that although the English-Chinese bilingual books covered a wide range of genres and topics, the books did not always provide accurate translations and included culturally inappropriate stereotypes.

In recent years, there has been a small amount of research that supports the use of bilingual texts. Hu, Chen, and Li (2012) explored the use of bilingual books for language development in several case studies. The five participants in the study were asked to read four bilingual English-Chinese picture books over an eight-week period. Hu, Chen, and Li found that the bilingual books, combined with instruction, promoted participants' L2 development. There was an increase in the number of words the participants could identify and spell correctly. At the beginning of the first session, the participants could identify 28.6% and 9.2% of words at two levels from the Dolch Fry wordlist (Hu & Commeyras, 2008). After eight weeks, the participants could identify 56.6% and 36.4% of the words, respectively. This indicates that bilingual books may help readers to learn L2 words, phrases, and idiomatic expressions. Hu, Chen, and Li suggested that with proper instruction, bilingual books can be a powerful resource for improving language proficiency. Taylor, Bernard, Garg, and Cummins (2008) also suggested that bilingual books can have a positive effect on helping learners to develop vocabulary knowledge because they help transfer conceptual knowledge and skills across languages. When language learners read materials in the target language, they need to acquire the vocabulary that is specific to the content. They will have to use their background knowledge as well as their knowledge of the L1 and L2 to learn language through reading bilingual texts. With very few studies investigating the effects of reading bilingual books on vocabulary learning, there is a need for further research in this area.

### How should Bilingual Texts be Used?

Bilingual texts contain two features: the L1 text and the L2 text. The most common way of presenting bilingual texts is the format of full-text translations (Semingson, Pole, & Tommerdahl, 2015). In full-text translations, the entire content is presented in two languages. Both languages can be put on one page, facing pages, or different pages. Many examples of bilingual texts in different languages and their varying formats can be found through searching for bilingual readers in online sites such as amazon.com. These variations in format raise the issue of the placement of the two languages; for example, which language should come first on the page. As readers should be able to easily understand the L1 version of the text, reading the L1 version first is intuitively logical. This order of reading would then allow better understanding of the vocabulary and content in the subsequent reading of the L2 version. This order of bilingual reading is also supported by the theory of errorless learning (Skinner, 1954), which incorporates an approach to learning that reduces or eliminates the potential for errors to occur during the learning process. According to this theory, errors may be consolidated in learners' memory and cause learners to remember false information. In the case of bilingual texts, reading the L1 version of the text first provides the reader with correct information that should reduce the potential for errors in comprehension to occur during L2 reading.

However, reading the L1 text prior to the L2 text may have the negative effect of reducing the readers' motivation to carefully attend to the L2 version of the text. That is, when the learners receive all the information about the content from the L1 version of the text, they are less likely to read the text carefully in the foreign language, and as a result, pay less attention to unknown vocabulary in the L2 version. Second Language Acquisition (SLA) theory has developed models of attention, memory, and consciousness based on cognitive psychology. The Noticing Hypothesis (Schmidt, 1990) suggests that in language learning, input does not equal intake unless it is noticed, or in other words, consciously registered. For the acquisition of lexical items, language learner's attention to input is crucial. This might suggest that reading the L2 text first might be more effective, because readers may pay greater attention to unfamiliar words in this reading order.

Reading the L2 version prior to the L1 version of the text is also supported by the desirable difficulties framework (Bjork, 1994). This framework suggests that introducing more difficulties into the learning process improves long-term retention of the learned features. Desirable difficulties are learning tasks that require a desirable amount of effort to accomplish the objective. Reading the L2 version of the text first may enable deeper processing of the language in the text than reading in the reverse order. This may contribute to greater learning of the vocabulary in the long-term than reading in the L1-L2 order.

A secondary aim of the present study is to investigate how the order of reading the L1 and L2 versions of a bilingual text may contribute to L2 vocabulary learning. To the best of our knowledge, no earlier studies have investigated how the order of reading L1 and L2 texts may contribute to language learning. Determining the most effective order of reading the texts has value because it indicates how to create and use bilingual materials for vocabulary learning. Because bilingual books come with different formats, investigating the placement of bilingual texts may help language learners and teachers to select suitable reading materials.

### Bilingual Reading and Glossed Reading

In glossed texts, the meanings of the target words are provided in either the L1 or L2. The placement of the meanings varies; glosses may be provided in the margins (marginal glossing), at the end of the book in a glossary, or immediately after the words. In bilingual texts, full-text translations are provided in the readers' L1. This might be viewed as a fully glossed text. Similar to glossing, the placement of the meanings varies with translations sometimes provided on the same page or different pages.

Glossing is a common feature of L2 texts written for language learners. There have been a large number of studies focusing on the effects of glossing on vocabulary learning (e.g., Khezrlou & Ellis, 2017; Ko, 2012; Liu, 2017; Moradan & Vafaei, 2016; Ying-Hsueh & Good, 2009; Yoshii, 2006). Providing the meanings of L2 words in a gloss can help readers to better understand the text (Davis, 1989; Jacobs, 1994). Glossing can also help readers to learn L2 words (Nation, 1990, 2001). For example, Al Hashim (2015) investigated the effects of L1 glossing on the recall of vocabulary and found that L1 glossing contributed to the learning of new words. Taylor (2012) suggested that L1 glossing may facilitate lexical acquisition at the level of intake because L2

learners can rely on L1 glossing to draw their attention to a particular word to help better understand content and meaning. The importance of attention also lies in the fact that glossing may enable learners to notice a mismatch between his or her previous knowledge and the target language. Attention may be drawn to a gap in L1 and L2 knowledge with bilingual books, because reading translations may also allow learners to recall their L1 knowledge when reading the L2 version of the text, or vice versa. This has the potential to improve L2 processing and learning.

The main difference between bilingual and glossed texts is that bilingual texts provide word meanings following the grammatical rules of the sentence. For example, in the sentence He ate an apple in the morning, if ate is glossed only the meaning of eat might be given. That is, when reading a glossed text, readers learn the glossed word separately from the context. Thus, the glossed word may be remembered as an individual word. However, in bilingual text, instead of providing the L1 meanings of individual words, the L1 meanings of all words are provided so that learners might better understand the meaning of the sentence. One study has compared learning in decontextualized and contextualized glosses. Gettys, Imhof, and Kautz (2001) compared two glossing formats in a study focusing on online glossing. In the study, participants read the text in two experimental conditions. They read an L2 article online and when they encountered unknown words, they could click on an electronic gloss to see the meanings of the words. In one condition they were provided with sentence-level word meaning which was grammatically equivalent to L2. That is, the target words were glossed with their meanings connected with the language form. Under the other condition, participants were provided with basic dictionary form meanings, that is, the meaning regardless of the grammatical rules of the L2 text were given. Results showed that reading with sentence-level equivalents took significantly less time than reading with dictionary forms of glossing. However, reading with dictionary forms of glossing resulted in better success rates in remembering new words. It seems that bilingual and glossed texts both have pros and cons, but there are to our knowledge no previous studies comparing these two types of text on the effects of vocabulary learning.

## The Present Study

Because bilingual reading materials or books are common to EFL settings, it is important to investigate their contributions to language learning. However, there are very few studies focusing on the effects of reading bilingual books. The purpose of the present study is to investigate the extent to which reading bilingual text may contribute to L2 vocabulary acquisition. This should indicate whether bilingual books may serve as a useful tool to learn L2 words. A secondary aim of this study is to determine which reading order, L1 followed by L2, or L2 followed by L1, is more effective for vocabulary learning. A third aim of the study is to compare reading bilingual text with one of the most common L2 text types, glossed text. This should further clarify the potential value of bilingual reading for vocabulary learning. Together, the findings of this study may provide a better indication of how reading materials can be designed to promote vocabulary learning and which text types teachers, parents and language learners should select. To address these issues, the following three research questions were posed:

- (1) To what extent is vocabulary learned through reading bilingual materials?
- (2) Does the order of reading bilingual texts affect vocabulary learning?
- (3) Does reading bilingual materials contribute to greater vocabulary learning than reading glossed materials?

#### Method

## **Participants**

Eighty-three participants learning EFL in the third year of a vocational school in China took part in this study. The participants had been learning English for a minimum of eight years, and their proficiency level was considered to be at a high-beginner level. Their ages ranged from 17 to 18, and their L1 was Mandarin. The participants were randomly assigned to one of four conditions. Each condition involved reading one of four different versions of the same text.

Participants were given a consent form to indicate their willingness to participate in this study and to authorize the use of their responses in this study. The participants were informed about the reading and the test, but they were not told that the study was focusing on vocabulary learning. They also did not know the format of the test until they finished the reading session.

