Translating and Writing Processes of Adult Second Language Learners

by

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Abstract

While translation in L2 learning/teaching has been viewed negatively since the 1950s in North America, in the late 1980s a re-evaluation of translation has begun (Duff, 1989). The purpose of this research is to explore text-level translation from the learner's perspective, as this kind of research, at present, remains quite scarce (Krings, 1987). This study focuses on text-level translation as a useful component of second language (L2) learning/teaching. Adult L2 learners' translation processes and performance are examined and contrasted with the same group's L1 and L2 writing performance.

Twenty-two Japanese ESL students studying at a Canadian college performed three tasks individually (translation from L1 into L2, L1 writing, L2 writing), thinking aloud. Their writing samples were evaluated, and think-aloud protocols were analyzed, supplemented by interviews and text analyses.

The data were analyzed with attention given to four recent cognitive theories of language learning: Cummins' theories (1986) of cross-linguistic interdependence of cognitive academic skills; Schmidt's "conscious attention" (1990); Swain's "i+1 output" hypothesis (1985); and McLaughlin's "restructuring" (1990b).

Findings: 1) The correlations of the quality of translation, L1 writing, and L2 writing of L2 learners (whose L1 writing skills are still developing) were not significant. 2) The learners' conscious attention to language use
was high in the translation task, but unexpectedly low in the L2 writing. Their language use was more sophisticated in the translation than in the L2 writing. 3) Some students preferred translation tasks to L2 writing tasks, expressing their views which were consistent with the "i+1 output" hypothesis. 4) Contrary to general expectation about student translations, the students did not translate word for word; they often restructured L1/L2 correspondences, and examples of "restructuring" were not limited to the word level.

General conclusions: Cross-linguistic interdependence among translation, L1 writing, and L2 writing was not confirmed clearly. However, there was evidence that translation processes prompted conscious attention, "i+1 output", and restructuring, which some consider to be necessary for second language learning. Thus translation in L2 learning deserves a closer look as it provides potential opportunities for learners to learn a second language.
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Chapter 1

INTRODUCTION

1.1. Overview

From the late 1950s to the early 1980s, use of the mother tongue in second language learning was considered ineffective by many researchers and educators in North America (Asher, 1981; Krashen, 1981, for example). Many Canadian and American language classes prohibited students from using their mother tongue or translating from the first to second language (Auerbach, 1993). Sorhus (1975, pp. 2-3) reviews this trend and comments:

After the Second World War, when the Grammar-Translation Method fell into disrepute, translation lost favour, too. It was believed that students spent too much time learning about the second language rather than practising it. The application of Behaviourism settled the matter by banishing translation and by focusing on making language habits automatic through many drills. Contrastive Analysis put a seal on the banishment of translation by introducing the concept "interference" to explain the effect of the first language upon the second. Yet students could still be seen translating, especially at the beginning of their second-language courses, and even later, whenever they had difficulty finding equivalent MEANING in their new languages.

During this period (late 1950s - early 1980s), research on spoken communicative competence in second languages was very popular in Canada
and the United States (Chaudron, 1988; Faerch & Kasper, 1983; Krashen, 1981; among others), while research in translation and second language writing was neglected. Although research in second language writing has become very active in the last decade in North America (e.g., Cumming, 1989; Edelsky, 1986; Jones & Tetroe, 1987; Zamel, 1976, 1983), research on translation has lagged behind (see Krings, 1987).

Translation might merit potential as a valuable activity for second language learners; also, it should not be overlooked as an academic subject by itself. In light of the recent cognitive approach to second language learning (Cummins, 1986; McLaughlin, 1990b; Schmidt, 1990), and the text-level approach to second language teaching (Brown & Yule, 1983; Carrell, 1985; Celce-Murcia, 1990; Mohan, 1986; Meyer, 1985), this dissertation researched the possible value of text-level translation in language learning, comparing it with first and second language writing.

The dissertation's five chapters are outlined as follows: the introductory chapter states the purpose of this study and provides a definition of terms; the second chapter presents a literature review, some research questions and methodological issues; the third chapter describes the research methods used in this study; the fourth chapter reports the results of the study with detailed analyses and discussion; and the final chapter summarizes relevant findings and discusses their significance for theories of second language acquisition. Also addressed are implications for second language education, and suggestions for future research in translation and second language writing.
1.2. Purpose of the Study

Since empirical data on text-level translation in the framework of language learning are still scarce (Krings, 1987), the purpose of this study is to explore text-level translation performed by adult second language learners and to seek the value of translation for second language learning and teaching. This study researches text-level translation in two ways: i) as a component of language proficiency, and ii) as a means to learn a second language.

Four recent cognitive theories in second language acquisition guide the qualitative analysis of the data. They are: Cummins' (1986) "linguistic interdependence of cognitive academic skills" (cognitive skills such as reading and writing developed in the learner's mother tongue are transferrable to a second language), Schmidt's (1990) "conscious learning" (the learner learns a second language by paying conscious attention to grammar, vocabulary, syntax, pronunciation, and pragmatics), Swain's (1985) "i+1 output" hypothesis (the learner has to produce an output which is a little above the learner's present level in order to learn a second language), and McLaughlin's (1990) "restructuring" (the learner learns a second language by restructuring L1 and L2 correspondences, not by merely adding new items to the existing L2 knowledge).

Learners' translating and writing processes, performances, skills, and perceptions are the primary focus of this thesis. Analyses include their conscious attention to language use, their restructuring L1 and L2 correspondences while translating from their mother tongue into a second
language, and their writing samples in translation, in L1 and in L2 writing tasks. Learners' perceptions of translation and second language writing are also examined through interviews in order to explore language learning in depth.

1.3. Definition of Terms

Before proceeding further, the definitions of some terms used in this study are presented here.

**Translation:** In this research, only written translation of text in a learner's mother tongue (L1) into second/foreign language (L2) is considered for the purpose of comparison with second language writing. Translation is seen in the framework of second language learning and teaching, not as a science for professional translators.

**Writing:** Writing is meant in this research as composing (a passage or an essay). This term does not include calligraphic writing or a type of writing which involves just jotting down a list of words or phrases. Copying text or dictation is not included, either.
Chapter 2

REVIEW OF LITERATURE

2.1. Text-Level Translation and Second Language Writing as Language Proficiency

2.1.1. Negative and Positive Views toward Translation

In university-level foreign language learning, acquiring translation and second language writing skills may be important, especially for people who seek careers in journalism, commerce, international relations, and so forth. Translation itself has a long history. Newmark (1981) comments that our "intellectual and artistic cultures" are "heavily indebted to translation". Good translators are valuable in our society. Without good translators, "there would be no summit talks, no glasnost or perestroika, no Cannes Film Festival, no Nobel prizes, no advances in medicine, science, or engineering, no international law, no Olympic Games, no Hamlet, no War and Peace..." (Duff, 1989, p. 7). Translation is seemingly a necessity in a world of shared information and global relationships. However, although translation itself has a long history, research concerning translation in a language learning context, compared to research concerning second language writing, has been relatively scarce (see Krings, 1987).

Research of second language writing became active following the student-centred process approach to first language writing in English. From the early 1970s to the 1980s, English educators and researchers shifted their
attention from analyses of written texts to studies which also addressed learners' writing processes (Bereiter & Scardamalia, 1987; Britton, et al., 1975; Emig, 1971; Hillocks, 1986; Langer & Applebee, 1987), and commented that writing essays and compositions (rather than completing word-level or sentence-level exercises) is necessary for students to think and learn (Applebee, 1982, 1984a; Emig, 1977; Goodlad, 1983; Langer & Applebee, 1984, 1987; Moffett, 1968). Writing is a personal, self-paced problem solving activity. A role for "writing as heuristic" (Emig, 1977) has been alluded to by many thinkers and educators (Bruner, 1971; Moffett, 1968; Olson, 1977; Polanyi, 1958; Vygotsky, 1986; among others). Second language writing researchers found many parallels between first and second language writing, commenting that second language writing is also a personal, self-paced problem solving activity (Cumming, 1988; Raimes, 1985, 1987; Zamel, 1976, 1982, 1983).

Translation in second language learning, however, has been negatively viewed by many researchers and educators. It has often been deemed a sentence-level activity, one which may not require deep thinking. Applebee (1982) unfavorably asserts that direct translation from one language to another is "writing without composing" because "the text to be translated provides the global structure, within which the translator can operate at a sentence-by-sentence level" (p.371).

Other researchers note the negative influence of translation on writing. Lay (1975) and Sa'Adeddin (1989), for example, report the negative influence of the learner's mother tongue on writing English as a second language (ESL). Similarly, Kaplan's "contrastive rhetoric", which has been very influential in the English as a second language research circle (1966, 1967, 1978, 1979, 1987; Andrade, 1990; Connor & Kaplan, 1987;

Translation has also been seen as a simple code-switching used by language learners, a communication strategy that compensates for insufficient linguistic knowledge in the learner's second/foreign language. Studies on learners' strategies for communication in the second language have not viewed translation as undesirable; but then they have not viewed it as an academic subject worthy of learning, either (Faerch & Kasper, 1984; Haastrup & Phillipson, 1983; Tarone, Cohen, & Dumas, 1983; Váladi, 1983; among others).

In the late 1950s and up until the early 1980s, translation was particularly rejected in second language pedagogy as the Grammar-Translation Method in North America. Translation was seen as a definite cause of "interference" in second language learning (see Sorhus, 1975). Even today, translation is ignored as a valid activity for language practice and improvement largely due to the communicative movement in the 1980s, which put a strong emphasis on spoken communicative competence (see Krashen, 1981; Chaudron, 1988; Ellis, 1988). Dulay, Burt, and Krashen (1982) comment that the second language is a new and independent language system and that contrasting the L1 and the L2, or translation, does not help the learner to "acquire" the second language. Krashen (1981, p. 66) says:

... studies that report a high amount of first language influence, ... are mostly foreign and not second language studies, situations in which natural appropriate intake is scarce and where translation exercises are frequent [emphasis added].
In spite of the banishment of translation in second language pedagogy, some researchers see value in translation within language learning. Duff (1989), a language educator, comments that translation activities in the classroom help students to better understand the influence of one language on the other because translation involves contrast, which enables them "to explore the potential of both languages - their strengths and weaknesses". He comments that through translation, the learner develops three qualities essential to all language learning: accuracy, clarity, and flexibility. Translation, he says, "trains the learner to search (flexibility) for the most appropriate words (accuracy) to convey what is meant (clarity)" (p.7).

Snell-Hornby (1985) also says that translation allows the student to learn to judge what is equivalent and what is not between L1 and L2; hence it is a worthwhile exercise in gaining mastery of, and knowledge about, a foreign language.

B. Harris (1977, 1978) views translation as a natural skill, saying that all bilinguals and students who learn a second language do translate even if the method used ignores or forbids it. Similarly, Carey (1991) says that knowledge acquired in L2 is often translated into L1 and stored in one's memory in L1. Thus, Carey says, French immersion students in Canada, after several years of studying school subjects in French, still perform better in subject exams written in L1 (English) than in L2 (French) (see also Samuel, 1990). Cumming (1990) and Uzawa and Cumming (1989) report that adult language learners, when they write in a second language, often compare and contrast L1 and L2, and translate/back-translate, consciously, in order to express what they really want to say. Most second language learners, thus, have a natural skill for translation. Positive views toward translation suggest that learners' natural skill for translation should be
guided and honed to produce better products of translation (B. Harris, 1977, 1978).

In summary, translation, as the Grammar-Translation Method, was devalued or totally ignored in language teaching from the 1950s up until the early 1980s in North America. However, researchers in the late 1980s began seeing the potential value in translation in second language learning, and some are now treating translation as a worthwhile academic subject. Viewing translation from the learner's perspective, these researchers affirm the learner as having natural skills of translation and emphasize that these skills should be nurtured.

2.1.2. Text-Level Approach to Translation

Students may be asked to translate single sentences ("sentence-level translation") or they may be asked to translate a whole discourse or text ("text-level translation"). While a text-level approach has been suggested by many researchers in teaching reading and writing in a second language (Carrell, 1985; Meyer, 1977, 1985; Mohan, 1986), the approach to grammar and translation may be still dominantly sentence-level in many second language classrooms in most countries (Applebee, 1982; Celce-Murcia, 1990).

Some researchers in the late 1980s, however, advocate the text-level approach to translation, and take into account the learner's perspective as well (Bell, 1991; Butzkamm, 1985; Duff, 1989; Enns-Connolly, 1985; Gerloff, 1987; B. Harris, 1977, 1978; Heike, 1985; Krings, 1987; Kupsch-Losereit, 1985; Snell-Hornby, 1985; Titford, 1985; Tudor, 1987b;
Weymouth 1984). In their approach, translation is positioned as a valid subject in the students' language curriculum.

For instance, Snell-Hornby (1985) emphasizes that translation should be approached as a complex, structured whole, not as a chain of separate sentences, and that in translation, as in writing, coherence, cohesion, focus, and progression are of primary importance. Snell-Hornby further says that "the detailed analysis of a well-written text, in particular one for translation from the foreign language, provides a basis for creative writing in that language, as in composition and essay-writing" (p.24). Similarly, Tudor (1987b) suggests that analyzing the genre, purpose, style, socio-professional profile, cultural allusions, and verbal associations of the source text involved in translation is useful for language learning.

In second language pedagogy in the 1980s, the emergence of translation as a worthy academic subject was influenced by the rise of text-linguistics (van Dijk, 1972; Kintsch & van Dijk, 1978), and discourse analysis (Brown & Yule, 1983; Kuno, 1978; Ono, 1990). Brown and Yule (1983) argue that a collection of single sentences does not form a text. Kuno (1978) shows how a single sentence changes its meaning depending on the context. Similarly, Celce-Murcia (1990) comments that the sentence-level approach to grammar has problems in semantic and/or pragmatic areas. For instance, Celce-Murcia (1990) argues that tense-aspect-modality, word-order, subordination, and complementation in English are often determined at the discourse level, not at the sentence level (e.g., Indirect object alternation as in "Peter gave the book to Alice" and "Peter gave Alice the book" is mostly determined at the discourse level by the relative degree of 'given' or 'new' information in the two objects).
In summary, many researchers in the late 1980s say that grammar and translation exercises in the second-language classroom should incorporate a text/discourse level approach. They emphasize that translation or grammar should be approached as a structured whole, not as a collection of separate sentences, because word choice, word order, meaning, and so forth, depend on the context.

2.1.3. Translating and Writing Processes

In first language writing research, the writing processes of skilled and unskilled writers have been studied in hopes of improving students' writing (Bereiter & Scardamalia, 1987; Emig, 1971; Faigley & Witte, 1981; Flower & Hayes, 1980, 1981a, 1981b; Matsuhashi, 1981; Matsuhashi & Gordon, 1985; Perl, 1979; Pianko, 1979; Rose, 1980; Selzer, 1983; Shaughnessy, 1977; Sommers, 1980; Witte, 1985; among others). Stimulated by this research, second language writing researchers also studied second language writing processes of language learners in order to improve the writing of ESL students (Butler-Nalin, 1984; Cumming, 1988, 1989; Friedlander, 1990; Friedlander & Hucking, 1987; Gaskill, 1986; Jones & Tetroe, 1987; Raimes, 1985, 1987; Taylor, 1981; Zamel, 1983).

Research on the translating processes of skilled and unskilled translators may also prove useful for second language classrooms (Gerloff, 1987). Studying how skilled and unskilled translators approach translation may be necessary in order to evaluate the place of translation in foreign language education properly.

Researchers who studied the writing processes of skilled (experienced) and unskilled (inexperienced) writers of English as a mother
tongue (Bereiter & Scardamalia, 1987; Burtis, Bereiter, Scardamalia, & Tetroe, 1983; Emig, 1971; Flower & Hayes, 1980, 1981a; Flower, et al. 1986; Perl, 1979; Pianko, 1979; Rose, 1980; Selzer, 1983; Shaughnessy, 1977; Sommers, 1980; among others) say that unskilled writers, in general, are overly concerned with mechanics like spelling, punctuation, and grammar in the process of writing. They frequently cut short planning before writing, and often tend to forget about text organization and their audience. Unskilled writers are generally inflexible in planning and revising, and seldom revise their texts beyond the word level.

In terms of education, these researchers suggested that inexperienced and basic writers could improve their writing if teachers were to pay more attention to, and oversee, students' writing processes as well as their writings. Pre-writing activities and discussions in the classroom (Hillocks, 1982, 1986; Troyka & Nudelman, 1975), peer interaction and peer revising (Becker, 1986; Crowhurst, 1981; DiPardo & Freedman, 1988; Hillocks, 1986), and one-to-one conferences with the teacher ("instructional scaffolding") (Applebee, 1984b) are suggested to have positive effects on students' writing. These activities are meant to help students think through the problems of a specific writing task. Conversely, it is generally agreed that teaching traditional grammar (such as parts of speech, terminology, parsing sentences) does not improve the quality of students' writing (Braddock, Lloyd-Jones, & Schoer, 1963; Hillocks, 1986).

Second language writing researchers (Cumming, 1988; Gaskill, 1986; Jones & Tetroe, 1987; Raimes, 1985, 1987; Zamel, 1983) say that the characteristics of first language writing processes are also found in the second language writing processes of skilled and unskilled writers. Referring
to Cummins' theories, they say that writing skills developed in a learner's mother tongue will appear in second language writing.

Cummins' (1979, 1984, 1986) well quoted theories of the cross-linguistic interdependence of cognitive academic skills have been empirically tested by many researchers in second language writing (Cumming, 1988, 1989; Cumming, Rebuffot, & Ledwell, 1989; Jones & Tetroe, 1987; Raimes, 1987). Cummins said that cognitive academic skills such as reading strategies, writing composition skills, and higher-order thinking skills developed in a person's first language (L1) would largely transfer to a second language (L2) provided there is adequate exposure to L2 and adequate motivation to learn L2. Researchers in second language writing agree with Cummins. They found that writing skills in L1 largely transfer to L2 writing and that second language general proficiency (mainly speaking skills) is not directly related to L2 writing skills.

Cummins' theories, however, have not been tested using second language learners' translation performances. Research on translation in the framework of second language learning has been very inactive, probably because, as Krings (1987) suggests, the role of translation in foreign/second language teaching has always been "a matter of controversy" due to "simplistic theories" concerning the role of the mother tongue in second language learning (for review of literature, see the previous section).

There are some preliminary studies on the translating performances of second language learners (Gerloff, 1987; Hölscher & Möhle, 1987; Krings, 1987). These studies examine the translating processes of language learners, indicating that we cannot comment on the role of translation in second language learning when we hardly know about learners' cognitive processes while translating. One study (Gerloff, 1987) reports that, in
translating a French (L2) text into English (L1), a professional translator in
the study paid more attention to discourse level analyses than student
participants did, and that one of the student participants relied heavily on
morphemic and syllabic analyses. Gerloff comments that good translators are
different from poor translators in such areas as size of units dealt with,
editing styles, and patterns of movement through the text. She says that the
professional translator in her study went through the whole text more than
once and moved backward and forward constantly, whereas poor translators
translated small units (words and phrases) rather stumblingly and seldom
gone through the whole text more than once. The bilingual professional
translator, unlike the student translators, maintained "her efforts at analysis
not primarily for comprehension purposes, but in the service of high-level
'production' goals, that is, for determining the best way to express the
original source text in English" (p. 142).

In sum, some characteristics of skilled and unskilled translators are
very similar to those of skilled and unskilled writers. It may be that second
language writing and translating performances involve the same cognitive
processes, in which case, writing expertise in L1 might transfer to
translating performances regardless of a learner's second language
proficiency. Newmark (1981), a translation theorist, comments: "A
translator has to know his own language, his subject and the target language
in that order. Excellence in the first requirement often saves him from
hideous mistakes in the second and the third" (p.141).
2.1.4. Translation Models

Frawley (1984) proposes the following translation model (Fig. 1), saying that "the translation itself is essentially a third code which arises out of the bilateral consideration of the matrix and target codes: it is, in a sense, a subcode of each of the codes involved" (p.168). B. Harris (1977) also says that the translation is a "third competence" in addition to some competence in two languages.

**Figure 1** Translation as Third Code (from Frawley, 1984)

```
Matrix Code ----------------> Target Code
    |      recodification
    |  \\
\  \\
V

New Code (the translation)
```

Frawley's translation model could be interpreted in Cummins' (1984) "dual-iceberg" metaphor of bilingual proficiency, in which common cross-lingual proficiencies (cognitive academic skills) such as reading strategies, writing composition skills, and higher-level thinking skills underlie the obviously different surface manifestations of each language. The translation proficiency of the skilled (experienced) translator could be added to the common cross-lingual proficiencies (see Fig. 2). According to this concept, although the processes of writing and translating look quite different on the surface level, they may involve the same kind of cognitive activities.
Figure 2 Translation Model of the Skilled Translator

Surface Features of L1

(Matrix Code)  \longrightarrow (Target Code)

\downarrow

(New Code)

(Translation Competence)

Common Underlying Proficiency

Surface Features of L2

This model is reinforced by a few professional translators' comments: Seleskovich (1976) says that translation is an interpretation of "thoughts and ideas", which are "non-verbal", and that especially in consecutive interpreting, the translator relies on "semantic memory" rather than on "formal memory", translating "meaning" in one language into another. Nida (1976) similarly says that transformational operations between
the surface and deep levels of the sentence are necessary for good translation because formal features on the surface level are often not reliable to determine the meaning of the sentence (see also Chomsky, 1964, 1972). Carroll (1963) indicates that a good translator is "properly aware of differences in linguistic codification" between two languages and takes this into account during translation because the structure of how one language expresses meaning is markedly different in another (see also Whorf, 1956).

These comments are quite similar to those concerning the skilled writer's "translating" process in L1 writing, which Flower & Hayes (1981a) and Hayes & Flower (1980) proposed. In this model, there are three main processes in composing: planning, translating, and reviewing. Flower and Hayes (1981a, p. 373) define the translating process in writing as "the process of putting ideas into visible language". The writer "translates" meaning (non-verbal thoughts) into the verbal form. The process of "translating" in writing often resembles translating one language into another, because "there is no rigid correspondence between the units of thought and speech" (Vygotsky, 1934/1986, p.249), and "a symbolic function exists (in mind) which is broader than language and encompasses both the system of verbal signs and that of symbols in the strict sense" (Piaget, 1964/1967, p. 91). Although the processes of writing and translating look quite different on the surface level, they do involve the same kind of cognitive activities.

However, translation by the unskilled translator, who may approach the task word-for-word, or phrase-by-phrase, may not necessarily require cognitive academic skills. That is, mechanical transposition from a source into a target language is possible. Fig. 3 shows a one-way translation model,
which is based on Frawley (1984, p.161). Translations by the unskilled translator may be represented by this model.

**Figure 3** Translation as One-Way Act

Source Language--------->Target Language

The translating performances of the unskilled translator may be, as Applebee (1982) comments, "writing without composing". The unskilled translator may operate at the sentence-by-sentence or word-for-word level, just transposing the source language into the target language.

The translation, thus, can be made at different levels ranging from concrete to abstract. Biggs and Collis (1982, pp.146-147) show that the French expression "sa table de nuit" could be translated as "his table of the night", "his table for the night", "his table at night", "his night table", and "his bedside table". They comment that the first translation ("his table of the night") shows a "direct one-to-one correspondence between words in two languages without consideration of any factor", and that the last one ("his night table") shows the "extended abstract" level, "considering not only the English idiomatic expression, but also applying a relevant abstraction to give the most appropriate translation of the phrase within the context".

In sum, the translating processes of skilled and unskilled translators may be quite different. The translation processes of the skilled/trained
translator might be quite similar to the writing processes of the skilled writer. The skilled translator does pay attention to the discourse level as well as the word and phrase level while translating, negotiating between the source and target texts.

