USING TRANSLATION IN L2 CLASSROOMS:

AN EMPIRICAL STUDY ON NON-LANGUAGE MAJOR STUDENTS'

ENGAGEMENT IN CLASS DISCUSSIONS

AND

IMPROVEMENT IN LANGUAGE USAGE

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Abstract

Using Translation in L2 Classrooms: An Empirical Study on Non-language Major Students' Engagement in Class Discussions and Improvement in Language Usage

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As interest has grown in recent years in the relationship between translation and language learning, a rising number of studies have begun to examine the pedagogical value of translation and explore the best ways to use translation in L2 classrooms. Some doubts have been raised about this practice, but few empirical studies have been undertaken.

This study compares how L2 learners react to particular translation tasks and to monolingual tasks and specifically investigates the outcomes of using translation tasks to (1) engender language-related discussions in class and (2) foster improvement in students' written language in grammar and lexis, as compared to corresponding monolingual tasks. The study also examines non-language major L2 learners' perspectives on the use of the two different types of tasks in L2 classrooms.

The study is longitudinal. It includes two Experiments. In Experiment I, half of the participants worked on translation tasks and the other half were exposed to monolingual writing tasks that resemble the translation tasks in terms of topic. In Experiment II, the two groups swapped roles and worked on the other type of tasks. In this way, both groups experienced the two different types of tasks. Data were collected over two semesters and from multiple sources, including class-discussion transcripts, completed translation and writing drafts and revisions and questionnaires. The findings reveal that those who worked on translation tasks (1) showed a higher level of engagement in L2 class discussions, (2) made more lexical and grammatical improvements in their writing, and (3) had more positive views on the use of translation in L2 classrooms.

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Chapter 1 Introduction

The use of translation [1] in second/foreign language classrooms has remained controversial since the second half of the twentieth century. Some consider that it has negative effects on learners' second/foreign language learning (Bloomfield, 1961; Hartmann and Stork, 1964; Lado, 1964; Huebener, 1965; Gatenby, 1967; Newson, 1998), while others contend that it can make positive contributions (Baynham, 1983; Danchev, 1983; Perkins, 1985; Titford, 1985; Atkinson, 1987; Tudor, 1987; Duff, 1989; Husain, 1994; Fraser, 1996; Cook, 1998). In general, opponents criticize the pedagogical use of translation as being ineffective, unhelpful, unnatural, and even counterproductive. Many teachers and curriculum planners refrain from using translation in L2[2] classrooms because they consider that such practice will be too time consuming and will deprive learners [3] of the opportunity to benefit directly from working within the second/foreign language. As Gatenby (1967: 70) puts it, 'why use two languages when the time allowed for learning one is so short?'. Indeed, this conception has been shared by many language teachers. However, a contrary claim has been made by Carreres (2006: 6), who considers translation to be a realistic method for L2 learning and points out that 'it is naïve and simply inaccurate to imagine that learners who only have one or two contact hours of second/foreign language teaching per week can learn a language by immersion in the same way as children learn their

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[1] By definition, translation is the conversion of expressions in one language into another language. In this study, 'translation' refers to written translation of text in learners' first language (L1) into their second/foreign language (L2), i.e. from Chinese to English.

[2] This is an abbreviation for second language or foreign language, commonly used to refer to the language that learners are learning in addition to their mother tongue. In some cases, when distinctive reference to the language learning context is necessary, SL and FL are used to refer to second language and foreign language respectively. However, this study has no intention to make specific reference to the language learning context. Hence, the terms 'second language' and 'foreign language' are conflated by using the abbreviation L2. In this context, L2 refers to English.

[3] The terms 'learners', 'students' and 'participants' are used interchangeably in this study to denote the L2 learners who took part in my study.

mother tongue'. Supporters of translation as a pedagogical tool see no conflicts between the use of translation and other teaching methods. Most of them assert that translation is a valuable asset for L2 classrooms in that it allows learners to systematize and enhance their linguistic knowledge through comparison between their native and target languages. Pym, Malmkjær and Plana (2013) investigated the role of translation in the teaching of languages in a research project commissioned by the European Union. The large-scale study[4] provides an overview of the use and policies of translation in primary, secondary and higher education across ten countries[5], including Australia, China, Croatia, Finland, France, Germany, Poland, Spain, the United Kingdom, and the United States. Results of the surveys show that translation is generally neither included nor prohibited in the official curricula of the case-study countries. However, in practice, translation tasks are found to be employed in L2 classrooms at various education levels, with relatively frequent use in higher education. In response to a question about whether translation can contribute to effective language learning, findings contradictory to the claim of anti-translationists that translation is detrimental to language learning are reported:

> We have found no empirical evidence of a clear causal relationship between high language competence and non-use of participative translation activities in class. Indeed, our cross-country comparison allows for speculation that the use of translation may correlate with better language skills at the national levels (37).

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[4] The study, which seeks to explore in what way the use of translation is related to language learning, is mainly qualitative in nature but includes quantitative research methods, notably questionnaires for experts and language teachers. A total of 962 respondents were involved in the two surveys.

[5] The study eventually received unexpected supplementary samples from five more countries, including Turkey, Lithuania, Sweden, Albania, and Italy.

At present, there is still no absolute proof as to whether translation provides more benefit or harm to language learning. Nevertheless, it is shown in recent literature that translation is making its way back to the L2 classroom. Experts in the field of applied linguistics and language education have begun to reassess the role of translation as a teaching tool in second/foreign language pedagogy. More and more scholars now believe that translation should not be deliberately excluded from L2 classrooms and advocate the use of translation as a language learning activity (Cunico, 2004; Malmkjær, 2004; Schjoldager, 2004; Cook, 2007; Machida, 2008; Märlein, 2009; Zojer, 2009; Danan, 2010), echoing the question raised by Duff (1989: 6), 'translation happens everywhere, all the time, so why not in the classroom?'.

1.1 Statement of the Problem

Over the past decades, the question has often been raised whether or not translation is beneficial to L2 learners. The focus of recent research has shifted to in what way and to what extent translation can be used profitably in L2 classrooms (Källkvist, 1998, 2004, 2008, 2013a, 2013b; Malmkjær, 1998, 2004; Schjoldager, 2003, 2004; Sewell, 2004; Carreres, 2006, 2011; Cook, 2007; Machida, 2008, 2011; Zojer, 2009; Danan, 2010). However, empirical studies in this area are still rare.

When it comes to the investigation of the relation between translation and language learning, much evidence can be traced back to a large body of literature that examines the differences between L2 learners' translation and free composition. These investigations have been popular in the field of language education as a means to study the impact of the first language on second language learning. Many compare L2 learners' essays produced through direct L2 writing[6] with those produced by using

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[6] In this study, 'writing' means 'composing' in L2 directly.

translation as a writing strategy (Kobayashi and Rinnert 1992; Cohen and Brooks-Carson, 2001); some provide L2 learners with L1-L2 translation exercises and direct L2 composition to compare learners' writing processes and language quality (Uzawa, 1996). The results vary greatly. Some findings suggest that students demonstrate better language use in their translated writing or translation compared to direct writing (Kobayashi and Rinnert, 1992; Brooks, 1996; Uzawa, 1996), while some indicate that L2 learners demonstrate better writing proficiency in direct writing than translated writing/translation (Källkvist 1998; Cohen and Brooks-Carson, 2001). Although the abovementioned studies are relevant to discussions of L2 learners' performance in translation compared to other monolingual tasks, they cannot demonstrate the results of translation tasks in L2 classrooms. First of all, these studies are not intended to examine the outcomes of translation as a pedagogical tool for the purpose of second/foreign language learning. They simply explore the results of translation as a writing strategy or process, rather than treating translation as a class activity designated for the purpose of language learning. Secondly, they simply show the immediate effects of using translation in L2 classrooms, and it is not clear whether the learners will perform in a similar way when given the tasks after a time gap. Thirdly, comparing the results of learners' immediate/initial output is merely an assessment of their existing writing competence. It does not show whether they have learned anything or made any improvement when translation is used as class activities.

