

Grammatical and Discursive Features of Korean EFL Learners' Direct, Translated and Back-translated Writing*

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Kim, Jeong A & Uhm, Chul Joo. 2010. Grammatical and Discursive Features of Korean EFL Learners' Direct, Translated and Back-translated Writing. *Linguistic Research* 27(2). 373-392. The purpose of this study is to investigate the influence of L1 on the quality of three different types of L2 writing products in the forms of direct writing (L2 writing task on a given topic), translated writing (L2 translation of L1 writing on the topic) and back-translated writing (L2 translation upon L1 translation of a short L2 text). Our aim was to identify explicit ways of enhancing L2 learners' writing ability by exploring writing tasks which involve different degrees of L1 use, ability and knowledge in producing and organizing the texts. We analyzed a total of 105 L2 writings of the three different tasks in terms of grammatical and discursive features. In order to understand how grammatical features of L2 writing are influenced by L1 in writing tasks, we assessed syntactic complexity and lexical density, accuracy in word choice, sentence structure and verb inflection. In addition, discursive features were evaluated by the scales of analytic scores, expression, and transition. Results indicated that L1 positively influences organization and vocabulary use in translated L2 writing, and also positively affects back-translated writing in terms of maintaining the original sentence structures. (Chonnam National University)

Key Words translation, back-translation, grammatical and discursive features, L1 influence, writing quality

1. Introduction

In EFL classrooms, explicit and/or implicit learning activities are variably recommended, depending upon learners' preferences, target content, learning context, and other factors. Although integrated use of explicit and implicit activities is often applied to L2 learners more generally, explicit learning activities are usually emphasized with respect to the acquisition of accurate syntax and vocabulary. In the meantime, implicit methods (such as incidental

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vocabulary learning via extensive reading) tend to be recommended for gaining a sense of English as a whole.

In seeking effective ways to improve L2 writing skills, many educators in EFL environments encounter difficulties in choosing appropriate topics and materials, and even in raising learners' consciousness about language use. Furthermore, they find gaps between writing ability and overall language knowledge, as represented in tests of grammar and vocabulary. Despite their cognitive development, linguistic competence, world knowledge and test taking skills, all of which enable them to achieve high test scores in grammar, learners often have difficulty applying these competencies to produce quality writing.

In Korea, English textbooks for middle and high school typically provide students with sentence-level controlled writing exercises rather than paragraph-level tasks (Keum, 2007), and accordingly Korean learners come to value grammatical accuracy in short sentence writing. For students who have been oriented toward tasks such as simple fill-in-the blank activities, but who have never been taught how to organize four or five paragraphs, a composition assignment seems to elicit essentially random writing lacking in cohesion and organization. Even planning for global organization, cohesion and consistency, or consideration of the intended audience, is apparently not envisioned in their writing.

It is often challenging for teachers to conduct writing tasks which help students acquire the accurate use of grammar and vocabulary, and skills to organize coherent relations within a text. Especially where students' concept of writing is limited to the sentence level, educators may try to draw on effective methods to boost L2 skills with the support of L1. As one such activity, 'translation' is considered to enhance L2 writing, and this study tries to find how it differently influences the quality of written output. As Liao (2006) has pointed out, translation has played various roles under different language teaching methods, and learners use it as a strategy to comprehend, remember, and produce texts in the foreign language. For the learners, the involvement of L1 in translation (whether L1 to L2 or L2 to L1) seems to help them devise more appropriate vocabulary, more elaborate content and overall organization.

In order to clarify the effects of L1, this study analyzes three modes of writing: direct writing (hereafter: DW), translated writing (TW) and back-translated writing (BTW). In the DW condition, students were advised to

write an essay in L2 (English) directly without any formal involvement of L1. In the TW condition, students were first instructed to write an essay in L1 (Korean) and then asked to translate it into English. In the BTW condition, students were first given a short English article to translate into L1 (Korean), and they were then asked to back-translate the Korean version of the story into English. The output of the three tasks was compared, to determine their similarities and differences with respect to grammatical and discourse structure. To quantify the comparison, syntactic complexity and lexical density were calculated, and two native English-speaking teachers evaluated the texts in terms of overall quality.