# Design

The study employed a pretest, posttest, delayed posttest experimental design. The independent variable was the learning condition and the dependent variable was vocabulary learning. Participants were given instructions about how to complete the tests and treatments in both English and Chinese. There were four different treatment groups: Plain Text Group (PTG), Glossed Text Group (GTG), English-first Bilingual Reading Group (EBRG), and Chinese-first Bilingual Reading Group (CBRG). Each group read a modified text. The Plain Text Group read the reading material in English only; the Glossed Text Group read the material with target words glossed; the English-first Bilingual Reading Group read the English version of the material first and then read the Chinese version of it; the Chinese-first Bilingual Reading Group read the Chinese version of the text before reading the English version. All groups were given 30 minutes to complete the treatment.

After the treatment, the participants completed the immediate posttest. One week after the treatments, the participants were administered a delayed posttest to determine the extent to which the learning gains were durable. Participants were given 20 minutes to complete each test. All of the participants were able to complete the treatments and tests within the allotted time.

#### Materials

The treatments involved reading different versions of the first two chapters of the Oxford Bookworms Library Stage 2 graded reader *Robinson Crusoe*. The Oxford Bookworms graded readers are published in China as bilingual books that include English text together with its Chinese translation. The Chinese translation was on different pages than the English text. In the

treatments, both L1 and L2 versions of the bilingual material that was found in the original graded reader were used to adapt the texts that the participants read.

Four different versions of the text were created. Each version contained the same set of L2 target words. PTG read the graded reader in the target L2, which was English. The material was two pages in length. GTG received the text in English with the target words glossed. In this study target words were glossed in the participants' L1 which was Chinese, because research indicates that L1 glosses are more effective than L2 glosses for vocabulary learning (Scherfer, 1993). In the gloss, the Chinese meaning was given in brackets immediately following each target word. The following example from the glossed text version shows the gloss for the target word prisoners:

There was a long, hard fight, but when it finished, we and the ship were prisoners (囚犯).

Providing the meaning of the unknown word in brackets immediately after the word is a common feature of English reading materials and tests in English courses in China, so the participants were very familiar with this kind of gloss.

The two bilingual reading groups read bilingual versions of the material. EBRG read the reading material in English first and then read it in Chinese. In this version, the first two pages of the material were in English and the latter two pages were in Chinese. In contrast, CBRG read the Chinese text first, followed by the L2 text. In this version, the first two pages were in Chinese and the final two pages were in English.

Table 1. Cumulative coverage including proper nouns and marginal words of the first two chapters of Robinson Crusoe

| Word list             | Tokens<br>percentage | Coverage | Coverage including marginal words, proper nouns, and transparent compounds |
|-----------------------|----------------------|----------|----------------------------------------------------------------------------|
| 1,000                 | 93.87                | 93.87    | 96.79                                                                      |
| 2,000                 | 2.71                 | 96.58    | 99.50                                                                      |
| 4,000                 | 0.07                 | 96.65    |                                                                            |
| 5,000                 | 0.07                 | 96.72    |                                                                            |
| 6,000                 | 0.07                 | 96.79    |                                                                            |
| 7,000                 | 0.07                 | 96.86    |                                                                            |
| 8,000                 | 0.07                 | 96.93    |                                                                            |
| 10,000                | 0.14                 | 97.07    |                                                                            |
| Proper nouns          | 2.71                 | 99.78    |                                                                            |
| Marginal words        | 0.14                 | 99.92    |                                                                            |
| Transparent Compounds | 0.07                 | 99.99    |                                                                            |
| Tokens                | 1,406                |          |                                                                            |

The English text was analyzed using Range (Nation & Heatley, 2002) together with Nation's (2012) British National Corpus and Corpus of Contemporary American English (BNC COCA) word family lists to determine the vocabulary size necessary to reach the lexical coverage level associated with adequate comprehension. Research suggests that if 95% of the words in a text are

known, then readers may be able to understand the text (Laufer, 1989; Laufer & Ravenhorst-Kalovski, 2010). Table 2 shows the cumulative coverage of the first two chapters of Robinson Crusoe. The most frequent 1,000 word families accounted for 93.87% coverage of the 1,406 words in the text, and this figure increased to 96.79% when marginal words, proper nouns and transparent compounds were included. The relatively high lexical coverage at the 1000-word level and the length of formal English instruction that the participants had received suggested that they should be able to understand the text.

## Target Items

Thirteen English words in the text were originally chosen as target items (See Table 2). However, one item *comfortable* was excluded from the analysis because the results of the pretest showed that only 2 of the 83 participants did not know this word. The remaining 12 target items were from a range of word frequency levels. Three words were chosen from the most frequent 1,000 words, six were from the second most frequent 1,000 words, and the other three words were from 5th, 8th, and 10th BNC COCA word family lists, respectively. Typically, in studies of incidental vocabulary learning, only lower frequency words are chosen as target words. However, choosing words at different frequency levels may better reflect vocabulary learning, because although high frequency words are often assumed to be known to readers, it is likely that some higher frequency words are unknown or partially known (Webb & Chang, 2015). Because the target items were real words, it was likely that they would be known to some degree. This may help to better engage participants in the pretest than if all words were unknown.

| Table 2. <i>List of target words</i> |         |  |  |  |  |
|--------------------------------------|---------|--|--|--|--|
| Target words                         |         |  |  |  |  |
| master                               | shore   |  |  |  |  |
| sail                                 | canary  |  |  |  |  |
| escape                               | pirate  |  |  |  |  |
| prisoner                             | cape    |  |  |  |  |
| storm                                | leopard |  |  |  |  |
| adventure                            | slave   |  |  |  |  |

## Dependent Measures

A pretest, immediate posttest, and delayed posttest were created to measure the incidental learning of unknown vocabulary. All tests were in a paper and pencil format, and the participants completed the tests without the external support of dictionaries and electronic devices. Twenty minutes were given to complete each administration of the tests. This was sufficient for all participants to finish each test.

In the pretest, the participants were instructed in both Chinese and English to translate 50 words from English to Chinese. Among the 50 words were the 12 target words, and another 38 words selected randomly from the BNC COCA 1,000–5,000 word lists to minimize a potential learning effect through completing the tests. Only target words were scored in the analysis. The immediate posttest was carried out after the treatments. Participants were given a paper with the 12 target words in English and were told to translate those words into Chinese. In the delayed

posttest, the participants were also told to translate the target words from English to Chinese. However, the order of the items in the immediate and delayed posttests was randomized. In the tests, every correct translation of a target word was scored 1 and the incorrect answer was scored 0. Thus, the maximum score on each test was 12.

Because of the nature of the Chinese language, there are different ways of expressing the same meaning. Thus, the translations of words in the dependent measures were carefully scored. Synonyms or definition of the words were marked as correct answers as long as they expressed the meaning of the target words in the context. For example, correct responses for the target word *escape* were 逃走 (run away), 逃跑 (synonym of escape), 溜走 (flee), or 逃亡 (run off).

# Analysis

The variables of interest were pretest scores, immediate posttest scores, and delayed posttest scores for the different treatments. Assumption testing was done to ensure the variables had no violations against further analysis. Two repeated measures analysis of variance (ANOVA) were used to compare the changes in mean scores with respect to the treatments. Repeated measures ANOVA were appropriate because the mean scores over two time points were compared. Analysis of covariance (ANCOVA) was conducted to analyze the differences between the groups' scores on the immediate and delayed posttests, because this statistical technique could assess the knowledge gains of different groups while controlling for the effects of pretest scores.

#### **Results**

The descriptive statistics including the number of participants, means, and standard deviations are reported in Table 3. The independent variable in this study was the version of reading material the participants received. To answer Research Question 1 and to determine whether words can be learned incidentally through reading bilingual books, repeated measures ANOVAs were conducted between pretest and immediate post-test scores, and pretest and delayed posttest scores within each group. The ANOVA showed that there was a significant main effect of time within groups, F(1, 79) = 134.16, p = .00, partial eta squared  $(\eta_p^2) = .63$ . Table 4 shows there were significant differences between pretest and immediate posttest scores for each group, indicating that each learning condition had contributed to significant gains in vocabulary knowledge.

After the treatments, the Glossed Text Group had the largest mean increase (3.21). The effect size was very large (d = 1.48). The glossing condition also led to a statistically significant increase between pretest and delayed posttest (1.12, d = .66). The English-first Bilingual Reading Group had a mean increase of 3.00 in the immediate posttest, and the effect size was very large (d = 1.75). Their mean increase from pretest to delayed posttest was 2.35 and the effect size was also very large (d = 1.27). The Chinese-first Bilingual Reading Group had a mean increase of 2.79 in the immediate posttest with a very large effect size (d = 1.54), and in the delayed posttest, their mean increase was 1.71 with a very large effect size (d = 1.22). The Plain Text Group had the lowest word knowledge gain, with only a 1.20 mean increase. However, there was still a large effect size (d = 1.18). There was no significant gain in vocabulary knowledge found for this

group in the delayed posttest.