This research will study Cummins' theories empirically, exploring how translating and first/second language writing proficiencies are interrelated. Since not many studies have dealt with the translating processes of second language learners by comparing them with L1/L2 writing processes, this exploratory study of second language learners' translating and writing processes may stimulate studies on translation in the framework of language learning.

2.2. Translation and Second Language Writing as Means of Learning a Second Language

This study will also address translation and second language writing from a different perspective, underscoring the specific values text-level translating and second language writing activities may have in enriching second language acquisition, and possibly widening the scope of the communicative approach to language learning.

2.2.1. Translation in Language Teaching/Learning

In second/foreign language teaching, using translation as a method was thought ineffective and labelled as the "Grammar-Translation Method"
throughout the 1950s - 1980s (reviewed in Odlin, 1989; Stern, 1983). Second language pedagogy emphasized spoken communication during this period, considering translation problematic, the cause of "interference" of the first language with the second. Many researchers and educators tried to eliminate translation from second language classrooms, or they totally ignored it (Asher, 1981; Chaudron, 1988; Dulay, Burt, & Krashen, 1982; Ellis, 1988; Krashen, 1981,1984; Terrell, 1977; among others). Auerbach (1993) reviews the "English only" belief in second language classrooms in the United States from social and cultural perspectives, and confirms that this belief is still strong among monolingual ESL (English as a second language) teachers. She says (p. 10):

Even official TESOL publications lend support to this ("English only") view with the publication of articles like a recent one (Weinberg, 1990) extolling the virtues of fining students for using their L1. The author humorously tells her students, "This is an English-only classroom. If you speak Spanish or Cantonese or Mandarin or Vietnamese or Russian or Farsi, you pay me 25 cents. I can be rich".

However, it is also true that quite a few researchers in the late 1980s and early 1990s have expressed positive attitudes toward translation, urging educators to re-assess the potential contribution which translation could make to language learning (Auerbach, 1993; Duff, 1989; Gerloff, 1987; Krings, 1987; Sorhus, 1975; Titford & Hieke, 1985; Tudor, 1987a, 1987b; Weymouth, 1984; among others). Catford (1965, p. viii) commented in the 1960s that "the chief defect of the now almost universally condemned "Grammar-Translation Method" was that it used bad grammar and bad translation -- translation is not a dangerous technique in itself provided its nature is understood, and its use is carefully controlled." Catford (1981)
further claims that "translation, itself, is a valuable skill, and an important means of refining one's knowledge of a foreign language at an advanced stage of learning" (cited in Krings, 1987, p. 160).

Snell-Hornby (1985), Titford (1985), and Tudor (1987a) also comment that translation is useful for advanced level learners. Titford (1985) says that translation is an activity that is "usefully engaged in after the basic L2 communicative skills have been taught" (p. 74). He says that translation is basically "consolidatory and facilitative". Similarly, Tudor (1987a) says that translation is good for advanced students in order to expand their L2 resources. His study shows that the inclusion of L1, compared to the use of L2 only, encouraged the students to use "achievement" strategies, which have positive effects on language learning. Tudor says that in order to present a speech in L2 (English), the students who worked "within their existing L2 competence, which naturally was not always adequate for the expression of more or less complex ideas in a precise way," delivered speeches which were "clearly marked by a lesser degree of precision and clarity" (p. 272) than those of the students who used their L1 (German) for the preparation stage. Uzawa and Cumming's study (1989) also reports that intermediate level learners of L2 (Japanese), when writing in L2, often used their L1 (English) for pre-writing planning, back-translating, vocabulary checking, and so forth, in order to keep up to the standard of their L1 writing.

Butzkamm (1985) comments that the usefulness of translation is not restricted to advanced learners. He says that "formal translation equivalents are an elegant and economical way of helping the learner to see through unaccustomed foreign language structures" (p. 12). He believes that utterances acquired as "prefabricated patterns" are unproductive, and that
only if the internal structure of a phrase is made transparent can the learner use the language actively (see also Schmidt, 1983). Butzkamm thus says that translation is helpful in order to make the beginner see and manipulate the L2 structure more clearly. Sorhus (1975), too, comments that the use of translation by a teacher is helpful as "an important avenue to meaning" for beginners.

Edelsky's (1982, 1986) one-year study on Spanish-speaking children learning English as a second language reports that the children she studied acquired second language writing skills using their mother tongue in a bilingual setting. Auerbach (1993) argues that the "English only" policy in many second language classrooms in the United States is often based on the social and cultural power structures ("English linguistic imperialism"), rather than on the learner's needs and/or second language learning theories and research.

Ways of using translation in the classroom, from the learner's perspective, are described by some researchers. Weymouth (1984) emphasizes the importance of group/cooperative/peer discussions on texts of non-literary, up-to-date topics. He says that the "linguistic spin-off from translation" should not only improve the learners' L2 grammar but also teach them text structure and appropriateness of style to the social context in L2. Duff's (1989) book is written as a resource manual for instructors who teach translation in the language classroom. His learner-centred approach to translation emphasizes small group and pair activities in which translation is actively and positively designed to be used by learners in the classroom. The book helps the learner, through group and pair interactions, to perform oral and written translation tasks, emphasizing appropriate L1/L2
correspondences not only in words and structures but also in register and context for better communication using the four language skills.

In summary, the re-emergence of translation in language teaching might have potential value for language learning at all levels of second language proficiency. Translation tasks for the advanced and/or intermediate students are good for refining, improving, and expanding their linguistic knowledge. Using translation at the beginner's level is good for associating and reinforcing clearly the L2's structure and meaning. Translation activities enable the learner to use the target language generatively and creatively, and make him/her aware of correct L1/L2 correspondences not only in words and structures but also in register and context.

Vygotsky's classical (1934/1986) views on foreign language learning also seem to support translation activities as a means to learn a second language. He said that, in learning a new language, one does not repeat past linguistic developments; rather, a second language is learned by using one's first language as a "mediator". And that the advanced knowledge of one's own language plays an important role in the study of the foreign one because foreign language learning uses the "semantics" of the native language as its foundation.

2.2.2. Conscious Learning and the "i+1 Output" Hypothesis

Translation and second language writing may be very conscious ways of learning a second language. And this concept of "consciousness" has been a key issue in second language learning research since the 1980s. Schmidt (1990, 1993, 1994) says that conscious "attention is necessary for the conversion of input to intake" (p. 17, 1994). Schmidt (1990) reviews
theories on conscious and unconscious learning, and claims that "subliminal language learning is impossible, and that intake is what learners consciously notice. This requirement of noticing is meant to apply equally to all aspects of language (lexicon, phonology, grammatical form, pragmatics)" (p. 149). Schmidt's (1983) case study of an adult who was learning English as a second language through natural communication without formal learning shows that the adult's acquisition of grammar and vocabulary through natural communication alone was very limited. He just accumulated many "prefabricated patterns" or "formulaic expressions" without acquiring the ability to use the language generatively and accurately.

Schmidt's view contrasts with Krashen's (1981) theories, which distinguish second language "learning" and second language "acquisition". According to Krashen, conscious "learning" does not promote language "acquisition", which is unconscious. However, many researchers (Bialystok, 1981, 1982; Ellis, 1986, 1994; McLaughlin, 1987; Tarvin & Al-Arishi, 1991; Wenden & Rubin, 1987) disagree with Krashen, saying that the distinction between conscious learning and unconscious acquisition is not necessary and that "conscious" learning (such as learning grammar rules, contrasting L1 and L2, paying attention, controlled processing, learning strategies, reflection) helps the adult learner to acquire/learn a second language. Yalden (1975) also comments that "analytic study of the forms and structure of the target language" is necessary in the teaching of second languages so that adult learners are able to express their thoughts in L2 in "a careful, literate way, whether orally or in writing" (p. 338). Bialystok (1982) also says that analyzed linguistic knowledge, which becomes automatic, is necessary for the language learner in order to reach the native speaker's fluency level. Schmidt (1990) says that "those who notice most
learn most, and it may be that those who notice most are those who pay attention most, as a general disposition or on particular occasions" (p. 144). Ellis (1993, 1994) similarly comments that "consciousness-raising" is effective for language teaching.

The concept of conscious learning may be reinforced by Swain's "i+1 output" or "pushed output" hypothesis (1985). Swain argues that the learner needs to have chances to produce words, expressions, and syntax which are a little higher than the learner's present level ("i+1 level output") in order to learn and improve the second language. She says that comprehensible input or "i+1 input" (Krashen, 1981) is not enough.

In the process of translating and L2 writing, the learner is often forced to pay conscious attention to all linguistic areas such as grammar, vocabulary, syntax, register, and so forth, and tends to produce a piece of writing which uses more difficult words and expressions than in his/her speaking. The concept of conscious attention in the context of the "i+1 output" hypothesis seems to be promising in second language learning. If translation and second language writing are effective in learning a second language, this may be due to the learner's conscious attention to L1/L2 linguistic aspects in the process of producing an "i+1 output".

2.2.3. Restructuring

Along with the concept of conscious learning and the "i+1 out" hypothesis, the concept of "restructuring" is important in recent cognitive theories of second language learning. Cognitive theories claim that the "reorganization" of grammar rules acquired wrongly and/or partially, and "restructuring" syntactic and semantic correspondences between L1 and L2,

Cheng (1985) comments, from an information processing perspective, that improvement in performance in cognitive tasks such as solving arithmetic problems (e.g., "Find the sum of ten 2s."), can be "due to a restructuring of the task components" (p.414), rather than simple automaticity. That is, the learner performs better in the task by restructuring perceptual and cognitive units (from adding ten 2s to multiplying 2 by 10). McLaughlin (1990b) also comments as follows: "Restructuring is characterized by discontinuous, or qualitative, change as the child moves from stage to stage in development. Each new stage constitutes a new internal organization and not merely the addition of new structural elements" (p.117).

Similarly, in second language acquisition, when the learner encounters new forms, he/she often restructures the whole system, rather than merely adding new forms to the existing system (Lightbown, 1985). Ijaz (1986) comments that "in many instances, a lexical item in the L2 cannot be directly mapped onto a concept existing in the L1"; therefore, "the L2 learner has to restructure existing L1 concepts or develop a new concept that corresponds to a lexical item in the L2" (p. 405). In terms of translation, examples from Biggs and Collis (1982) may illustrate the restructuring of L1/L2 correspondences. That is, the French expression "sa table de nuit" was translated as "his table of the night" or "his bedside table". In the second translation, "his bedside table", there seems to be a restructuring of semantic and syntactic L1/L2 correspondences. The first one, however, shows no trace of restructuring. It is a direct one-to-one correspondence between
words in two languages. There is a qualitative difference between the two translations.

Translation and second language writing may have value for learning a second language when the learner pays conscious attention to grammar, vocabulary, syntax, text, register, sociolinguistic aspects, and so forth, and tries to produce an "i+1 output", and when this process leads to restructuring semantic and syntactic correspondences between L1 and L2. Butler-Nalin's (1984) case study shows that ESL (English as a second language) learners often search for the words and the proper grammatical forms to express their messages while writing (L2). This process may be facilitative for learning a second language, although it may disturb the writing process. One of her participants comments:

Sometimes I change some sentence, reorganize it. But I not sure some words . . . I not sure its meaning. So I'm not sure it's proper to use in this sentence so I have to look at dictionary and check it.
----Li, grade 9 (p. 129)

Cumming (1990) also says that composition writing in L2 would have value in second language learning if learners put effort into searching out and assessing appropriate wording, while they compare their thoughts and uses of language cross-linguistically (see also Ringbom, 1987). Cumming found that the frequency and quality of metalinguistic and ideational thinking of adult second language learners while they write (L2) is significantly related to learners' writing expertise in their mother tongue. He speculates that the frequency and quality of cross-linguistic analyses while writing in a second language would have good effects for incidental learning of the second language.
Recent cognitive theories which advocate conscious learning and restructuring support this study's underlying assertion that translation and second language writing tasks are helpful for language learning. Translation and second language writing often involve conscious cross-linguistic attention to vocabulary, grammar, syntax, and discourse in order to produce an "i+1 output", and this conscious focus may lead to a qualitative change in the learner's semantic and syntactic correspondences between L1 and L2.

Raimes (1983) says that second language writing helps students learn the language because writing reinforces the grammatical structures, idioms, and vocabulary that have been taught in the classroom. It seems, however, that writing (and translation as well) often provides more than simple reinforcement in the language learning process. These tasks provide learners chances of producing a conscious "i+1 output" and restructuring of L1 and L2 correspondences, which may lead to second language learning.

This exploratory study seeks to determine, by analyzing learners' conscious metalinguistic awareness and restructuring, how translation and second language writing tasks act as a means for second language acquisition. What learners think about translation and second language writing exercises as a means of learning a second language, and how their positive or negative thinking is related to their translating/writing skill levels will also be of interest.

2.3. Research Questions

As mentioned previously, this study explores translation and second language writing in two ways: 1) as components of language proficiency and 2) as a means of language learning. The preceding sections have reviewed
the literature on translation and second language writing in the framework of language learning, highlighting these two perspectives of proficiency and acquisition.

In the field of translation and second language writing as language proficiency, there are many studies on skilled and unskilled writers in second language writing (Cumming, 1988; Jones & Tetroe, 1987; Raimes, 1985, 1987; Zamel, 1983; among others), but few on translation. Detailed studies on the learner's translating processes are scarce (Gerloff, 1987), and there is a gap between theories of translation and studies on the learner's translating processes. Thus many questions may arise: How do language learners translate? How are translation skills related with first and second language writing skills? What views do language learners have on translation?

Translation and second language writing from the perspective of second language learning has seldom been studied empirically although researchers and educators in the late 1980s touch on the prospects of translation and second language writing for language learning (Butzkamm, 1985; Cumming, 1990; Duff, 1989; Raimes, 1983; Titford & Hieke, 1985). Concepts of conscious learning, "i+1 output", and restructuring may lead toward ascertaining why translation and second language writing may foster language learning, but no empirical studies on this subject are evident. Thus many questions remain. Specifically, how often do learners pay conscious attention while translating and writing in L1 and L2? How does their conscious attention relate to their translating and writing skills? How do language learners restructure L1/L2 semantic and syntactic correspondences while translating? What do language learners think about translation and second language writing as a means of second language learning?
Considering these questions, the following six research questions were formulated.

1. How does the quality of second language learners' translation correlate with the quality of their L1 and L2 writing?

2. What do second language learners think about translation and second language writing tasks?

3. What do second language learners pay conscious attention to while translating and writing?

4. How often do second language learners pay metacognitive and metalinguistic attention while translating and writing?

5. What characteristics are observed in the translating and writing processes of second language learners?

6. How do second language learners restructure L1/L2 semantic and syntactic correspondences while translating?

(Regarding research question #4, see 3.1.2. for the definition of "metacognitive" and "metalinguistic".)

2.4. Methodological Issues

2.4.1. Holistic Scoring

To answer research question #1, holistic scoring will be applied. Holistic scoring has been used extensively for evaluation in English writing education and research, and its strengths and limitations have been discussed (Charney, 1984; Odell & Cooper, 1980; White, 1985). It is a highly reliable procedure for sorting or ranking samples of writing qualitatively.
within a reasonably short time, and it is suitable for measuring growth in writing ability, or judging a student's achievements in writing in reference to a test group (Diederich, 1966; White, 1985). However, it is not suitable for diagnostic purposes, and it cannot represent an absolute value in itself (Odell & Cooper, 1980; White, 1985). Since the purpose of evaluating samples of writing for the present study is to find the relative levels of translation and composition proficiency of each participating student in relation to the group of participants, and not to find diagnostic information or an absolute value of each participant's translating and writing abilities, holistic scoring is appropriate here.

The validity and reliability of holistic ratings have been challenged because holistic ratings are often influenced by superficial features such as handwriting, spelling, lexical choice, grammar, and so forth, while content and organization are not duly evaluated (Charney, 1988; W. H. Harris, 1977; Santos, 1988; Vann, Meyer, & Lorenz, 1984), and evaluators' different experiences and disciplines may cause discrepancies in ratings (Mendelsohn & Cumming, 1987). In order to overcome these drawbacks in holistic scoring, some revisions have been made in the present study: (1) content, organization, and language use are evaluated separately using the scale for rating ESL compositions developed by Jacobs, et al. (1981); (2) chosen evaluators do not follow their own evaluation criteria (for the evaluation procedures, see the next chapter); and (3) all the samples of writing are typed so that participants' handwriting does not influence the evaluation.
2.4.2. Think-Aloud Protocols

Regarding research questions, #2 to #6, the think-aloud technique combined with interviews, observations, and text analyses will be used in order to analyze learners' thinking and cognitive activities while translating and writing.

In order to analyze cognitive processes during translation, some researchers (Gerloff, 1987; Hölscher & Möhle, 1987; Krings, 1987) have discussed uses of think-aloud protocols, following research on writing processes (Hayes & Flower, 1983). They found that think-aloud protocols are suitable for analyzing the cognitive processes involved in translation as well.

Think-aloud protocols (Ericsson & Simon, 1980, 1984) have been used by many writing researchers, and pros and cons have been discussed. The merits of think-aloud concurrent verbal reports (compared to retrospective reports) are that they are relatively accurate and reliable, because they are less altered by the participant's elaboration, evaluation, generalization, or memory loss than are retrospective reports (Ericsson & Simon, 1980, 1984; Hayes & Flower, 1983; Krings, 1987), and that they are useful to detect some of the conscious strategies a writer uses to solve problems (Bereiter & Scardamalia, 1987; Flower & Hayes, 1981b; Odell, Goswami, and Herrington, 1983). Hayes and Flower (1983) say that concurrent verbal reports can provide "rich" and "direct" evidence about composing processes.

It is generally said that concurrent verbal reports do not affect the performance of the task if the information is already in verbal form. And even if the information is in non-verbal form (e.g., visual images, motor images), verbal reports do not change the quality of the performance; they
may just make the performance of the task slower (Ericsson & Simon, 1980, 1984; Hayes & Flower, 1983).

The limitations of concurrent verbal reports may be that "tacit" and "automated" knowledge (such as spelling, grammar, word choice in L1 writing) is usually not commented on in these kinds of reports (Ericsson & Simon, 1984; Hayes & Flower, 1983; Odell, Goswami, & Herrington, 1983), and that not everyone feels comfortable doing two things (reporting and writing) at the same time. Krings (1987) comments that his "data shows that individual differences between subjects with regard to their willingness to verbalize might be greater than Ericsson and Simon seem to assume" (p. 167). This tendency has been also detected in our preliminary studies as reported in the next chapter.

Therefore, think-aloud protocols will be combined with other process-tracing methods (interviews, observations, and text analyses) in this study in order to overcome some of these drawbacks (see Odell, Goswami, & Herrington, 1983). Also, a session of demonstration and practice of thinking-aloud before the experiment will be provided for each participant (see Cumming, 1988).
Chapter 3

METHODS

This chapter is divided into seven sections. The first section presents preliminary studies, performed in order to field test the research tools. The second section details the data collection procedures. The third section profiles the characteristics of the participants. The fourth and fifth sections describe how transcribing, segmenting, coding, and rating of data were performed. The sixth section summarizes procedures for statistical and descriptive analyses used to answer the research questions. And the final section reports the meeting with instructors at the College where participants were recruited for this study.

3.1. Preliminary Studies

3.1.1. Case Studies

Three case studies on translation and second language writing processes were carried out from 1988 to 1990 at UBC (University of British Columbia) in order to field test the research design and give the tools for this dissertation a trial run. All data collected in the case studies were derived from the think-aloud technique combined with interviews, observations, and text analyses, stressing the learner's thinking and cognitive strategies while translating and writing. The think-aloud data were collected
individually in a small classroom on the UBC campus. The present researcher (Uzawa) sat beside the participant, taking observational notes. The think-aloud utterances were tape-recorded, and then transcribed by the researcher for analyses.

The first case study involved four English-speaking university students who were studying Japanese as a foreign language at UBC. They were asked to write one English and one Japanese essay on the same topic, thinking aloud in English. Eventually, this case study was published (for details, see Uzawa & Cumming, 1989). Within this study, it became clear that the amount of verbalization while writing varied more than expected from one participant to another, as Krings (1987) suggested. Thus, the interviews performed right after the writing tasks in this case study have proven valuable in order to grasp the participant's thinking and cognitive strategies perhaps not fully expressed in the think-aloud protocols.

The second case study involved a Japanese graduate student at UBC, who was an experienced translator. He translated an English passage into Japanese, and wrote an English short letter, thinking aloud in Japanese. He seemed to be able to verbalize easily what he was thinking while translating and writing, but commented later that he was able to verbalize just a small portion of his thoughts. Here, this case study also reinforces the idea that a follow-up interview right after the writing session may indeed be useful in order to supplement think-aloud protocols. The writing tasks in this case study (translation from L2 into L1, letter writing in L2) were admittedly problematic, and translation from L1 into L2 may be a more appropriate task to compare with L2 writing.

The third case study was performed using two Cantonese-speaking university students who were learning Japanese as a foreign language at
UBC. They wrote a short letter in Japanese and translated a short English passage into Japanese, thinking aloud in English and Cantonese. The two participants were not able to verbalize well due to a language gap. That is, the researcher did not understand their mother tongue, and English, our lingua franca, was their second language. This case study showed that using the participant's mother tongue, one which the researcher is able to understand, is important for a think-aloud task. As for the translation task, translating their second language (English) into their third (Japanese) was too complicated to analyze.

In order to widen the possibilities of the think-aloud method, the present researcher asked several students who were studying Japanese at UBC in 1991 to write a Japanese composition on an assigned topic at home over the weekend, thinking aloud and tape-recording their utterances. This experiment was not successful because most participants summarized on tape what they did after having written the composition. Some students said that they usually generate ideas for a composition while taking a shower or drinking coffee, when they write at home. Thus it was very difficult to tape-record "real time" thinking-aloud utterances in the natural environment. Consequently, the controlled environment of fixed-time writing in a classroom with the researcher in attendance seemed a more direct route in collecting think-aloud data for this study.

3.1.2. Pilot Study

A small scale pilot study using six Japanese students who were studying English as a second language at the ELI (English Language Institute), UBC, was performed in spring, 1992. The participants were all in
their twenties, and had been in Canada for less than one year. Six individual sessions (three hours each) were held on the UBC campus over two months.

In the pilot study, some drawbacks of the think-aloud technique, which became clear in the case studies, were modified. For instance, ample time to practise thinking aloud was provided for those who were not good at verbalizing their thoughts; semi-structured interview questions were prepared and asked orally, in Japanese, immediately after each task; and the use of the participants' mother tongue for thinking-aloud was encouraged. Interview questions were modified after the pilot study in order to address the research questions more directly. In this way, the think-aloud technique was fine-tuned for the full-scale study.

The participants were asked to do three tasks (translation from L1 into L2, L1 writing, and L2 writing) while thinking aloud in their mother tongue. The topics of the three tasks seemed to be appropriate in the pilot study in terms of time, content, and levels of difficulty. All the participants finished the three tasks within the scheduled time, saying that the topics were not too difficult. The three topics used in the pilot were kept for the full-scale study. (For the topics, see 3.2.5.)

In the pilot study, it was extremely difficult to get participants who were experienced translators. (There was only one experienced translator among the six participants.) In order to answer the research questions, it was important to include several students who, if not experienced translators, were at least taking translation courses. Thus, students at Canadian International College (CIC) in North Vancouver, where translation courses are offered, were asked to participate in the present study. It was also extremely difficult to find professional writers among the ESL students;
therefore, the research questions were modified so that a factor in L1 writing skill levels would not become a major focus.

Our coding was roughly based on Gerloff's (1987, p. 141) coding scheme (Table 1) in order to analyze participants' metalinguistic attentions while translating and writing. However, after the pilot study, Gerloff's levels 1-5 were combined as one linguistic level because the number of our participants' utterances in each level was too small to calculate statistically, especially in the protocols of the L1 and L2 writing tasks.

The "metacognitive" attention was taken from Applebee (1982, p. 372). Metacognitive attention includes strategies for retrieving and organizing information and experiences relevant to the writing topic, as well as strategies for narrowing the subject to be discussed.