There are two further key reasons why many of the existing studies fail to show the outcomes of using translation tasks[7] in L2 classrooms. Firstly, they do not involve repeated observations of the same variables over a longer period of time. As Pym,

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[7] 'Task' can be defined in many ways, but in this study I adhere to Van den Branden's (2006: 4) definition: 'A task is an activity in which as a person engages in order to attain an objective, and which necessitates the use of language'. The term 'tasks', 'activities' and 'exercises' are used interchangeably in the study.

Malmkjær and Plana (2013: 139) suggest, in order to examine the effectiveness of using translation tasks in L2 classrooms, the results must 'be measured in terms of improvement in language skills' and 'should be directly compared with those of other types of activity'. Hence, to achieve more valid measurement of the outcomes of using translation tasks in the L2 classroom, it is necessary to compare L2 learners' improvements in translation tasks with other tasks which involve the same or similar form of treatments/trainings. Secondly, most of the translation exercises/activities/tasks found in the existing literature are pure assignments that do not come together with treatments or training[8] judiciously provided to enable L2 learners to receive certain 'input' and acquire new knowledge, information or skills. At present, only a few studies (Berggren, 1972; Slavikova, 1990; Källkvist, 2004, 2008) have included these two crucial elements in measuring the effects of the use of translation for language learning. In these studies, different groups of subjects were given instructional treatments over a certain period of time, in which some were exposed to translation exercises while the rest were given non-translation exercises. These studies featured different forms and types of translation exercises, but resembled each other very much in that they integrated explicit classroom instructions as treatments, and the effects of translation exercises were measured through comparing the subjects' performance in pre-tests and post-tests. However, there is still a literature gap in terms of (1) the types of treatments given to the subjects; and (2) ways of measuring the subjects' improvement when it comes to comparing the outcomes of using translation versus non-translation tasks. For instance, what would happen if the subjects were given other forms of treatments rather than instructional lectures? Could the subjects' improvement or performance be measured in a different way than by means of tests? Taking the time gap involved into

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[8] The term 'training' is used interchangeably with 'treatment' in this context. One typical type of treatment is instructional lectures.

consideration, would the subjects' results in pre-tests and post-tests be clear enough to show that the subjects' progress could be attributed to the type of exercises they were assigned? What would the results be if the subjects' progress were monitored and measured within a shorter time gap? There is also a lack of studies that investigate the outcomes of using translation versus non-translation tasks to encourage L2 learners make improvement or to help them to make actual improvement in language usage. More research in this area using different types of translation tasks/activities (e.g. forms or genres) is necessary to provide a better basis for evaluating the results of using translation versus non-translation tasks. In fact, many language activities can be presented as translation tasks for teaching purpose and a variety of translation tasks designed together with some form of treatment/training to help L2 learners make progress have been proposed in a number of publications (González Davies, 2004; Leonardi, 2010; Carreres and Noriega-Sánchez, 2011; Pym, Malmkjær and Plana 2013), but the effects still await experimentation.

Another underexplored aspect of the use of translation in the L2 classroom is its potential to foster in-class communication. A few publications have appeared in recent years exploring whether and to what extent translation can contribute to class discussion. Some findings indicate that translation can serve as a communicative activity to enhance L2 learning and has the potential to engender student-initiated discussions (Danan, 2010; Källkvist, 2013a, 2013b). In examining students' use of language to discuss language in the L2 classroom, which was referred to as 'languaging' in her studies, Källkvist (2013a, 2013b) found that translation tasks played an effective role in eliciting language-related episodes (LREs), which represent a form of learner interaction in which L2 learners consciously reflect on and talk about their own language use (For details see Chapter 2). Källkvist's studies (2013a, 2013b) show some

preliminary outcomes of exploiting translation as a communicative activity and lay further foundations for reassessment of the pedagogical value of translation in language learning, but one major limitation is that the tasks adopted in the studies do not resemble professional translation and simply involve sentence-level translation. Moreover, her studies mainly concern L2 learners of English whose first language is Swedish, so it is uncertain whether the findings apply to ESL/EFL learners of English whose mother tongue is not a Germanic language. For instance, in contrast to students in English/Western settings, Chinese students tend to show very different behaviors when it comes to class discussion, often appearing quiet, passive, reticent and reluctant to participate. This phenomenon is not surprising to many teachers who have experience in teaching Chinese students and has been noted by many scholars (e.g. Flowerdew and Miller, 1995; Cortazzi and Jin, 1996; Liu and Littlewood, 1997; Jackson, 2002; Liu, 2002; Holmes, 2004). Hence, more experiments in this area in different educational contexts are necessary. As noted by Källkvist (2013a: 230), 'further research is needed to explore the potential of translation in other contexts, involving other language pairs, and for purposes other than the learning of difficult morphosyntax'.

In addition to the outcomes of using translation activities to engender class discussions and encourage L2 learners make improvement or make actual improvement in language usage, another area worth investigating is L2 learners' perspectives on the use of translation versus non-translation (often monolingual) activities. Although it is not unusual to see language teachers advising L2 learners to think directly in English and discouraging the use of translation, it is apparent that translation is still quite commonly used by L2 learners when learning a second/foreign language (Omura, 1996). The reasons can be attributable to learners' own beliefs. In view of the fact that an understanding of learners' beliefs and perspectives about language learning

facilitates appropriate language planning or instruction (Horwitz, 1999), there have been an extensive number of studies exploring learners' beliefs about language learning in recent years (O'Malley et al, 1985; Yang, 1992; Kern, 1995; Park, 1995; Truitt, 1995; Oh, 1996; Kunt, 1997; Liao, 2006). Among these, Liao's study (2006) is one of several studies that examine L2 learners' beliefs about the use of translation (other studies will be reviewed in Section 2.5). His study shows that junior college students in Taiwan generally 'endorsed the belief that translation played a positive role in their English learning experiences' (2006: 130) despite their acknowledgement of some negative effects of translation, such as a reduction in English input caused by first language interference. Liao's study provides some insights into learners' beliefs about the use of translation; however, the results are mainly based on a series of questionnaire surveys probing students' view of translation as a learning strategy in general. Not all of the students surveyed have actual experience in using translation for language learning and even for those who have, the experience may vary greatly. To date, there has been a lack of studies examining L2 learners' perspectives after they are actually exposed to specific translation tasks and corresponding non-translation tasks designed for the purpose of language learning in class. Hence, this study also attempts to fill this gap in our understanding and explore L2 learners' specific perspectives on the use of the designated translation tasks versus non-translation tasks to enhance their language proficiency.

Regarding the use of translation in L2 classrooms, another underexplored area is the question: who should be the target users? As Carreres (2006: 5) points out, one of the arguments against the use of translation into L2 as a language teaching tool is that 'translation is a method that may well work with literary-oriented learners who enjoy probing the intricacies of grammar and lexis, but it is unsuited to the average learner'.