Our research questions are as follows:

- How do translated writing (in which writers' own creative ideas are involved) and back-translated writing (in which writers are able to compare the original English text with their explicit translation) differ in terms of syntactic complexity, lexical density, and grammatical accuracy?
- How does L1 differently affect direct writing, translated writing and back-translated writing in terms of discursive features?

2. Literature Review

2.1 L1 and L2 Writing

To explore means of improving L2 learners' writing skills, a wide range of studies have been conducted, from the perspectives of language-medium use effects in English writing class to learners' self awareness. Storch (2009) investigated whether studying in a second language (L2) medium (at a university) affected L2 writing ability, finding that after a semester of study, learners' writing improved mainly in terms of structure and the development of ideas. However, there was no evidence of improvement in linguistic accuracy or complexity. Also largely unchanged were strategies used to incorporate source materials. In ESL/EFL writing, studies have addressed linguistic and metalinguistic knowledge (Roer, 2007) and self-regulation for revision (Bereiter & Scardamalia, 1987; Flower & Hayes, 1981a, 1981b; Hayes, 1996). Hinkel's (2003) study, which analyzed 1,083 L1 and L2 academic texts, suggested that the

non-native speaker's productive range of grammar and lexis is comparatively small and consists largely of constructions prevalent in spoken and conversational discourse as well as high-frequency, everyday vocabulary items.

In an EFL environment such as Korea, educators are first and foremost required to seek out and develop activities and materials which help learners employ their already-established linguistic and non-linguistic resources from L1. Similarly, many language researchers have devoted their efforts toward identifying the influences of L1 on L2, connecting them to the results in L2.

Many research studies on the role of L1 in L2 writing have revealed that L1 transfer effects involve not only grammar, syntactic structure, vocabulary and expression, but also planning, organization and the pragmatics of L2. Kobayashi and Rinnert (2008) demonstrated transfer in writing competence during high school training in L2 essay writing for university entrance exams. In their study, intensive training in L1 helped to establish clarity and demonstrate originality for the sake of gaining the reader's approval in L2. Since the development of L2 student writing involves multiple factors, including L2 language proficiency (Cumming, 1989; Sasaki & Hirose, 1996) and L1 writing expertise and ability (Cumming, 1989), no single theory has been successful in explaining such development.

Sunderman and Kroll (2006) have indicated that even highly proficient learners are not entirely free from L1's influence on L2 lexical processing. In the lexical restructuring research, Wolter (2006) contended that L1 lexical knowledge can be both a help and a hindrance when forming L2 connections, particularly in respect to collocation.

Weijen, Bergh, Rijlaarsdam and Sanders (2009) examined writers' use of their L1 while writing in their L2, and found that all participants used L1 to some extent. In addition, L2 proficiency was directly related to L2 text quality but was unrelated to the occurrence of conceptual activities in either L1 or L2. Oh (2006) investigated how L1 (Korean) affects Korean college students' use of lexical phrases in their L2 (English) self-description writings. This research found that L1 interference in lexical phrases occurred mostly on the sentence level, in the context of describing family, school, personality and future dreams. The semantic similarities between Korean and English caused L1 interference in L2 writing.

The transfer of writing knowledge did not take place only from L1 to L2, but occurred in both directions. Kobayashi and Rinnert's (2008) interview data about

discourse types revealed that the source of knowledge about meta-discourse markers was either L1 or L2 writing training, or both. Wang and Wen (2002) analyzed 16 Chinese EFL writers' think-aloud protocols, which revealed that students were more likely to rely on L1 when they were managing their writing processes, generating and organizing ideas, but more likely to rely on L2 when undertaking task-examining and text-generating activities. Hirose (2003), however, revealed that L2 organization scores were not significantly correlated with L1 organization scores; moreover, L2 composition and organization scores differed significantly from those of L1. The ways in which a learner was educated and instructed about writing affected the learner's writing skill development across languages.