Table 1 shows the coding scheme used in the pilot study. Examples are taken from Cumming (1988, 1990), in which French-speaking students are writing in their second language (English). Their utterances are reclassified according to our coding scheme. (Utterances enclosed in " " are the created text.)

In the pilot study, the participants' utterances which could be classified into more than one level were double or triple coded. For instance, the example presented in level 6 (discourse level attention) (see Table 1) could be coded as level 2 (word level attention) as well.
Table 1 Coding Scheme Used in the Pilot Study

Level 1 -- morphemic or syllabic level attention (M)
Breakdown or expansion of a word into syllables or morpheme unit. Also, attention to kanji writing is included here. Example: "To fulfill"? "Fulfilling"? Ah, "to fulfill"? "To fill". "To fulfill."

Level 2 -- word level attention (W)
Treatment of a word as a complete unit. Example: I'm looking for a word. "Not even are they..." "Are they..." I was going to say "enable." "Able"? Ah. I don't want to say "able". I don't want to say "efficient". Ah, I'm looking for words. "Are they..." "Not even are they able"? Ah. How do you say someone who has the qualification of doing something? Are they qualified? "Qualified" would be too much. No, no, that's not what I want to say. "Capable", yah, "capable". Well, is it the same than "able"? Yah, okay. Okay.

Level 3 -- phrase level attention (P)
Processing of a group of words constituting a phrase. Example: No, not "the majority". "What some people"? No. Okay, "what the majority". No, not "the majority". "The public"? No. Okay, I'll change it to "the traditional way".

Level 4 -- clause level attention (C)
Processing of words in units containing a subject and verb alone; or subject and verb, plus complements. Example: "Courses who I prefer..." I don't know if I can say that. Des cours que j'aime. "The courses, who, that I really like are..."

Level 5 -- sentence level attention (S)
Processing a complete sentence as an entire unit, without breaking it down into smaller units of analysis. Example: "But the couple..." Le couple doit parler. "The couple must talk".

Level 6 -- discourse level attention (D)
Clearly processing two or more sentences together, either by referring back to something read previously in the text while decoding another unit; by skipping ahead to another sentence or paragraph in order to decode the unit being processed; or by reading two or more sentences consecutively, without significant pausing. Example: "About the..." I'm trying to find a way to start the other paragraph. Like, "about the other course", or "as.. ." I want to introduce the other paragraph. I can't find the right word. I know in French, but I switch it in English, and it doesn't fit there. Mm. How can I put it? Ah. Okay, I'll try to imagine it's in French. Pour l'autre cours. "For the other one"? No, it doesn't sound... A propos? "About"? Um. "In concern"? "What concerns"? En ce qui concerne. I want to say en ce qui concerne "the other one" I'll put "about".

Level 7 -- metacognitive attention (MC)
Strategies for retrieving and organizing information and experiences relevant to the writing topic, as well as strategies for narrowing and focusing the subject to be discussed. Example: So, I have to describe my courses, unha. Three points. If I enjoy the courses, what I learn in class, and other things I want to explain to you.
3.2. Data Collection

3.2.1. Recruiting Participants

Canadian International College (CIC), where the participants for the present study were recruited, is for Japanese high-school graduates, and academic courses such as environmental studies, international business, academic writing, translation/interpretation, and so forth are offered in English. The College has two campuses: one in North Vancouver and the other in Nelson, B. C. The first-year students have to study basic English at the Nelson campus before coming to the North Vancouver campus.

By recruiting participants from CIC (North Vancouver campus), the background of the participants was controlled naturally. That is, ages, educational and cultural backgrounds, emotional maturity, motivation, and lengths of residence in Canada were controlled. Furthermore, training in translation was controlled as well because there were students who had been taking the translation/interpretation course, and those who had never taken the course. (For details about the characteristics of the participants, see 3.3.)

A research proposal was submitted to the faculty of CIC in order to obtain the approval to recruit students at the College. In October, 1992, participants were recruited from six classes. These six classes had been selected carefully beforehand with the assistance of the dean of the College so that both students who had been taking the translation/interpretation course and those who had not could be recruited equally. (Memo to the instructors is in Appendix A.) Fourth and second-year students were targeted; all the first-year students were at the Nelson campus. Some third-year students were included in the fourth-year group because the enrollment of fourth-year students at CIC was very small and, according to the faculty,
there was not much difference in English proficiency between the third and fourth-year students.

Japanese was used to explain the project in the class, with one exception, where the researcher spoke English and two students interpreted it simultaneously into Japanese as a part of the class activities. This lasted half an hour. (The instructor of the class and the researcher had arranged this plan beforehand.) Copies of recruiting letters in English and Japanese (Appendix B) were handed out to students in each class. The names and telephone numbers of students who were interested in participating in the project were taken from the six classes. Thirty-three students (6 male, 27 female) volunteered altogether. The proposed research design for this study needed 24 participants (12 male, 12 female) as in Table 2, so 33 volunteers seemed to be sufficient.

**Table 2 Proposed Research Design**

<table>
<thead>
<tr>
<th>Training in Translation</th>
<th>Trained</th>
<th>Not Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Year English Proficiency</td>
<td>6 (m=3; f=3)</td>
<td>6 (m=3; f=3)</td>
</tr>
<tr>
<td>2nd Year</td>
<td>6 (m=3; f=3)</td>
<td>6 (m=3; f=3)</td>
</tr>
</tbody>
</table>

The researcher telephoned each student later to confirm his/her participation, and to arrange times for individual writing sessions. Two students cancelled. Twenty-two students (6 male, 16 female) were selected out of the 31. Fourth-year students not trained in translation were difficult
to find because the number of fourth-year students at the College was very limited, as mentioned earlier. It was also hard to balance the male vs. female proportion of the participants because the number of male students at the College was very small. Table 3 shows a preliminary classification of the participants. This classification was modified a little after having checked the participants' backgrounds in detail. (For the final classification of the participants, see Table 7.)

Twenty-two controlled background participants seemed to be substantial enough for the think-aloud data collection; in the past most second language writing studies which used think-aloud protocols involved less than 10 participants, and their backgrounds were hardly controlled (see also comments in Cumming, 1988).

**Table 3** Preliminary Classification of Participants

<table>
<thead>
<tr>
<th></th>
<th>Trained in Translation</th>
<th>Not Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth Year</td>
<td>6 (m=3, f=3)</td>
<td>4 (m=2, f=2)</td>
</tr>
<tr>
<td>English Proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td>6 (m=0, f=6)</td>
<td>6 (m=1, f=5)</td>
</tr>
</tbody>
</table>

The participants' English proficiency level was judged by the amount of time spent learning English (see Stern, 1985), measured as the length of residence (LOR) in Canada (see Cummins, 1984, 1986; Cumming, 1989) plus the length of formal learning of English. Thus, their years at the
College (fourth and second year) were used to establish two levels of proficiency. None of them had TOEFL scores.

3.2.2. Pre-Writing Sessions

After arranging writing sessions for each participant, a small classroom on the campus in North Vancouver was booked for the 22 individual three-hour writing sessions. The researcher met with each participant in the room during October and November, 1992. Sessions were undisturbed by anyone else.

Each participant was first asked to fill in a consent form to ensure his/her willingness to participate (Appendix C). The content of the consent form was explained in Japanese and all participants received a Japanese version of the consent form. They were then asked to answer a questionnaire on their educational background (Appendix D). This whole procedure took about 10 minutes.

Next, four questions on translation and second language writing tasks were asked orally, in Japanese, and each participant answered using a five-point scale. (For details, see the next section, 3.2.3.) This question-and-answer session also took about 10 minutes.

Each participant was then asked to perform three tasks, thinking aloud. Before the tasks, the researcher demonstrated how to think-aloud while writing for each participant, with the participant first supplying a topic (such as "my hobbies") for the researcher. Then the participant practiced thinking-aloud while writing on the topic given by the researcher ("Our College"). The practice session took about 10 minutes.
3.2.3. Interview Questions

The following prepared questions (Table 4) were asked verbally in Japanese in the pre-writing session. Also, open-ended questions were asked, in Japanese, regarding translation and L2 writing tasks for language learning by developing and extending the prepared questions (e.g., Why do you think that second language writing tasks are very helpful/not so helpful for learning a second language?). The distinction between "learning" and "improving" in these questions was explained to the participants so that "learning" meant beginners to intermediate level acquisition, and "improving" meant advanced level acquisition in language learning.

Table 4 Interview Questions

1. Generally speaking, translation tasks are helpful for learning a second language. How strongly do you agree or disagree with this statement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>strongly agree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Generally speaking, translation tasks are helpful for improving a second language. How strongly do you agree or disagree with this statement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>strongly agree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Generally speaking, second language writing tasks are helpful for learning a second language. How strongly do you agree or disagree with this statement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>strongly agree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Generally speaking, second language writing tasks are helpful for improving a second language. How strongly do you agree or disagree with this statement?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>strongly agree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.4. Writing Sessions

Three tasks (translation, L1 writing, L2 writing) were assigned. (For topics, see the next section.) They were randomized so that the order would not affect the performance. Each participant was told to write a first "draft" while thinking aloud. All were encouraged to use dictionaries while writing and translating. One hour each was allocated for the translation and for the L2 writing tasks, and half an hour was given to L1 writing. The suggested length for the L1 and L2 writing was one-page each, double-spaced. Most students finished their three tasks in less than the allocated time. Nobody experienced "writer's block" in the writing session. Each participant was asked not to tell other participants about the topics of the three tasks.

The researcher was sitting just beside the participant, taking observational notes, while he/she was performing the three tasks. Think-aloud utterances were recorded using a small tape-recorder. The researcher basically remained silent, just nodding from time to time, responding to the participant's comments and questions. With some participants who tended to forget to verbalize, the researcher occasionally reminded them to verbalize or asked the participants questions (e.g., "What are you thinking now?").

The following semi-structured, open-ended questions (Table 5) were asked in Japanese right after each task in order to supplement the think-aloud
protocols. The questions are overlapped intentionally in order to maximize each student's answers. This question session took several minutes.

Table 5 Questions on Tasks

<table>
<thead>
<tr>
<th>Questions on Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Where did you pay attention most in this task?</td>
</tr>
<tr>
<td>2. What do you think is the most important aspect of this task?</td>
</tr>
<tr>
<td>3. What was the most difficult aspect of this task?</td>
</tr>
<tr>
<td>4. If you were asked to revise this text for publication later, how and what would you like to revise?</td>
</tr>
</tbody>
</table>

In order to express gratitude for the students' participation, an honorarium (gift certificate) was paid to each participant after the writing session, and a copy of the short summary of the study (10 pages in typed Japanese) was sent to each participant in January, 1993, when data collection and analyses were completed.

3.2.5. Writing Topics

The following are topics for the three writing tasks. (They were tested in the pilot study prior to the present study.) A length of one-page (double-spaced) was suggested for each composition.
1) Translation (Japanese into English)

An article from the Nihongo Journal (April, 1990), which is for learners of Japanese as a second/foreign language, was used for this task (Appendix E). This article was selected because the text is easy to read for most native speakers of Japanese, while translating the text into English is challenging due to some words and expressions which are hard to translate into English. In addition, the content is general and understandable without specific background knowledge, and the length is appropriate for a one-hour task. The publisher's English translation (Appendix F) is attached to the text, so this was used as a guide/model translation for evaluating the students' translations.

2) L1 writing (Japanese)

The topic was taken from Jones and Tetroe (1987): Describe the most difficult adjustment that you have had to make living in Canada. In their research, this topic had been used as an L1 (Spanish) writing task for Spanish-speaking ESL students in Canada. The present study selected this topic because it would be contextually appropriate for Japanese ESL students in Canada.

3) L2 writing (English)

The topic was also taken from Jones and Tetroe (1987) and modified a little according to our needs. (In the present study, the one word "Venezuelan" in Jones and Tetroe was changed to "Japanese"): What is the most important difference between Canadian and Japanese society? In their research, this topic had been used for the L2 (English) writing task for the same Spanish-speaking students mentioned above, who were from Venezuela.
This topic seemed appropriate for the present study as well because our participants had been studying in Canada for 1.5 to 3.5 years, and seemed to be familiar with Canadian society.

These last two topics were chosen from topics which Jones and Tetroe used for their research on the second language writing processes of Spanish-speaking ESL university students. These topics are, as Jones and Tetroe indicate, generally used for conventional writing tasks usually given to ESL students in their writing courses or on English-proficiency tests.

In this study, different topics were intentionally assigned for the two writing tasks in order to avoid some unwanted influences of ordering. That is, if the same topic is used, the first task may facilitate the second task. It is considered that the difference in the two topics for the L1 and L2 writing would not greatly affect the participants' writing performance, based on Cumming's (1988) comment that the level of cognitive demand (e.g., argument vs. personal letter writing), rather than simple difference in topics, affects the learner's L2 writing performance. Since both topics in the present study require "descriptive" writing and a specific background knowledge is not necessary, the level of cognitive demand in the two writing tasks (of course, L2 writing is more demanding than L1 writing, but as far as the topics are concerned) seems equal. Likewise, the content of the translation task is also "descriptive", and does not require any specific knowledge. Thus, the level of cognitive demand in the three tasks (again, as far as the topics and content are concerned) is similar.
3.3. Characteristics of Participants

3.3.1. Backgrounds

Twenty-two Japanese students were selected from the thirty-one who volunteered to participate in the study. All of them were learning English as a second language at the same College through studying academic subjects in English. They stated that studying English would enable them to get jobs in Japan or enter Japanese universities. Relevant aspects of participants' backgrounds are presented in Table 6. Pseudonyms are used throughout this study in order to maintain the confidentiality of the participants.

All of the participants had studied in Japan for 12 years (up to the high-school level) before coming to Canada. Five students had studied English two more years in Japan at college, university, language school, or prep school. One student (Takako) had studied in Argentina under a high-school exchange program for 10 months. None of them had taken TOEFL at the time of this study.

The participants ranged in age from 19 to 23, and had been in Canada for 1.5 to 3.5 years. None of the participants had professional experience in writing or translation. Nor did they have work experience, writing or translating letters and memos.
Table 6 Backgrounds of Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Year at CIC</th>
<th>Age</th>
<th>LOR in Canada (years)</th>
<th>Educational background</th>
<th>Length of Training in Translation at CIC (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Takako</td>
<td>F</td>
<td>4</td>
<td>23</td>
<td>3.5</td>
<td>high-school</td>
<td>2.5</td>
</tr>
<tr>
<td>2. Takeshi</td>
<td>M</td>
<td>3</td>
<td>21</td>
<td>2.5</td>
<td>high-school</td>
<td>1.5</td>
</tr>
<tr>
<td>3. Takuya</td>
<td>M</td>
<td>3</td>
<td>21</td>
<td>2.5</td>
<td>high-school</td>
<td>1.5</td>
</tr>
<tr>
<td>4. Tami</td>
<td>F</td>
<td>4</td>
<td>21</td>
<td>3.5</td>
<td>high-school</td>
<td>2.5</td>
</tr>
<tr>
<td>5. Taro</td>
<td>M</td>
<td>3</td>
<td>23</td>
<td>2.5</td>
<td>prep school</td>
<td>1.5</td>
</tr>
<tr>
<td>6. Toshie</td>
<td>F</td>
<td>4</td>
<td>22</td>
<td>3.5</td>
<td>high-school</td>
<td>2.5</td>
</tr>
<tr>
<td>7. Saburo</td>
<td>M</td>
<td>3</td>
<td>21</td>
<td>2.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>8. Sachiko</td>
<td>F</td>
<td>4</td>
<td>22</td>
<td>3.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>9. Satomi*</td>
<td>F</td>
<td>2</td>
<td>22</td>
<td>1.5</td>
<td>2-year college</td>
<td>none</td>
</tr>
<tr>
<td>10. Sawako</td>
<td>F</td>
<td>4</td>
<td>23</td>
<td>2.5</td>
<td>2-year college</td>
<td>none</td>
</tr>
<tr>
<td>11. Setsuko*</td>
<td>F</td>
<td>2</td>
<td>22</td>
<td>1.5</td>
<td>university (2 years)</td>
<td>none</td>
</tr>
<tr>
<td>12. Shiro</td>
<td>M</td>
<td>4</td>
<td>22</td>
<td>3.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>13. Shizuko*</td>
<td>F</td>
<td>2</td>
<td>22</td>
<td>1.5</td>
<td>language school</td>
<td>(1 month)</td>
</tr>
<tr>
<td>14. Madoka</td>
<td>F</td>
<td>2</td>
<td>19</td>
<td>1.5</td>
<td>high-school</td>
<td>0.5</td>
</tr>
<tr>
<td>15. Makiko</td>
<td>F</td>
<td>2</td>
<td>19</td>
<td>1.5</td>
<td>high-school</td>
<td>0.5</td>
</tr>
<tr>
<td>16. Mari</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>0.5</td>
</tr>
<tr>
<td>17. Miki</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>0.5</td>
</tr>
<tr>
<td>18. Momoko</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>0.5</td>
</tr>
<tr>
<td>19. Naoko</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>20. Nami</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>21. Nobuo</td>
<td>M</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>none</td>
</tr>
<tr>
<td>22. Noriko</td>
<td>F</td>
<td>2</td>
<td>20</td>
<td>1.5</td>
<td>high-school</td>
<td>none</td>
</tr>
</tbody>
</table>

*Moved from the second-year group (See details in 3.3.2.).
3.3.2. Classification of Participants

The participants were classified initially, as in Table 3 (section 3.2.1.), according to their training in translation at CIC and their English proficiency (LOR in Canada and years at the College). However, after checking their backgrounds more closely, the preliminary classification was modified a little: three students in the second year (Setsuko, Satomi, and Shizuko) were moved to the fourth-year (not trained) group because they reported that they had studied English in college, university, and language school, respectively, for two years after high-school (See Table 6 in the previous section). Thus, years at the College do not necessarily correspond to the years counted in the modified classification. (In the case of Shizuko, she reported at the time of recruiting that she was taking CIC's first-year translation course, but she had just started the course in September while the other second-year "trained" students had been taking this course since April. She was therefore disqualified as a "trained" student.) This new categorization seemed appropriate as the three students' mean scores in the three tasks were closer to the mean scores of the 4N group than to the 2N group.

Participants in the "trained" group had been taking the translation/interpretation course at the College for some time at the point of being interviewed (October, 1992); the students in the fourth-year group had been studying translation and interpretation for 1.5 to 2.5 years, and the second-year group for half a year. All the "trained" participants, however, had never undertaken translation professionally. The participants in the "not trained" group had never taken the course at the College and none had any professional experience doing translation.
All the participants in the fourth-year (trained) group mentioned in the interview that they wanted to use the training in translation and interpretation as a skill for the workplace, although they had no intention of translating or interpreting, professionally, in the future. All the second year (trained) students said that they selected the course because the course description stated that students would get to know Canadian people and society through training in translation and interpretation. They said they were interested more in interpretation than in translation. Most students in the "not-trained" group said that they did not enroll in the course because they had no desire to be translators or interpreters.

Table 7 is the modified (final) classification of the participants. Pseudonyms used here correspond to the classification:

Names start from "T" belong to the fourth-year, trained in translation (4T);

"S" " fourth-year, not trained in translation (4N);

"M" " second-year, trained in translation (2T);

"N" " second-year, not-trained in translation (2N).
### Table 7 Modified Classification of Participants

<table>
<thead>
<tr>
<th></th>
<th>Trained in Translation</th>
<th>Not-Trained in Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4th-year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 (m=3) (f=3)</td>
<td>7 (m=2) (f=5)</td>
</tr>
<tr>
<td><strong>2nd-year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 (m=0) (f=5)</td>
<td>4 (m=1) (f=3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trained</th>
<th>Not Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takako</td>
<td>Saburo*</td>
</tr>
<tr>
<td>Takeshi*</td>
<td>Sachiko</td>
</tr>
<tr>
<td>Takuya*</td>
<td>Satomi</td>
</tr>
<tr>
<td>Tami</td>
<td>Sawako</td>
</tr>
<tr>
<td>Taro*</td>
<td>Setsuko</td>
</tr>
<tr>
<td>Toshie</td>
<td>Shiro*</td>
</tr>
<tr>
<td></td>
<td>Shizuko</td>
</tr>
<tr>
<td><strong>4th-Year</strong></td>
<td></td>
</tr>
<tr>
<td>Madoka</td>
<td>Naoko</td>
</tr>
<tr>
<td>Makiko</td>
<td>Nami</td>
</tr>
<tr>
<td>Mari</td>
<td>Nobuo*</td>
</tr>
<tr>
<td>Miki</td>
<td>Noriko</td>
</tr>
<tr>
<td>Momoko</td>
<td></td>
</tr>
</tbody>
</table>

*male student
3.4. Transcribing, Segmenting, and Coding of Protocols

All the tape-recorded think-aloud protocols (approximately 50 hours) were transcribed by the researcher during the two months from October to November, 1992. However, Setsuko's think-aloud protocols of the translation task were erased by mistake; this was treated as missing data in the statistical calculation.

Segmentation was roughly based on previous studies (Cumming, 1988; Ericsson & Simon, 1984; Flower & Hayes, 1981b): pause (a silence of five seconds or more before and after the statement), intonation, and meaning were used in this study in order to distinguish stretches of verbalization from one another.

Coding was performed using the coding scheme (Table 8) developed for the present study, revised from the coding scheme used in the pilot study. The five linguistic levels (morphemic, word, phrase, clause, and sentence levels) in Gerloff's study (1987, p. 141) were combined into one as the linguistic level (L). Her discourse level was retained as the discourse level (D). The category "Personal comments" (P) was added to this study because participants often expressed their personal comments (metacommments) while performing the task (e.g., "I'm sorry, my handwriting is very awful." "Oh, I've forgotten to double-space.") The metacognitive level (M) was, as mentioned in the section about the pilot study, taken from Applebee (1982).

Examples of utterances in Table 8 are taken from the data collected for the present study, in which our students were speaking in their mother tongue (Japanese). Examples of Japanese utterances are enclosed with < >,
and the English translations by the researcher which follow the Japanese utterances are presented in ( ). Participants' created text (not necessarily written down) is indicated by " ". (More examples of transcribed and coded think-aloud protocols are in Appendix G.)

Table 8 Coding Scheme

<table>
<thead>
<tr>
<th>Metacognitive level attention (M) -- content generation, attention to audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. &lt;&quot;kanadajin to nihonjin no shakai no chigai&quot;....um, &quot;kanadajin wa chotto individual, nihonjin wa group shiiki&quot; tte kaitte...(writes down key words)&gt; (&quot;difference between Canadian and Japanese society&quot;....um, &quot;Canadian people are a little individualistic, Japanese people have a group consciousness&quot;, let's write this.... (writes down key words)) -- Shiro, English task</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discourse level attention (D) -- attention to text organization, logical flow, attention to more than two sentences at the same time</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. &lt;kono tsuzuki doo nagarete ikoo kana'tte omotte....&gt; (how to continue from here, I wonder...) -- Madoka, English task</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linguistic level attention (L) -- attention to single sentences, clauses, phrases, words, spelling, punctuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. &lt;&quot;regard&quot; to &quot;respect&quot; kana, kono chigai'tte yuuno naka naka wakari nikui...&gt; (&quot;regard&quot; and &quot;respect&quot;, it's hard to tell the difference of the meaning...) -- Nobuo, English task</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal comments (P) -- metacommments, questions, personal chatting, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. &lt;jisho tsukatte ii desu ka?&gt; (may I use the dictionary?) -- Sawako, Translation task</td>
</tr>
</tbody>
</table>

The inter-rater reliability assessment on coding was performed by an independent judge on 182 randomly selected utterances (10 percent of the
protocols). The reliability was very high (.92). The intra-rater reliability on 118 another randomly selected utterances was also high (.91).