Similarly, most existing studies explore the usefulness of translation exercises with advanced-level L2 learners or language major students in tertiary education. Sewell (2004) suggests that translation activities are suitable for college students who major in language or cultural studies. The studies carried out by Källkvist (2004, 2008, 2013b) also mainly target advanced L2 learners and those who have good communicative competence in their second language. For example, in her study on student-teacher interaction elicited by translation activities, Källkvist (2013b: 115-116) examined the facilitating role that translation tasks may play in L2 learning 'among advanced-level L2 learners who need superior or distinguished levels of L2 proficiency', such as those who 'were aiming for a profession as secondary-school teachers of English, as translators or as interpreters'. However, it should be noted that the majority of students in tertiary education do not specialize in language or translation studies. Since it is contended that translation plays a facilitative role in engendering classroom discussions and can serve as a useful language learning activity, the use of translation activities should not only be limited to a certain group of students. However, existing literature merely takes advanced-level L2 learners or language major students into consideration when it comes to observing the results of using translation in L2 classrooms. It is unclear whether translation activities can also be helpful for students who do not major in language studies in L2 classrooms. Given this concern, this study also attempts to explore the outcomes of using translation with average L2 learners, i.e. non-language major students.

1.2 Purpose of the Study

The main purpose of this study is to investigate the results of using translation in L2 classrooms. First, in order to explore the potential benefits of using translation for

communicative purposes, this study examines the outcomes of employing translation as an approach to initiate language-related discussions in class. Second, aiming to explore in what way translation can be judiciously used as pedagogical practice to benefit L2 learning, it examines the outcomes of using particular translation tasks (hereinafter referred to as 'translation tasks') that are integrated with treatments to encourage L2 learners make improvement and help them to make actual improvement in their language usage. Third, it looks into non-language major L2 learners' perspectives on the use of translation versus non-translation tasks[9] in L2 classrooms. One special feature of this study is that it examines the use of translation tasks with non-language major students rather than advanced ESL/EFL learners who specialize in translation or language studies. This particular context is chosen because the study aims to explore the effectiveness of using translation tasks with a more general group of L2 learners.

1.3 Research Questions

Specifically, the research questions to be addressed in this study are as follows:

1. How does translation compare with direct L2 writing in engendering class discussions among L2 learners?

2. To what extent do the designated translation tasks[10] encourage and help learners to make improvement in lexis and grammar compared to corresponding L2 writing tasks?

3. What are non-language major students' perspectives on the helpfulness of the translation versus L2 writing activities?

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[9] In this context, 'direct L2 writing' is used as a non-translation activity to be compared with translation activity.

[10] In this study, designated tasks involve a number of procedures, including using 'parallel texts' as treatments. Parallel texts in the target language that represents a similar genre or has a similar topic as the activity concerned. For details see Chapter 3. It should be noted that such treatment is different from those used in other studies and hence the results of this study do not conclusively apply to other translation-related activities.

1.4 Significance of the Study

In general, the significance of this study lies in its investigation into whether, in what way and to what extent translation can contribute to L2 learning for non-language specialists. With the returning interest in the use of translation in language classrooms and the recognition that most learners are in favor of translation for second/foreign language acquisition (Liao, 2006), it has become increasingly important that we understand the pedagogical value of translation in L2 learning. As Källkvist (2008: 199) points out, 'more empirical research on the effect of translation exercises or tasks is needed for us to more fully understand when to opt for translation in the L2 classroom'. Findings of the study allow for further understanding of the potential of using translation as class activities for second/foreign language learning. On the theoretical level, the results are relevant to the controversy about the role of translation in L2 learning and influence perceptions of those who are in favor or not in favor of the use of translation in L2 classrooms.

On the practical level, the findings may allow researchers, curriculum planners and language instructors to gain a better understanding of the results of using translation tasks for writing instruction. They may refer to more solid empirical evidence in evaluating the advantages or disadvantages of their teaching materials and class activities. This is particularly important in the case of teaching non-language major students, because this group of L2 learners tends to have relatively few L2 learning contact hours per week. In addition, as this study targets non-language major students, the findings may be appealing to the general public who are interested in L2 learning.

The exploration of L2 learners' engagement in class discussions after completing translation versus writing assignments offers insights about the outcomes of using translation for engendering discussions. It may provide further evidence for the

communicative function of translation tasks. If students are found to have higher levels of engagement in discussions of their translation than L2 writing, it echoes previous studies (e.g. Källkvist, 2013a) which found that translation can help to prompt class discussions. If not, it may imply that the effectiveness of using translation to foster in-class communication can be subject to educational context.

A longitudinal study that investigates how learners react to the particular translation tasks designed for the purpose of L2 learning and whether they show more attempts to make improvement and make more actual improvement in the translation tasks than corresponding language tasks can help fill the literature gap and lend support to evaluation of the outcomes of using translation in L2 classrooms. It can offer insights into concerns about how translation can be best used in L2 classrooms, thus allowing researchers, curriculum planners and language instructors to gain a better understanding of the results of using translation tasks for writing instruction. These methodological and pedagogical implications are valuable for language education and may contribute to guidance on developing effective teaching materials.

Investigation into learners' perspectives on the use of translation versus writing tasks is also essential. Unlike existing studies on learners' beliefs, this study seeks L2 learners' specific opinions about the use of translation tasks. As all participants in this study are given corresponding translation and writing tasks for comparison, they are able to make more precise evaluation and develop a clearer idea of their learning preference. Their perspectives may provide educators with practical insights into the pedagogical value of translation tasks in L2 classrooms.

This study differs from many existing studies in that it investigates the results of using translation or writing tasks over a period of time. Moreover, the study does not aim to 'test' the L2 learners' existing and instant ability to translate into L2, but seeks to

test whether and how translation can be integrated into class activities that enhance L2 learners' writing proficiency and engagement in class discussions. The findings also shed light on the effects of using parallel texts as treatments in translation and non-translation tasks to help L2 learners gain linguistic information and make progress. In sum, the study contributes to the literature on the outcomes of using translation in L2 classrooms and offers new pedagogical insights into second/foreign language learning.

1.5 Organization of the Study

Chapter 1 of this study includes the context, the statement of problems, the purpose of the study, the research questions, and the significance of the study. Chapter 2 presents background information about the pedagogical use of translation and relevant literature pertaining to this study. Chapter 3 provides a detailed framework of methods used to address the research questions raised in the first chapter. Chapter 4 provides an overview of the findings of the study. Chapter 5 analyzes and discusses the findings. Chapter 6 summarizes the study, underlines some implications as well as limitations of the study, and provides recommendations for further research.

Chapter 2 Literature Review

The purpose of this study is to investigate the results of using translation tasks, as compared to corresponding writing tasks, to enhance L2 learners' writing proficiency and engagement in class discussion. Background information and results of earlier studies related to the study are presented in this Chapter. I begin with an overview of some main arguments against and in favor of the use of translation for L2 learning and teaching. Next, I present key empirical evidence about the use of translation in L2 classrooms and a review of the growing trend to devise translation exercises as communicative tasks and its potential to engender LREs, followed by theoretical discussions on the benefits of LREs for L2 learning. Finally, I discuss studies of learner's perspectives on the use of translation for L2 learning.

2.1 Pedagogical Translation

In this study, 'translation' is used in the sense of 'pedagogical translation'. Delisle, Lee-Janke and Cormier (1999: 167-168) define pedagogical translation as 'a mode of translation practiced as an exercise for the purpose of learning a foreign language' or 'any result of this mode of translation' and note that:

> In language pedagogy, these exercises are designed to enrich vocabulary, to promote the assimilation of new syntactic structures, to verify comprehension and to assess the acquisition of new vocabulary.