2.2 Translation

Translation refers not only to the literal rendering of equivalent meanings between languages, but also to converting intentions or plans into a mental representation (Gagné, 1985). During translation, the writer forms a representation of the goals, ideas and organizational plan developed in the construction or organization stage. Gagné (1985) points out that during the translation stage, it is useful for a writer to have automatic mechanical skills of this sort, so that attention can be freed up for developing the cohesion, coherence and knowledge of audience that improve the quality of writing.

According to Chamot (1987), a translation strategy means using L1 as a base for understanding and/or producing L2. Surveying the relatively few research studies on comparisons of L1 writing, L2 writing and translation, or L1-transferred tasks, most results have shown that tasks including translation generate significantly better output than single-language tasks. Uzawa (1996) found that attention to language use in a translation task was significantly higher than in L1 and L2 writing tasks; moreover, scores in the translation tasks were significantly better than in the L2 writing task. Laufer and Girsai's (2008) study on the tests of words and collocations involving three high school groups (a meaning-focused instruction group, non-contrastive form-focused instruction group, and contrastive analysis and translation group) of learners with the same L1 and comparable L2 proficiency reported that the contrastive analysis and translation group significantly outperformed the other two groups. A contrary

result was found by Cohen and Brooks-Carson (2001). They examined two writing tasks (writing directly in L2 (French) versus writing in L1 English and translating into French) among thirty-nine intermediate learners, and found that two-thirds of the students did better on the direct writing task across all rating scales, while only one-third did better on the translated task.

As for beliefs about the benefits or drawbacks of translation in Liao (2006), most participants believed that translation has a practical effect on learning English. L2 writers use translation strategies for a big portion of their L2 writing, particularly with respect to planning and organization. Generally, more advanced learners have a pessimistic view toward translation strategies than do less proficient students, who put more focus on direct translation from their L1 to L2. Interestingly, to compensate for linguistic deficiencies, low-level participants often concentrate on direct translation from L1 while writing in L2. By using their fluent L1 linguistic knowledge, low-level learners might be able to ease their mental struggle, thereby correctly shaping the thoughts which they wish to express. As Wang (2003) notes, "Composing their writing tasks in this way might help them overcome writing difficulties without exerting much mental effort" (p. 366). Bruton (2007) has suggested that in process writing, L1-L2 translating could be a more effective step and therefore replace draft writing. From the research concerning the effects of Korean on English direct writing versus translation writing, Shin (1998) found that syntactic complexity was greater in translations than in direct writing. The study also showed that higher-level students tended to make more errors that interfered with intended meaning in translation than in direct writing.

In the previous research on L1's role in L2 writing, results vary according to subjects' L2 proficiency, native language(s), and/or writing training experience. Also, while it is still controversial whether L1 positively or negatively affects the process of writing, translation activities (L1 to L2 or L2 to L1) have achieved a rather positive reputation as a learning strategy or skill for developing ideas. In this study, our goal is to determine what grammatical or discursive features characterize the writing products of different modes.

3. Method

3.1 Participants

At a language education center affiliated with a Korean public university, sixty middle school students were selected based upon their school teachers' recommendations and their test results in English grammar, listening and writing. Out of the sixty middle school students who participated in the program, data from thirty-five students aged 12 to 14 (8 male and 27 female) who had completed each of the three writing tasks were included in this study. The average TOEIC (Test of English for International Communication) score for the thirty-five participants was 662.

All of the participants attended a Saturday program for 15 weeks, consisting of listening, speaking, reading and writing classes. In their writing class, the participants were trained in argumentative, narrative and other forms of writing, in which their written drafts were revised by both teachers and peer groups. Up until the time when the research data was collected, each participant had written a total of ten five-paragraph essays. DW and TW data were collected in the 13th week of the program, and BTW data in the 14th week.