Table 3. Means and standard deviations of learning conditions on dependent measures

| Group                   |    | Pretest Scores | Immediate Posttest Scores | Delayed Posttest Scores |
|-------------------------|----|----------------|---------------------------|-------------------------|
| PTG $(n = 15)$ $M$ 1.47 |    | 2.67           | 1.53                      |                         |
|                         | SD | .92            | 1.11                      | 1.25                    |
| GTG ( $n = 24$ )        | M  | 1.13           | 4.33                      | 2.25                    |
|                         | SD | 1.36           | 2.75                      | 1.98                    |
| EBRG $(n = 20)$         | M  | 1.10           | 4.10                      | 3.45                    |
|                         | SD | .85            | 2.27                      | 2.48                    |
| CBRG $(n = 24)$         | M  | 1.00           | 3.79                      | 2.71                    |
|                         | SD | .83            | 2.35                      | 2.54                    |

*Note*. The maximum score of all tests was 12.; PTG = read English text only; GTG = read English with Chinese glossing; EBRG = English-first Bilingual Reading Group; CBRG = Chinese-first Bilingual Reading Group

Table 4. Repeated measures ANOVA for knowledge gain from pretest to immediate and delayed Posttests

|                               | Cassa       | Mean       |     | CI    |       | Cohen's d |
|-------------------------------|-------------|------------|-----|-------|-------|-----------|
|                               | Group       | Difference | p   | Lower | Upper | Conen's a |
| Immediate posttest to pretest | PTG         | 1.20*      | .02 | .19   | 2.21  | 1.18      |
|                               | GTG         | GTG 3.21*  |     | 2.41  | 4.01  | 1.48      |
|                               | <b>EBRG</b> | 3.00*      | .00 | 2.12  | 3.88  | 1.75      |
|                               | CBRG        | 2.79*      | .00 | 1.99  | 3.59  | 1.54      |
| Delayed posttest to pretest   | PTG         | .07        | .88 | 82    | .82   | .06       |
|                               | GTG         | 1.12*      | .02 | 4.21  | 1.83  | .66       |
|                               | <b>EBRG</b> | 2.35*      | .00 | 1,58  | 3.12  | 1.27      |
|                               | CBRG        | 1.71*      | .00 | 1.01  | 2.41  | 1.22      |

*Note.* CI = 95% Confidence Intervals; p < .05 \*

To answer the second and third research questions a one-way between-groups ANCOVA was conducted to compare the effect of reading different forms of text on incidental vocabulary learning. When the scores on the pretest and immediate posttest were considered, there was a significant difference between groups, F(3, 78) = 3.81, p = .01,  $\eta_p^2 = .13$ . Post hoc tests using the Bonferroni adjustment were conducted to compare the mean differences between groups. The post hoc test showed that the Plain Text Group had a significant difference with the Glossed Text Group (p = .01), and the Plain Text Group also had a significant difference with English-first Bilingual Reading Group (p = .04). When the pretest and delayed posttest scores were analyzed, there was also a significant difference between groups  $(F(3, 78) = 5.11, p = .00, \eta_p^2 = .16)$ . A significant difference was found between the Plain Text Group and the two bilingual groups. Table 5 shows the between-groups comparisons for the immediate posttest scores and for the delayed posttest scores.

| Table 5. Results of unalyses of variance between groups |       |      |     |      |      |  |  |
|---------------------------------------------------------|-------|------|-----|------|------|--|--|
|                                                         | Group | PTG  | GTG | EBRG | CBRG |  |  |
| Immediate Posttest                                      | PTG   | _    |     |      |      |  |  |
|                                                         | GTG   | .01* |     |      |      |  |  |
|                                                         | EBRG  | .04* | 1   |      |      |  |  |
|                                                         | CBRG  | .07  | 1   | 1    |      |  |  |
| Delayed Posttest                                        | PTG   | _    |     |      |      |  |  |
|                                                         | GTG   | .48  |     |      |      |  |  |
|                                                         | EBRG  | .00* | .14 |      |      |  |  |
|                                                         | CBRG  | .04* | 1   | 1    |      |  |  |

Table 5. Results of analyses of variance between groups

*Note. p* < .05 \*; PTG = read English text only; GTG = read English with Chinese glossing; EBRG = English-first Bilingual Reading Group; CBRG = Chinese-first Bilingual Reading Group

In summary, the analysis showed: (a) All four groups made significant gains in lexical knowledge through completing the treatments, (b) Those who read glossed text or bilingual text had significantly durable knowledge gain, (c) The mean scores in the immediate posttest of participants who read glossed text or read the English version of the text before the Chinese version were significantly higher than the scores of participants who only read the English version of the text, (d) The knowledge gains of participants who read bilingual texts were significantly higher on the delayed posttest than those who only read the English version of the text.

#### **Discussion**

In response to the first research question, the results of this study indicated that reading bilingual materials contributed to the acquisition of vocabulary knowledge. Each of the bilingual reading conditions contributed to significant gains in vocabulary knowledge. The results showed that the vocabulary test scores increased by 25% and 23% through reading the bilingual materials. This finding is supported by the results of Hu et al. 's (2012) study indicating that reading bilingual books may contribute to vocabulary learning. In their study, native Chinese participants were involved in an eight-week treatment where they read English-Chinese bilingual books for one and a half hours every week. Hu et al. compared the statistics obtained from pre- and postassessments to report on their participants' English language development. They found that the number of words participants could identify had an increase of 28% and 27.2% for two groups of target words. The present study found slightly smaller vocabulary knowledge gains. There are two reasons for the slightly smaller increases in knowledge in the present study. First, the lower scores in this study may be due to the fact that the participants were tested on their knowledge of form-meaning connection in the present study rather than knowledge of spelling. Research suggests that knowledge of written form is gained more easily than knowledge of form-meaning connection (Webb, 2005, 2007, 2008, 2009a, 2009b). Second, the reading session was conducted only once in this study rather than multiple times in Hu et al.'s (2012) study. Research on incidental vocabulary learning tends to suggest that gains are larger when learners read multiple texts rather than a single text (Horst, 2005; Webb & Chang, 2015). Reading multiple texts

increases the chances of repeatedly encountering the same words, and thus increases the potential for learning the words.

Significant gains by participants who read the English-only text showed that there were also learning effects through reading the plain text. The gain made through reading plain text was 10% on the immediate posttest. Although the size of the gain is relatively small, it is consistent with many earlier studies of incidental vocabulary learning through reading L2 texts (Day, Omura & Hiramatsu, 1992; Waring & Takaki, 2003). There was, however, no statistically significant increase in vocabulary knowledge from pretest to the delayed posttest for the group who only read the English text. A lack of durable incidental learning gains has also been found in other studies (Waring & Takaki, 2003). The fact that the Plain Text Group were able to incidentally learn words indicates that the English version of the text was at the appropriate level for the participants. However, it is important to note that this may negate the advantage that the translations in the bilingual learning conditions provide.

In answer to the second research question, the results indicated that the order of reading L1 and L2 bilingual versions of the text had no significant influence on vocabulary learning. This result does not provide any clear support for the theories of SLA discussed earlier. From the standpoint of the noticing hypothesis and the desirable difficulty hypothesis, learning should be superior in the L2-L1 order because readers may be more likely to notice and attend to unfamiliar language (noticing hypothesis), and or process the language in the text more deeply (desirable difficulty) in that order. From the standpoint of the theory of errorless learning, more vocabulary may be learned in the L1-L2 direction because readers are less likely to make errors in relation to the L2 version of the text after having read the L1 version of the text. Perhaps, the reason why there was no difference found between the two bilingual learning conditions may be that the relatively short reading materials used in this study enabled the participants to more easily recall the information found in the first version of the text when reading the second version. This may have allowed participants to more easily notice and attend to language features when reading the subsequent L2 version in the L1-L2 orders. Similarly, unfamiliar words encountered in the L2 version in the L1-L2 order may have also been processed deeply because the readers were able to focus on these words and try to recall their L1 meanings. Moreover, although the L1-L2 order may lead to fewer errors in comprehension, reading short texts may have reduced the potential for errors to be made and remembered in the L2-L1 direction. Reading longer bilingual versions of a text in order might have a different effect on vocabulary learning, because greater spacing between reading L1 and L2 versions may reduce the reader's ability to link the information encountered in the two versions. However, the results suggest that the order of reading bilingual text may not affect vocabulary learning if learners move from reading one version of a text to its translation in a relatively short time.