Gile (1995: 22) points out that a distinction must be drawn between 'professional translation', where the focus lies on the 'content', and 'school translation', where the

focus lies on the 'language'. Similarly, Klaudy (2003: 133) considers that there are two types of translation, 'real translation' and 'pedagogical translation'. In real translation, the translated text is the goal of the process and the addressees are real-world readers in the target language (L2) who want information from the translated texts. In pedagogical translation, the translated text functions as a tool to improve the learners' L2 proficiency and the addressees are language teachers or examiners who are interested in understanding or improving learners' L2 proficiency. According to Klaudy (2003: 133), there are two types of pedagogical translation, including (1) an instrumental kind of translation that seeks to strengthen L2 language proficiency in the realm of second/foreign language teaching and (2) one that seeks to strengthen translational proficiency in the realm of translator training. Schäffner (1998) also sees a distinct difference between translation for language teaching/learning and translation for professional purposes. Translation for language learning, according to Schäffner (1998: 131-132), seeks to reproduce 'the message of the ST' with attention drawn to 'different linguistic structures' and can thus be regarded as a 'decoding-encoding' task. By contrast, translation for professional purposes seeks to accomplish 'text production for specific purposes' and the focus lies on the function of the text. As Stewart (2008: para.2) notes, in the framework of pedagogical translation, important factors for professional translation practice or translation training, such as 'target readership', 'translation commissioner', 'the real-world purpose of the text', are less of a concern.

Pedagogical translation can be practiced in different directions, i.e. from the L1 to the L2 or vice versa (Delisle, Lee-Janke and Cormier, 1999). As Stewart (2008: para.11) puts it, 'pedagogical translation can of course be either from native to foreign language or from foreign to native language – there is no reason why translation as an aid to language learning should not be bidirectional'. However, Stewart (2008) observes

that in actual practice pedagogical translation appears to lean towards the use of translation from the L1 into the L2. This directionality is what Ladmiral referred to as 'prose translation' (as cited in Beeby-Lonsdale, 1996) or what Newmark called 'service translation' (Newmark, 1988). It is worth noting that Ladmiral (1979, as cited in Beeby-Lonsdale, 1996) dismisses prose translation from professional practice but recognizes its use as a pedagogical exercise. Likewise, despite his conviction that translation into the L1 is more preferable in the realm of professional translation, Newmark (1981: 144) acknowledges the helpfulness of L1-L2 translation when it is used pedagogically, suggesting that 'brief translations from native to foreign languages are useful for the consolidation and testing of spoken and written utterances'.

2.2 Controversies over the Use of Translation in L2 Classrooms

Nevertheless, the use of translation in L2 classrooms has long been controversial. Some believe that it is harmful for language learning/teaching[11] and doubt the need to include translation in L2 classrooms (Bloomfield, 1961; Hartmann and Stork, 1964; Lado, 1964; Huebener, 1965; Gatenby, 1967; Newson, 1998), while some consider it conducive to language learning/teaching and question why translation should be excluded from L2 classrooms when it has benefits to offer (Baynham, 1983; Danchev, 1983; Perkins, 1985; Titford, 1985; Atkinson, 1987; Tudor, 1987; Duff, 1989; Husain, 1994; Fraser, 1996; Cook, 1998).

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[11] This study does not attempt to differentiate these two notions, which represent the use of translation from the point of view of students and teachers respectively. The tasks involved in the experiments described in the present study are used as pedagogical tools by the teacher but affect students' L2 learning.

2.2.1 Anti-translation Arguments

2.2.1.1The Impact of the Grammar-Translation Method

To a large extent, the bad reputation of translation and objections to the use of translation in L2 classrooms stem from negative views of the Grammar-Translation Method (GTM), a foreign language teaching method that was originally associated with the teaching of Latin and ancient Greek and thrived in England in the nineteenth century following the establishment of a system of public examinations (Malmkjær, 1998). As Zojer (2009: 32) states, 'the greatest damage done to the reputation of translation as a language teaching tool was probably inflicted by the Grammar-Translation Method'.

According to Richards and Rodgers (1986: 3), the Grammar-Translation Method is 'a way of studying a language that approaches the language first through detailed analysis of its grammar rules, followed by application of this knowledge to the tasks of translating sentences and texts into and out of the target language'. This method requires students to learn grammar rules by rote and translating grammar drills composed of isolated sentences.

In the late 19th century, the appropriateness of this method was questioned by supporters of the Reform Movement, which laid the foundations for the rise of new language teaching methods. The Grammar-Translation Method was thought to take little account of the way language was used in authentic situations and to place excessive emphasis on the form of the sentences rather than their content. As Catford (1965: viii) points out, the main problem of this approach is that the grammar drills were often decontextualized or even meaningless:

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.

Another shortcoming of the Grammar-Translation Method is that it taught language at the expense of listening and speaking skills (Zojer, 2009; Leonardi, 2010) because it neglected practice in these areas and often the contact with the L2 was established through translation. Gradually, opposition grew to the use of translation in L2 classrooms and alternative teaching methods such as the Direct Method and the Audiolingual Method[12] became popular. These methods rejected the use of translation and advocated exclusive use of the target language based on the assumption that the L2 could be learnt in the same way as learners' mother tongue. In the 1970s the Communicative Approach, also known as Communicative Language Teaching (CLT), rose to prominence (Larsen-Freeman, 1986). This method, which advocates task-based language teaching and stresses the need to create opportunities for students to use L2 authentically and creatively, can be regarded as the currently dominant teaching methodology. A key criticism of this approach is that it does not provide enough opportunities for L2 learners to develop accuracy in language use. It seems to emphasise exposure to L2 in authentic situations at the expense of the teaching of explicit linguistic forms. According to Widdowson (1999: 161), 'learners do not very readily infer knowledge of the language system from communicative activities. The grammar, which they must obviously acquire somehow as a necessary resource for use, proves elusive'. Likewise, Swain (1991: 241) argues that 'by focusing entirely on meaning, teachers frequently provide L2 learners with inconsistent and possibly random information about their target language use'. Interestingly, this shortcoming of the

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[12] The Direct Method emphasises vocabulary, whereas the Audiolingual Method focuses on drilling students in the grammar. However, these methods were soon found to be too time-consuming and often not practical in the EFL context because they require teachers to possess native-like proficiency.

Communicative Approach seems to be the strength of translation as it allows students to gain better understanding of the target language by contrasting the different linguistic forms in L1 and L2 (see Section 2.2.2 below). However, the assumption that using translation in L2 classrooms is tantamount to adopting the Grammar-Translation Method has led to much hostility regarding the use of translation in L2 classrooms despite the fact that many of those who advocate using translation as a pedagogical tool never associate it with the Grammar-Translation Method (Cook, 2010; Malmkjær, 1998). Other arguments that add to language teachers' reluctance to use translation as a pedagogical tool and further fuel the heated controversy over the use of translation in L2 classrooms (Malmkjær, 1998; Newson, 1998; Schjoldager, 2004; Zojer, 2009) are the following:

2.2.1.2 Translation is unnatural and inefficient

One of the anti-translation arguments derives from the perception that translation is an unnatural and inefficient approach (Lado 1964; Gatenby, 1967). Lado (1964) considers translation unnatural because natural bilinguals do not translate but simply learn the languages naturally. Gatenby (1967: 69) contends that 'to ask for a translation is to ask for something unnatural'. Meanwhile, he asserts (1967: 70) that translation is a waste of time and questions the need to involve learners' mother language when there is often insufficient time for them to learn L2:

> Why use two languages when the time allocated for learning is so short? Translation is a deceptive process in that, being laborious, it persuades teacher and pupil that a great deal has been accomplished. Unfortunately, such work is all but useless. Translation may give meaning, but it does not

teach. It perpetuates the time-wasting habit of always associating the new

language with the old […].

Similarly, Newson (1998: 63) argues that translation is an ineffective approach that 'deprives teacher and learner of the opportunity to benefit from the accruing advantages of working within one language'.