3.5. Evaluation of Writing Samples

The quality of the participants' written texts was evaluated by two independent judges (in each language) who were native speakers and experienced language teachers / evaluators / editors, using holistic scoring and the ESL Composition Profile developed by Jacobs, et al. (1981) (see Appendix H). In the present study, however, the ESL Composition Profile was modified a little: a 4-point scale was used and the three categories of "vocabulary", "language use", and "mechanics" were combined into one as "language use" (see also Cumming, 1988). That is, two judges evaluated writing samples using a 4-point scale (max=4, min=1) in three categories (content, organization, language use). In the case of the translation, only one category (language use) was evaluated because content and organization were given by the text assigned. The English evaluators evaluated participants' translations referring to a model translation in the Nihongo Journal (Appendix F). The sum of scores (max=8, min=2) produced by two judges for each task was used for statistical calculation.

Two independent evaluation sessions (one for each language) were held. The English language evaluators gathered in a classroom on the UBC campus, and the Japanese language evaluators at the residence of one of the evaluators. The two judges in each language had practice sessions (about 30 minutes) before evaluating whole samples. (Two sets of writing samples of the three tasks had been prepared beforehand for the two judges in each
language.) They first read 10 randomly chosen papers quickly and rank-ordered them; then they evaluated two randomly selected papers out of the ten, using the modified ESL Composition Profile. Any ambiguous point regarding the evaluation criteria, etc. was clarified during the practice session. The inter-rater reliability on 6 items (2 papers x 3 categories) was .94 in English and .89 in Japanese in the practice session.

The two judges in each language then evaluated all of the writing samples as follows: 1) first, they sorted the writing samples into four groups (high / mid-high / mid-low / low), judging the quality of the samples by reading them quickly, estimating that each group should have 25% of the samples; 2) they then evaluated the samples in three categories (content, organization, and language use) using the modified ESL Composition Profile. They did a re-evaluation when the evaluation discrepancy between the two evaluators was greater than 1. The two judges discussed the differences in rating before the re-evaluation. About 15 papers were re-evaluated in L1 writing, 8 in L2 writing, and 2 in Translation. The whole session of evaluation (practice, evaluation, discussion, and re-evaluation) took about two and half hours for the English session (translation and L2 writing samples), and one and half hours for the Japanese session.

Each participant's name and his/her language fluency level were not known to the evaluators, and all the papers had been typed by the researcher before the evaluation so that handwriting would not influence the evaluation. Evaluators had been informed, before evaluating the samples, that participants created only first "drafts" in the three tasks while thinking aloud. Thus the evaluators knew that the participants in this study produced first, and not final, drafts and that the writing situation was very artificial. This consideration was necessary because students' composing behaviours
and quality of writing may vary according to writing situations (Hall, 1991).

The inter-rater reliability on evaluation assessed by the Pearson product-moment correlation coefficient (r) on 22 papers in each task is presented in Table 9. (Note: As mentioned earlier, the translation task involved only one category (language use) because content and organization were given by the text assigned.)

**Table 9 Inter-Rater Reliability on Evaluation**

<table>
<thead>
<tr>
<th></th>
<th>Translation</th>
<th>L1 Writing (Japanese)</th>
<th>L2 Writing (English)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>Content</td>
<td>---</td>
<td>.903</td>
<td>.697</td>
</tr>
<tr>
<td>Organization</td>
<td>---</td>
<td>.887</td>
<td>.696</td>
</tr>
<tr>
<td>Language Use</td>
<td>.678</td>
<td>.959</td>
<td>.773</td>
</tr>
<tr>
<td>Total*</td>
<td>---</td>
<td>.952</td>
<td>.835</td>
</tr>
</tbody>
</table>

(*Total is the sum of scores on Content, Organization, and Language Use.)

**3.6. Procedures for Analyses**

The data collected for this study (writing samples, think-aloud protocols, interviews, observational notes) were analyzed in the context of the research questions. Not only the four groups (4T, 4N, 2T, and 2N) were compared, but also group pairs (second vs. fourth year; trained vs. not
trained) and the whole group of 22 participants was compared across three tasks, depending on the research questions, as described below.

In order to answer the research question #1 (*How does the quality of second language learners' translation correlate with the quality of their L1 and L2 writing?*), the rank order correlation of the quality of the 22 students' writing samples involving three tasks (Translation vs. L1; Translation vs. L2; L1 vs. L2) was calculated using the Pearson product-moment correlation coefficient (r) and the Spearman correlation coefficient (rho). Raw scores produced by the judges were then converted into percentages and the four groups (4T, 4N, 2T, 2N) were compared in each task using ANOVA (analysis of variance).

The research question #2 (*What do second language learners think about translation and second language writing tasks?*) was answered by the profile analysis using the participants' answers (scores on a 5-point scale) to the questions discussed in 3.2.3. The parallelism among the profiles for the four groups and difference among response means were calculated. The profile analysis was complemented with a qualitative analysis of the interviews.

The research question #3 (*What do second language learners pay conscious attention to while translating and writing?*) was answered by analyzing the 22 participants' answers to the questions asked directly after each task (For the questions, see Table 5, Section 3.2.4.). The answers were categorized into four writing aspects (content, organization, language use, and audience) and how many students of the 22 paid attention to these aspects in the three tasks was counted.

For the research question #4 (*How often do second language learners pay metacognitive and metalinguistic attention while translating and
writing?), the think-aloud utterances were analyzed. This question was approached using a factorial analysis of variance with four factors: Attention (4 levels) x Tasks (3 levels) x Training (2 levels) x Year (2 levels).

The research questions #5 and #6 were answered descriptively. The observational notes were analyzed to answer research question #5 (What characteristics are observed in translating and writing processes of second language learners?). For #6 (How do second language learners restructure L1/L2 semantic and syntactic correspondences while translating?), the participants' translations were analyzed referring to the Japanese text and the model translation of the assigned text in order to examine the restructuring in detail. Their transcribed think-aloud protocols were also analyzed.

3.7. Meeting with Instructors

After analyzing the data, a 15-page summary was submitted to the College faculty in January, 1993, requesting their comments, opinions, and/or questions. It was important to ask instructors' views on the research findings in order to counterbalance the researcher's views, which are based strictly on the created experimental setting. (see Guba & Lincoln, 1989). The faculty kindly arranged a one-hour discussion session, which was held on the CIC campus in May, 1993, and was attended by about 15 faculty members. The session was tape-recorded with the permission of the attending instructors. Because of their insights based on classroom experience and observation, their comments and opinions were very informative. Findings in this study, which were limited in the experimental setting, were then expanded.
The instructors' comments and opinions on findings in this study are reported in the next chapter along with the researcher's interpretations of the findings.
Chapter 4

RESULTS AND DISCUSSION

In this chapter, the results of descriptive and statistical analyses are juxtaposed with the six research questions guiding this study. Findings for each research question are reported in separate sections. In every section, the main findings are summarized first, and this is followed by detailed analyses and discussion of findings.

4.1. Results for Research Question 1: How does the quality of second language learners' translation correlate with the quality of their L1 and L2 writing?

4.1.1. Summary

The statistical analyses for research question #1 were not significant. However, in the case of the quality of the students' language use, although it was not significant, there were weak correlations between the translation and L2 composition, and between the L1 and L2 compositions. As well, group comparisons of mean scores of the quality of the three tasks showed that the 4T (fourth-year, trained in translation) students performed better than the students in the other three groups in the translation and L2 writing tasks although the difference was not strong enough to reach statistical significance.
In most studies of second language writing in which professional and student writers are compared, it has been said that skills in L1 writing largely transfer to L2 writing. However, in this study, in which second and fourth-year college students, not professional writers, were compared, the evidence for this skill transfer was not clear.

4.1.2. Analyses

As reported in section 3.5, two independent evaluators in each language (English and Japanese) evaluated the participants' writing samples. They did not know the participants' English proficiency levels and backgrounds. The English evaluators evaluated the translations and L2 compositions.

The raw scores on each participant's writing samples in the three categories (content, organization, and language use) are presented in Appendix I. The scores are out of 8 (max=8, min=2). That is, the sum of the two raters' scores (max=4, min=1) are used. (Some of the students' writing samples are attached in Appendix J.)

The raw scores in Appendix I were calculated for correlational relations (Translation vs. L1; Translation vs. L2; L1 vs. L2), using the Pearson product-moment correlation coefficient (r) and Spearman (rho). The results are summarized in Table 10. As mentioned before, the translations were evaluated only on language use because content and organization are given by the assigned text.
Table 10  Results of Correlational Analyses

<table>
<thead>
<tr>
<th></th>
<th>Pearson r</th>
<th>Spearman rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content (L1 vs L2)</td>
<td>.282</td>
<td>.174</td>
</tr>
<tr>
<td>Organization (L1 vs L2)</td>
<td>.174</td>
<td>.126</td>
</tr>
<tr>
<td>Language Use (L1 vs L2)</td>
<td>.472*</td>
<td>.448*</td>
</tr>
<tr>
<td>Language Use (Trans vs L1)</td>
<td>.004</td>
<td>.045</td>
</tr>
<tr>
<td>Language Use (Trans vs L2)</td>
<td>.365*</td>
<td>.510*</td>
</tr>
</tbody>
</table>

*weakly correlated

According to this table, correlational relations between L1 and L2 Writing (content and organization) and L1 writing and Translation (language use) of the participants are very low and not significant. However, the correlations between L1 and L2 Writing (language use), and Translation and L2 (language use) are relatively high, although they are not significant.

Because the correlational relations of the quality of the individual participant's performances in the three tasks were found to be very weak and not significant, the raw data (Appendix I) were examined from a different perspective in order to seek possible interrelations among the four groups. The raw scores were converted into percentages so that the quality of writing (content, organization, and language use, combined) in the three tasks could be compared. The proportions for the three categories (i.e., content, organization, language use) were weighted as follows (see Jacobs, et al., 1981; Kikuchi, 1987).

Translation = Language Use 100%
L1 Writing = Content 50%, Organization 20%, Language Use 30%
L2 Writing = Content 30%, Organization 20%, Language Use 50%
The proportions for the three categories in L2 Writing were based on Jacobs, et al. (1981) (see Appendix H). This proportion seems to be appropriate because most second language learners often feel that the most difficult part in L2 writing is vocabulary (Silva, 1992; Uzawa & Cumming, 1989). In the case of L1 Writing, the proportion was decided by the two Japanese evaluators and the researcher. That is, considering differences in L1 and L2 writing, the weight on language use in L2 Writing (50%) was reduced to 30% for L1. The translation task was evaluated on language use only; thus 100% was based on language use.

The scores in percentages were examined by ANOVA. The difference in the quality of translation and writing in the four groups (4N, 4T, 2T, 2N) was not strong enough to show a statistical significance, as shown in Table 11. However, there was a tendency for the fourth-year students (4T and 4N) to perform better than the second-year students (2T and 2N) in the L1 writing task (p = 0.0589). As well, there was a tendency for the trained (in translation) groups (4T and 2T) to perform better than the non-trained groups (4N and 2N) in the L2 writing task (p = 0.0778). In the translation task, the 4T group performed slightly better than the other three groups although the difference was not significant. Overall, the fourth-year trained (4T) group performed better than the other three groups in the three tasks although the difference was not strong enough to be significant. The fourth-year not-trained (4N) group did best in the L1 writing task, but did not perform well in the translation and L2 writing tasks.
Table 11  Group Comparisons of Quality of Writing Samples

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Translation</td>
<td>L1 Writing</td>
<td>L2 Writing</td>
</tr>
<tr>
<td># of Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>11</td>
<td>70.98 %</td>
<td>65.39 %</td>
</tr>
<tr>
<td>Not-trained</td>
<td>11</td>
<td>69.57</td>
<td>63.73</td>
</tr>
<tr>
<td>Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>13</td>
<td>70.65</td>
<td>70.18</td>
</tr>
<tr>
<td>2nd</td>
<td>9</td>
<td>69.74</td>
<td>56.45</td>
</tr>
<tr>
<td>Year x Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4T</td>
<td>6</td>
<td>74.08</td>
<td>69.65</td>
</tr>
<tr>
<td>2T</td>
<td>5</td>
<td>67.26</td>
<td>60.28</td>
</tr>
<tr>
<td>4N</td>
<td>7</td>
<td>67.70</td>
<td>70.63</td>
</tr>
<tr>
<td>2N</td>
<td>4</td>
<td>72.85</td>
<td>51.66</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>70.28</td>
<td>64.56</td>
</tr>
</tbody>
</table>

Translation:
Training x Year: $F(1, 18) = 1.78$  $p = 0.20$
Training: $F(1, 18) = 0.01$  $p = 0.93$
Year: $F(1, 18) = 0.03$  $p = 0.85$

L1 Writing:
Training x Year: $F(1, 18) = 0.47$  $p = 0.50$
Training: $F(1, 18) = 0.30$  $p = 0.59$
Year: $F(1, 18) = 4.07$  $p = 0.0589^*$

L2 Writing:
Training x Year: $F(1, 18) = 0.16$  $p = 0.70$
Training: $F(1, 18) = 3.50$  $p = 0.0778^*$
Year: $F(1, 18) = 2.52$  $p = 0.13$

*marginally significant
4.1.3. Discussion

A difference of one or two years in school learning, as in this study, may not show a difference in the quality of translation and L2 writing if we follow Cummins' theories. Contrary to face-to-face communicative competence in L2, cognitive academic skills such as L2 writing and reading skills develop very slowly, taking several years (Cummins, 1984).

Specifically, in the context of academic writing, Cummins' hypotheses (1979, 1984, 1986) of cross-linguistic interdependence of cognitive academic skills were not confirmed clearly in this study. Cumming (1988) provides evidence that L1 and L2 writing skills are interdependent, comparing professional and student writers. He claims that writing skills in L1 largely transfer to L2, saying that professional writers' expertise in paying attention, simultaneously, to more than one aspect of writing and problem-solving while writing is transferable from L1 to L2 writing. No student in this study has had professional experience and expertise in L1 writing. Thus their translation, L1 writing, and L2 writing skills might not have shown strong correlations, therefore appearing modular and independent.

In addition, the target language here (English) is linguistically very different from the learners' mother tongue (Japanese). Learning a language quite different from L1 may take three to four or five times longer than learning a language similar to L1 (e.g., Indo-European languages similar to one another) (Odlin, 1989; Ringbom, 1987; Stern, 1985). As well, it may take additional time to acquire translational competence as "translational competence is an interlingual competence, it is clearly marked off from the four traditional monolingual skills: listening, speaking, reading, and writing" (Wilss, 1976, p. 120).
The levels of cognitive demand within the tasks may not have been appropriate to differentiate the skill levels of the participants: Cumming (1988) reports that the cognitively demanding tasks in his study (argument and summary writing) produced a great difference in the quality of writing between the expert and student writers, whereas in the cognitively less demanding task (letter writing), the difference in the quality of writing between expert and student writers was small in his study.

It is likely that the three tasks in the present study were cognitively demanding enough for the participants. The participants' average scores in the three tasks were less than 80%, indicating they were not easy tasks for the participants.

Technically speaking, the number of participants may not have been large enough for a statistical analysis of score ratings. However, in this study, each student did not necessarily gain consistent scores across the three tasks, and the standard deviation was high. For instance, scores of the six 4T students in the L1 and L2 writing (content) were, as shown here, not consistent across the two tasks with high standard deviation.

L1 (content) 4.2  7.0  8.0  4.3  3.5  7.0 (means = 5.7; s = 1.88)
L2 (content) 4.0  5.0  7.0  5.5  6.5  6.0 (means = 5.7; s = 1.08)

Thus, even if more participants were added, the correlational relations and the difference in the four groups for the three tasks might still have been the same; i.e., it might not have produced a significantly different profile.

Some instructors at the College mentioned in the discussion session that class hours spent for actual translation exercises (L1 into L2) at the College were very limited: one hour a week, or less than a few hours a week, at most, over 33 weeks (one academic year). Therefore, "trained" and
"not-trained" distinctions in translation (especially for the second-year students) seemed inappropriate.

The instructors further said that the English proficiency of new students from Japan entering the College was improving each year because the reputation of the College had become known in Japan, thus attracting more "good" students. The difference in English proficiency between the fourth and second-year students in this study, therefore, may have actually been very slight.

In sum, correlational relations among the translation, L1 and L2 writing performance of college ESL students who were not professional writers and translators were not significant. Likewise, group comparison of performance in the three tasks showed no significant difference among the four groups.

4.2. Results for Research Question 2: What do second language learners think about translation and second language writing tasks?

4.2.1. Summary

The results of research question #2 showed that the participants in this study generally regarded both translation and L2 writing tasks as relatively helpful for learning and improving a second language. The participants were asked four questions about their thoughts on translation and L2 writing tasks as a means of learning and improving a second language, and their answers were recorded on a five-point scale. The profile analyses based on these answers showed no significant difference in thinking among the four groups.
However, in the interviews, the students in the 4T group expressed very positive views toward translation tasks, while most students in the other three groups (4N, 2T, 2N) preferred L2 writing tasks to translation. In addition, many students indicated that speaking practice is also necessary for learning and improving a second language.

### 4.2.2. Analyses

As stated in 3.2.3., the participants were asked four questions regarding translation and L2 writing tasks as a means for language learning as follows (partially duplicated here from Table 4).

1. Generally speaking, translation tasks are helpful for learning a second language. How strongly do you agree or disagree with this statement?

2. Generally speaking, translation tasks are helpful for improving a second language. How strongly do you agree or disagree with this statement?

3. Generally speaking, second language writing tasks are helpful for learning a second language. How strongly do you agree or disagree with this statement?

4. Generally speaking, second language writing tasks are helpful for improving a second language. How strongly do you agree or disagree with this statement?

The distinction between "learning" and "improving" was explained to the participants: "learning" meant beginners to intermediate level acquisition, and "improving" meant advanced level acquisition in language learning.

The participants answered on a five-point scale (5=very helpful, 3=neutral, 1=not helpful at all) and explained in the interview their reasons
for choosing the particular number. These answers on a five-point scale are summarized in Table 12 (raw scores) and Figure 4 (group means of their answers for each question in graph form).

The statistical analyses showed no significant difference among the profiles for the four groups. The multivariate test of parallelism among the profiles for the four groups (4T, 4N, 2T, 2N) gave a p-value of 0.12. As well, there was no difference among response means. In addition, the group effect was equal (p=0.31) over all four questions.

Although it was not statistically significant, the 4T (fourth-year, trained in translation) group seemed to have a somewhat different view toward translation and L2 writing, compared to the other three groups, as shown in the graph (Figure 4). The students in the 4T group thought that translation is very helpful (means = 4.67 - 4.25) for learning and improving a second language, and that L2 writing is less helpful (compared to translation) for learning and improving a second language (4.33 - 3.50). Inversely, the students in the other three groups (4N, 2T, 2N) thought that L2 writing is more helpful (means = 3.70 - 4.20) than translation (3.30 - 3.75) for learning and improving a second language.

Statistically speaking, however, the students in the four groups generally regarded both translation and L2 writing tasks as relatively helpful for learning and improving a second language. Their positive answers toward using translation for language learning might be related to the participants' educational background. In Japan, translation exercises in English classrooms are very common. If participants are from other countries, where translation exercises are seldom performed, the results may have been quite different.
Table 12 Raw Scores of Participants' Answers to Questions on Translation and L2 Writing as a Means for L2 Learning and Improvement

5 = very helpful; 4 = helpful; 3 = neutral; 2 = not helpful; 1 = not helpful at all.

<table>
<thead>
<tr>
<th></th>
<th>Translation for L2 Learning</th>
<th>Translation for L2 Improvement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trained in Translation</td>
<td>Not-Trained in Translation</td>
<td>Trained in Translation</td>
<td>Not-Trained in Translation</td>
</tr>
<tr>
<td>4th Year</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4.5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
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<td>4</td>
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<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>means</td>
<td>4.67</td>
<td>3.64</td>
<td>4.25</td>
<td>3.50</td>
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<tr>
<td>2nd Year</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>4</td>
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<td></td>
<td>3.5</td>
<td>3</td>
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<td>means</td>
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<td>3.30</td>
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<table>
<thead>
<tr>
<th></th>
<th>L2 Writing for L2 Learning</th>
<th>L2 Writing for L2 Improvement</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Trained in Translation</td>
<td>Not-Trained in Translation</td>
<td>Trained in Translation</td>
<td>Not-Trained in Translation</td>
</tr>
<tr>
<td>4th Year</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
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<td>4</td>
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<td>2nd Year</td>
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<tr>
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<td>4.20</td>
<td>3.75</td>
<td>3.80</td>
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</tr>
</tbody>
</table>
4.2.3. Discussion

Although the statistical analyses did not show a significant difference among the four groups, the results of the interviews show that students in the 4T group have a very positive attitude toward translation as a means of learning and improving a second language. For example, Takeshi said that
translation is more helpful than L2 writing for improving expressions in L2 because one has to use new words and expressions in addition to those which one already knows in order to translate a text, whereas in L2 writing, one can write using only very basic words. Toshie and Tami said that translation is more helpful than L2 writing because one has to think about L1/L2 correspondences in translation tasks. Taro said that he often experienced in translation tasks new discoveries in language use. Takuya said that he could learn differences in culture and expressions in L1 and L2, through translation. Takako, who was somewhat negative toward translation, said that translation and L2 writing may be helpful, but speaking skills cannot be improved by translation and writing exercises.

Thus five out of six students in the 4T group said in the interviews that translation tasks are very helpful for learning and improving a second language. Their comments might be summarized as follows: in L2 writing, one can usually write essays using only words and expressions which he/she knows well, without checking dictionaries. Thus there is not much opportunity for improving the second language, whereas in translation, a person has to use words and expressions which are beyond his/her level, and also has to consider the L1/L2 differences in language use and cultures in order to translate the original text. This process is helpful for learning and improving a second language.

These comments are consistent with Swain's (1985) "pushed output" hypothesis in language learning. Swain argues that the learner needs to have chances to produce words, expressions, and syntax which are a little higher than the learner's present level ("i+1 level output") in order to learn and improve the second language. She says that comprehensible input or "i+1 input" (Krashen, 1981) is not enough.
Swain (1985) compared L2 speaking and L2 writing, and commented that French immersion students in her study performed better in writing French than speaking it because the students had often produced "i+1 output" in L2 writing. For the 4T students in this present study, however, L2 writing, compared to translation, was often perceived as an "i-1" level task.

Other students, especially second-year students, however, said that L2 writing is more helpful than translation. For instance, Saburo (4N) said that an assignment such as diary writing is more helpful than translation tasks for learning L2; translation tasks are good for improving accuracy after having acquired speaking fluency. Noriko (2N) said that checking dictionaries while translating often leads to mechanical and direct translations; L2 writing is better because one can think in English directly. Nami (2N) said that good translations do not necessarily mean improvement in L2. Momoko (2T) said that translation is not efficient for L2 learning because words and expressions used for translations are not often used in everyday conversation.

For the not-trained (in translation) students, translation often means using the dictionary all the time, whereas in L2 writing, they can express what they really want to say in their own words. For the not-trained students, translation may have often meant an "i+2" level task.

Many students mentioned that practice in speaking is also important to improve second language skills. Nobuo (2N) said that writing and speaking are separate skills. Nami (2N) indicated that writing itself is not helpful for improving speaking. Miki (2T) said that words in speaking and writing are different. Mari (2T) said that writing may be helpful for speaking, but that translation is not because content is already provided. Even the 4T students said that translation practice is not enough for language learning, if speaking
practice is not included. These comments are very astute; the students have insights into language learning. They know that writing practice alone will not facilitate speaking, and vice versa. Their answers are consistent with Cumming's (1988) comments that speaking and writing are indeed separate skills.

4.3. Results for Research Question 3: What do second language learners pay conscious attention to while translating and writing?

4.3.1. Summary

The results of research question #3 were analyzed by classifying the participants' answers to interview questions into four categories: content, organization, language use, and audience.