In answer to the third research question, the results indicated that bilingual reading was as effective as glossed reading for learning words. There were no significant differences in learning gains between these groups. It should be noted however, that the group that read glossed text and the group that read English text before the Chinese version of the text significantly outperformed the group that read plain text in the immediate posttest. Also, in the delayed posttest, only the two bilingual groups had significantly higher test scores than the plain text group. Lee and VanPatten (1995) suggested that from the perspective of noticing and attention, glossed target

words should have a greater chance to be learned by participants because the glossing helps to focus readers' attention on the target words in the text. Thus, it is reasonable to believe that bilingual reading would be less effective in vocabulary learning than glossed reading. However, the results of this study did not support the assumption as there was no significant difference found between glossed reading and bilingual reading.

The lack of a difference between the glossed reading condition and the two bilingual reading conditions may be due to the fact that the relatively short length of the reading material enabled participants to notice and attend to the unfamiliar words in the bilingual reading conditions. Also, in the bilingual reading conditions, the L1 translation of the material may have enabled participants to make less effort in understanding the material. The low burden on comprehension may have given participants more time to focus on the learning of unknown words.

## Pedagogical Implications

The findings indicate that bilingual text, as well as more traditional forms of text (plain text, glossed text) may make useful contributions to L2 vocabulary learning in reading programs. In bilingual text, the translation of the L2 text may be helpful not only for reading comprehension but also for incidental vocabulary acquisition. There are reasons why there is value in including bilingual texts in reading programs. First, language teachers and learners would have a wider range of appropriate reading materials because bilingual books may reduce the potential for learners to misunderstand content. Second, learners are able to read bilingual materials that are beyond their proficiency level and may still learn new words through the reading process. This is indicated from the fact that bilingual books are readable for those who do not comprehend 95% or 98% of the second language because they can read the book in their first language. Bilingual books also allow greater flexibility of learning and teaching. It is very likely that language learners have different background knowledge of a text even if they are from the same class using the same curriculum. Thus, in glossed reading materials, the selection of glossed words is unlikely to meet every reader's individual learning needs. In contrast, reading bilingual books gives readers the opportunity to learn every unknown word at their own pace. This may help to facilitate vocabulary learning both inside and out of the classroom.

# Limitations and Suggestions for Future Research

Most importantly, it should be noted that bilingual versions of texts are likely to vary in terms of L1 and L2 overlap; some sentences may have word for word overlap while other sentences may vary to a large degree in terms of overlap. This will likely affect the degree to which words can be learned through reading bilingual texts. In this study, the text that was used included L2 target words that had L1 equivalents in the translation. Thus, there may have been a better chance to learn L2 vocabulary in this study than there might be in other examples of bilingual text. Although this is a common element of research designs for studies of incidental vocabulary learning (words that are unlikely to be learned due to misleading and opaque contexts are rarely if ever selected as target items), it is important to be aware that the results cannot be generalized to all texts. Clearly, further research on incidental vocabulary learning through reading bilingual texts is warranted.

Several elements of this study could also be modified in future studies in order to further investigate the effects of bilingual reading on vocabulary learning. First, it would be useful to examine the influence of time on the effects of reading bilingual books. The same treatment time was used in this study for the bilingual reading conditions. However, research indicates that time on task can influence the vocabulary gains made through different learning conditions (Webb, 2005). Reading two versions of the same text is likely to take a different amount of time than reading one L2 version of the text. This leads to the question of efficacy and whether more time-consuming reading tasks lead to greater learning (Nation & Webb, 2011). Thus, it would be useful to examine how the time given to read bilingual and plain text materials made one type of text more efficient for vocabulary learning.

The second element that could be modified in a future study is the format of bilingual texts. In the present study, participants either read the English version of the text before the Chinese version or the Chinese before the English text. These two versions of the texts were presented on separate pages. It would be useful to investigate other ways of presenting bilingual texts for reading. For example, future studies could include the L1 and L2 texts in columns on the same page, or provide the translation sentence by sentence, paragraph by paragraph, or complete version by complete version. Including L1 and L2 versions of the same text on the same page may allow a form of contrastive analysis to occur when reading that may help to increase vocabulary learning (Laufer & Girsai, 2008). It would thus be useful to investigate whether the placement of the L1 and L2 versions of the material affected vocabulary learning.

The third element that could be examined in further research is the extent to which vocabulary may be learned when the L2 versions of bilingual reading materials are beyond a readers' current proficiency level. The material used in the present study was chosen to fit the proficiency level of the participants. Thus, it would be useful to examine the extent to which bilingual materials that are clearly beyond the readers' proficiency level contribute to learning. For example, it would be useful to investigate the degree to which readers who are yet to master the most frequent 2000 L2 words are able to learn vocabulary through reading a bilingual text in which knowledge of the most frequent 3000 words is required to reach 95% lexical coverage. Moreover, it would be useful to examine which words are learned in this situation; the highest frequency words that have the most value for the learners or the less frequent topic related words that may be quite frequent within that text.

A final limitation relates to the ways of assessing participants' vocabulary learning. In this study, only receptive knowledge of the target words was measured in the form of meaning recall tests. Future research can build upon the present study by extending the present research design to include different types of tests assessing vocabulary knowledge. For example, the extent to which participants were able recall the L2 vocabulary and link it to the L1 meaning was not examined in this study. An argument could be made that the L2-L1 order may lead readers to recall the L2 forms of words during the subsequent L1 reading. This additional productive component of the reading could have a positive effect on learning that may make that order superior in developing productive vocabulary knowledge (Nation & Webb, 2011; Waring, 1997; Webb, 2009b).

#### Conclusion

The findings of the present study indicate that bilingual books may be a useful tool for vocabulary learning. The vocabulary gains through reading bilingual text were similar to reading glossed text and greater than reading English only text. These findings show the potential value of including bilingual reading in language learning. Also, the study indicates the reading order of bilingual texts did not affect the learning of L2 vocabulary. However, because almost no research has focused on the use of bilingual materials for vocabulary (and language) learning, we believe that more research is warranted to further explore this topic.

The main findings are as follows. The participants who read English-only text, glossed text, and bilingual texts all made significant vocabulary knowledge gains through reading the material. Reading glossed text and bilingual texts enabled participants to get significantly higher scores in the delayed posttest than in pretest. That is, reading glossed text and reading bilingual texts contributed to significant durable knowledge gains. Compared to participants who read the English-only material, those who read glossed text and the English version of the text before the Chinese version performed significantly better in the immediate posttest. One week after the treatment, the participants who read bilingual text significantly outperformed those who only read the English text in the delayed posttest. The findings indicated the value of using bilingual books for vocabulary learning. Also, the results revealed that the reading order of the English version and Chinese version of the bilingual texts may not affect the knowledge gains.

The present study provides some useful implications for language learning. First, a wider range of appropriate reading materials should be available for language teachers and learners. Bilingual books can reduce the potential of misunderstanding content as they enable readers to get correct meaning of the content from text written in their L1. Second, learners are able to read bilingual materials with greater flexibility. In EFL classrooms, it is very likely that learners with different proficiency levels and different background knowledge use the same curriculum. Using glossed text as reading material is unlikely to meet every learner's needs because the target vocabulary may be known to one learner but not to the other. Bilingual books allow every reader to have the opportunity to learn L2 vocabulary at their own pace. A further benefit to bilingual books is that they enable language learners to read beyond their proficiency level and still learn new words in the reading. Bilingual books thus have value both inside and outside of the classroom.

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## Appendix A

## Examples of Bilingual Text

### 第八章

## 华生医生的第一份报告

从此以后,我要按照事情发生的前后,把放在我面前的桌子上的、我写给歇洛克·福尔摩斯先生的信件抄录下来。虽然其中一篇已经遗失,但我相信我现在所写的内容与事实绝无出入。我对这些可悲的事件记忆得很清楚,可是这些信总还是能更准确地说明我当时的感觉和怀疑的。

我亲爱的福尔摩斯: 我以前发的信和电报,谅已使你及时地了解了在这个最荒凉的角落里所发生的一切。一个人在这里呆得愈久,沼地的神貌就会愈深地渗入你的心灵,它是那样的广大,具有那样可怕的魔力。只要你一到了沼地的中心,你就要看不到近代英国的丝毫的痕迹了:可是另一方面,你在这里到处都能看到史前人的房屋和劳动成果。在你散步的时候,四周都是这些被人遗忘的人们的房屋,还有他们的坟墓和粗大的石柱,这些石柱,可能就陈明了他们的庙宇之所在。当你在班驳的山坡上看到那些用灰色岩石建成的小屋的时候,你就会忘记你现在所处的年代了,如果你竟看到从低矮的小洞里爬出一个身披兽皮、毛发茸茸的人,将燧石箭头的箭搭在弓弦上,你会感到他的出现比你本人在这里还要自然得多呢。奇怪的倒是在这一直都是最贫瘠的土地上,他们竟会往得那样稠密。我并不是个考古学家,可是我能想象得出,他们都是些不喜争斗而受人蹂躏的种族,被迫接受了这块谁也不愿居住的地方。

#### VIII

#### PREMIER RAPPORT DU DOCTEUR WATSON

J'ai sous les yeux, éparses sur ma table, les lettres que j'écrivais à Sherlock Holmes au fur et à mesure que se déroulèrent les événements. Une page manque ; mais, sauf cette lacune, elles sont l'expression exacte de la vérité. De plus, elles montrent mes impressions et mes craintes d'alors plus fidèlement que ne pourrait le faire ma mémoire, quelque ineffaçable souvenir qu'elle ait gardé de ces heures tragiques. Je vais donc reproduire ces lettres afin de relater les faits selon leur enchaînement.