2.2.1.3 Translation strengthens L1 interference

Another argument against the use of translation in L2 classrooms is that it encourages students to think in their mother tongue and L1 interference may hamper L2 learning, by provoking mistakes due to negative transfer. The claim that translation strengthens L1 interference is closely associated with the perception that the use of the mother tongue will interrupt and hinder the learning of the target language, especially when spoken communicative competence is emphasized (Terrell, 1977; Asher, 1981; Krashen, 1981; Faerch and Kasper, 1983; Chaudron, 1988; Ellis, 1988). Interference, as defined by Lott (1983: 256), is "errors in the learners' use of the foreign language that can be traced back to the mother tongue". 'Positive transfer', according to Contrastive Analysis (CA), occurs when L1 habits resemble those of the L2 and result in correct L2 usages. This notion is in contrast with 'negative transfer', which occurs when the L1 habits differ very much from the L2 habits so that transfer of the L1 habits causes errors in the L2. Lado (1957: 59) acknowledges that learners tend to 'transfer the habits' of their L1 patterns and structures to the L2 and suggests that when the L1 and L2 patterns differ, negative transfer is likely to occur, leading to L2 errors. This is one reason why Lado (1964:54) cautions that translation may lead students to produce incorrect language constructions. Likewise, Krashen (1981: 66) points out that 'studies that report

a high amount of first language influence' are mostly 'situations in which natural appropriate intake is scarce and where translation exercises are frequent'.

2.2.1.4 Translation fosters misleading beliefs

Another anti-translation argument revolves around the claim that translation fosters a misleading belief (Weller, 1989; Malmkjær, 1998; Leonardi, 2010). According to Lado (1964: 54), translation may give students the false impression that the two languages have absolute equivalent expressions. Newson (1998: 64) echoes this view that learners who adopt translation for second/foreign language learning may develop the false impression that 'there is such a thing as simple word-to-word equivalence between languages'.

2.2.1.5 Translation is a fifth skill

Meanwhile, translation is sometimes considered a fifth skill which is unrelated to the teaching of the other four skills – reading, writing, speaking and listening (Weller 1989; Malmkjær 1998; Zojer 2009). Lado (1964: 54) argues that translation involves more complexity than the four skills and therefore should only be taught after students have mastered the second/foreign language. Likewise, Newson (1998: 63) argues that translation has no part to play in the four skills 'which define language competence'.

2.2.1.6 Other arguments

In Carreres's (2006: 5) summary of objections to the use of translation in L2 classrooms, more specific arguments are put forward:

(1) Translation is an artificial, stilted exercise that has no place in a communicative methodology. Also, it is restrictive in that it confines language practice to two skills only (reading and writing).

(2) Translation into L2 is counterproductive in that it forces learners to view the foreign language always through the prism of their mother tongue; this causes interferences and a dependence on L1 that inhibits free expression in L2 (see also Zojer, 2009).

(3) Translation into L2 is a wholly purposeless exercise that has no application in the real world, since translators normally operate into and not out of their mother tongue.

(4) Translation and translation into L2 in particular are frustrating and de-motivating exercises in that the student can never attain the level of accuracy or stylistic polish of the version presented to them by their teacher. It seems an exercise designed to elicit mistakes, rather than accurate use of language (see also Zojer, 2009).

(5) Translation is a method that may work with literary-oriented learners who enjoy probing the intricacies of grammar and lexis, but it is unsuited to the average learner.

Many of the above arguments have been put forward repeatedly and consistently as reasons not to use translation and thus may not be wholly false. However, as Malmkjær (1998: 6) notes, "the degree to which they are true depends radically on the kind of 'translation' experience students are exposed to". Moreover, Schjoldager (2004: 129) points out that 'it is now widely acknowledged that an exclusive use of L2 in the classrooms is neither practical nor recommendable' and suggests that 'if L1 should play a role after all – why not in the form of translation between L1 and L2?'. While many of the theoretical arguments are yet to be settled, it is only fair to also examine some of the counterclaims and arguments for the use of translation.

2.2.2 Pro-translation Arguments

Amid the attacks on the use of translation in L2 classrooms, there are also a considerable number of pro-translation arguments. Duff (1989: 7), one of the most outspoken supporters of pedagogical translation, argues that translation helps L2 learners to develop three essential qualities, including flexibility, accuracy, and clarity: It 'trains the learner to search (flexibility) for the most appropriate words (accuracy) to convey what is meant (clarity)'. Similarly, Tudor (1988: 364, in Gnutzmann, 2009) claims that translation can enhance L2 learners' awareness of a 'resource gap', which in turn encourages them to adopt 'resource expansion strategies'. This, as Gnutzmann (2009: 70) puts it, can help L2 learners to 'achieve enhanced acquisition by self-directed inquiry based on observation'. Another advantage of translation is that it allows for conscious learning (Kopczynski, 1983; Weller, 1989; Uzawa, 1994) and there has been extensive research suggesting that conscious learning plays an effective role in helping adult learners to learn L2 (Yalden, 1975; Bialystok, 1981; Ellis, 1986; Mclaughlin, 1987; Wenden and Rubin, 1987; Schmidt, 1990; Tarvin and Al-Arishi, 1991) and therefore consciousness-raising language tasks are beneficial pedagogical tools. Schäffner (1998: 125) summarizes six potential benefits of using translation: It can (1) improve verbal agility, (2) expand the students' vocabulary in L2, (3) develop their style, (4) improve their understanding of how languages work, (5) consolidate L2 structures for active use, and (6) monitor and improve the comprehension of L2.

Interestingly, many of the claimed disadvantages have been considered advantages by others. The claim that translation is an unnatural and inefficient approach has been countered by the argument that translation itself is a natural strategy adopted by most students. Danchev (1983) observes that many students naturally use translation as a learning approach even when they are told not to do so. He therefore believes teachers

should introduce translation judiciously in the L2 classrooms rather than letting students translate incorrectly on their own. Malmkjær (1998) points out that it is often unavoidable that translation occurs in many L2 learners' mind because it is, unsurprisingly, a natural cognitive function that activates when students encounter writing, reading, speaking or listening tasks. Hence, asking students to avoid using their mother tongue is a rather unnatural practice. According to Malmkjær (1998: 8), 'if a translation task is properly situated, it provides as natural a focus for practice as any other classroom activity'. Similarly, Leonardi (2011: 18) points out that the use of translation in L2 classrooms is a deliberate choice of the teacher but a 'naturally-occurring and cognitive activity of students when learning a foreign language which cannot be stopped or avoided'. Meanwhile, Leonardi (2010) contends that it is unfair to regard translation as a time-consuming activity that takes up valuable time if the activity enables students to practice several language skills – reading, writing, speaking and listening - at once. As to the concern on time consumption, she suggests that shorter texts can be used in class, while larger texts can be assigned as homework and discussed in class afterwards as a means to practice listening and speaking skills.

The possibility that translation strengthens L1 interference is one of the main reasons why educators often refrain from using translation in L2 classrooms. However, many counter that translation in fact is a helpful tool to counteract L1 interference by helping students to develop awareness of the contrastive aspects of two languages and may in turn prevent interference mistakes (Sørensen, 1990; Harvey, 1996; Malmkjær, 1998; Schjoldager, 2004). Duff (1989) argues that translation activities involve contrast and therefore offer good opportunities for students to come to understand the differences between the native and target languages. Weller (1989:45) acknowledges

the risk that translation may trigger negative transfer but argues that translation can be a means to 'overcome and neutralize' it:

> It has been argued that translation of the native language into the target language induces learners to make errors and thus amounts to setting traps. Empirical observation however has shown that the same kinds of errors attributed to translation also occur when learners produce target language utterances without setting out from a native language (such as free composition). By applying translation consciously and systematically, learners can be conditioned to monitor their own code switching.

Vermes (2010) shares the same view and doubts the logicality of associating translation exercises with L1-induced errors and notes that interference does not only arise when translation is used but can occur in any other method of language learning. Titford (1985: 78), who also observes that students often refer to their mother tongue and 'translate silently' anyway, contends that translation in fact makes it easier for teachers to correct and explain L1-induced errors. Likewise, Leonardi (2010: 28) asserts that 'interference' arises only when negative effects are produced. Translation, on the other hand, brings positive effects as it allows students to notice and control interference and therefore should be considered as 'facilitation' instead.