3.2 Procedures for Data Collection

During the writing class, in the 13th and 14th weeks of the program, students were asked to do a DW task, TW task and BTW task. The procedure for data collection was as follows:

In the 13th week, the students were asked to complete writing tasks according to the topic: personal preference for spending time either alone or with friends.

Step 1 (DW): Students were given five minutes to discuss the topic in L2 with a partner. Students were then given 20 minutes to write and 10 more minutes to make revisions.

Step 2: Students were instructed to compose a piece of writing in L1 using the same topic for approximately 20 minutes.

Step 3 (TW): After a 10-minute break, the students were given 20 minutes to translate the text into L2.

In the 14th week (one week after the DW and TW tasks), a short English text (138 words, taken directly from an English textbook) about a boy who played in a band at school was assigned as the original English text for L1 translation and L2 back-translation. This text consisted of one simple sentence, two compound sentences, and six complex sentences. The average number of words per sentence was 15.2. The level of difficulty in vocabulary was low enough to help the participants understand and remember with ease.

Step 4: The students were simply asked to translate the story into Korean. Upon completion of the translation assignment, the teachers collected the original texts, so that the students could not copy from them during the BTW assignment.

Step 5 (BTW): The students were given 20 minutes to rework their L1 translations back into L2.

3.3 Data Analysis

Firstly, in order to measure syntactic complexity and lexical density, all of the collected hand-written writings were compiled as an electronic document. A software program called 'Range' (downloaded from Paul Nation's website) was used to automatically count the number of tokens (i.e. total word count) and types (i.e. different words used). Syntactic complexity was assessed in terms of the number of T-Units (Minimal Terminable Unit), the number of words per T-unit, the number of clauses, and the number of sentences. Lexical density was represented as a Type-Token Ratio (TTR henceforth), the rate which shows the average number of unique words used per ten words.

In addition, two native English teachers assessed the grammatical accuracy and the overall quality of each text. They were asked to count grammatical errors such as word-level choice errors, verb-centered error, and sentence structure errors in accordance with Kroll (1990). Also, to examine the overall quality of writing, both teachers were asked to grade the assignments according to a writing assessment rubric on content, organization, word choice, sentence fluency and writing conventions, with numerical scores ranging from 1 to 6. In addition, expression and transitions were also assessed using a scale from 1 to 5, based upon Cohen's (2001) rating scales. The scores were marked by the two teachers separately at the same time. The inter-rater reliability of the two native

speaker raters is Cronbach α 0.67 (calculated using SPSS).

The mean values for each score were calculated and compared, to see whether L1 benefits or weakens L2 writing. The Statistical Package for the Social Sciences (SPSS, version 15.0) was used to identify how explicit translation activities (L1) differently influence the quality of the three writing tasks.

4. Result and Discussion

4.1 Grammatical Features

Syntactic complexity, lexical density and accuracy rates were examined across DW, TW and BTW output, as well as the original L2 text used for BTW. The results of TW were compared with those of DW, and the results of BTW were compared with the elements of the original text.

4.1.1 Syntactic complexity and lexical density

Table 1 shows the mean values for DW and TW, and for BTW and the original text. On the whole, the differences between the original L2 text and the BTW output were almost twice that found between DW and TW. This indicates that BTW was substantially affected by participants' L1. Illustrated as the smaller differences between DW and TW, for the participants to recall what they have creatively yielded in their L2 DW writing and TW is less difficult and less different from one another. This is also explained in the case of BTW and the original L2 text, revealing big differences in the number of clauses and in all elements of the lexical density due to the greater difficulty that the participants experienced in recalling those elements from the original L2 text.