Château de Baskerville, 13 octobre.

« Mon cher Holmes,

« Mes dépêches et mes lettres précédentes vous ont à peu près tenu au courant de tout ce qui s'est passé jusqu'à ce jour dans ce coin du monde, certainement oublié de Dieu. « Plus on vit ici, plus l'influence de la lande pénètre l'âme du sentiment de son immensité, mais aussi de son charme effrayant. Dès qu'on a foulé ce sol, on perd la notion de l'Angleterre moderne. On heurte à chaque pas les vestiges laissés par les hommes des temps préhistoriques. Où qu'on dirige sa promenade, on rencontre les demeures de cette race éteinte, ses tombeaux et les énormes monolithes qui marquent, à ce que l'on suppose, l'emplacement de ses temples. Si celui qui examine ces huttes de pierres grisâtres adossées au flanc raviné des collines apercevait un homme, la barbe et les cheveux incultes, le corps recouvert d'une peau de bête, sortant de l'une d'elles et assujettissant sur la corde de son arc une flèche terminée par un silex aigu, celui-là se croirait transporté à un autre âge et jurerait que la présence en ces lieux de cet être, depuis longtemps disparu, est plus naturelle que la sienne propre. On se demande avec stupeur comment des êtres humains ont pu vivre en aussi grand nombre sur cette terre

## Chapter 8

#### First Report of Dr. Watson

From this point onward I will follow the course of events by transcribing my own letters to Mr. Sherlock Holmes which lie before me on the table. One page is missing, but otherwise they are exactly as written and show my feelings and suspicions of the moment more accurately than my memory, clear as it is upon these tragic events, can possibly do.

BASKERVILLE HALL, October 13th.

MY DEAR HOLMES,—My previous letters and telegrams have kept you pretty well up to date as to all that has occurred in this most God-forsaken corner of the world. The longer one stays here the more does the spirit of the moor sink into one's soul, its vastness, and also its grim charm. When you are once out upon its bosom you have left all traces of modern England behind you, but on the other hand you are conscious everywhere of the homes and the work of the prehistoric people. On all sides of you as you walk are the houses of these forgotten folk, with their graves and the huge monoliths which are supposed to have marked their temples. As you look at their gray stone huts against the scarred hill-sides you leave your own age behind you, and if you were to see a skin-clad, hairy man crawl out from the low door fitting a flint-tipped arrow on to the string of his bow, you would feel that his presence there was more natural than your own. The strange thing is that they should have lived so thickly on what must always have been most unfruitful soil. I am no antiquarian, but I could imagine that they were some unwarlike and harried race who were forced to accept that which none other would occupy.

## Chapter 8

#### First Report of Dr. Watson

From this point onward I will follow the course of events by transcribing my own letters to Mr. Sherlock Holmes which lie before me on the table. One page is missing, but otherwise they are exactly as written and show my feelings and suspicions of the moment more accurately than my memory, clear as it is upon these tragic events, can possibly do.

BASKERVILLE HALL, October 13th.

MY DEAR HOLMES,—My previous letters and telegrams have kept you pretty well up to date as to all that has occurred in this most God-forsaken corner of the world. The longer one stays here the more does the spirit of the moor sink into one's soul, its vastness, and also its grim charm. When you are once out upon its bosom you have left all traces of modern England behind you, but on the other hand you are conscious everywhere of the homes and the work of the prehistoric people. On all sides of you as you walk are the houses of these forgotten folk, with their graves and the huge monoliths which are supposed to have marked their temples. As you look at their gray stone huts against the scarred hill-sides you leave your own age behind you, and if you were to see a skin-clad, hairy man crawl out from the low door fitting a flint-tipped arrow on to the string of his bow, you would feel that his presence there was more natural than your own. The strange thing is that they should have lived so thickly on what must always have been most unfruitful soil. I am no antiquarian, but I could imagine that they were some unwarlike and harried race who were forced to accept that which none other would occupy.

# Appendix B

# Pretest (One week before the Treatments)

# Translate the following items 翻译单词和词组

| uiibic | tte the following items milit   / / / / | 1.1.1         |               |
|--------|-----------------------------------------|---------------|---------------|
| 1.     | news                                    | 18. storm     | 35. young     |
| 2.     | coffee                                  | 19. innocent  | 36. adventure |
| 3.     | ignore                                  | 20. confuse   | 37. thousand  |
| 4.     | effect                                  | 21. guarantee | 38. complete  |
| 5.     | comfortable                             | 22. pirate    | 39. Turkish   |
| 6.     | character                               | 23. explore   | 40. relatives |
| 7.     | knowledge                               | 24. jail      | 41. sweat     |
| 8.     | Brazil                                  | 25. sail      | 42. hug       |
| 9.     | screen                                  | 26. powder    | 43. master    |
| 10.    | shore                                   | 27. task      | 44. golf      |
| 11.    | shave                                   | 28. escape    | 45. canary    |
| 12.    | trade                                   | 29. diet      | 46. array     |
| 13.    | cape                                    | 30. volunteer | 47. slave     |
| 14.    | plate                                   | 31. fresh     | 48. legacy    |
| 15.    | curse                                   | 32. leopard   | 49. owl       |
| 16.    | gloom                                   | 33. prisoner  | 50. sinker    |
| 17.    | native                                  | 34. special   |               |
|        |                                         |               |               |

# *Immediate Posttest (Immediate after the Treatments)*

# Translate the following items 翻译单词和词组

| 1. | master      | 6.  | storm    | 11. | leopard |
|----|-------------|-----|----------|-----|---------|
| 2. | sail        | 7.  | prisoner | 12. | slave   |
| 3. | escape      | 8.  | Brazil   | 13. | Turkish |
| 4. | comfortable | 9.  | pirate   | 14. | shore   |
| 5. | adventure   | 10. | cape     | 15. | canary  |

# Delayed Posttest (One week after the Treatments)

# Translate the following items 翻译单词和词组

| 1. | prisoner    | 6.  | cape    | 11. | sail      |
|----|-------------|-----|---------|-----|-----------|
| 2. | escape      | 7.  | leopard | 12. | Brazil    |
| 3. | shore       | 8.  | Turkish | 13. | adventure |
| 4. | comfortable | 9.  | pirate  | 14. | storm     |
| 5. | canary      | 10. | master  | 15. | slave     |

## Appendix C

#### **Materials**

### **Group One: Plain Text**

Before I begin my story, I would like to tell you a little about myself.

I was born in the year 1632, in the city of York in the north of England. My father was German, but he came to live and work in England. Soon after that, he married my mother, who was English. Her family name was Robinson, so, when I was born, they called me Robinson, after her.

My father did well in his business and I went to a good school. He wanted me to get a good job and live a quiet, comfortable life. But I didn't want that. I wanted adventure and an exciting life.

'I want to be a sailor and go to sea?' I told my mother and father. They were very unhappy about this.

'Please don't go?' my father said. 'You won't be happy, you know. Sailors have a difficult and dangerous life?' And because I loved him, and he was unhappy, I tried to forget about the sea.

But I couldn't forget, and about a year later, I saw a friend in town. His father had a ship, and my friend said to me, 'We're sailing to London tomorrow. Why don't you come with us?'

And so, on September 1st, 1651, I went to Hull, and the next day we sailed for London.

But, a few days later, there was a strong wind. The sea was rough and dangerous, and the ship went up and down, up and down. I was very ill, and very afraid.

'Oh, I don't want to die! 'I cried. 'I want to live! If I live, I'll go home and never go to sea again!' The next day the wind dropped, and the sea was quiet and beautiful again. 'Well, Bob,' my friend laughed. 'How do you feel now? The wind wasn't too bad.' 'What!' I cried. 'It was a terrible storm.'