While some claim that translation should be avoided because it may foster misleading beliefs that there is always equivalence between two different languages, some indicate that this possibility can be offset by proper instruction. Snell-Hornby (1985) acknowledges that translation may delude students to the naïve view that exact equivalence between two languages exist, but points outs that if it is used rationally rather than intuitively it may help to dispel this delusion. Similarly, Malmkjær (1998: 8)

endorses the view that if translation is used judiciously in L2 classrooms, 'it will soon become clear to language students that expressions in the two languages do not necessarily correspond one-to-one'. Leonardi (2010: 26) points to the reality that students often naturally assume that 'one-to-one correspondence exists for any situation'. She contends that in fact translation can dispel this misconception and help students to understand that different expressions are used under different circumstances and that there is no such thing as absolute equivalence at all times.

With regard to the accusation that translation is a fifth skill and has no relationship with or has detrimental effects on the learning of the other four skills, some counter that the process of translating will inevitably touch upon the four skills. As Malmkjær (1998:8) remarks, translation is 'in fact dependent on and inclusive of them' and 'language students who are translating will be forced to practice them'. Leonardi (2010: 23-25) asserts that translation is inclusive of the four skills, including reading, writing, speaking and listening, drawing on knowledge of the translation process. Firstly, students need to read the source text thoroughly and comprehensively before they can translate it. In this way, their reading skills can be enhanced. Secondly, students will proceed to 'the three main stages of a translation, namely, decoding the ST, transferring linguistic and cultural elements and meanings into the TL and encoding the text into the new language and context' (2010: 24). In this way, students' writing skills can be strengthened. Thirdly, students can comment on each other's translations and if this communication is carried out in L2, students' listening and speaking skills can be practiced. As Leonardi (2010: 25) points out, 'there does not seem to be much difference in the way students practice oral skills in any traditional FL course. In both cases a topic is selected and conversation takes place in L2 to express students' opinions or make cultural references to different systems'.

Though Carreres (2006: 5) summarizes many common counter-translation and pro-translation arguments, it is apparent that she considers the arguments in favor of translation more convincing than the claimed disadvantages. First, regarding the argument that translation 'has no place in a communicative methodology', Carreres (2006: 6) believes that this perception derives from the misconception that translation equals the Grammar-Translation Method. She counters this claim by pointing out that translation serves a communicative purpose in the real world. She argues that it is the teaching methodology that determines whether the tasks – translation or non-translation – can serve a communicative purpose. Carreres sees good potential in using translation to foster communication, claiming that translation can encourage discussion as students will naturally defend their versions. Similar arguments are made by Danan (2010) and Källkvist (2013a, 2013b).

As mentioned earlier, translation is claimed to hinder free expression in the target language (see Carreres, 2006; Zojer, 2009). Zojer (2009: 35) counters this argument by pointing out that the constraints imposed by the source texts in translation tasks prevent students from avoiding problems (as opposed to tasks such as free composition) and thus help students to expand their range of expressions (see also Schjoldager 2004: 135). In fact, already in early eighties, Barhoudarov (1983:13-14, in Weller 1989) argued that 'translation into a foreign language is an even more effective means of developing speech habits than free speech in the sense that when speaking freely the student can limit himself to the narrow range of vocabulary and grammar well known to him to avoid linguistics mistakes'. This view has survived long but is yet to be supported by empirical studies.

With regard to the anti-translation claim that translation is not a meaningful exercise that can have application in the real world, Carreres (2006) counters that this concern is

rather irrelevant when translation is used as a pedagogical tool for language learning rather than translator training. Meanwhile, she also notes that the into-L1-only practice is mostly observed in literary translation but not in commercial or technical translation. Moreover, many monolingual language exercises, such as gap-filling exercises, are also rarely used in the workplace. Compared with many monolingual tasks, translation appears to have a closer connection to the real world.

Another argument in both Carreres's (2006) and Zojer's (2009) summaries is that L1-L2 translation exercises are 'frustrating, 'de-motivating' and 'designed to elicit mistakes rather than accurate use of language'. However, a considerable number of recent studies on students' perspectives suggest that the opposite is true, i.e. many students generally have positive views about the use of translation in L2 classrooms (Kobayashi and Rinnert, 1992; Sewell, 1996; Uzawa, 1996; Hsieh, 2000; Carreres, 2006; Liao, 2006). These empirical studies do not support the notion that translation exercises are more difficult (with more constraints) or that they frustrate students.

There is also a lack of consensus on the suitability of translation exercises for different levels and types of L2 learners. Marsh (1987) considers translation an unsuitable exercise for beginners who do not have a significant level of proficiency in the L2. Blank (1987, in Zojer, 2009) and Snell-Hornby (1985) advise that the use of translation be limited to advanced learners. Newson (1988: 2) believes that translation is an art that is only suitable for specialized students and should not be introduced in general college classrooms. On the other hand, Butzkamm (1985) claims that translation is not only beneficial to advanced learners but also helps beginners to understand the L2 structures more clearly. Carreres (2006: 7) acknowledges that 'translation as taught in the traditional method was wholly unsuited to the average learner without erudite or literary leanings' but points out that 'there is no reason why translation should be

restricted to literary passages and it certainly can be taught in more stimulating ways than has traditionally been the case'. This suggests that it is the task design itself - rather than translation as a pedagogical tool - that determines its suitability.

It is interesting to see how the arguments against translation have been countered by the supporters of pedagogical translation and how disadvantages in the eyes of some are deemed advantages by others. The negative attitude towards translation is mostly derived from the negative view of the Grammar-Translation Method, but hardly anyone who supports pedagogical translation in recent literature refers to this way of using translation. Many arguments against the use of translation in L2 fall away when translation is understood in a less de-contextualized way and used in a way that resembles actual translation practice, because this encourages students to engage in the four essential language skills and enhance their L2 proficiency (Keith and Mason 1987; Malmkjær, 1998; Carreres, 2006). As Danchev (1983) puts it, translation is like a medicine in that it could be harmful if used inappropriately but can bring positive effects when judiciously used in the right way and with the right dose. In recent years, it has gradually been acknowledged that the focus should be shifted from theoretical discussions on the pros and cons of translation to how translation could be best utilized in L2 classrooms (Cook, 1998, 2007; Källkvist, 1998, 2008, 2013a, 2013b; Malmkjær, 1998, 2004; Cunico, 2004; Schjoldager, 2004; Machida, 2008; Märlein, 2009; Zojer, 2009; Danan, 2010).

2.3 Empirical Research

2.3.1 Translation versus Non-translation Tasks

In order to gain better understanding of the pedagogical value of translation activities in L2 classrooms, it is essential to compare it with monolingual language activities. As Pym, Malmkjær and Plana (2013: 139) suggest, 'the results can be measured in terms of improvement in language skills, numbers of interactions in the learning process, and student satisfaction. These results should be directly compared with those of other types of activity'.

One of the most popular empirical studies investigating the use of translation as compared to other types of monolingual tasks is the comparison between direct writing and translated writing. For example, Kobayashi and Rinnert (1992) compared the quality of the direct writing and translated writing of 48 fourth-year Japanese university students majoring in a variety of subjects. The participants were divided into two groups randomly. During regular class hours, one group was asked to write their essays in L1 (Japanese) and then translate them into L2 (English), while the other group was instructed to write directly in L2. The two groups reversed tasks on a different topic the following day. The measurement was based on ratings on a 5-point scale for three major aspects: content, organization and style. The 'content' and 'organization' concerns content-related issues, while the 'style' concerns language use, i.e. vocabulary and variety of form. The students who completed their composition in the translation mode outperformed those who composed directly in L2 on the dimension of syntactic complexity, especially in the case of students with lower language proficiency[13].