Contrary to our expectation (see Cumming, 1990; Uzawa and Cumming, 1989), half of the participants in this study did not pay conscious attention to "language use" in L2 writing. However, all of the participants were conscious about "language use" in the translation task. Attention to "content" and "organization" was very high in the writing tasks (both L1 and L2), and relatively high in the translation task. The number of participants who paid attention to "audience" was very small.

4.3.2. Analyses

In order to answer research question #3, the following questions (presented here from Table 5, section 3.2.4.) were prepared. Each student was asked these questions in Japanese following every task.
1. Where did you pay attention most in this task?

2. What do you think is the most important aspect of this task?

3. What was the most difficult aspect of this task?

4. If you were asked to revise this text for publication later, how and what would you like to revise?

These questions were overlapped intentionally in order to maximize each student's response: i.e., even if a participant missed giving thorough answers to one question, he/she still had a chance to give answers additionally within the framework of other questions.

For example, Takako's (4T) answers for these questions after the translation task were as follows:

1. I tried to translate the meaning of the text, and tried not to translate word for word.

2. To translate the point, i.e., to translate what the writer wants to say is important.

3. It was difficult to find appropriate English words for Japanese words like zazen and dantai seikatsu because English equivalents for these words listed in the dictionary did not seem to fit into this context.

4. I would like to revise my grammar (especially prepositions and tense), and also would like to ask a native speaker to check whether my English expressions are natural.

These answers were categorized using four writing aspects (content, organization, language use, and audience), which are commonly recognized in writing pedagogy. Takako's answer to question 1 was categorized into
"content"; question 2, "content"; question 3, "language use"; and question 4, "language use". Altogether, Takako's conscious attention in the translation task was judged to be directed to "content" and "language use". Similarly, Noriko's (2N) answers in the translation task were:

1. I tried to transfer the content/information accurately.
2. To convey information as much as possible.
3. Vocabulary. Although I checked the dictionary, it was not clear. Oftentimes, I had to create my own English equivalents for some Japanese words, and this bothered me.
4. I would like to check for grammar, words (whether they are translated accurately), and accuracy of content.

Noriko's answers were categorized as follows: question 1, "content"; question 2, "content"; question 3, "language use"; question 4, "language use" and "content". Noriko's conscious attention in the translation task was also directed to "content" and "language use".

Regarding the L2 writing task, Takako's response was:

1. I paid attention whether what I wanted to say was organized well; I tried to organize what I wanted to say logically.
2. Content generation.
3. I was not able to generate examples well. I should have generated enough examples and ideas before writing.
4. I would like to add some more concrete examples. Also, I would like to check my grammar.
Takako's answers were categorized as follows; question 1, "organization"; question 2, "content"; question 3, "content"; question 4, "content" and "language use". Takako's conscious attention in the L2 writing task was directed to "content", "organization", and "language use".

Noriko's answers after the L2 writing task were:

1. I paid attention to whether the content was appropriate, i.e., I tried to answer the topic directly and faithfully.

2. Faithfulness to the topic.

3. To generate ideas was difficult, because I lack information about the Japanese educational system.

4. I would like to check the structure (introduction, body, conclusion), and the appropriateness of my examples, and comparisons.

Noriko's response to question 1 was categorized into "content"; question 2, "content"; question 3, "content"; and question 4, "organization" and "content". Noriko's conscious attention in the L2 writing task was directed to "content" and "organization".

Likewise, other participants' answers to questions posed after they finished the three tasks were analyzed and categorized using the same method. All participants' answers concerning each task are summarized in Table 13. This table shows how many students reported to have paid attention to certain writing aspects during the three tasks. It indicates the students' beliefs about where their writing's attentions should be, while translating and writing. This does not mean that the students themselves paid attention to these aspects. Table 13 is presented graphically in Figure 5.
Table 13  Participants' Reported Conscious Attention in Three Tasks

(Figures are out of 22 students.)

<table>
<thead>
<tr>
<th></th>
<th>Translation</th>
<th>Japanese (L1)</th>
<th>English (L2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>16/22</td>
<td>19/22</td>
<td>16/22</td>
</tr>
<tr>
<td>Organization</td>
<td>13/22</td>
<td>20/22</td>
<td>22/22</td>
</tr>
<tr>
<td>Language</td>
<td>22/22</td>
<td>17/22</td>
<td>11/22</td>
</tr>
<tr>
<td>Audience</td>
<td>9/22</td>
<td>7/22</td>
<td>5/22</td>
</tr>
</tbody>
</table>
### 4.3.3. Discussion

In this study, it was very surprising that the number of students who paid attention to "language use" in L2 writing was fewer than in L1 writing. Most students in the interviews said that they wrote the English composition using very easy words and expressions. Indeed, they seldom used dictionaries while writing in English. In the previous section (research question #2), many participants commented that they usually wrote essays in English using...
only words and expressions which they knew well, without checking dictionaries. Thus, they would appear to write by using an "avoidance" strategy which sidesteps difficult vocabulary and structures (see Schachter, 1974).

For language acquisition, conscious attention to language is important (Schmidt, 1990). Cumming (1990) and Raimes (1983) suggest that L2 writing is facilitative for language learning due to the learner's conscious attention to language use. However, our data show that half of the participants did not pay conscious attention to "language use" in L2 writing. It was in the translation task that all of the students paid conscious attention to "language use". For research question #2 (in the previous section), our 4T students maintained that compared to translation, L2 writing is not an effective exercise for improving a second language. They said that using words and expressions which are beyond one's level, and considering the L1/L2 differences in language in order to translate the original text are both helpful for learning and improving the second language. If language learners who have attained some face-to-face oral communicative skills habitually write L2 compositions using only words and expressions which they know well, there seems to be little opportunity to improve the L2.

Regarding "content" and "organization", it is often said that student translators do not pay attention to content and organization in translation because these are given by the text to be translated (Applebee, 1982). However, the data indicate that more than half of the students were very conscious about content and organization, even in the translation task. (For instance, Noriko (2N) answered that she tried to transfer the content/information accurately in the translation task. See the previous section.) This table does not contend that they actually paid attention to these
aspects while translating, but it shows that at least half of the participants believed that it is necessary to pay attention to content and organization while translating.

Regarding "audience", more than half of the participants did not pay attention to the audience in the three tasks, and those who paid attention to the audience were mostly the fourth-year students. However, even the students who said that the reader was important were not able to give satisfactory answers to such questions as how to take care of the reader. Lack of conscious attention to audience and lack of "procedural knowledge" (Anderson, 1983) about audience seem to characterize the translating and writing processes of the student writers who do not have much writing experience.

4.4. **Results of Research Question 4: How often do second language learners pay metacognitive and metalinguistic attention while translating and writing?**

4.4.1. **Summary**

Research question #4 was approached by analyzing the think-aloud data using a factorial analysis of variance.

The results were that the attention patterns of the participants depended on the task. That is, the participants' attention patterns in the L1 and L2 writing tasks were very similar, but they were quite different in the translation task. The participants' metacognitive attention in the writing tasks (L1 and L2) was relatively high, but it was very low in the translation task. The participants' attention to language use in the translation task was very
high, but it was unexpectedly low in the L2 writing task. Their conscious metalinguistic attention may be related to the quality of their language use; the participants' scores on the language use in the translation task were higher than in the L2 writing.

4.4.2. Analyses

Research question #4 was approached by collecting "think-aloud" speech data. Each student was asked to talk aloud while translating and writing, and their utterances were tape-recorded. Taped utterances were transcribed, segmented, and coded by the researcher according to the procedures described in section 3.4. (Transcribed and coded think-aloud protocols are in Appendix G.) The coding scheme used in this study appears in Table 8 in section 3.4. (A simplified version is presented here.) The inter-rater reliability was high (.92 on 182 randomly chosen utterances), and the intra-rater reliability was also high (.91 on another 118 randomly chosen utterances).

M: *metacognitive level attention* (e.g., content generation, attention to audience)

D: *discourse level attention* (e.g., attention to text organization, attention to more than two sentences at the same time)

L: *metalinguistic level attention* (e.g., attention to single sentences, clauses, phrases, words, spelling, punctuation)

P: *personal comments* (e.g., metacommments, personal chatting, questions, etc.)
The utterances of each participant in each attention level across three tasks were counted separately and converted into percentages. The use of percentages was necessary for the statistical analyses because the number of utterances was different from participant to participant. The number of each participant's utterances in one level in one task was divided by the number of his/her whole utterances in one task. The participants' whole utterances in three tasks ranged from 8 to 67 (means 27.1) in the translation task, 4 to 44 (means 17.1) in the L1 writing, and 4 to 54 (means 18.3) in the L2 writing.

The data include four factors: Attention (4 levels: M, D, L, P), Task (3 levels: Translation, L1, L2), Training (2 levels: Trained, Not-trained), and Year (2 levels: 4th-year, 2nd year). In order to answer research question #4, the data were analyzed using analysis of variance with four factors (4 x 3 x 2 x 2). The results are shown in Table 14. When utterances could be coded into more than one category, double or triple coding was used. Thus, the total is more than 100%. The data in Table 14 are presented in graph form in Figure 6, in which differences of attention in the three tasks are shown visually by presenting means of the four attention levels (metacognitive, discourse, metalinguistic, metacomments) of the 22 participants.

According to the statistical analyses, there were very significant interactions in Attention x Task (p = 0.0000), Attention x Year (0.0223), and Attention x Training x Year (0.0147). However, there were no significant interactions in Attention x Task x Year (p = 0.2194), and Attention x Task x Training (p = 0.1385). As well, an interaction in the four factors (Attention x Task x Training x Year) was not significant (p = 0.458). That is, the 22 participants' attention patterns in the three tasks were quite similar. The
participants, regardless of their training and year, paid attention
differentially depending on the tasks. The participants' attention patterns
were very similar in the L1 and L2 writing tasks, but significantly different
in the translation task. Every participant in the four groups paid significantly
very high metalinguistic attention but low metacognitive attention in the
translation. (This tendency corresponds to the results of research question #3
in the previous section.) Figure 6 visually shows the participants' very high
metalinguistic attention and low metacognitive attention in the translation
task, and the similar patterns of attention in the L1 and L2 writing.
**Table 14** Metacognitive and Metalinguistic Attention As Measured by Frequency (%) of Utterance

\[ M = \text{metacognitive level attention} \]
\[ D = \text{discourse level attention} \]
\[ L = \text{linguistic level attention} \]
\[ p = \text{personal comments} \]

Figures are percentages (%). Group means are shown.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>df</th>
<th>Sum of squares</th>
<th>Mean square</th>
<th>F</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Attention</td>
<td>3</td>
<td>12646.96</td>
<td>4215.66</td>
<td>18.05</td>
<td>0.0000</td>
</tr>
<tr>
<td>Attention x Task</td>
<td>6</td>
<td>25716.23</td>
<td>4286.04</td>
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<td>0.0000</td>
</tr>
<tr>
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<td>383.47</td>
<td>1.64</td>
<td>0.1385</td>
</tr>
<tr>
<td>Attn x Task x Year</td>
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<td>1954.81</td>
<td>325.80</td>
<td>1.39</td>
<td>0.2194</td>
</tr>
<tr>
<td>Attn x Task x Train x Yr</td>
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<td>1337.36</td>
<td>222.89</td>
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<td>0.4580</td>
</tr>
<tr>
<td>Attention x Training</td>
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<td>1720.35</td>
<td>573.45</td>
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<td>0.0649</td>
</tr>
<tr>
<td>Attention x Year</td>
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<td>2300.57</td>
<td>766.86</td>
<td>3.28</td>
<td>0.0223</td>
</tr>
<tr>
<td>Attn x Train. x Year</td>
<td>3</td>
<td>2526.94</td>
<td>842.31</td>
<td>3.61</td>
<td>0.0147</td>
</tr>
</tbody>
</table>
Figure 6 Participants' Mean Attention Levels in Three Tasks Measured by Percentage of Utterance

Translation: $\Delta \rightarrow \Delta$  
L1 Writing: $\bullet \rightarrow \bullet$  
L2 Writing: $\ast \rightarrow \ast$

metacognitive level attention  
discourse level attention  
metalinguistic level attention  
personal comments
4.4.3. Discussion

The participants' attention levels measured by proportion of frequency of utterance relating to the four categories are quite similar in the L1 and L2 writing, but not in the translation. In the L1 and L2 writing, the percentages of the utterances on the metacognitive level (M) are high because every participant talked before writing about the content to be written. In the translation task, however, the metacognitive level is very low. (Only one student in the 4T group talked about the audience of the translated text.) By contrast, the percentages of the participants' discourse level (D) utterances are almost the same in the three tasks. Participants paid attention to the paragraphs and the groups of sentences in the translation task as well as in the writing tasks. The participants' personal comments or metacomments are similar in the three tasks, although they are a little lower in the translation task. The personal comments, such as comments on handwriting, writing habits, personal experiences, and so forth, however, are not directly related to research question #4, but make up a part of the percentages.

The percentages of the utterances on the linguistic level (L) is extremely high in the translation, and it is lower in the L2 writing than in the L1 writing. In the L2 writing, most students wrote English very quickly without checking their dictionaries, although their English vocabulary and grammar were very limited. They certainly had a writing fluency in L2, but their language use was not very articulate. Also, they did not elaborate or develop their ideas fully; thus, most students just wrote a half page, finishing writing in half an hour. By contrast, in the translation task, most participants spent one full hour translating the assigned text, examining words and expressions which they did not know well. Nobody skipped sentences in the
Cumming (1988) reports that expert writers (such as journalists and novelists) in his study paid "conspicuous" attention to words while writing in L2 in order to overcome their lack of second language proficiency. Our students did not pay enough attention to language use in the L2 writing task, probably because they lacked the necessary L1 writing experience and their writing skills are still developing. In the present study, it was in the translation task that the participants paid conspicuous attention to words and grammar in order to express the meaning of the text assigned (L1) in the second language.

The participants' conscious attention to language and grammar in the translation task seems to be related to the quality of their language use. The two English evaluators remarked that the translations were much better than the English compositions when they first read several translation papers for evaluation, after having finished evaluating the L2 compositions. And the results of the evaluators' actual evaluation of the quality of the students' language use was 10.88% higher on average in the translation than in the L2 writing task (Table 15). This is a statistically significant difference (p = 0.0006; s = 12.01). Particularly, the students in the non-trained groups (4N & 2N) up-graded their language use in the translation task more so than the trained groups (4T & 2T) as the scores of L2 writing of the non-trained groups were lower than the trained groups.

In general, the participants' English expressions were more vivid and colorful in the translation than in the L2 writing; details there were expressed with varied vocabulary and syntax. An English native speaker,
whom the researcher asked to read the students' writings, similarly commented as follows:

The translations were, overall, far more precise and logical than the L2 writings. There was a lot more structure to the translation pieces and that writing sounded like it had a purpose. However, most of the L2 writing rambled and digressed and was confused by lack of structure. The L2 writing was plagued by too many undeveloped ideas.

The results of this study are consistent with some studies on translation and L2 writing. Kobayashi & Rinnert (1990), comparing composition via translation and direct composition, say that Japanese EFL (English as a foreign language) students in their study produced significantly better L2 (English) compositions by writing via translation (from Japanese) than by writing directly in L2. The students in the low proficiency group in their study, when compared to the students in the high proficiency group, especially benefitted from translation.

Similarly, Tudor (1987a) reports that the work of the students who worked within their existing L2 (English) competence was "clearly marked by a lesser degree of precision and clarity" than that of the students who used their L1 (German) for the preparation of a speech in L2 in his study.

In these studies, the same topic was used for direct writing and writing via translation. In the present study, however, two different topics were used for the translation and L2 writing tasks. By assigning different topics, the present study was able to avoid an obvious influence of the first task on the second task. It was also able to avoid the problem of translating material which was far beyond the participants' English proficiency level.
(translating one's own L1 composition is often too difficult for low proficiency level second language learners).

While the degree of difficulty between the two tasks in this study may not have been exactly the same, this fact does not significantly affect the results. Cumming (1988) shows that it is the level of cognitive demand (e.g., argument vs. personal letter writing), rather than simple difference in topics, that affects the learner's L2 writing performance. Since the content of the translation task was "descriptive" and the topic of the L2 writing also required "descriptive" writing, there is reason to believe that the level of cognitive demand in the two tasks in this study was not significantly different.

In the interview, some students said that the translation task was more difficult than the L2 writing due to the number of many unknown words. Some other students said that the translation task was easier than the L2 writing task because they were not required to generate their own ideas in translation. However, most students said that they did not see much difference between the two tasks and topics.

Generally speaking, in the translation task, the participants were freed from the cognitive activities of generating and organizing ideas, and were able to concentrate on linguistic activities. Thus, their use of language and grammar may have been qualitatively better in the translation than in the L2 writing.
Table 15 Comparison of Scores on Language Use in Translation and L2 Writing

(Scores are sum of two evaluators: max = 8, min = 2)

<table>
<thead>
<tr>
<th>L2 Writing</th>
<th>Translation (Trans. minus L2 Writing)</th>
<th>Difference</th>
<th>L2 Writing</th>
<th>Translation (Trans. minus L2 Writing)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4T</td>
<td>5.0</td>
<td>5.8</td>
<td>+10.0%</td>
<td>4N</td>
<td>5.5</td>
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<tr>
<td></td>
<td>5.0</td>
<td>5.5</td>
<td>+6.25%</td>
<td>4.0</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
<td>5.7</td>
<td>-3.75%</td>
<td>3.0</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
<td>6.5</td>
<td>+6.25%</td>
<td>5.5</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
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<td>6.05</td>
<td>+6.88%</td>
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<td>4.5</td>
</tr>
<tr>
<td></td>
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<td>6.0</td>
<td>0</td>
<td>4.5</td>
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</tr>
<tr>
<td></td>
<td>5.0</td>
<td></td>
<td></td>
<td>5.0</td>
<td>4.0</td>
</tr>
<tr>
<td>means</td>
<td>+4.27%</td>
<td></td>
<td></td>
<td>+12.3%</td>
<td></td>
</tr>
<tr>
<td>2T</td>
<td>4.5</td>
<td>5.0</td>
<td>+6.25%</td>
<td>2N</td>
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<td></td>
<td>5.5</td>
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<td>-18.75%</td>
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</tr>
<tr>
<td></td>
<td>5.5</td>
<td>6.5</td>
<td>+12.5%</td>
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</tr>
<tr>
<td></td>
<td>4.5</td>
<td>5.8</td>
<td>+16.25%</td>
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<tr>
<td></td>
<td>4.0</td>
<td>5.6</td>
<td>+20.0%</td>
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</tr>
<tr>
<td>means</td>
<td>+7.25%</td>
<td></td>
<td></td>
<td>+19.7%</td>
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</tbody>
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4.5. **Results of Research Question 5**: What characteristics are observed in the translating and writing processes of second language learners?

4.5.1. **Summary**

Research question #5 was approached by observing the 22 participants individually while they were translating and writing (L1 and L2). The following characteristics were noted.

1) Many participants used the "sentence-by-sentence" approach in the translation task without reading the whole assigned text before translating. As well, they did not re-read their translated texts after having finished translating.

2) In the writing tasks (both L1 and L2), most students used the "what-next" approach. That is, before writing, they generated ideas, but they did not organize these in any way or develop them further to form a unified text before actually writing. In sum, the students may have had "theoretical" knowledge, but lacked "practical" knowledge, of translation and (L1 and L2) writing.

4.5.2. **Analyses**

The observational notes taken while each participant was performing the three writing tasks were mainly used to answer research question #5. (For the procedural details, see section 3.2.4.) Recorded observations of participants' writing behaviors were then analyzed.

In the translation task, 12 of the 22 students started translating the text sentence by sentence without reading the whole text first. After having translated the passage, 13 students read back the whole translated English text quickly, but only three students took time to revise. Many students in this study believed that paying attention to "content" and "organization" is
important in translation (see the results of research question #3, section 4.3.), but this was not put into practise well in the actual translating process. Their translating processes may be summarized as "writing without composing" (Applebee, 1982), or "translation as a one-way act" (Frawley, 1984, see section 2.1.3.).

When an experienced translator translated the same text for the preliminary study, she read the assigned text very slowly, underlining some expressions, considering the possible audience, and then translated the text in 10 minutes. However, after translating the text, she spent 50 minutes revising the translation and said that, if possible, she would like to revise it further. She paid a great deal of attention to the audience of the translated English text, indicating that words and phrases as well as the text organization of the English text should be natural, comprehensible, and clear to a reader who may not know the cultural background of the original text.

In this study, however, only one fourth-year, trained student paid attention to the likely reader of the translated text, and consequently inserted some explanatory phrases not in the original text, in order to make the piece sensible to a reader who might not know Japanese social customs. Paying attention to the reader, both in the translation and writing tasks, was rare in the participants' actual processes as well as in their thinking patterns (see the results of research question #3).

The results of the thinking aloud in the previous section (4.4) show that the percentages of the participants' metacognitive attention in the L1 and L2 writing was quite high in comparison with the translation task. However, the real picture was that most students generated ideas, haphazardly, about what they wanted to say, only for a few minutes before writing, without thinking of strategies: i.e., how to organize generated ideas or how to argue
a point. In this study, they did not think beforehand about logical flow. Both in the L1 and the L2 writing, the so-called "what-next" approach was widespread. Oftentimes, "introduction-body-conclusion", "topic sentence", "thesis statement", and so forth were mentioned, but were not implemented as concepts by which to organize and develop the text.

The revising pattern was similar in the L1 and L2 writing as well. After writing, most students did not reread their own text. Some students re-read, but only once, revising some minor points, such as spelling. Some students said that they were afraid of rereading because they did not know what to do if they discovered errors.

One instructor at CIC commented that their students, when assigned essay writing in L2, would often finish their writing very quickly, without spending enough time generating ideas, organizing and re-organizing the structure, reflecting upon the topic, and revising their own text. Thus, it seemed that the general characteristics of the participants' writing processes revealed in the think-aloud session did not greatly differ from their usual writing behaviors in the classroom.

4.5.3. Discussion

In general, the characteristics mentioned above are quite similar to the profile of the "basic" or "inexpert" writer documented in many research papers (Bereiter & Scardamalia, 1987; Emig, 1971; Flower & Hayes, 1980; Perl, 1979; Sommers, 1980; for example). Bereiter and Scardamalia (1987) say that expert writers usually can "transform" their knowledge as they write by rethinking and restating ideas until they become fully developed thoughts, but inexpert writers just "tell" their knowledge as they write by simply
stating ideas without planning or goal-setting. Most students in this study, through their knowledge of composition, knew terms like "brain-storming", "outlining", "thesis statement", "topic sentence", "introduction-body-conclusion", and so forth, and mentioned these often during writing, but they used these concepts as formulaic prescriptions and were not actually able to "transform" their ideas using these concepts. This knowledge gap is also similar to Ryle's (1949, pp. 25-61) distinction between "knowing how" and "knowing that", Anderson's (1983, p. viii) distinction between "declarative knowledge" and "procedural knowledge", and Mohan's (1986) "theoretical knowledge" and "practical knowledge". The participants in this study may have "declarative" or "theoretical" knowledge about composition, or know facts about writing, but they lack "procedural" or "practical" knowledge", or knowledge of how to perform the task. In short, they lack writing practice.

As shown in this study, second language learners who lack experience in writing cannot write as they might wish, even in L1, due to the gap between "declarative" and "procedural" knowledge. Their writing skills are still "developing" (see Mohan and Lo, 1985). Raimes (1987) also comments that second-language writers, in addition to lacking linguistic proficiency in L2, might also lack writing ability in L1, lack knowledge of the conventions of L2 written products, and lack practice in generating and organizing ideas in L2 for an L2 reader.