'Oh, that wasn't a storm,' my friend answered. 'Just a little wind. Forget it. Come and have a drink.' After a few drinks with my friend, I felt better. I forgot about the danger and decided not to go home. I didn't want my friends and family to laugh at me!

I stayed in London for some time, but I still wanted to go to sea. So, when the captain of a ship asked me to go with him to Guinea in Africa, I agreed. And so I went to sea for the second time.

It was a good ship and everything went well at first, but I was very ill again. Then, when we were near the Canary Islands, a Turkish pirate ship came after us. They were famous thieves of the sea at that time.

There was a long, hard fight, but when it finished, we and the ship were prisoners.

The Turkish captain and his men took us to Sallee in Morocco. They wanted to sell us as slaves in the markets there. But in the end the Turkish captain decided to keep me for himself, and took me home with him. This was a sudden and terrible change in my life. I was now a slave and this Turkish captain was my master.

For two long years I lived the life of a slave. I worked in escape, but it was never possible. I thought about it day and night. My master liked to go fishing in a little boat, and he always took me with him. A man called Moely, and a young boy also went with us.

One day my master said to us, 'Some of my friends want to go fishing tomorrow. Get the boat ready.' So we put a lot of food and drink on the boat, and the next morning, we waited for my master and his friends. But when my master arrived, he was alone.

'My friends don't want to go fishing today,' he said to me. 'But you go with Moely and the boy, and catch some fish for our supper tonight.'

'Yes, master, 'I answered quietly, but inside I was excited. 'Perhaps now I can escape,' I said to myself. My master went back to his friends and we took the boat out to sea. For a time we fished quietly, and then I moved carefully behind Moely and knocked him into the water. 'Swim!' I cried. 'Swim to the shore!' My master liked to shoot seabirds and so there were guns on the boat. Quickly, I took one of these guns. Moely was swimming after the boat and I shouted to him:

'Go back to the shore! You can swim there! It's not too far. I won't hurt you, but if you come near the boat, I'll shoot you through the head!' So Moely turned, and swam back to the shore as quickly as he could.

Then I said to the boy, 'Xury, if you help me, I'll be a good friend to you. If you don't help me, I'll push you into the sea too.'

But Xury was happy to help me. 'I'll go all over the world with you,' he cried.

I wanted to sail to the Canary Islands, but I was afraid to go too far from the shore. It was only a small boat. And so we sailed on south for some days. We had very little water, and it was dangerous country here, with many wild animals. We were afraid, but we often had to go on shore to get more water. Once I used a gun to shoot a wild animal. I don't know what animal it was, but it made a good meal.

For about ten or twelve days we sailed on south, down the coast of Africa. Then one day we saw some people on the shore— strange, wild people, who did not look friendly. By now we had very little food, and We really needed help. we were afraid, but we had to go on shore.

At first, they were afraid of us, too. Perhaps white people never visited this coast. We did not speak their language, of course, so we used our hands and faces to show that we were hungry. They came with food for us, but then they moved away quickly. We carried the food to our boat, and they watched us. I tried to thank them, but I had nothing to give them.

Just then two big wild cats came down to the shore from the mountains. I think they were leopards. The people were afraid of these wild cats, and the women cried out. Quickly, I took a gun, and shot one of the animals. The second wild cat ran back up into the mountains.

Guns were new to these African people, and they were afraid of the loud noise and the smoke. But they were happy about the dead wild cat. I gave them the meat of the dead animal, and they gave us more food and water.

We now had a lot of food and water, and we sailed on. Eleven days later we came near the Cape Verde Islands. We could see them, but we couldn't get near because there was no wind. We waited. Suddenly Xury called to me, 'Look, a ship!'

He was right! We called and shouted and sailed our little boat as fast as we could. But the ship did not see us. Then I re-membered the guns which made a lot of smoke. A few minutes later the ship saw us and turned.

When we were on the ship, the Portuguese captain listened to my story. He was going to Brazil and agreed to help me, but he wanted nothing for his help. 'No, 'he said, when I tried to pay him. 'Perhaps, one day, someone will help me when I need it.'

But he gave me money for my boat, and for Xury, too. At first, I did not want to sell Xury as a slave, after all our dangerous adventures together. But Xury was happy to go to the captain, and the captain was a good man. 'In ten years' time, 'he said, 'Xury can go free.'

When we arrived in Brazil three weeks later, I said goodbye to the captain and Xury, left the ship, and went to begin a new life.

# **Group Two: Glossed Text**

Before I begin my story, I would like to tell you a little about myself.

I was born in the year 1632, in the city of York in the north of England. My father was German, but he came to live and work in England. Soon after that, he married my mother, who was English. Her family name was Robinson, so, when I was born, they called me Robinson, after her.

My father did well in his business and I went to a good school. He wanted me to get a good job and live a quiet, comfortable(舒适的) life. But I didn't want that. I wanted adventure (冒险) and an exciting life.

'I want to be a sailor and go to sea?' I told my mother and father. They were very unhappy about this.

'Please don't go?' my father said. 'You won't be happy, you know. Sailors have a difficult and dangerous life?' And because I loved him, and he was unhappy, I tried to forget about the sea.

But I couldn't forget, and about a year later, I saw a friend in town. His father had a ship, and my friend said to me, 'We're sailing(航行) to London tomorrow. Why don't you come with us?'

And so, on September 1st, 1651, I went to Hull, and the next day we sailed for London.

But, a few days later, there was a strong wind. The sea was rough and dangerous, and the ship went up and down, up and down. I was very ill, and very afraid.

'Oh, I don't want to die! 'I cried. 'I want to live! If I live, I'll go home and never go to sea again!' The next day the wind dropped, and the sea was quiet and beautiful again. 'Well, Bob,' my friend laughed. 'How do you feel now? The wind wasn't too bad.' 'What!' I cried. 'It was a terrible storm (暴风雨).' 'Oh, that wasn't a storm,' my friend answered. 'Just a little wind. Forget it. Come and have a drink.' After a few drinks with my friend, I felt better. I forgot about the danger and decided not to go home. I didn't want my friends and family to laugh at me!

I stayed in London for some time, but I still wanted to go to sea. So, when the captain of a ship asked me to go with him to Guinea in Africa, I agreed. And so I went to sea for the second time.

It was a good ship and everything went well at first, but I was very ill again. Then, when we were near the Canary(金丝雀) Islands, a Turkish(土耳其的) pirate(海盗) ship came after us. They were famous thieves of the sea at that time. There was a long, hard fight, but when it finished, we and the ship were prisoners(囚犯).

The Turkish captain and his men took us to Sallee in Morocco. They wanted to sell us as slaves (
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For two long years I lived the life of a slave. I worked in escape (迷), but it was never possible. I thought about it day and night. My master liked to go fishing in a little boat, and he always took me with him. A man called Moely, and a young boy also went with us.

One day my master said to us, 'Some of my friends want to go fishing tomorrow. Get the boat ready.' So we put a lot of food and drink on the boat, and the next morning, we waited for my master and his friends. But when my master arrived, he was alone.

'My friends don't want to go fishing today,' he said to me. 'But you go with Moely and the boy, and catch some fish for our supper tonight.'

'Yes, master, 'I answered quietly, but inside I was excited. 'Perhaps now I can escape,' I said to myself. My master went back to his friends and we took the boat out to sea. For a time we fished quietly, and then I moved carefully behind Moely and knocked him into the water. 'Swim!' I cried. 'Swim to the shore (海岸)!'

My master liked to shoot seabirds and so there were guns on the boat. Quickly, I took one of these guns. Moely was swimming after the boat and I shouted to him:

'Go back to the shore! You can swim there! It's not too far. I won't hurt you, but if you come near the boat, I'll shoot you through the head!' So Moely turned, and swam back to the shore as quickly as he could.

Then I said to the boy, 'Xury, if you help me, I'll be a good friend to you. If you don't help me, I'll push you into the sea too.'

But Xury was happy to help me. 'I'll go all over the world with you,' he cried.

I wanted to sail to the Canary Islands, but I was afraid to go too far from the shore. It was only a small boat. And so we sailed on south for some days. We had very little water, and it was dangerous country here, with many wild animals. We were afraid, but we often had to go on shore to get more water. Once I used a gun to shoot a wild animal. I don't know what animal it was, but it made a good meal.

For about ten or twelve days we sailed on south, down the coast of Africa. Then one day we saw some people on the shore— strange, wild people, who did not look friendly. By now we had very little food, and We really needed help. we were afraid, but we had to go on shore.

At first, they were afraid of us, too. Perhaps white people never visited this coast. We did not speak their language, of course, so we used our hands and faces to show that we were hungry. They came with food for us, but then they moved away quickly. We carried the food to our boat, and they watched us. I tried to thank them, but I had nothing to give them.