Between the DW and TW, all of the six elements of syntactic complexity and lexical density in DW are higher than those of TW. Similarly, none of the six elements showed a higher value in the BTW than in the original L2 text. Comparing syntactic complexity with lexical density, DW and TW showed differences, but not in TTR, while the two elements of T-Unit and the number of sentences in syntactic complexity showed no differences between the original L2 text and BTW. From this observation, the study found that L2 learners tend to retain their vocabulary items, with the difference ranging from 2.4% in Type to

6.2% in Token between writing tasks in which they have been creatively involved, while L1 influenced all the elements of syntactic complexity, ranging from 5.6% in the number of T-Units, 7.4% in the number of clauses and 7.1% in the number of sentences. On the other hand, the L2 learners tended to maintain the sentence structure of the original L2 text, showing differences (13.6%) in the number of clauses although L1 translation had intervened before their BTW task, while vocabulary use showed the bigger differences (from 0.2% to 20%) between the two writings.

Table 1. Descriptive statistics: Direct writing (DW) vs. translated writing (TW) and back-translated writing (BTW) vs. original L2 text

		DW		TW		Differences (DW-TW)	Original L2 Text	BTW		Differences (Original L2 Text-BTW)
		Mean	SD	Mean	SD	No. (%)	No.	Mean	SD	No. (%)
Syntactic Complexity	T-Unit	18	6	17	7	1 (-5.6)	12	12	2	0 (0)
	No. of Clauses	27	9	25	10	2 (-7.4)	22	19	2.8	3 (-13.6)
	No. of Sentences	14	4.05	13	4.39	1 (-7.1)	9	9	1.20	0 (0)
Lexical Density	Token	171	50	166	60	11 (-6.2)	137	115	16	22 (-16.1)
	Type	83	22	81	23	2 (-2.4)	85	68	8	17 (-20)
	TTR	.50	.08	.50	.07	0 (0)	.62	.60	.04	0.01 (-0.2)

4.1.2 Accuracy

In this subsection, grammatical errors were compared between DW, TW and BTW. The writings were also analyzed in terms of grammatical errors in order to compare accuracy across the three writings. Table 2 shows the three error categories ranked by frequency. The word-level choice error came first at 46%, 47% and 43%, followed by sentence structure errors of 38%, 37% and 32 %, and verb-centered errors of 16%, 16% and 25%, in DW, TW and BTW respectively. BTW showed the fewest word-level choice errors and sentence structure errors. The reason for this may be that during DW and TW, the participants had built up their writing based upon their own opinions and ideas. Additionally, word choice was dependent upon the participants’ own decisions, personal preferences, and problem-solving techniques. As Li and Schmit (2009) have contended, in

terms of L2 learners' use of lexical phrases, learners typically overuse a limited number of well-known phrases and have a less diverse phrasal repertoire. This could be one reason why the subjects were less able to use accurate vocabulary in DW and TW than in BTW.

In the BTW assignment, participants could have used vocabulary at the same level of sophistication as the original English text. However, this simple exchange or copying of vocabulary is not an easy task for the subjects. As shown in Table 1, the participants used fewer vocabulary words (-16.1%) than those in the original L2 text. L1 translation conducted before L2 back-translation negatively affected L2 in vocabulary recall. The subjects experienced difficulty retrieving and applying L2 vocabulary exactly as it was in the original L2 text. Even going through Korean translation in advance of BTW made the learners feel more difficulty in properly employing the vocabulary originally used in the L2 text. However, this task could have enhanced the subjects' awareness of the gap between their memory for, and practical use of, the vocabulary. Put another way, the L2 original text forced the learners to be more attentive to the differences in language use during BTW.

Table 1 explains how lexical use is far more various than the sentence structures among the three writing tasks. The numbers of T-Unit, clauses, and sentences indicated in syntactic complexity between DW and TW are smaller than those between the original L2 text and BTW. On the contrary, the results for token, type and TTR between the original L2 text and BTW are much higher than those between DW and TW.