Some ESL researchers may think that second-language writers' writings are influenced by cultural thought patterns, as Kaplan's "contrastive rhetoric" (1966, 1967, 1978, 1979, 1987; Hinds, 1980, 1983) may suggest. According to Kaplan (1966), "Oriental" (he means Korean and Chinese) students' way of writing/thinking is circular and does not approach a
conclusion directly. He says that the cultural thought patterns of non-English students may affect their English (L2) writing. Similarly, Hinds (1983) argues that a Japanese rhetorical pattern (ki-sho-ten-ketsu: introduction-development-development with twist-conclusion) is radically different from the English rhetorical pattern, and that this may have a negative influence on Japanese students' English (L2) composition.

However, both Kaplan and Hinds compared published articles in L1 (translated into English) and students' L2 (English) compositions. Their studies are not based on the direct comparison of students' actual writings and writing processes in L1 and L2. The present study, by comparing the students' actual translation and (L1 and L2) writing processes and texts, failed to confirm Kaplan's and Hinds' claims. It was hard to conclude that the students' thought patterns were fixed in cultural thought patterns, as such.

4.6. Results of Research Question 6: How do second language learners restructure L1/L2 semantic and syntactic correspondences while translating?

4.6.1. Summary

In order to answer research question #6, the participants' written texts (translations) were analyzed descriptively, and compared with the original text and model translation. The participants' think-aloud protocols were also analyzed descriptively. Contrary to the findings from the observations reported in the previous section (4.5), where the participants' translating processes were described rather negatively as "one-way acts" or "writing without composing", the text analyses of the participants' translations
revealed that most of their lexical choices were not simple word-for-word mappings across L1 and L2, and instances of restructuring were frequently discovered. In the L2 writing task, however, because most students wrote directly in English using vocabulary and sentence structures which they knew well, and there was no "model" or "original" text, examples of restructuring were not able to collect.

4.6.2. Analyses

Examples of participants' restructuring in the translation task are analyzed here as follows. The sentences in italics are from the model translation in the Nihongo Journal. (The whole translation is in Appendix F, and the Japanese text is in Appendix E.)

(1) "April is the month for joining companies. It's a time when many new employees come into being."

In this model translation, the underlined expression "come into being" is a translation of a Japanese expression, "umareru" (lit. "are born"). Most students in the study avoided literal translation and rephrased the Japanese expression so that their translated English expression became "appear", "start to work", "go to companies", "we can see ....", and so on. Some examples of student translations:

a) April is the month when job start. At that time there are a lot of new employees. (Shiro, 4N)

b) April is the month to starting jobs. It's also the time when many people become freshmen. (Takako, 4T)
(2) "Some companies request a lecture from a famous person. Others teach the proper use of polite language. Sometimes, employees will go to a camp; this helps them adjust to working in a group."

In this case, the sentence subject in each sentence in the Japanese text is omitted because it is clear from the context. Therefore, when translating into English, it is necessary to supply the subject, as shown in the model sentences (underlined), due to the English structural rule. Almost all the students in the study supplied the sentence subject by saying "companies", "some companies", "people", "they", and so on. However, the subject of the third sentence is different from the subject of the first and the second. Unfortunately, many students failed to distinguish this point clearly in the English translation. They used "they" carelessly and made the translation ambiguous. Otherwise, their restructuring of the Japanese sentence by supplying the sentence subject was successful.

Examples of student translations:

a) The side of training always ask a famous person for lecture. For example, new employee have to learn the way of speaking right words, to go camp for accompanying with other coworkers and they have to sit in religious meditation. From the religious mediation, they can obtain the habit of the cool and concentrated minds. (Setsuko, 4N)

b) The company asks to a famous person to have a lecture. They teach them wording expression. They lodge together to get used to a group life. Also, they sit in religious contemplation at a temple. They make quiet, calm mind to do it. (Nami, 2N)

(3) "Recently, a certain publishing company put together a textbook on employee education. The textbook, which is targeted to a generation of young people raised on comic books, (consists of comics from cover to
In the present study, the underlined part was omitted inadvertently from the text to be translated. The result, however, turned out to be unexpectedly rewarding; The researcher was able to observe each student struggling to understand the whole paragraph and supplying words in order to make the translated text logical. Many students guessed that the textbook was a comic book by reading the last sentence in the paragraph ("The comic is truly considerate."), and several students restructured the first sentence by inserting information ("comic") although it was not in the sentence of the assigned (Japanese) text. For example, one student restructured this as "....published a comic textbook", and another, ".... published a textbook, which is written in comic."

Other examples of student translations are as follows.

a) Recently, a certain publishing company made a textbook for young people who are in a period of comic to teach the knowledge of the worker easily. *It was written by comic.* (Miki, 2T)

b) Recently, one publishing company published a easy cartoon textbook which shows some experiences of business man for young generation who grow with cartoon. (Takuya, 4T)

The participants' think-aloud protocols also revealed that they often consciously restructured L1 (Japanese) phrases and syntax according to L2 (English). Following is some of Madoka's (2T) think-aloud protocols on restructuring in the translation task. (All of her think-aloud protocols are in Appendix I.) She was speaking in Japanese, but for ease of reading, only the English translation (made by the researcher) is presented here.
• "no, not 'education','kyooyoo' (education, culture),'shitsuke' (training, drill, discipline)"

• "it's 'training'!"

(Madoka avoided direct translation (kyooiku = education), listing up synonyms in Japanese.)

• "in Japanese, it says 'kono hitotachi ga yoi shain ni naru yooni kaisha wa kyooiku o hajimeru' (lit. in order that these people would become good workers, companies start training), but I would restructure this sentence this way, 'company start training for them to be a good staff'"

(Madoka restructured the Japanese sentence according to the English sentence structure.)

• "and it lists various examples, so I inserted 'for example'"

(She inserted "for example" in the English translation although it was not in the Japanese text.)

• "there is no sentence subject, so....'a company', 'a company', is it odd?"

(Madoka supplied a sentence subject which is omitted in the Japanese sentence.)

• "in this case, I will make the person or something the sentence subject, I may use 'it' or...."

(Here again, she supplied a sentence subject for the English translation.)

• "I'm gonna connect these sentences with a comma..."

(She connected two short sentences in the Japanese text for the English translation.)
4.6.3. Discussion

Contrary to the findings from the observations reported in the previous section (4.5), where the participants' translating processes were described rather negatively as "one-way acts" or "writing without composing", the text analyses of the participants' translations and "think aloud" protocols revealed that most of their lexical choices were not simple word-for-word mappings across L1 and L2, and instances of restructuring occurred throughout.

Repeatedly, it is asserted that direct or literal translation has negative effects on language learning (Dulay, Burt, & Krashen, 1982; Krashen, 1981). However, as shown here, direct translations were often avoided and restructuring was not limited to only the sentence level. Although finished translations may oftentimes be unsuccessful due to the lack of English proficiency, the second language learners in this study took the time in their translating tasks to, as Ijaz (1986, p.405) said, "restructure existing L1 concepts or develop a new concept that corresponds to a lexical item in the L2".
Restructuring during translation and paying conscious attention to vocabulary and grammar across L1 and L2 seems related to an increase in the scores on language use for the translation task as reported in section 4.4. Translation often involves conscious cross-linguistic attention to vocabulary, grammar, syntax, and discourse; and this conscious attention may lead to the qualitative change in the learner's L1/L2 semantic and syntactic correspondences.

Raimes (1983) says that L2 writing is helpful for language learning due to the reinforcement of the grammar and vocabulary which students learn in the classroom, but it seems that translation tasks could give more than simple reinforcement of the grammar and vocabulary. Translation tasks provide learners with good opportunities for restructuring between L1 and L2 linguistic correspondences by paying conscious attention to L1/L2 grammar and expressions.
Chapter 5

CONCLUSION

This concluding chapter presents, first, a summary of the research findings. The second section develops these findings into three generalized points of relevance, leading to conclusions. The subsequent three sections describe the significance of this study in terms of second language acquisition theory, including implications for second language education and suggestions for future research in translation and L2 writing.

5.1. Summary of Findings

The research findings described in the previous chapter are summarized as follows.

1. Correlations between the quality of second language learners' (the second and fourth-year college students') translation and that of their L1 and L2 writing were unclear. Other studies, such as Cumming (1988), Gaskill (1986), and Jones and Tetroe (1987), compared student writers and professional or semi-professional writers, and claim that second language learners' L1 writing skills are transferable to their L2 writing skills. However, in this study, only student writers participated. Due to their similar levels of L1 writing skills, correlations between the quality of
translation and that of their L1 and L2 writing were not able to be clearly confirmed.

2. The second language learners in this study generally thought that both translation and L2 writing exercises are helpful for learning and improving a second language. As well, they expressed the view that speaking practice is important. The fourth-year students in this study who were trained in translation maintained, however, that translation tasks are more helpful than L2 writing for learning and improving a second language. Their comments were consistent with Swain's (1985) "pushed" output hypothesis for language learning.

3. The second language learners' self-reported conscious attention paid to "language use" in the translation task was very high, as we expected, but very low in the L2 writing task. Similarly, their conscious attention paid to vocabulary and grammar while performing the task was very high in the translation, but unexpectedly very low in the L2 writing.

4. The two English evaluators found that the quality of the second language learners' language use was significantly better in the translation than in the L2 writing.

5. The second language learners, both second and fourth-year college students, showed the characteristics of unskilled writers' translating and writing processes described by many other research papers. The second language learners in this study had "declarative" or "theoretical" knowledge, but lacked "procedural" or "practical" knowledge. That is, they lacked practice in writing and translation.

6. The text analyses revealed that the second language learners did not translate the text word for word, contrary to our expectation. They often avoided direct translations and restructured L1 expressions and syntax.
according to L2. In their translating processes, instances of restructuring not just at the word level were observed frequently.

5.2. Generalizations

Based on the research findings stated in the previous section, three generalizations are presented here:

First, the present research findings indicate that second language learners who have obtained basic spoken communicative competence in L2, yet whose L1 writing skills are still developing, tend to write L2 compositions using only words and expressions readily accessible to them. Both translation and L2 writing tasks may be perceived by learners to be helpful for learning/improving a second language, but translation tasks may be more helpful for improving learners' language use in L2. The learners in this study frequently paid conscious attention to language use in the translation task but did not pay enough attention to language use in the L2 writing task. The quality of the students' language use in the translation task was significantly better than in the L2 writing task.

Second, translation tasks can encourage or push second language learners to produce an "i+1 output" by keeping the level of translation tasks slightly higher than the learners' present level. The fourth-year students in this study who were trained in translation expressed views which were consistent with Swain's "i+1 output" hypothesis.

Third, translation tasks may provide good opportunities for "restructuring" L1/L2 correspondences for second language learners. Second language learners often restructure L1 and L2 corresponding phrases and
sentences while translating. The research findings indicate that second language learners seldom translate word for word; they often consider synonyms, and restructure L1 phrases, sentences, and paragraphs according to the L2, although the translated text may not necessarily be successful due to the students' particular lack of linguistic resources.

Thus, conclusions from this study can be stated as follows: Text-level translation in L2 learning deserves a closer look as it provides potential opportunities for learners to learn a second language 1) by paying conscious attention to language use, 2) by producing an "i+1 output", and 3) by restructuring L1 and L2 correspondences at word, phrase, sentence, and paragraph levels.

5.3. Significance for Theories of Second Language Acquisition

5.3.1. Skill Transfer

Cummins' (1979, 1984, 1986) theories of the cross-linguistic interdependence of cognitive academic skills have been tested by many researchers in second language writing (Cumming, 1988, 1989; Cumming, Rebuffot, & Ledwell, 1989; Jones & Tetroe, 1987; Raimes, 1987). Comparing inexperienced or basic student writers and professional or advanced writers, they found that writing skills in L1 largely transfer to L2 writing and that second language general proficiency (mainly speaking skills) is not directly related to L2 writing skills.

The present study tested Cummins' theories using second language learners' translation performances, but was not able to confirm the relationships among translation, L1 and L2 writing under his theories. The
learners' L1 writing skills showed only a weak correlation with translation and L2 writing. Probably this is because the learners' L1 writing skills are still developing. Unless a person's L1 writing skills are professional or of a high level, this skill transfer may not occur. If "skill transfer" does not occur unless the skill acquired is extremely developed or professional, second language learners whose L1 writing skills are still developing may need training in both L1 and L2 writing, as well as translation (see Edelsky, 1982, 1986).

5.3.2. Conscious Learning

The generalizations on translation in language learning stated in this study may not be entirely consistent with some views of second language pedagogy. As described in the literature review, translation has generally been ignored as the "Grammar-Translation Method" in second language pedagogy since the late 1950s in Canada and the United States. Even today, many researchers and educators think that translation or use of L1 is ineffective in second language education.

Generalizations from this present research, however, are in concert with cognitive theories of second language acquisition which advocate conscious learning. Schmidt (1990) comments that "those who notice most learn most, and it may be that those who notice most are those who pay attention most, as a general disposition or on particular occasions" (p. 144). Many researchers (Bialystok, 1981, 1982; Ellis, 1986, 1993; McLaughlin, 1987; Wenden & Rubin, 1987) say that conscious learning is facilitative for adult learners learning/acquiring a second language.
Translation is often done in a very conscious way, but few researchers have studied translation in the framework of conscious learning. This study, in a sense, expands the concept of conscious learning by exploring second language learners' translating processes in this context. Examining the learners' conscious attention patterns in the translation and L2 writing tasks, this study suggests that translation tasks may be more helpful than L2 writing tasks for language learning due to the learner's frequent conscious attention to language use while translating.

Translation tasks may be particularly helpful for those whose L1 writing skills are still developing. The learners' conscious metalinguistic attention in the L2 writing task was unexpectedly very low in this study. The inexperienced student writers in this study consciously avoided the use of difficult expressions and syntax in the L2 writing task. As Cumming (1988) says, L2 writing may be "more beneficial for those with greater writing expertise" (p. 190).

5.3.3. The "i+1 Output" Hypothesis

Most students in the study indicated that both translation and L2 writing tasks are helpful for learning and improving a second language. However, the fourth-year students trained in translation answered that translation is more helpful than L2 writing because students are forced to use words and expressions which are slightly beyond their levels when they translate.

Their comments are consistent with Swain's (1985) "pushed" output hypothesis. Swain argues that the learner needs to have chances to produce words, expressions, and syntax which are a little higher than the learner's
present level ("i+1 level output") in order to learn and improve the second language. Swain considered that L2 writing, compared to L2 speaking, is a task that forces students to produce an "i+1" output, after she had examined French immersion students in Canada, who performed better in written than in spoken French. In this case, she did not pay attention to translation exercises.

However, translation exercises controlled at the "i+1" level may be more effective than L2 writing exercises for second language acquisition because learners have to use words, expressions, grammar, and syntax which are a little beyond their present level in order to translate the L1 text into L2. Second language learners may write L2 compositions at the "i - 1" level, using only words and expressions readily accessible to them. They often tend to "avoid" expressions and syntax which they feel too difficult (see Schacter, 1974). Or they may write at the "i+2" level, trying to achieve a higher level than expected, and end up writing an incomprehensible text or giving up completely (see Uzawa & Cumming, 1989).

Thus, translation exercises controlled at the "i+1" level by the instructor may be effective in encouraging the learner to produce a "pushed" output without necessarily pushing the learner too far.

5.3.4. Restructuring

Recent cognitive theories in second language learning suggest that learners learn an L2 by restructuring syntactic and semantic correspondences between L1 and L2, and not by merely adding new L2 items to their existing L2 systems (see Cheng, 1985; Ellis, 1986; Ijaz, 1986; Karmiloff-Smith, 1986; Lightbown, 1985; McLaughlin, 1987, 1990b).
The concept of "restructuring" in language learning, however, has never been studied in the process of translation. This study found that "restructuring" often occurred in the process of translation of second language learners; it revealed that the second language learners, even if they were not good at translation, often avoided a word-for-word translation, contrary to general expectations. The text analyses of their translations and think-aloud protocols showed that the learners frequently rephrased L1 expressions so that the L2 might sound natural and grammatical. Instances of "restructuring" were abundant in the learners' translating processes, and were not limited to the word level.

Translation and any use of L1 in language learning has been thought to have a negative influence on L2. However, here there is reason to believe that translation tasks are in concert with recent cognitive theories of language learning.

5.4. Implications for Second Language Education

5.4.1. College Instructors' Views

After analyzing the data, a short preliminary summary was submitted to the College faculty, requesting their comments, opinions, and/or questions. It was necessary to ask instructors' views on the research findings in order to counterbalance the researcher's views, which are based strictly on the experimental setting. (see Guba & Lincoln, 1989.) The faculty arranged a one-hour discussion session, which was held on the CIC campus, and was attended by about 15 faculty members. The session was tape-recorded with the permission of the attending instructors.
First of all, many instructors expressed their surprise at one of the research results, which showed no significant difference in the quality of the students' translation, L1 and L2 writings among the four groups. That is, the quality of the "4th-year trained" and "2nd-year not-trained" students' translations in this study was relatively similar. The researcher explained that the number of the participants was very small for statistical analyses of ratings of writing samples, and that, although not significant statistically, the 4th-year trained students did best in translation and L2 writing tasks among the four groups.

Regarding the students' performance, two instructors in the translation and interpretation courses mentioned that the number of class hours spent for actual translation exercises was very limited (one hour a week, over 33 weeks a year). Thus, one instructor said that the term "trained" used in the research was not completely appropriate.

Another instructor mentioned that most students in the College, who are high-school graduates, do not get enough training in writing in their mother tongue (Japanese) at the College. That is, the students' chances to write in Japanese are limited to personal letter writing. She suggested that training in L1 writing seems to be necessary to teaching text-level translation.

One instructor expressed her doubts about translation, saying that using a first language in the language classroom is inefficient because students are learning a second language, not a first. This type of view against translation in second language learning, actually, seemed to be still very strong among language instructors in general.

Generally speaking, however, the instructors, especially those who teach the translation and interpretation courses at the College, expressed
similar views toward translation as the researcher's. For example, an experienced instructor of translation at the College commented as follows:

"... once they [students] have done a few exercises in translation, they quickly realize they can't translate literally word for word. Oftentimes, students are forced to use more complicated sentence structures, vocabulary they are not used to; they seem to draw more upon a kind of "passive" vocabulary, rather than just rely on their more limited "active" vocabulary, to express ideas and concepts that are there in the Japanese; they [students] probably would not try to express [these] in English, without translation requiring them to do so ... In a sense, they have to express themselves in more complicated ways ...

... It stretches them, and at times stretches them too much and you get something that doesn't make sense, but then, if you give them the structure and vocabulary they need, or at least direct them to where they can find that, then it's another step in the writing process ... whereas in L2 writing, they [students] might be content to use sentences they are familiar with ... and therefore not really take chances."

In sum, the instructor indicates that students tend to use L2 structures and vocabulary which they normally don't use more often in translation exercises than in L2 writing, and that this type of taking chances is good for language learning. This tendency observed in the classroom was observed in the present research.

Although the students' performance in general was not good enough to satisfy the instructors, most instructors were favorable towards views that translation could be an important component in second language learning, and a worthwhile academic subject.
5.4.2. *Text-Level Approach*

Translation (especially L1 into L2) exercises in second/foreign language classrooms used to be predominantly sentence-level ones, and only grammatical mistakes were checked by the instructor. Text-level exercises were rare.

One instructor at CIC commented that most Japanese students educated in Japan are generally familiar with text-level translation because they usually translate English textbooks into Japanese in most English classes. However, text-level translation exercises from Japanese into English are very rare in high school English classrooms in Japan. Most participants in the 4N and 2N groups said that this study was their first experience of translating a whole Japanese text into English. The present researcher's experience of learning English as a foreign language at junior and senior high-schools in Japan was similarly dominated by sentence-level translation (L1 into L2) exercises.

The concept of translation in the language classroom needs to be rethought. Text-level translation exercises should be incorporated into the curriculum. A collection of single sentences does not form a text (see Brown & Yule, 1983); the text has a structure, organization, or wholeness as a text. The choice of vocabulary and syntax depends on the context, i.e., text. Similarly, for teaching grammar, the sentence-level approach has problems in semantic and/or pragmatic areas (Celce-Murcia, 1990). Celce-Murcia (1990) argues that tense-aspect-modality, word-order, subordination, and complementation in English are often determined at the discourse level, not at the sentence level.
Translation exercises, as Weymouth (1984) says, should teach the student text structure and appropriateness of style in the sociolinguistic context in L2. Text structures such as description, contrast, and argument can be taught explicitly in text-level translation exercises using Mohan's (1986) concept of "knowledge structures", which examines academic discourse at practical and theoretical levels (see also Carrell, 1983, 1985; Meyer, 1977, 1985). For example, the text structures of "description" and language register in L2 can be discussed in lectures first (giving theoretical knowledge). Then through the actual practice of translating short stories, comic strips, letters (personal and formal), and so forth, the learner can learn how structures of "description" and language register in L2 are interrelated, and how they are similar or different across L1 and L2.

In terms of text organization, the present study showed that the participants lacked "procedural" or "practical" knowledge of translation and L1/L2 writing. They often mentioned terms such as "introduction-body-conclusion", "thesis statement", and "topic sentence" while writing, but were not able to "transform" their knowledge in their actual writing. They lacked actual practice in translation and writing. In general, teaching "theoretical knowledge" (e.g., grammar rules, writing rules, translation rules) seems to be more emphasized than "practical knowledge" (actual writing and translation) in many classrooms. In fact, some instructors at the College said that their students normally do not have enough time for actual translation (L1 into L2) practice (only one hour a week over 33 weeks in one academic year) because students have to study theories of translation as well (four to five hours a week). Keeping a balance between the "declarative" and the "procedural", or the "theoretical" and the "practical", in classroom teaching is therefore important.
In the present study of second language acquisition, translation tasks seemed more effective than L2 writing tasks for second language learners with developing L1 writing skills, but L2 writing exercises are also very necessary. Translation exercises may not necessarily encourage students to generate and organize ideas independently. Students need text-level practice both in translation and in L2 writing.

5.4.3. Peer Interaction

Researchers and educators in writing in the 1980s have suggested "peer" interaction as a way of improving students' writing skills (e.g., Crowhurst, 1981; DiPardo & Freedman, 1988; Hillocks, 1986). Researchers in translation have also mentioned the importance of "peer" interaction (Duff, 1989; Weymouth, 1984). Weymouth (1984) says that group/cooperative/peer discussions on texts involving non-literary, up-to-date topics in the translation classroom are facilitative. Paying attention to the reader and revising accordingly was very rare among the participants in this study. Peer discussions and peer revising in the translation classroom might encourage the students to pay attention to the reader and to acquire "practical knowledge" and real experience in translation.

5.4.4. Separate Skills

Many students in the study indicated that speaking practice is also necessary for learning and improving the second language. Speaking and writing are separate skills (Cumming, 1988; Fodor, 1983). It is doubtful that the learner can acquire speaking skills only through translation and L2
writing. Similarly, as the present study suggests, it may be that L1 writing skills do not transfer to L2 writing, or L2 writing skills do not transfer to translation unless the learner's skill levels are extremely high. It would appear that each skill needs to be learned and practiced. In the classroom, listening, speaking, reading, writing, translating, and interpreting activities should all be planned (see Duff, 1989).

To this end, team teaching (with two instructors, at least one bilingual and biliteral) may be ideal for L2 language teaching in the next century, in order to satisfy this kind of dynamic model of language learning.

5.5. Suggestions for Future Research in Translation and L2 Writing

Reviewing the present research, the following five points may be suggested for future research in translation and L2 writing.

1. In this study, Cummins' theories were not clearly confirmed. If Cummins' hypotheses are to be examined, comparisons between professional and student writers/translators, as in Cumming's (1988) study, would be ideal. However, it is very hard to find a number of professional translators and/or writers with similar backgrounds.

2. In the present research, only Japanese (L1) and English (L2) were compared. Thus, findings are limited. Other language combinations, such as Korean and Japanese, English and Chinese, French and Spanish, and so on might produce some other interesting results.
3. The number of participants should be large enough for statistical analyses if the participants' translation or writing ratings are to be compared. The number of participants in this study (22 students) was large enough only for the statistical analyses of their think-aloud utterances, not for the ratings of writing samples.