Just then two big wild cats came down to the shore from the mountains. I think they were leopards (美洲 豹) . The people were afraid of these wild cats, and the women cried out. Quickly, I took a gun, and shot one of the animals. The second wild cat ran back up into the mountains.

Guns were new to these African people, and they were afraid of the loud noise and the smoke. But they were happy about the dead wild cat. I gave them the meat of the dead animal, and they gave us more food and water.

We now had a lot of food and water, and we sailed on. Eleven days later we came near the Cape (海角) Verde Islands. We could see them, but we couldn't get near because there was no wind. We waited. Suddenly Xury called to me, 'Look, a ship!'

He was right! We called and shouted and sailed our little boat as fast as we could. But the ship did not see us. Then I re-membered the guns which made a lot of smoke. A few minutes later the ship saw us and turned.

When we were on the ship, the Portuguese captain listened to my story. He was going to Brazil (巴西) and agreed to help me, but he wanted nothing for his help. 'No, 'he said, when I tried to pay him. 'Perhaps, one day, someone will help me when I need it.'

But he gave me money for my boat, and for Xury, too. At first, I did not want to sell Xury as a slave, after all our dangerous adventures together. But Xury was happy to go to the captain, and the captain was a good man. 'In ten years' time, 'he said, 'Xury can go free.'

When we arrived in Brazil three weeks later, I said goodbye to the captain and Xury, left the ship, and went to begin a new life.

### **Group 3: L2>>L1**

(English Version)

Before I begin my story, I would like to tell you a little about myself.

I was born in the year 1632, in the city of York in the north of England. My father was German, but he came to live and work in England. Soon after that, he married my mother, who was English. Her family name was Robinson, so, when I was born, they called me Robinson, after her.

My father did well in his business and I went to a good school. He wanted me to get a good job and live a quiet, comfortable life. But I didn't want that. I wanted adventure and an exciting life.

'I want to be a sailor and go to sea?' I told my mother and father. They were very unhappy about this.

'Please don't go?' my father said. 'You won't be happy, you know. Sailors have a difficult and dangerous life?' And because I loved him, and he was unhappy, I tried to forget about the sea.

But I couldn't forget, and about a year later, I saw a friend in town. His father had a ship, and my friend said to me, 'We're sailing to London tomorrow. Why don't you come with us?'

And so, on September 1st, 1651, I went to Hull, and the next day we sailed for London.

But, a few days later, there was a strong wind. The sea was rough and dangerous, and the ship went up and down, up and down. I was very ill, and very afraid.

'Oh, I don't want to die! 'I cried. 'I want to live! If I live, I'll go home and never go to sea again!'

The next day the wind dropped, and the sea was quiet and beautiful again. 'Well, Bob,' my friend laughed. 'How do you feel now? The wind wasn't too bad.' 'What!' I cried. 'It was a terrible storm.'

'Oh, that wasn't a storm,' my friend answered. 'Just a little wind. Forget it. Come and have a drink.'

After a few drinks with my friend, I felt better. I forgot about the danger and decided not to go home. I didn't want my friends and family to laugh at me!

I stayed in London for some time, but I still wanted to go to sea. So, when the captain of a ship asked me to go with him to Guinea in Africa, I agreed. And so I went to sea for the second time.

It was a good ship and everything went well at first, but I was very ill again. Then, when we were near the Canary Islands, a Turkish pirate ship came after us. They were famous thieves of the sea at that time.

There was a long, hard fight, but when it finished, we and the ship were prisoners.

The Turkish captain and his men took us to Sallee in Morocco. They wanted to sell us as slaves in the markets there. But in the end the Turkish captain decided to keep me for himself, and took me home with him. This was a sudden and terrible change in my life. I was now a slave and this Turkish captain was my master

For two long years I lived the life of a slave. I worked in escape, but it was never possible. I thought about it day and night. My master liked to go fishing in a little boat, and he always took me with him. A man

called Moely, and a young boy also went with us.

One day my master said to us, 'Some of my friends want to go fishing tomorrow. Get the boat ready.' So we put a lot of food and drink on the boat, and the next morning, we waited for my master and his friends. But when my master arrived, he was alone.

'My friends don't want to go fishing today,' he said to me. 'But you go with Moely and the boy, and catch some fish for our supper tonight.'

'Yes, master, 'I answered quietly, but inside I was excited. 'Perhaps now I can escape,' I said to myself. My master went back to his friends and we took the boat out to sea. For a time we fished quietly, and then I moved carefully behind Moely and knocked him into the water. 'Swim!' I cried. 'Swim to the shore!' My master liked to shoot seabirds and so there were guns on the boat. Quickly, I took one of these guns. Moely was swimming after the boat and I shouted to him:

'Go back to the shore! You can swim there! It's not too far. I won't hurt you, but if you come near the boat, I'll shoot you through the head!' So Moely turned, and swam back to the shore as quickly as he could.

Then I said to the boy, 'Xury, if you help me, I'll be a good friend to you. If you don't help me, I'll push you into the sea too.'

But Xury was happy to help me. 'I'll go all over the world with you,' he cried.

I wanted to sail to the Canary Islands, but I was afraid to go too far from the shore. It was only a small boat. And so we sailed on south for some days. We had very little water, and it was dangerous country here, with many wild animals. We were afraid, but we often had to go on shore to get more water. Once I used a gun to shoot a wild animal. I don't know what animal it was, but it made a good meal.

For about ten or twelve days we sailed on south, down the coast of Africa. Then one day we saw some people on the shore— strange, wild people, who did not look friendly. By now we had very little food, and We really needed help. we were afraid, but we had to go on shore.

At first, they were afraid of us, too. Perhaps white people never visited this coast. We did not speak their language, of course, so we used our hands and faces to show that we were hungry. They came with food for us, but then they moved away quickly. We carried the food to our boat, and they watched us. I tried to thank them, but I had nothing to give them.

Just then two big wild cats came down to the shore from the mountains. I think they were leopards. The people were afraid of these wild cats, and the women cried out. Quickly, I took a gun, and shot one of the animals. The second wild cat ran back up into the mountains.

Guns were new to these African people, and they were afraid of the loud noise and the smoke. But they were happy about the dead wild cat. I gave them the meat of the dead animal, and they gave us more food and water.

We now had a lot of food and water, and we sailed on. Eleven days later we came near the Cape Verde Islands. We could see them, but we couldn't get near because there was no wind. We waited. Suddenly Xury called to me, 'Look, a ship!'

He was right! We called and shouted and sailed our little boat as fast as we could. But the ship did not see us. Then I re-membered the guns which made a lot of smoke. A few minutes later the ship saw us and turned.

When we were on the ship, the Portuguese captain listened to my story. He was going to Brazil and agreed to help me, but he wanted nothing for his help. 'No, 'he said, when I tried to pay him. 'Perhaps, one day, someone will help me when I need it.'

But he gave me money for my boat, and for Xury, too. At first, I did not want to sell Xury as a slave, after all our dangerous adventures together. But Xury was happy to go to the captain, and the captain was a good man. 'In ten years' time, 'he said, 'Xury can go free.'

When we arrived in Brazil three weeks later, I said goodbye to the captain and Xury, left the ship, and went to begin a new life.

## (Chinese Version)

开始我的故事之前,我想先向你谈一点我自己的情况。

我 1632 年出生在英国北部的约克郡。我父亲是德国人,但他却来到英国居住和工作。此 后不久,他与我母亲结了婚。我母亲是英国人,娘家姓鲁宾孙,因此,我出生后他们都 称呼我鲁宾孙,沿用了我母亲的姓氏。

我父亲在生意上做得很出色,并且我也进了一所好学校。他希望我找到好的工作,过一种平静的、舒适的生活。但是我不希望如此。我喜欢冒险和刺激的生活。"我想成为一名水手去航行,"我告诉父母亲。他们对此很不高兴。"不要去,"父亲说。"你不会幸福的,你知道。水手过着艰苦而且危险的生活。"因为我爱父亲,他不高兴,我便试图忘掉大海。

但我不可能忘掉,大约一年后,我在镇里遇到一个朋友。他的父亲有一艘船,我的朋友对我说,"明 天我们航行去伦敦。你为什么不和我们一起走呢?"

于是,1651 年 9 月 1 日,我到了赫尔港,第二天我们驶向伦敦。 但是,几天后,刮起了狂风,狂暴的大海危机四伏,船不断颠簸。我晕船晕得厉害,非常害怕。

"哦,我不想死!"我哭喊起来。"我想活着!假如我活着,我就要回家,再也不出海了!"