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[13] The data was also analyzed by comparing the performance of students at two proficiency levels, which were determined by a grammar test and an oral interview. The findings suggest that lower-level students benefited more from translation than higher-level students.

Likewise, Brooks (1996) examined the effect of using translation as a strategy in writing for French as a foreign language. 31 intermediate-level students participated in the study. They wrote a composition directly in French (L2) and translated a comparable piece from English (L1) as homework. The students performed better in their translated writing than in direct writing, especially in terms of cohesion, coherence and syntactic complexity.

Cohen and Brooks-Carson (2001) compared students' direct writing and translated writing completed within a 50-minute class period. No dictionaries were allowed. The subjects were 39 intermediate learners of French, of which 25 were native English speakers, 10 were Spanish-English bilinguals and 4 were native speakers of other languages. Two-thirds of the students demonstrated better results[14] in direct writing than translated writing under time constraints, while one-third did better in the translated task, suggesting that direct writing in French as L2 is more effective than translated writing when there is time pressure. However, the subjects' performance on the grammatical level showed no significant difference across the two types of writing.

The studies discussed above did not aim to evaluate the outcome of using translation as a language task in L2 classrooms; their focus was on the effects of L1 on L2 or on different types of writing strategies. However, they offer some empirical evidence about the outcomes of using translation for language learning/teaching.

Existing studies that aim at investigating students' performance in translation tasks and non-translation tasks have either sought to assess the role of translation as language assessment tool, or to analyze the cognitive processes involved in monolingual writing and translation tasks, or to compare the learning outcomes of translation tasks and non-translation tasks.

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[14] The measurement was based on a rating scale of the subjects' proficiency in expressions, transitions, clauses and grammar.

To examine whether translation is a suitable tool for assessing students' general proficiency, Källkvist (1998) compared students' performance in free composition and translation. She focused on the proportion and types of lexical errors found in translation and free composition completed by Swedish EFL learners. The data was collected from test/exam scripts from the English Department in Lund. A total of 150 translation scripts and 8 writing scripts were collected as data for this study. The former were collected from translation tests administered to students in the English Department at Lund University, while the latter were obtained from the same Department and the University of Cambridge Local Examination Syndicate. She found that the translation tests adopted in her study 'induce a higher proportion of lexical error for nouns, lexical verbs, and adjectives than the free compositions' (82). Based on these findings, Källkvist (1998) disagrees with Weller's (1989: 45) statement that 'the same kinds of errors attributed to translation also occur when learners produce target language utterances without setting out from a native language (such as free composition)'; she points out that the same kinds of errors occur but in different proportions. However, Källkvist notes that the reason that more lexical errors were found in translations could be that students who worked on translation were unable to resort to the avoidance strategy discussed earlier in this chapter.

Uzawa (1994, 1996) compared the translation and writing processes, attention patterns and quality of language use among 22 Japanese ESL students from a Canadian college. The subjects were assigned three tasks, including writing an essay in L1, writing an L2 essay on a different topic, and translating a short text from L1 to L2. The sessions were tape-recorded and the think-aloud protocols were analyzed according to the subjects' attention to the metacognitive, discourse and linguistic levels as well as their personal comments. The students demonstrated similar attention patterns in both

L1 and L2 writing tasks but very different patterns in L1-L2 translation tasks, in which attention to language use in translation tasks were found to be significantly higher than in either form of writing tasks. Students tended to think about what to write next and pay more attention to the organization when they composed in L1 or L2, but tended to pay conscious attention to language usage and used a wider range of vocabulary when they translated from L1 to L2. Uzawa therefore suggests that translation allows for conscious L2 learning, which mirrors the view of Kopczynski (1983) and the findings of studies on the facilitative role conscious-learning activities play in L2 learning mentioned earlier (Yalden, 1975; Bialystok, 1981; Ellis, 1986, Mclaughlin, 1987; Wenden and Rubin, 1987; Tarvin and Al-Arishi, 1991).

Another major finding of Uzawa's study is drawn from the evaluation of students' written texts. The subjects demonstrated better language use in their translation than in their L2 writing. This result is consistent with the findings of Kobayashi and Rinnert (1992). Uzawa (1996) argues that L1-L2 translation exercises may be beneficial for the second or foreign language writing curriculum as they free students' cognitive efforts from 'generating and organizing ideas' and enable them to 'concentrate on linguistic activities', whereas L2 writing seems to have allowed, if not encouraged, students to stay safe by using only expressions familiar to them and avoiding those that are difficult.

Uzawa's work (1996) is crucial as it provides evidence about how the cognitive efforts for monolingual writing tasks differ from cognitive efforts for translation tasks. Her observation that cognitive efforts for translation and writing tasks vary is consistent with some more recent findings in literature on cognitive processes in translation, which has been one of the main concerns of translation research since the 1980s. For instance, in investigating the pause patterns in translation and monolingual text production,

Immonen (2006: 333) found that 'translation is a slower activity than text production at word and clause level – also word medially – but a faster activity at sentence and paragraph level'. According to Immonen, one possible reason for this phenomenon is that translation tasks take more time for the selection of word choice and formulation of clauses, whereas text production takes more time to deal with larger text structures. Later Immonen (2011: 250-251) conducted a quantitative study utilizing 'pause' as a tool to investigate cognitive processing during translation and monolingual writing and found that the allocation of cognitive efforts of 28 professional translators varied when dealing with translation as compared to monolingual text production:

> When monolingual text production is concerned, processing must take place at all linguistic levels because the text is created entirely by the writer. […] In monolingual text production, clauses seem to carry the main weight of the syntactic processing and words the greatest load of word processing, while, in translation, the weight of syntactic processing seems to be on phrases and words, and the emphasis of word processing on words and compound words.

The subjects of these studies were professional translators and the translation tasks were mainly L2 (English) to L1 (Finnish). Nevertheless, the results lend some indirect support to Uzawa's findings (1996) that cognitive efforts in completing translation and writing tasks vary.

Hummel (1995) introduces some cognitive insights into the use of translation for L2 learning by linking it to the notion of 'elaborateness of processing' (Anderson, 1990) from the psycholinguistic literature. As Hummel (1995: 450-452) explains:

Elaboration refers to extensiveness of processing and number of encoded features. It is suggested that a more extensive and more elaborated analysis of a stimulus is associated with greater retention [...] When translating, a dual set of structures are activated: (a) the first language structures from which the meaning or message is derived, and (b) the second language structures which are constructed to match the message. Thus the translation process should entail just such an increased set of interconnections, resulting in a more elaborate set of memory traces associated with the L2 structures. And, according to the "elaborateness of processing" view discussed earlier, the L2 structures should therefore be more resistant to forgetting.

To put it simply, when learners translate they make efforts to process the information in the L1 and try to find an appropriate expression in the L2. The large amount of information generated during such decoding and encoding processes leads to a burdensome cognitive load, which, according to the 'elaborateness of processing' model, allows for better recall. In particular, Hummel (1995: 452) suggests that 'the processing effort associated with finding translation equivalents may additionally contribute to allowing the translation equivalent to be more durable in memory'.