4. In the present study, only one translation task was assigned. The level of cognitive demand was not low, but it may not have differentiated the skill levels clearly. More than two kinds of translation (cognitively demanding and less cognitively demanding translation tasks, e.g., argument vs. personal letter writing) may be useful in order to check how tasks affect the participant's performance depending on his/her skill levels.

5. The use of the "think aloud" technique for data collection in order to examine the learner's translating and writing processes was appropriate in this study. However, there were some participants who tended to forget to verbalize their thoughts, or whose utterances were extremely limited, even if they practiced thinking aloud before performing three tasks. Thus, both interviews right after the performance and text analyses were very useful in order to compensate for the weaknesses of the "think aloud" technique. Triangulation of data collection methods (combining at least three types of data collection as in this study) is necessary.
REFERENCES


APPENDIX A: Memo to the Instructors

To: E., J., K., T, and C.

From: Kozue Uzawa (685-6957)

Re: Research project on writing and translating processes of second language learners

Date: September 14, 1992

Your name has been given to me by M. L. because you are teaching students who might be able to become volunteers for a research project for my Ph.D. dissertation (UBC). I am looking for 24 volunteers (12 fourth- and third-year and 12 second-year students who are taking/not taking translation courses). Would you please spare 10 minutes of your class time for me so that I could talk about the project to the students in your class? I will gather volunteers' names and phone numbers. Time and place for the data collection will be arranged later over the phone. If the place is not CIC, transportation will be provided. For details about my project, please ask M. L. (She has a copy of my research proposal.) The volunteers will get feedback on the research in the middle of January, 1993. The summary of the results will be available to the faculty by the end of January, 1993, if everything goes smoothly.

The schedule for visiting your class is tentatively arranged as follows, following M. L.'s guidance. If inconvenient, please notify.

Oct 5 (Mon) E. (Rm 218) 10:10
J. (Rm 203) 12:30
E. (P4) 2:10

Oct 6 (Tue) K. (P1) 8:30
T. (Rm 205) 10:10
L. (P4) 10:30

Your supportive comments and encouragement for the students' participation is really indispensable. I am looking forward to seeing you soon. Thank you.
APPENDIX B: "Volunteers Needed for Educational Project"

If you are:
* a second or third/fourth year student at CIC,
* a native speaker of Japanese,

.......could you participate in a research project for my dissertation?
The purpose of the project is to explore writing and translating processes.

I am looking for students who are taking the translation course (six students in each year), and those who have never taken translation courses (six students in each year).

What you will be asked to do is write a composition in Japanese and English, and translate a Japanese passage into English. You can use dictionaries. You will be asked to talk aloud what you are thinking while writing, and this will be tape-recorded. Also, you will be interviewed in Japanese after each task. Confidentiality is assured. The time required is about 3 - 3.5 hours at your convenience. A reward for your efforts will be offered.

If you are interested in participating, please write down your name and telephone number on the sheet circulating or call me at 685-6957 (Kozue Uzawa) for details. I am a Ph.D. student in Education at UBC. Thank you!

p.s. You can withdraw or cancel participation at any time, no explanation necessary.
ボランティアを求む

CICの二年生または三・四年生の皆さん！

私はUBCの博士課程（教育学）の学生ですが、論文を書くためにボランティアを求めています。研究の目的は学生の作文と翻訳のプロセスを調べることです。

翻訳のコースを取っている方（三・四年生が六名と二年生が六名）、ならびに作文のコースを取った方はあるけれど翻訳のコースは取ったことがない方（三・四年生が六名と二年生が六名）が必要です。

ボランティアとしていただくことは、日本語と英語の作文（各一つ）を書くことと、日本語の文章（半ページぐらいの長さ）を英語に翻訳することです。辞書はもちろんです使ってかまいません。作文を書いているとき、また翻訳をしているときに頭に浮かんだことをそのまま口に出して言ってもらい（日本語でよい）これをテープレコーダーに録音します。その後作文と翻訳のプロセスについての短いインタビューに日本語で答えてください。プライバシーは厳守します。所要時間は三時間から三時間半で時間と場所は各人の都合に合わせます。（お礼をさしあげます。）

とうか参加してください。参加してくださる方はお名前と電話番号をこれからまわす用紙に書いて下さい。または、685-6957までお電話ください。

鶴沢 梢（うぎわこすえ）

なお、都合が悪くなった場合、いつでもキャンセルできます。理由はお聞きしません。
APPENDIX C: Statement of Consent

I consent to participate in this study under the following conditions:

1. **Title of Project:** Translating and Writing Processes of Second Language Learners.

2. **Investigator:** Kozue Uzawa (685-6957).

3. **Purpose of the Project:** To explore language learners' translating and writing processes.

4. **Procedures:** Talking aloud while writing, followed by interviews.

5. **Confidentiality:** Confidentiality is assured, and each participant's real name will not be disclosed to anybody.

6. **Total Amount of Time Required:** About 3 - 3.5 hours.

7. **Participant's Award:** $20 Eaton's Gift Certificate.

8. **Questions:** Any questions concerning the procedures, etc. will be answered.

9. **Right to Refuse to Participate:** The participant has the right to participate, or to withdraw at anytime without prejudice from the college toward anyone's current or future educational plans.

Signed by: 
Date:

I acknowledge receipt of a copy of the consent form:

Signed by: 
Date:
同意書

下記の条件のもと、このリサーチに参加することに同意します。

1. 研究題目：第二言語学習者の翻訳と作文のプロセス
2. 研究者名：鶴沢 稔（685－6957）
3. 研究目的：外国語学習者の翻訳と作文のプロセスを解明すること
4. 実験方法：作文、翻訳中に頭に浮かんだ事を口に出して言う（日本語でよい）。
その後、個人個人の作文、翻訳のプロセスについてのインタビューに答えます。
5. 秘密の厳守：参加者の本当の氏名は誰にも明らかにされないこと。
6. 所要時間：約3時間から3時間半（お礼をさしあげます。）
7. 疑問点：もし疑問がある場合、何でも聞けること。
8. 参加取り消し：もし都合で参加できなくなった場合、学校の成績、その他と
   んら係わりなくいつでも参加取り消しができること。

署名： 年月日：

同意書の写しを受け取りました。

署名： 年月日：
APPENDIX D: Questionnaire on Background

a. Your name is______________________________

b. Your age is__________

c. Your educational background:
   high-school graduate_______ others_________________

d. Are you male?___________ or female?____________

e. How long have you been in Canada?__________

f. Have you lived in English-speaking countries before coming to Canada?

g. Do you have some experiences in translating letters, reports, essays, etc. for your friends?

h. Do you like to write reports, essays, poems, etc. in Japanese?

i. Do you have any experience in publishing your writings?
APPENDIX E: Translation Task

新入社員の教育

四月は入社の月である。たくさんの新入社員が生れるときである。この人たちがよい社員になるように、会社は教育をはじめめる。

教育の方法はいろいろである。会社によってちがう。有名人に講演をたのむ。ことばづかいを教える。団体生活になれるため、合宿をする。また、寺で座禅をすることもある。座禅によって、しずかな、おちついた心をつくるためである。

最近ある出版社が社員教育の教科書をつくったが、まんが時代の若者のために、わかりやすく社会人の心得を教える。出動のまえに朝ごはんをたべなさい。新聞を読みなさい。十分ぐらい早くうちを出て、すいている電車をえらんでのりなさい。などと教える。じつに親切なものである。

こんなに親切にする必要はない、と言う人もいる。しかし、その必要があると言う人もいる。長いあいだの学生生活からきゅうに社会に出る若者は、大きな不安を感じる。その不安をへらすために、会社はいろいろな努力をする必要がある、という意見である。新入社員の教育は、現在の会社の大きな問題になっている。
APPENDIX F: Model Translation

<Training New Employees>

April is the month for joining companies. It's a time when many new employees come into being. To help these employees turn into good workers, companies start off by training them.

A variety of training methods are used. These methods differ according to the company. Some companies request a lecture from a famous person. Others teach the proper use of polite language. Sometimes, employees will go to a camp; this helps them adjust to working in a group. Some employees do Zen meditation at a temple. Zen meditation helps them build a calm, relaxed frame of mind.

Recently, a certain publishing company put together a textbook on employee education. The textbook, which is targeted to a generation of young people raised on comic books, consists of comics from cover to cover. In the book, a senior employee tells a new worker -- in easy-to-understand terms -- the ins and outs of the adult world. Eat breakfast before coming to work, he says. Read the newspaper. Leave the house about ten minutes ahead of time; pick a train that isn't too crowded. The comic is truly considerate.

To some people, such consideration is unnecessary. Yet other people feel that it is. Having suddenly embarked on the real world after many years as students, the young people are torn with anxiety. Companies have to make many efforts to reduce this anxiety -- or so these people believe. The training of new employees has become an enormous issue facing today's companies. (from The Nihongo Journal, April, 1990, p. 28)
APPENDIX G: Transcribed and Coded Think-Aloud Protocols

M = metacognitive level
D = discourse level
L = linguistic level
P = personal comments

< > = English translations by the researcher
" " = phrases and sentences created by the student; words and phrases in the assigned text;
words and phrases in the dictionary just read by the student
// = end of the protocol

Japanese Task (Madoka - 2T)

M 1. iroiro agetakuto, kitanaku natchau kedo, toire toka mo sooda shi, toire no benki ga
takai toka.....ato doa no shita no hoo ga aiteiru no ga iyada toka....

<I have many examples, it may be gross, but the toilet thing is one example, the toilet seat
is too high for me, and the underneath of the toilet door is open, I don't like this....>

M 2. ato ichiban taioo dekinakatta no ga chippu dato omou'n dakedo.... ichiban wa chippu
da to omou kedo, ma, ikura agetara iino ka toka...

<another thing that I could not adjust well to was tipping, I guess... the most difficult
adjustment was tipping, I think, well, how much should I give, and so on....>

M 3. tatoeba taxi toka dattara ageru kedo, makku dattara agenai toka, nanka sono hen
ga....dakara tamatama haitta tokoroga agete iino ka... tatoeba nihonjin no resutoran
toka dattara hitsuyoo nain'ja naikanaa to omoitsutsu agetari shitemasu kedo....

<for example, we tip the taxi driver, but we don't at Mcdonald's, it's not clear to
me.....so, I'm not sure whether I should tip at a restaurant, for example, at a Japanese
restaurant, I usually tip, thinking it may not be necessary to tip....>

P 4. kore ichi-peeji kaku'n desu yo ne?

<I write one page, right?>

P 5. demo moto moto ji ga dekkai'n desu yo

<I usually write Japanese characters very big, you know>

M 6. uum, yappari nihon ni nai shuukan dakara, te yuttara, saisho ni nihon ni nai
shuukan'tte kiite sugu chippu toka, saisho no uchiwa zenzen agete nakattashi, minna ga
ageteru no o mite aa ageru mono nanda to omotte....demo atashi no baai kanari ooku
ageteru to omou'n desu kedo.....son shiteru na'tte omou'n desu kedo
<umm, anyway, it's a custom which we don't have in Japan, or, when I thought about a custom which does not exist in Japan, tipping immediately came to mind. When I first came to Canada, I did not tip at all, but my friends were tipping, so I realized that I should tip... but I think I am tipping too much....sometimes I feel I am tipping too generously.....>

P 7. dai wa kono mama kaite ii'n desu yo ne?

<I can write down the topic as it is, right?>

P 8. ichiban, ichiban

<first, first>

L 9. chippu o watasu no watasu'tte sanzui ni do'tte yuu ji desu yo ne

<the Chinese character of "watasu", I'm not sure how to write it>

P 10. dokkara kikidashite ii'noka wakaranai

<I don't know where to start>

M/P 11. resutoran toka taxi no hoka niwa watashita koto nai desu yo ne....

<we don't need to tip in other places besides restaurants and taxies, do we?>...

P 12. sakubun o kaite iru toki'tte nanka kangaenaide kaichau taipu no yoo na ki ga suru

<when I write a composition, I'm the kind of person who writes without thinking>

L 13. ageru no kanji ga wakaranai (checks the dictionary)

<I don't know the Chinese character, "ageru">

L 14. ageru'tte...mono o ageru toki'tte hiragana nandesuka nee

<do we use hiragana for "ageru"? umm>

D/L 15. chigau (erases a whole sentence)

<no, not this way> (erases a whole sentence)

P 16. koko made wa nanka nami ni notte kaite kita kedo tsumazuichatta naa'tte kanji

<so far, I have been writing very smoothly, but I am stuck now, sort of...>

M 17. koko kara...kanori oomeni chippu o watashiteta'tte koto kaita kedo....

<from here....I wrote that I used to tip very generously, but...>

L/P 18. keigo de nakute ii'n desu yo ne?

<I don't need to use honorifics for writing this, do I?>
M 19. kaita kedo, sokokara doo nattaka'tte yuu jibun no koto o kaku kaa....

< I've written what I wanted to say. Now, I will write about myself, about what happened to me.... >

M 20. soretomo, soo yuu nihonjin ga ooi'tte koto kaku kaa...tte nayanderu'n desu....

< or, I write that there are many such Japanese people..., I am wondering... >

D/M 21. nanka, jibun no nagare ni shiyoo

< oh, well, I will write about myself >

M 22. jibun de chippu no gaku o kimetta'tte yuuno kana....

< I decided the amount of the tip each time myself, sort of... >

P 23. nanka sakubun'tte kanji ja nai

< somehow, this is not like a composition >

L 24. ummm, "jibun de control shita"

< ummm, "I controlled myself" >

L 25. "jibun de tsukai wakeru yoo ni natta" de ii kana

< " I started to differentiate", is it OK, I wonder >

P 26. nihongo ni tekisanai kiga suru

< I am not good at Japanese, I'm afraid >

D 27. chotto saisho kara yomikaeshite miyoo kana

< I will read back from the beginning>

P 28. koe agete yomimasuka?

< shall I read aloud? >

L 29. "watashitari shimasen deshita" datte, "watashita koto ga arimasen deshita" (corrects the sentence)

< " I would not have tipped", oh, no, " I have never tipped" > (corrects the sentence)

P 30. nanka nihongo'tte muzukashii

< Japanese is kind of difficult >

L/D 31. chigau naa (erases a whole sentence)

< no, not right > (erases a whole sentence)
P 32. nanka settokuryoku ni kakeru ki ga suru
   <it lacks persuasive power, I think>
D 33. moo conclusion ni itchaoo kana'tte omotteru
   <I am thinking about writing the conclusion already>
D 34. moo ikkai yomiikaeshite miyoo
   <I will read back again>
L 35. kyuuryoo'tte donna ji dakke....(checks the dictionary)
   <what's the Chinese character for "kyuuryoo" (salary)?> (checks the dictionary)
L 36. kasegu, kasegu'tte ji wa... (checks the dictionary)
   <"kasegu" (to earn), how to write "kasegu"?> (checks the dictionary)
P/L 37. sugoi kanji ga yowai
   <I am poor at Chinese characters>
L 38. "gaijin"tte shitsurei na iiikata nanda'kke?
   <is the expression "gaijin" (foreigner) rude?>
L/D 39. bun ga tsunagatte inakatta (corrects the sentence)
   <this sentence was not connected well> (corrects the sentence)
L 40. keikoo, keikoo no kanji ga wakaranai (checks the dictionary)
   <"keikoo" (tendency), I don't know the Chinese characters for "keikoo"> (checks the dictionary)
D/P 41. chotto saigo ni ochi ga haitchatta mitai ni natchatta
   <I tried to make the ending funny>
P 42. ura ni kaite ii'n desu ka?
   <may I write on the reverse side?>
M 43. "shuukan no chigai de ichiban kuroo shita koto" desu yo ne?
   <"the most difficult adjustment caused by differences in customs", isn't it?>
M 44. nanka chigau naa (comparing the topic and the composition)
   <I feel it's not right....> (comparing the topic assigned and the composition written)
P 45. nanka hisashiburi ni sakubun kaitara nanka tanoshikute.....
<I enjoyed writing a composition, it's been a long time....>

P 46. nanka pen ga susun'jatta kedo, yappari sakubun heta danaa'tte kanji//

<I wrote without thinking much, anyway, I think I am poor at composition>//
Translation Task  (Madoka - 2T)

P 1. (reading the title) yaru ki ga denai, aa, yaru ki ga denai, ha, ha, ha, ha, nigate na mono wa yaru ki ga denai’n desu yo

<(reading the title) I am discouraged, oh, I'm discouraged, (laughing), this title is not interesting, I don't know much about it>

L 2. um, mazu, "shin nyuu shain" ga wakaranai (checks the dictionary)

<um, first, I don't know how to say "shin nyuu shain" in English> (checks the dictionary)

P 3. watashi ga darame na tokoro wa chotto, korekana’tte omottemo, honto ni jisho hiku’n desu yo, nanka, jibun ga jishin ga naito, dakara yokei jikan ga kakachau’n desu yo, dakara kore, kanari jikan kakachau’n ja naikana

<my weak point is that I don't have a confidence in vocabulary, you know, I have to check the dictionary frequently, so it takes extra time, you know, I think it will take a long time to finish this>

P 4. hon’yaku’tte yuuto, koo, jibun ga atama ga warui no o mitome nakutchana naranai kara....

<translation is, well, I have to admit that I'm not smart enough to translate....>

L 5. kono baai no "kyooiku" tte.....

"kyooiku" in this case means....>

D 6. mazu zentai yonda hoo ga ii desu ne (starts reading the text)

<I'd better read the whole text first> (starts reading the text)

P 7. muzukashi soo....

<it looks difficult....>

L 8. "education" ja naishi, "kyooyoo", "shitsuke"

<no, not "education", "kyooyoo" (education, culture), "shitsuke" (training, drill, discipline)>

L 9. "educate"

"educate"

L 10. "training" da

<it's "training" !>

P 11. nanka, daimeitokonna dattara doonaru’n da roo

<it took such a long time just to translate the title, well, I'm not sure whether I can go through the whole thing>
L 12. "shain" (checks the dictionary)
   <"shain" (employee)> (checks the dictionary)
L 13. "nyuusha" nante eigo aruno kanaa (checks the dictionary) a, atta....
   <I wonder whether there is an English word for "nyuusha" (checks the dictionary) oh, here it is!>

P 14. wakan'nai...
   <I don't know....>
L 15. "toki' tte yuu no cut shite ii no kanaa...
   <can I cut "toki" ("when") in this sentence, I wonder....>
   <can I say "it's a time"? oh, well, I think it's OK>
L 17. "because" tsukatte....
   <I use "because"....>
L 18. ima "kooen" shirabetara, nanda "speech" ka'tte kanji
   <I just checked "kooen" in the dictionary, then I found "speech", oh, well, I knew this word>
L 19. nihongo de " kono hitotachi ga yoi shain ni naru yooni kaisha wa kyooiku o hajimeru" tte natteru kedo, watashi wa "company start training for them to be a good staff" tte katchi de kakinaoshite....
   <in Japanese, it says "kono hitotachi ga yoi shain ni aru yooni kaisha wa kyooiku o hajimeru" (lit. companies start training these people so that they will become good workers.), but I would restructure this sentence, "company start training for them to be a good staff".>
L/D 20. soshite don'nani chigau ka'tte kaite arukara "for example" to shite sore o ireta'n desu
   <and it lists various examples, so I inserted "for example".>
P/L 21. jisho ni nottetari suru to lucky nandesu kedo
   <it's lucky if it's listed in the dictionary>
L 22. "kooen o tanomu" "tanomu" (checks the dictionary) "ask" wa "tazuneru" desu yo ne, ii no kana, "ask" de ii no kana
   <"kooen o tanomu" ("request a lecture"), "tanomu" (request, ask) (checks the dictionary) "ask" means "inquire", right? Is it OK to use "ask" here, I wonder>
L 23. shugo ga nai kara..."a company", "a company" ja hen ka naa?
<br>there is no sentence subject, so..."a company", "a company", is it odd?>

L 24. "ask for" ka, zenchishi ga mata wakan'naku natchau....
<br>oh, "ask FOR", I'm confused, I don't know prepositions....>

L 25. "to make a speech" de iika
<br>"to make a speech", I think it's OK>

P 26. hon'yaku shitete ichiban iyani naru koto wa nihongo o eigo ni shite baa to kaitemite
<br>soshite baa to yonde mite jibun ga rikai dekinai koto, ha, ha, ha, ha, sore ga ichiban iya
<br>desu ne
<br>the most discouraging thing in translation, you know, in translating a Japanese text
<br>into English, when I read back the translation, I cannot understand it myself,
<br>(laughing), that's the most discouraging thing>

P 27. chotto shita machigai nara wakarushi, jibun ga kaita bun dakara, demo hito ni yonde
<br>morattara hito ga wakaranakattari, jibun de rikai dekitero sensei ni naoshite morattara
<br>makkaka dattari, yappari chigaunoka'tte kanji de....
<br>I think I am beginning to see some grammatical mistakes in my own writing, and I
<br>can understand what is written, but other people often cannot understand my writing,
<br>and my teacher often corrects my English so much with red ink, so anyway, my
<br>English is not good, I'm afraid...>

P 28. kore no baai wa, jisho o hikanakereba wakaranai tango ga ippai aru kedo, hon toka
<br>dattara, nihongo dokuji no imawashi toka, sooyuu no o kangaeteru no ga ichiban
<br>mayou kara, zettai toohi shimasune, hon'yaku no shukudai data toki wa, zenjitsu ni
<br>naru made zettai yaranai kara bunshoo ga kongaragatchau'n da keredo
<br>in this case, there are many difficult words which I have to check in the dictionary,
<br>and in the case of translating a book, culture-specific Japanese expressions are very
<br>troublesome. I definitely avoid translation, you know, when I have a translation
<br>homework, I never do it until it is day before the due date, so sentences often get
<br>tangled, you know>

L 29. "kotoba Zukai o oshieru" "kotoba Zukai" "kotoba Zukai" de nottetara ii nee (checks the
dictionary) "kotoba Zukai" nai ja nai
<br>"kotoba Zukai o oshieru" ("to teach the proper use of polite language"), "kotoba
<br>Zukai" (the proper use of polite language), if it is listed in the dictionary as "kotoba
<br>Zukai", it's lucky, (checks the dictionary), no, it's not...>

L 30. "gasshuku" (checks the dictionary)
<br>"gasshuku" ("to go to a camp") (checks the dictionary)

L 31. "nareru" (checks the dictionary)
<"nareru" ("to get used to")> (checks the dictionary)

L 32. "dantai seikatsu ni", "dantai" tte iikata ga aru? (checks the dictionary) aa, "group" de ii no ka, "group life"

<"dantai seikatsu" ("group work"), is there an expression such as "dandai" in English? (checks the dictionary), ah, "group"! "group life">

P 33. kono tekitoo sa ga nobinai hiketsu desu ne

<I'm a lazy translator, and this may be the reason why I won't improve, you know>

P 34. moo jisho hiku da de tsukare tchatte...kangaezu ni moo pappa tango kaitchau kara...kore ga eigo nobinai hiketsu da to omotte...kitto motto chantu yaru ko wa nante eigo no benkyoo ni naru nante omoundaroo kedo

<just checking dictionaries makes me tired....I just copy down words from the dictionary without thinking..... I think this may be why my English does not improve..... some smart guys may think that checking dictionaries is very helpful for learning English....>

P 35. fudan eigo o yonderu tokiwa nihongo ni yakushi nagara yonderu tokimo arukedo daitai wakaranai tango wa tobashite yonde, sonomama rikai shitchaukara, aete konna fuu ni kami ni kaite miru to umaku iknan'i desuyo ne, dakara imi wa wakatteru'n dakedo bunshoo ni dekinai toka....

<when I am reading English, sometimes I may be translating into Japanese, but I usually skip difficult words and try to understand directly, you know, so when I write this down for translation, I cannot express myself well, you know, I cannot compose the sentence although I know it>

L 36. "zazen" (checks the dictionary) "meditation in Zen Buddhism temple" nihongo de ittara kanran nanoni....