As indicated in table 2, BTW shows a higher percentage of verb-centered errors than that of DW and TW on the whole. This inconsistent verb use probably resulted in an increase in verb-centered errors. Another main cause of error was the participants' poor ability to maintain consistent tense usage during back-translation. Considering that the original text was a relatively easy piece of writing mostly in the simple past tense, this indicated that although the student's knowledge of grammar was sufficient to translate the simple past tense vocabulary into L1, they mostly failed to duplicate the exact tense use in BTW. Conversely, these highly frequent errors can later be compared to raising the participants' awareness of incorrect or different use of verbs.

Table 2. Descriptive statistics: Grammar error categories of direct writing (DW), translated writing (TW) and back-translated writing (BTW)

	DW		TW		BTW	
	Mean(%)	S.D.	Mean(%)	S.D.	Mean(%)	S.D.
Word-level choice error	8.61(46%)	4.36	8.84(47%)	5.60	5.80(43%)	2.81
Sentence structure error	7.00(38%)	3.52	6.96(37%)	4.05	4.43(32%)	2.96
Verb-centered error	3.03(16%)	2.82	3.03(16%)	2.47	3.39(25%)	2.46

Table 3 below indicates the ANOVA results which reveal significant differences between the three writing tasks. While word level errors and sentence structure errors in numerical counts were significantly different, as ($F(2, 66)=6.27$, $p<.001$) and ($F(2, 66)=9.93$, $p<.001$) respectively, no statistical significance in verb-centered errors was found among the three tasks ($F(2, 66)=0.57$, N.S). As mentioned earlier, this study anticipated significant differences among the three different types of writing because BTW, which gives the subjects opportunities to recall the vocabulary and sentence structure in the original L2 texts would allow them to better acquire writing quality. For this reason, the observed scores for verb-centered errors, which showed no significant differences and shows an even higher percentage than that of DW and TW, has important implications.

Table 3 explains that although participants were expected to have significantly fewer errors in BTW, they committed the same level of error as with DW or TW, in which their own ideas were involved. In this case, despite the fact that BTW was considered to give participants a greater opportunity to recall overall content, and therefore make fewer errors, participants made just as many verb-centered errors during BTW as they did in DW writing and TW. From the result, it seems that Korean learners have difficulty in identifying proper verb forms for tense and agreement.

Table 3. ANOVA Results: Grammar error categories for direct writing (DW), translated writing (TW) and back-translated writing (BTW)

		SS	df	MS	F	sig
Word level choice	Task	134.68	2.00	67.34	6.27**	0.002
	Errors	708.96	66.00	10.74		
Sentence structure error	Task	142.30	2.00	71.15	9.93***	0.00
	Errors	473.11	66.00	7.17		
Verb centered error	Task	5.65	2.00	2.82	0.57	0.57
	Errors	328.55	66.00	4.98		

** $p<.01$, *** $p<.001$

4.2 Discursive Features

While syntactic complexity, lexical density and grammatical errors were numerically counted, discursive features were evaluated by two English native speaker teachers. These raters estimated general quality based upon an analytic score rubric, and assessed how much the writing was more like L2, free from L1 influence upon expression, and how well the writing flowed, carrying out exact points to the audience with the use of transitions. In this subsection, BTW was expected to result in higher scores than DW or TW due to its translation from the original L2 text. Accordingly, differences between DW and TW are important.

4.2.1 Analytic Scores

On the whole, BTW obtained the highest scores in every measurement owing to its authentic resource, as expected. Excluding BTW, TW showed better scores than DW writing. This is assumed to result from the L1 writing draft completed prior to the translated and BTW tasks which had a seemingly positive effect on writing organization, vocabulary choice, and sentence fluency. Thinking and scribbling in L1 seemed to help participants to recall what they translated, and to produce a much more sophisticated level of writing than that of the DW writing task. L1 seemed to play a large role in increasing the participants' awareness between L1 and L2.