第二天,风停了,大海又重新恢复了平静而美丽。

"好了,鲍伯,"我的朋友笑着说。"现在你感觉如何?这风并不太令人讨厌。"

"什么!"我大叫起来。"这可是一场可怕的风暴。"

"哦,这不算风暴,"我的朋友回答。"仅仅是小风而已。忘记它吧,来,喝一杯。"和朋友喝了几杯, 我感觉好多了。我忘记了危险,决定不回家了。我不愿意我的朋友和家人嘲笑我!

我在伦敦停留了一段时间,但我仍然想去航行。所以,当一位船长要求我和他一起去非洲的几内亚时,我答应了。于是,我第二次去航海。这是一艘好船,开始一切都很顺利,但是我又晕得厉害。此后,当我们接近金丝雀群岛时,一艘土耳其海盗船跟上了我们。他们是当时有名的海盗。经过一场长时间激烈的交火,一切都结束时,我们连人带船都成了俘虏。土耳其船长和他的部下把我们带到摩洛哥的萨利。他们想在那儿的市场上把我们当作奴隶卖掉。但最后土耳其船长决定把我留给他自己,带我随他回家。

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## **Group 4: L1>>L2**

(Chinese Version)

开始我的故事之前,我想先向你谈一点我自己的情况。

我 1632 年出生在英国北部的约克郡。我父亲是德国人,但他却来到英国居住和工作。此后不久,他与我母亲结了婚。我母亲是英国人,娘家姓鲁宾孙,因此,我出生后他们都称呼我鲁宾孙,沿用了我母亲的姓氏。

我父亲在生意上做得很出色,并且我也进了一所好学校。他希望我找到好的工作,过一种平静的、舒适的生活。但是我不希望如此。我喜欢冒险和刺激的生活。"我想成为一名水手去航行,"我告诉父母亲。他们对此很不高兴。"不要去,"父亲说。"你不会幸福的,你知道。水手过着艰苦而且危险的生活。"因为我爱父亲,他不高兴,我便试图忘掉大海。

但我不可能忘掉,大约一年后,我在镇里遇到一个朋友。他的父亲有一艘船,我的朋友对我说,"明 天我们航行去伦敦。你为什么不和我们一起走呢?"

于是,1651年9月1日,我到了赫尔港,第二天我们驶向伦敦。但是,几天后,刮起了狂风,狂暴的大海危机四伏,船不断颠簸。我晕船晕得厉害,非常害怕。

"哦,我不想死!"我哭喊起来。"我想活着!假如我活着,我就要回家,再也不出海了!"

第二天,风停了,大海又重新恢复了平静而美丽。

"好了,鲍伯,"我的朋友笑着说。"现在你感觉如何?这风并不太令人讨厌。"

"什么!"我大叫起来。"这可是一场可怕的风暴。"

"哦,这不算风暴,"我的朋友回答。"仅仅是小风而已。忘记它吧,来,喝一杯。"和朋友喝了几杯,我感觉好多了。我忘记了危险,决定不回家了。我不愿意我的朋友和家人嘲笑我!

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#### (English Version)

Before I begin my story, I would like to tell you a little about myself.

I was born in the year 1632, in the city of York in the north of England. My father was German, but he

came to live and work in England. Soon after that, he married my mother, who was English. Her family name was Robinson, so, when I was born, they called me Robinson, after her.

My father did well in his business and I went to a good school. He wanted me to get a good job and live a quiet, comfortable life. But I didn't want that. I wanted adventure and an exciting life.

'I want to be a sailor and go to sea?' I told my mother and father. They were very unhappy about this.

'Please don't go?' my father said. 'You won't be happy, you know. Sailors have a difficult and dangerous life?' And because I loved him, and he was unhappy, I tried to forget about the sea.

But I couldn't forget, and about a year later, I saw a friend in town. His father had a ship, and my friend said to me, 'We're sailing to London tomorrow. Why don't you come with us?'

And so, on September 1st, 1651, I went to Hull, and the next day we sailed for London.

But, a few days later, there was a strong wind. The sea was rough and dangerous, and the ship went up and down, up and down. I was very ill, and very afraid.

'Oh, I don't want to die! 'I cried. 'I want to live! If I live, I'll go home and never go to sea again!' The next day the wind dropped, and the sea was quiet and beautiful again. 'Well, Bob,' my friend laughed. 'How do you feel now? The wind wasn't too bad.' 'What!' I cried. 'It was a terrible storm.'

'Oh, that wasn't a storm,' my friend answered. 'Just a little wind. Forget it. Come and have a drink.' After a few drinks with my friend, I felt better. I forgot about the danger and decided not to go home. I didn't want my friends and family to laugh at me!

I stayed in London for some time, but I still wanted to go to sea. So, when the captain of a ship asked me to go with him to Guinea in Africa, I agreed. And so I went to sea for the second time.

It was a good ship and everything went well at first, but I was very ill again. Then, when we were near the Canary Islands, a Turkish pirate ship came after us. They were famous thieves of the sea at that time.

There was a long, hard fight, but when it finished, we and the ship were prisoners.

The Turkish captain and his men took us to Sallee in Morocco. They wanted to sell us as slaves in the markets there. But in the end the Turkish captain decided to keep me for himself, and took me home with him. This was a sudden and terrible change in my life. I was now a slave and this Turkish captain was my master.

For two long years I lived the life of a slave. I worked in escape, but it was never possible. I thought about it day and night. My master liked to go fishing in a little boat, and he always took me with him. A man called Moely, and a young boy also went with us.

One day my master said to us, 'Some of my friends want to go fishing tomorrow. Get the boat ready.' So we put a lot of food and drink on the boat, and the next morning, we waited for my master and his friends. But when my master arrived, he was alone.

'My friends don't want to go fishing today,' he said to me. 'But you go with Moely and the boy, and catch some fish for our supper tonight.'

'Yes, master, 'I answered quietly, but inside I was excited. 'Perhaps now I can escape,' I said to myself. My master went back to his friends and we took the boat out to sea. For a time we fished quietly, and then I moved carefully behind Moely and knocked him into the water. 'Swim!' I cried. 'Swim to the shore!' My master liked to shoot seabirds and so there were guns on the boat. Quickly, I took one of these guns. Moely was swimming after the boat and I shouted to him:

'Go back to the shore! You can swim there! It's not too far. I won't hurt you, but if you come near the boat, I'll shoot you through the head!' So Moely turned, and swam back to the shore as quickly as he could.

Then I said to the boy, 'Xury, if you help me, I'll be a good friend to you. If you don't help me, I'll push you into the sea too.'

But Xury was happy to help me. 'I'll go all over the world with you,' he cried.

I wanted to sail to the Canary Islands, but I was afraid to go too far from the shore. It was only a small boat. And so we sailed on south for some days. We had very little water, and it was dangerous country here, with many wild animals. We were afraid, but we often had to go on shore to get more water. Once I used a gun to shoot a wild animal. I don't know what animal it was, but it made a good meal.

For about ten or twelve days we sailed on south, down the coast of Africa. Then one day we saw some

people on the shore—strange, wild people, who did not look friendly. By now we had very little food, and We really needed help. we were afraid, but we had to go on shore.

At first, they were afraid of us, too. Perhaps white people never visited this coast. We did not speak their language, of course, so we used our hands and faces to show that we were hungry. They came with food for us, but then they moved away quickly. We carried the food to our boat, and they watched us. I tried to thank them, but I had nothing to give them.

Just then two big wild cats came down to the shore from the mountains. I think they were leopards. The people were afraid of these wild cats, and the women cried out. Quickly, I took a gun, and shot one of the animals. The second wild cat ran back up into the mountains.

Guns were new to these African people, and they were afraid of the loud noise and the smoke. But they were happy about the dead wild cat. I gave them the meat of the dead animal, and they gave us more food and water.

We now had a lot of food and water, and we sailed on. Eleven days later we came near the Cape Verde Islands. We could see them, but we couldn't get near because there was no wind. We waited. Suddenly Xury called to me, 'Look, a ship!'

He was right! We called and shouted and sailed our little boat as fast as we could. But the ship did not see us. Then I re-membered the guns which made a lot of smoke. A few minutes later the ship saw us and turned.

When we were on the ship, the Portuguese captain listened to my story. He was going to Brazil and agreed to help me, but he wanted nothing for his help. 'No, 'he said, when I tried to pay him. 'Perhaps, one day, someone will help me when I need it.'

But he gave me money for my boat, and for Xury, too. At first, I did not want to sell Xury as a slave, after all our dangerous adventures together. But Xury was happy to go to the captain, and the captain was a good man. 'In ten years' time, 'he said, 'Xury can go free.'

When we arrived in Brazil three weeks later, I said goodbye to the captain and Xury, left the ship, and went to begin a new life.

### **About the Authors**

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