<"zazen" (checks the dictionary) "meditation in Zen Buddhism temple" (reading the dictionary), the Japanese expression is much simpler....>

P/L 37. "zazen o suru koto mo aru" toka yuuto, atashi no baai, "suru" to yuuto sugu "do" toka kimetsukete shimau'n dakedo, "koto mo aru" toka yuu komakai tokoro ga yoku yakusenai'n desu, demo "do" ni shitchaooo...

<when we say "zazen o suru koto mo aru" ("some employees do Zen meditation at a temple"), I immediately translate "suru" as "do", I cannot translate such a subtle expression as "koto mo aru" ("sometimes"), you know, but anyway, I translate it as just "do"....>

P 38. jibun wa hon'yakuka ja nai kara wakaryaa iiya'tte kanji

<because I am not a translator, I will be satisfied if the translation is understandable, I don't want anything more>

L 39. "tera" (checks the dictionary) "tera" tte "temple" kana, "temple" de ii no ka

<"tera" (checks the dictionary) "tera" is "temple", I think, that's right, it's "temple"
P/L 40. "zazen ni yotte shizukana...", nihongo'tte shugo ga cut sareteru to choo atama ni kimasu ne

<"zazen ni yotte shizukana..."("by zazen, quiet..."), when the sentence subject is omitted like in this Japanese sentence, I get angry, you know>

L 41. kono baai dattara, watashi no baai wa, hito o shugo ni suru toka, nani ka shugo ni suru toka kangaete, "it" ni shitchau toka...

<in this case, I will make the person or something as the sentence subject, I may use "it" or....>

L 42. "zazen ni yotte" tte yuuno cut shitchatte ii kanaa...

<can I omit this phrase, "zazen ni yotte", I wonder....>

D 43. "comma" de tsunagechaaoo...

<I'm gonna connect these sentences with comma...>

L 44. "tsukuru tame de aru", "sore ni yotte tsukurareru", "hito ga sore ni yotte shizukana ochitsuita kokoro o tsukuru koto ga dekira"...a, kongaragatte kita...

<"in order to make", "to be made by them", "people can make (build) a quiet and composed mind through them", ah, I'm getting confused...>

L 45. "shizukana" (checks the dictionary)

<"shizukana" (quiet) (checks the dictionary)

P 46. nanka chigau kanji...

<I feel it's somewhat different....>

L 47. "saikin" (checks the dictionary)

<"saikin" (recently) (checks the dictionary)

L 48. "aru shuppansha" tte....(checks the dictionary)

<"aru shuppansha" (a certain publishing company), how do you say... (checks the dictionary)

D 49. "kyookasho o tsukutta ga", kono nihongo ga okashii, "tsukutta ga" tte kitakara atoni hiteikei ga kuruka to omottara....

<"kyookasho o tsukutta ga", this Japanese sentence does not make sense, after the "ga", I expected a negative sentence....>

L 50. "kokoroe"? (checks the dictionary) "chishiki", kaiten sasete kangaeru, "chishiki" de ii,...
<"kokoroe" ("information, knowledge, hints")? (checks the dictionary), "chishiki" (knowledge), let's be flexible, let's use "chishiki" (knowledge)>

L 51. "shakaijin", son'na eigo arunoka naa (checks the dictionary) "member of society"
<"shakaijin", is there such an expression in English, I wonder... (checks the dictionary), "member of society">

L 52. "manga jidai" "comic" "jidai" wa...(checks the dictionary)
<"manga jidai", "comic", how do you say "jidai"...(checks the dictionary)>

P 53. nanka chotto chigau....
<this isn't right....>

L 54. kono "wakariyasuku" tte..."easy for me to understand" "it's easy for young people to understand", nanka bumpoo ga chigau ki ga suru kedo
<this phrase, "wakariyasuku"...."easy for me to understand", "it's easy for young people to understand", I'm not sure about the grammar>

L 55. "shukkin" (checks the dictionary) "go to work", sono mamma
<"shukkin" (checks the dictionary), "go to work", what a simple expression>

P 56. yatto hanbun da
<I've just finished the half>

L 57. "10-pun gurai hayaku iku"
<("10-pun gurai hayaku iku" ("to go (leave) about ten minutes ahead of time")>
(restructuring the original Japanese sentence)

L 58. "suiteru densha" dakara "man'in ja nai densha"
<"suiteru densha" (lit. "a train that is empty") means "man'in ja nai densha" ("a train that is not crowded")>

L 59. "jitsuni" "very"
<"jitsuni", "very">

P 60. aa, ato juppun de ichi jikan....
<ah, it'll be one hour in ten minutes....>

P 61. kore wa kesshite wakaru eigo ja nai
<this is probably an incomprehensible English>

L 62. "kyuumi" tte "suddenly" ja okashii shi... (checks the dictionary) "totsuzen", "suddenly" de ii no kanaa
"kyuuni" is "suddenly"? It does not sound right.... (checks the dictionary), "totsuzen", "suddenly", it may be alright....>

D 63. "to yuu iken de aru" tte yuu nowa "sono hitsuyoo ga aru" tte hito no....ue ni iretchoo

"to yuu iken de aru" ("these people believe so"), this phrase belongs to the above sentence, "sono hitsuyoo ga aru to yuu hito" (some people think that it is necessary), let's insert it here>

L 64. "doryoku", dete konai, (checks the dictionary) "effort"

"doryoku", what was it... (checks the dictionary) "effort">

P 65. owarii!

<finished!!>

D 66. yomikaeshite miyoo (reads back the translated text once)

<let's read back>

P 67. ma, iika! ok ni shiyou! //

<sounds alright, it's OK>//
English Task  (Madoka - 2T)

M 1. umm, shakai ni tsuite wa nani mo shiranai
   <umm, I don't know anything about the society>

M 2. shakai'tte yuutemo shinbun toka yomanaishi, zenzen wakaranai
   <I seldom read newspapers, so I don't know about the society at all>

M 3. shakai'tte yu'unja nai kedo, hito'tte yuuka....nhon wa nihonjin shika inai kedo,
   kanada, bunka ni natchau kamo shirenai kedo, kono kuni wa iron'na jinshu ga iru kara,
   sooyuuno'tte, nihon ni ita toki gaijin mite bikkuri shiteta kedo, aru teido henken no me
   de mimasu yo ne, tabun sooyuu no nakunatta shi, hito no kangaekata no chigai'tte natte
   kuru kedo, shakai wa....
   <it's not the society, but people...., in Japan, there are only Japanese, but in Canada, it
   may be a cultural comparison, there are many ethnic groups in this country, you see,
   when I was in Japan, I used to be frightened by the sight of foreigners; we, Japanese
   people have a prejudice against foreign people, you know, but I've overcome this kind
   of prejudice now, so, it will be a comparison between Canadian and Japanese ways of
   thinking, and not their societies....>

P 4. umm, sooda naa, shakai.....muzukashii.....umm
   <umm, well, society.....it's tough.....umm>

P 5. essay-choo de kaku'n desu ne?
   <it's essay writing, right?>

L 6. a, mae no translation de "shakai" no spelling machigaetchatta, "e" o "a" ni shitchatta
   <in the previous translation task, I made a mistake in spelling, I spelled "a" instead of "e"
   in "society">

L 7. "before" tte "b-e-f-o-r", "e" ga tsukimasu yo ne?
   "before" is "b-e-f-o-r", it needs "e", right?>

L 8. "foreigner" no spell ga wakaranai (checks the dictionary)
   <I'm not sure about the spelling of "foreigner"> (checks the dictionary)

D 9. dakara nanda'tte tokoro made mochikomu tameni...
   <people might say "so what?", so I have to write about....>

D 10. ma toriaezu, sassa kaita koto wa, "kanada wa maruchi-culture datte koto to nihon wa
   shimaguni dakara, nihon no hito wa nihonjin da' tte koto kaite...
   <so far, I've written this way: "Canada is a multicultural country and Japan is an island
   country, so only Japanese people live there"....>
D 11. kono tsuzuki doo nagarete ikoo kana’tte omotte....

<how to continue from here....>

D 12. tsunagaranaai....

<it does not connect well....>

M 13. demo soo yuu henken no me de gaijin o miru’tte koto wa, nihon no shakai ga, nihonjin shika inai kara....ma, saikin wa gaijin mo fuete kitakedo...

<we have a prejudice against foreigners because Japanese society consists of only Japanese people,...well, recently, many foreigners are living in Japan, but...>

M 14. toriaezu, henken no koto kaite...

<anyway, first, I'll write about prejudice....>

P 15. umm, yappa, shakai’tte yuu no muzukashii

<umm, it's still difficult to write about the society>

M 16. nihonjin te yappa amari tanin ni hontoo no koto misenai te toko arukedo, kanajin wa ooppirogge’tte kanji desuyo ne, nihonjin ni kurabete, dakara kanadajin wa sugoku "friendly" dana tte kanjita

<Japanese people are reserved, but Canadian people aren't, you know, I think, compared with Japanese people, Canadian people are very friendly>

M 17. kore’tte bunka no sei tte koto mo arushi, ichigai ni nihonjin wa friendly janai, kanadajin wa friendly tte ienai shi...umm

<this might be due to the culture, I cannot simply say that Japanese people are not friendly, and that Canadians are friendly, umm>

M 18. kore wa seikatsu shuukan mo kakawatte iru to omoushi, kanada no kodomo’tte jibun ga happyoo shiyyoo to shite sugo te o ageru kedo nihonjin wa sugoku shizuka dashi, gakkoo no koto kara mo sooyuu seikatsu shuukan no chigai’tte ki ga suru shi.....

<this is related to everyday customs, you know, Canadian children are very aggressive in the classroom, expressing their opinions, but Japanese pupils are very quiet, you know, differences in everyday customs, including the school life, affect the society....>

P 19. demo sore o eigo ni shite iku to owaranaku naru kara....

<however, I cannot say it in English, it takes a long time....>

D 20. nanka tsunagaranaai naa....

<it sounds incoherent, somehow....>

M 21. nihon wa...um, nihon no shakai toka seikatsu shuukan toka...
<Japan is, ....um, Japanese society and customs, and...> 

M 22. kono dai wa "kanada to nihon no shakai no ichiban juyoo na chigai wa nani ka" to yuu node kekkyoku saigo ni sono chigai o doo omouka'tte koto o kakeba ii'n desu yo ne? 

<this topic, "what is the most important difference between Canadian and Japanese society", I should state my own opinion about the differences, right?>

M 23. kantan ni yuuto, kanada no hoo ga yokute nihon no hoo ga warui tte koto ni naru no kanaa....ummm

<to make it simple, it may boil down to say, Canada is better than Japan, I wonder...ummm>

P 24. doo kaite ikoo kana.... 

<how to continue...>

P 25. muzukashii...

<i't's tough...>

P/D 26. moo conclusion ni itchaoo kana, sugoi hayai....

<let's go to the conclusion now, it's so fast....>

D 27. umm, yomikaeshite miyoo kana (reads back the text created so far)

<umm, let's read back>

P 28. moo ii kana, nanka motomaranakatta kedo//

<I think it's OK now, it is not coherent, but...>//
# APPENDIX H: ESL Composition Profile

## ESL Composition Profile

<table>
<thead>
<tr>
<th>Score</th>
<th>Level</th>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-27</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>knowledgeable • substantive • thorough development of thesis • relevant to assigned topic</td>
<td></td>
</tr>
<tr>
<td>26-22</td>
<td>GOOD TO AVERAGE:</td>
<td>some knowledge of subject • adequate range • limited development of thesis • mostly relevant to topic, but lacks detail</td>
<td></td>
</tr>
<tr>
<td>21-17</td>
<td>FAIR TO POOR:</td>
<td>limited knowledge of subject • little substance • inadequate development of topic</td>
<td></td>
</tr>
<tr>
<td>16-13</td>
<td>VERY POOR:</td>
<td>does not show knowledge of subject • non-substantive • not pertinent • OR not enough to evaluate</td>
<td></td>
</tr>
<tr>
<td>20-18</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>fluent expression • ideas clearly stated • supported • succinct • well-organized • logical sequencing • cohesive</td>
<td></td>
</tr>
<tr>
<td>17-14</td>
<td>GOOD TO AVERAGE:</td>
<td>somewhat choppy • loosely organized but main ideas stand out • limited support • logical but incomplete sequencing</td>
<td></td>
</tr>
<tr>
<td>13-10</td>
<td>FAIR TO POOR:</td>
<td>non-fluent • ideas confused or disconnected • lacks logical sequencing and development</td>
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<tr>
<td>9-7</td>
<td>VERY POOR:</td>
<td>does not communicate • no organization • OR not enough to evaluate</td>
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<tr>
<td>25-22</td>
<td>EXCELLENT TO VERY GOOD:</td>
<td>effective complex constructions • few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions</td>
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<tr>
<td>21-18</td>
<td>GOOD TO AVERAGE:</td>
<td>effective but simple constructions • minor problems in complex constructions • several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured</td>
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<td>17-11</td>
<td>FAIR TO POOR:</td>
<td>major problems in simple/complex constructions • frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions • meaning confused or obscured</td>
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<td>10-5</td>
<td>VERY POOR:</td>
<td>virtually no mastery of sentence construction rules • dominated by errors • does not communicate • OR not enough to evaluate</td>
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<td>EXCELLENT TO VERY GOOD:</td>
<td>demonstrates mastery of conventions • few errors of spelling, punctuation, capitalization, paragraphing</td>
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<td>GOOD TO AVERAGE:</td>
<td>occasional errors of spelling, punctuation, capitalization, paragraphing but meaning not obscured</td>
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<td>FAIR TO POOR:</td>
<td>frequent errors of spelling, punctuation, capitalization, paragraphing • poor handwriting • meaning confused or obscured</td>
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<tr>
<td>2</td>
<td>VERY POOR:</td>
<td>no mastery of conventions • dominated by errors of spelling, punctuation, capitalization, paragraphing • handwriting illegible • OR not enough to evaluate</td>
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</table>

**TOTAL SCORE**  
**READER**  
**COMMENTS**
APPENDIX I: Ratings of Writing Samples

Content

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### Organization

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## Language Use

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Educating New Employees

April is a month for entering companies. This is a time for new employees. Companies start several kinds of training for these new employees to make them good workers.

There are several ways of educating new employees. It depends on the companies. Some companies ask the famous presenters to have a speech. Some companies teach how to use polite words. Some companies lodge all new employees together to be able to coexist. Also some companies make them sit in religious contemplation in the temple. By doing this, they can calm down and be quiet.

Recently, one publish company has published a textbook which is about educating new employees. This textbook is cartoon and the cartoon teaches them to have breakfast before you go to the office, read the newspaper, leave home 10 minutes earlier and catch the train which is not too crowded. This cartoon textbook helps recent young people because they always read cartoons.

Some people say that's too much to do for new employees. On the other hand, some people say it is needed for them. Young people are worried when they work in a society after they graduate from school. There is an opinion that to reduce their anxiety companies should make an effort. To educate new employees is a current issue for the companies.
Families are the most important for married businessmen for both Canadian and Japanese society. However, their ways to express love for their families are totally different.

In Canada, almost all businessmen put their family picture in their office, therefore, other people can notice how much he loves his family. On the other hand, Japanese businessmen don't show how much they love their family. They love their family for sure but their ways of expressing love for family is just work so hard.

In Canada, usually family gets together when they have dinner. Businessmen get home by then and dinner is time for communication for a family. In Japan, businessmen go drinking after they finish working. Sometimes they don't see their children for a few days. Even though these businessmen say that "I am working so hard for my family."

In this way, businessmen's ways of expressing love for their families are extremely different between Canada and Japan, however, they love their families.
私がカナダに来た最初の夏、私は２ヶ月間カナダ人のホストファミリーと共に過ごしました。その時、私は彼らにとって自分はお客様ではなく、家族の一員なのだということを身をもって知りました。その時の実感はまさに感じだっただと思います。

「朝ごはんは自分で作りなさい。」「冷蔵庫の物は何でも好きに食べていけからね。」 そういわれても、お客様だと思っていた私は、つい遠慮してしまいました。この気持ちを正直にホストに伝えると、なんと彼らは、「あなたは家族の一員なのよ。」とあたりまえのようにかえってきました。そういわれて、なるべく自分からすすんでキッチンに立ったり、食事の手伝いをするようにしました。

日本では、海外から誰かが来た場合、その人はお客様としてあつかわれます。食事から何から何まで、その家の人たちが手伝ってくれます。これをあたり前だと思っていた私は、感いはしたものの、日本とカナダの違いを体で学びました。

カナダは多民族社会で、世界中から様々な人たちがやってきます。一つの国でありながら、街でふと横をみれば違う人種、というのがあたりまえです。ですから、海外からきている人に対しても、オープンで親しく接してくれるのだと思います。単一民族で、まだまだ海外からの人を受け入れられない日本人とはまさに反対の状況でした。
Recruit Education

April is the month when job start. At that time there are a lot of new employees. Companies start to educate new employees to be good businessmen.

There are many ways to educate them. These ways depend upon companies. For example, making presentation of famous person, teaching communication skills, living together 2-3 days to be accustomed to group life, and doing "Zen" in the temple, for making calmful mind.

Recently a publishing co-operation has made a text book how to educate employees, because youngers who are living in "comic" generations can easy to understand who polite workers are. This text book is very kind comic book. It said like "Eat breakfast before going to work.", "Read newspapers" or "Leaving home 10 min. early, and get on non-crowed train."

Someone said it is necessary for them to be kind so much. However someone agree that being kind. Youngers who get into business suddenly from the long students life time feel anxieties too much. Therefore companies should make an effort to reduce their anxieties. Now recruit education is a big problem in many companies.
I think the most important difference between Canadian and Japanese society is the difference of multicultural society and homogeneous society. For example, a variety of people such as Chinese, Indian, Japanese and so on gather and make one society. However, Japanese people make society just Japanese. In Canada these groups keep their own identities and make one society. These communities are very friendly each other, but if some other foreign people get into Japanese society, there is a sort of prejudices for these foreigners. Canadian keep their society with many tribes friendly, but Japanese can't do this way. Japan used to be a homogeneous country for a long time. Therefore they can't assimilate other people. Canada was an immigrant country, so they know how to manage each community and how to be friendly.

I think this difference is the most important between Japanese and Canadian society.
私がカナダへきて、一番難しく思ったことは、言葉の違いです。日本で多少なりとも英語を学んでいたので、カナダに来る前にはそれほど心配もありませんでした。しかし実際にカナダで生活してみると、自分の英語の表現が通じていないことを強く感じました。たとえば、カナダ人にとっては自分の意見を主張するということは、人の中に参加することだけでなく、自分をその中で確立させるという意味があると思います。もし自分がその中に入っていくには、その会話能力を持たなければいけません。しかし私にはそれができませんでした。カナダ人に自分の意見を英語で言ってしまい、自分の言っていることの論理性がなくなってしまうので、結局は黙ってしまってしまうこともしばしばありました。また内容が薄いために質問が殺到してしまい、答えに苦しんだこともありました。日本で母国語を使ってはできることなのに、英語でできないのは重い。そこで気付いたことは英語で話すときも日本語の頭で考えており、頭の中で日本語を翻訳していることに気付きました。これはまだ続いていますが、多少なりとも最初の状況からは進歩したと思っていきます。自分の意見をはっきり言う、これが私がカナダに来て生活をする上で難しかったことです。
Education for incoming employees

April is the month to income. On this time, we can see a lot of incoming employees. Then the company start to educate them to be a good employee.

They have many ways to educate to incoming employees. Each company has different style to educate. To ask some famous people to speak. To teach way of choice of words. To be familiar with group life, stay together for somedays. Also sometime people go temple to do Zazen. Because they believe doing Zazen follow the quiet and calm mind.

Recently, a publishing company published a textbook for incoming employees education, and it's easy to get some knowledge or manner from this book as a adult in the society for young people who are growing up in the society which is swarm with comic book. It tells them that they should have breakfast before they go to company. They'd better to read the newspaper. Also it tells them that they have to leave their home earlier than normal people about 10 minutes, and catch a not busy train. It's a very kind comic.

Some people say that it's too kind and unnecessary. However, somebody say it's useful. When suddenly youth enter the society feel very uncomfortable, because they spend long time as a student, the company need to try something for the youth to remove their anxiety, so some people say the book is necessary. Education for incoming employees is recognized a big issue in the today's company.
Momoko (2T) - L2 Writing

As we know, Canada has multiculturism and as against Japan is an island country. I think some differences between Canada and Japan come from this point.

According my experiences, Canadian has own identity definitely more than Japanese. When I did home stay in Nelson, I thought that. In other words, Canadian always say their opinion clearly to communicate, even a child. A main cause is probably their culture.

However Japanese often say something ambiguously. Canadian sometimes don't understand this feeling.

As a conclusion, the difference between Canada and Japan is caused by difference of our culture.
幸か不幸か、C I Cとはカナダの中の小さな日本社会である。従って悪くすると日本の生活何も変えずに生きていくことも可能である。しかし、何かしらカナダ社会の影響を受けていることは、事実である。その中で、適応しにくかった点をあげてみたいと思う。

授業形態。これは学生全員が感じている日本とカナダと大きな違いの一つであろうと思う。まず、何より大切なことは、個々の意見を持つことにある。つまり、机に向かい、静かにノートをとる、又は宿題をきちんとこなすというのは、最低レベルのやるべきことであって、カナダで求められていることではないのである。授業に参加するということは、そこでいることではなく、存在を意見、意思の発表によってアピールすることなのである。この考え方にチャンネルを合わせるように、少々手をとったが、今では次のトピックは何だろうかといつでもかまえができるようになった。

このことはカナダ社会に適応していく上で大きなステップとなっていると思う。
Naoko (2N) - Translation

It is April to enter a company. It is time that many new employees appear. The company begins to educate to these people to be good employees.

There are many way of education. It is different between a company and a company. We'll ask a famous man to have a lecture. We will teach new employees how to use language. They will stay same house for one or two night for getting custom to a group life, and they will have religious meditations for making quiet and cool mind.

Recently one publication company made textbook of education for new employees, but it teaches rules of a public person plainly for young men of a comic time. We'll teach new employees these: Have a breakfast before your attendance. Read a newspaper. Choose and get on a bus which become less crowed before ten minutes earlier. It is a kind comic very well.

Some people said we don't need to give these kind, other said we need it. Young men who will appear to society from long school life suddenly feel a big uneasiness. That is a opinion that a company need to have many charenges for lessen the uneasiness. Education of new employees is a big problem of modern society.
I had many experiences in Canada, and I felt many difference between Canadian and Japanese society.

When I had homestay last summer, I found difference between Canadian and Japanese family, because my host mother was very strong for her children. Her children obeyed their mother. Their mother saying means demanding absolute obedience. There are no these stiff in Japanese family. Japanese children don't obey their parents, and Japanese parents aren't angry to their own children now. It is form of modern parents now.

When I was a child, my mother got angry to me. Of course, I was scared, but I think it was important for me to get my mother's angry. Now, Japanese children need true parents who are not only soft for them.
カナダと日本には国的に大きなかがいがあると同時に文化も人間も大いに異なる。

私がカナダに来て、1番慣れるのに大へんだったと思ったのは、授業態度である。日本では、だまって座ってノートを取るだけでも、立派に参加してる事になるが、カナダでは、自分から発言したりして、はじめて参加した事になる。日本では、静かにするのが、良い授業をするための基本であり、規則である。しかしカナダは、うるさい位が、丁度良く、先生も喜んで授業をしてくれると。この事は、頭ではわかっていても実際にするのは大へん難しく、今でも私は努力しているが、なかなか声が出せずに、とまとう時が多い。

カナダにかぎらず国外の授業と日本との間には大きなかがいがあり、それは、ある種の国民性も表れているように思う。日本人は全体的に恥かしがりやかもしれないが、それも日本的に良い所だと思う。