Table 4. Descriptive statistics: Analytic scores of direct writing (DW), translated writing (TW) and back-translated writing (BTW)

	DW		TW		BTW	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Content	3.09	0.78	3.07	0.93	3.97	1.07
Organization	2.99	0.97	3.16	1.05	4.24	0.90
Word choice	2.59	0.67	2.75	0.92	3.56	1.15
Sentence fluency	2.72	0.93	2.87	1.14	3.67	1.31
Convention	2.80	0.79	2.69	0.96	3.46	1.29

4.2.2 Expression

Freedom of translation, sense of the language, variety in vocabulary and

correct use of vocabulary were assessed as expression, which measures whether writing tasks were accurately delivered in L2. As indicated in Table 5, BTW produced the highest scores. In detail, freedom of translation and correct vocabulary usage in DW writing were higher when compared with that of TW. However, sense of language and variety in vocabulary were lower in DW writing than in TW. Sense of the language and correct use of vocabulary showed almost no difference between the two tasks, which means that linguistic knowledge is unaffected by different tasks. During DW writing the participants' writing became more creative, but they were limited by their vocabulary. In the translation task, they were less accurate but their ideas became more varied and they attempted to use a wider range of vocabulary. However, freedom from translation was higher in DW writing, which means that the L1 draft restricted natural L2 use. On the other hand, variety in vocabulary was higher in TW, which indicates that the L1 draft positively supported extensive vocabulary use in TW. This also negatively affected TW, which resulted in lower scores on vocabulary correctness. From this result, it seems that L1 has both a positive influence on variety of vocabulary use, and a negative influence on accurate use of vocabulary.

Table 5. Descriptive statistics: Expression of direct writing (DW), translated writing (TW) and back-translated writing (BTW)

Expression	DW		TW		BTW	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Freedom from translation	2.89	0.78	2.68	0.91	3.52	1.13
Sense of the language	2.72	0.75	2.75	0.95	3.45	1.17
Variety in vocabulary	2.53	0.53	2.79	0.78	3.85	0.94
Correct use of vocabulary	2.78	0.83	2.72	0.86	3.36	1.12

In Table 6 below, the ANOVA results indicated that all components of expression had significant differences among the three tasks, since BTW gained apparently higher assessment scores.

Consequently, using the original L2 text enhanced the subjects' overall understanding of L2 usage. This result shows that good authentic reading materials play an important role by increasing participants' awareness of the differences between L1 and the target language, allowing participants to develop

better L2 linguistic skills. L2 can be related to the L1 idea, so that more L2-like language can be generated as L1 is more easily retained in the participants' memory.

Table 6. ANOVA results: Expression of direct writing (DW), translated writing (TW) and back-translated writing (BTW)

Components	Source	SS	df	MS	F	sig
Freedom from translation	Task	11.67	2.00	5.83	14.72***	0.00
		26.16	66.00	0.40		
Sense of the language	Task	9.76	2.00	4.88	12.11***	0.00
		26.58	66.00	0.40		
Variety in vocabulary	Task	30.54	2.00	15.27	37.94***	0.00
		26.57	66.00	0.40		
Correct use of vocabulary	Task	7.55	2.00	3.77	7.43***	0.00
		33.54	66.00	0.51		

*** $p < .001$

4.2.3 Transitions

In terms of transitions - the natural flow of passages, BTW achieved the highest scores in all of the three components among the three tasks as shown in Table 7. In particular, comparing the three evaluating components, the clarity of points of BTW gained the lowest scores, which means that the participants failed to clarify exactly what they were writing about. The participants seemed to have simply recalled what they had read in the original L2 text and attempted to reproduce similar sentences. From this observation, we found that even in the case of text given to a learner for the purpose of simple imitation, the learner still experienced difficulty in understanding input material which makes L1 or L2 translation more challenging. This is caused not only by the L2 learner's knowledge about the writing process acquired in L1 but also his or her L2 proficiency.

In DW and TW, clarity of points was the highest, and organization of structure and smoothness of connectors followed. Interestingly, while the overall result showed that TW resulted in higher scores than DW writing, the score in the component of 'clarity of points' in TW was lower than that of DW writing. From this result, it seems that participants encountered problems in making clear

points in TW and BTW in which L1 was involved.

Table 7. Descriptive statistics: Transition of direct writing (DW), translated writing (TW) and back-translated writing (BTW)

Transitions	DW		TW		BTW	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Clarity of points	3.01	0.85	2.93	0.99	3.93	1.18
Organization of structure	2.69	0.74	2.84	0.87	4.09	0.85
Smoothness of connectors	2.61	0.87	2.66	0.99	4.04	1.09

5. Conclusion

As was previously assumed, the participants produced very similar texts while completing TW and BTW tasks. However, the results for grammatical features in syntactic complexity and lexical density suggested that L2 learners had generally simplified the back-translated versions. On the one hand, TW is all but less simplified than DW, both in syntactic complexity and lexical density. On the other hand, lexical density in BTW is more simplified than in the original L2 text, while syntactic complexity is relatively maintained. During the BTW activity, the participants tried to duplicate by recalling the original L2 text, and were able to use more varied but fewer vocabulary words. This implies that even if L2 learners have a chance to write directly in L2 and then have another chance to think about the topic in L1 and then translate it into L2, their fundamental language ability toward sentence structure and vocabulary is not likely to be affected by their L1. Their language ability is restricted by their language knowledge. In the case of BTW, though learners are less able to recall all the vocabulary used in the original L2 text, they can manage to maintain the sentence structure from the original L2 text.

In an investigation of accuracy, TW showed little difference from DW, while BTW showed different rates of word-level choice error, sentence structure error and verb-centered errors. BTW showed fewer errors in word-level choice and sentence structure, but had more verb-centered errors. Considering that the participants were more exposed to accurate use of language by the original L2 text, the participants' L1 positively affects word-level choice and sentence structure, and negatively influences verb-centered errors in BTW. This is possibly

due to misunderstandings of the L2 grammar related to verb use in context. This implies that L2 learners failed to come up with the proper L2 verbs which might have been stored in their short-term memory. According to Wolter (2006), L1 lexical knowledge can be both a help and a hindrance regarding how learners might draw upon L1 lexical and conceptual knowledge while making assumptions about connections between words in the L2 lexicon.

Comparing the five analytic measurements, L2 writers were better at organization, word choice and sentence fluency in their TW than DW while overall scores of BTW were all better than those of DW and TW. As Wang & Wen (2002) have indicated, unskilled writers tend to translate directly from L1 to L2, whereas skilled writers make strategic use of their L1 to generate ideas before finding the appropriate vocabulary. From the results, L1 positively influenced L2 writing.

From the measurement of expression and transition, BTW has consistently gained the highest scores. In terms of correct use of vocabulary, the participants used a wider range of vocabulary, unfortunately with a lower accuracy in TW and BTW. In conveying the clear points of the writing, TW and BTW resulted in low scores.

As predicted, DW, TW and BTW presented complicated features indicating beneficial and/or unhelpful influences in writing practice. The overall results imply that in class, throughout BTW, the participants have ample opportunity to compare and recall sentence structures and vocabulary of the original L2 writing. Besides, TW and BTW, which seem tedious and complicated for the participants, can be a meaningful learning activity, in particular for L2 learners in the middle of expanding their learning strategies as well as language use skills. On the one hand, drawing up an L1 draft will give L2 learners reason to reflect on its organization. On the other hand, comparing their BTW with its original L2 text can enhance their attention or raise awareness of linguistic gaps between their L1 and L2. The effect of explicit contrastive and translation activities, as found by Laufer and Girsai (2008: 5), have shown that word retention seems stronger when subjects can recall words intentionally or unintentionally by translating and contrasting texts. That the participants paid attention to specific points helped them to detect linguistic features of vocabulary which are useful in the study of vocabulary.

One limitation of this study is that the thirty-five participants had spent

limited time with translation activities. For further studies of translation involving L1 influence, various and repeated translation activities in the classroom should be investigated.

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