The superiority of translation tasks in helping L2 learners to recall a word is reflected in Prince's (1996: 483) study, which compared the outcomes of using translation and non-translation (context) for the learning of vocabulary. The participants were forty-eight French students from the Pharmacy Faculty of the University of Montpellier. The experiment consisted of two phases. During the study phase, half of the subjects were exposed to 44 words along with their translations (TL), while the other half were exposed to L2 words exclusively in L2 contexts (CL). After an

approximately 40-minute interval, a recall phase took place and all of the subjects received a sheet with 22 words to translate (TR[15]) and another sheet containing 22 English sentences with the target words had to be selected for gap-filling (CR). Students' performance in recalling words was measured by the percentage of correct responses by learning condition, recall condition and group [16]. The results were presented by group, namely, the weak group and the advanced group. The results reveal that translation learning was superior to context learning in terms of the quantity of new vocabulary acquired, though weaker learners did not show high ability to transfer the meaning of the newly acquired vocabulary into L2 contexts. The results seem to suggest that, contrary to the belief that the presence of L1 will interfere and therefore hinder L2 learning, the involvement of translation can bring benefits to the learning of the target language, though it may have different impacts on learners of different proficiency levels.

The studies discussed above provide some evidence about the outcomes of using translation versus monolingual task for language learning/teaching. However, these studies did not primarily concern the pedagogical value of translation in L2 classrooms and the investigation was mostly based on data collected from one lesson or an exam session. They therefore show only the immediate effects of using particular translation tasks at a particular moment. In other words, it is uncertain whether similar results will be achieved after a time gap or when a text with a different topic is assigned as translation or writing task. A more comprehensive study that addressed this issue and which is more directly related to the present study is the 13-week longitudinal study

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[15] To examine whether the translation direction makes a difference, half of the subjects were asked to translate from L1 to L2 while the other half translated from L2 to L1. The results showed that the direction of translation was not a significant factor.

[16] In addition to the learning condition and recall condition, the subjects' proficiency level was also taken as a factor in Prince's study. The two groups of subject were divided into the weak and advanced group based on the results of a placement test.

carried out by Källkvist (2008), which aimed at investigating the effects of translation exercises compared with that of gap-filling and transformation exercises.

The subjects of her study were native speakers of Swedish with at least 8 years of classroom instruction in English. Her study involved two experimental groups, i.e. the 'translation group' (15 subjects) and the 'no-translation group' (15 subjects) as well as a 'meaning-only comparison group' as a reference group (14 subjects). Her study also included an intact group (known as 'NoG' group) in order to compare the differences between treatments with and without form-focused exercises and explicit grammatical instructions given to the subjects. The 'translation group' and the 'no-translation group' were consistently assigned translation exercises and gap-filling plus transformation exercises respectively and received explicit explanations of the same target structures. The meaning-only comparison group was exposed to the target language (English) without any form-focused exercises and explicit grammar instruction. The effects of the different exercise types were measured by pre-tests and post-tests, which consisted of multiple-choice, translation and retelling tasks. The findings show that when such test-like elicitation instruments were used, (i) there were no significant differences between the two groups in the multiple-choice test, (ii) the 'no-translation group' showed a slightly better performance in the retelling tasks than the 'translation group', and (iii) the 'translation group' outperformed the 'no-translation group' in the L1-L2 translation test. Both the 'translation' and the 'no-translation' groups performed much better than the intact group which did not work on focus-on-form exercises and did not receive any explicit explanations about the target structures. These findings suggest that translation can elicit similar gains as monolingual exercises like gap-filling and transformation, but explicit instruction is essential for progress. Based on these results, Källkvist (2008) concludes that translation has a place in L2 classrooms when judiciously used though it

may not be superior to monolingual teaching method. Källkvist, however, notes that it would be a beneficial pedagogical practice to expose students to a combination of several exercise types in L2 classrooms. Källkvist's (2008) findings provide more convincing evidence about the outcomes of translation as an exercise type than the studies mentioned earlier in terms of the methodology, duration and objectives of her study. Although the subjects' performance was also measured by a test completed in a particular lesson (week 13), the study lasted for 13 weeks throughout which the experimental groups were consistently given corresponding treatments. Hence it seems more justified to consider the final results revealed in the post-tests to be a reflection of task-type effects, as compared to studies which merely examine students' one-time performance in a particular translation and non-translation task[17] administered in one particular lesson, as in the case of many studies mentioned earlier. Källkvist's two other recent studies (2013a, 2013b) also compare the results of using translation with the results of using non-translation tasks, but the focus shifted to exploration of their effects on class discussions, which will be presented later in this Chapter.

2.3.2 Pedagogical Use of Translation

In addition to these studies, much recent literature also offers suggestions about how translation tasks can be judiciously designed and best used in L2 classrooms, especially in a more communicative way, providing some ideas for further experimentation.

Snell-Hornby (1985: 24) suggests that 'a detailed and critical analysis of the text' and 'active participation of every student in the class' are essential for translation to be a successful pedagogical tool. She remarks that 'there seems little point in simply

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[17] This can be in the form of class assignment, test or exam.

working through texts for the sake of covering material, whereby a translation is achieved by mere intuitive hunch'. This view suggests that if translation is to be used as pedagogical tool, the tasks should not be designed to only require students to 'translate' using their limited linguistic knowledge intuitively without allowing them to 'learn' something new. In this sense, relevant treatments or analytical comments from peers or teachers are essential.

Weymouth (1984) suggests that translation activities be designed using non-literary texts, preferably on up-to-date topics, and used in a way that allows group discussions. In a similar vein, Tudor (1987) suggests that in designing translation tasks, the materials should not be limited to literary texts, but be prepared to cater to students' need. He also proposes to adopt materials from fields ranging from the media, law, commerce to science so that L2 learners can be exposed to expressions and terminology in different fields.

Duff (1989) believes that translation should be tied to communicative ways of teaching and designed to allow for peer or group activities in L2 classrooms so that the four language skills can be practiced. Similarly, Leonardo (2010) advocates that translation activities be communicative to strengthen students' aural and oral skills. For instance, upon completing a translation, teachers may invite students to discuss problems they have encountered during the translation process. Expressing opinions in L2 can allow students to practice their oral skills just as they do using other traditional materials.

Sewell (2004) and Danan (2010) suggest using real-life translation tasks because they can enable learners to experience the enjoyment of completing a product. Danan (2010) investigated the effects of using subtitling activities in L2 classrooms. In her study, students were required to translate from L1 to L2, accompanied with dubbing

activities. The findings reveal that these professional-like translation tasks not only help to improve students' listening comprehension and vocabulary acquisition, but also lead to better enjoyment, enthusiasm and motivation among students.

An increasing number of voices have supported the view that pedagogical translation can benefit from professional practice (Fawcett, 1987; Keith and Mason, 1987; Fraser, 1996; Klein-Braley, 1996). Carreres and Noriega-Sanchez (2011) favour the use of contextualized real-life translation tasks and hold the view that translator training and language teaching can benefit from mutual exchange. Carreres and Noriega-Sanchez (2011: 292-293) present a number of sample task-based translation activities that could be adapted to language classrooms, such as film subtitling and translating news releases or political speeches. Tasks designed for translator training, such as the work of Gonzalez Davies (2004), can also offer refreshing insights into language pedagogy in terms of task design. However, the outcomes of these proposed tasks await experimentation.

2.4 New Trend: Using Translation for Communicative Purposes
2.4.1 Language-related Episodes

Language-related episodes (LREs)[18], as defined by Swain and Lapkin (1998: 326), are 'any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others'. More specifically, they include conversational turns where learners 'may question the meaning of a linguistic item, question the correctness of the spelling/pronunciation of a word, question the correctness of a grammatical form or implicitly or explicitly correct their own or another's usage or a word, form or structure' (Leeser, 2004: 56). These

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[18] Swain (1998) uses the terms 'LREs' and 'metatalk' interchangeably.

instances of collaborative dialogue or segments of learner interaction show how learners may consciously make reflection on their language use and explicitly discuss certain linguistic forms.

LREs have received different forms of categorization, which is mostly dependent on the objectives of the studies and the presence of these categories in the data generated. One categorization of LREs is by their mode, such as LREs that are prompted by the teacher and LREs that are initiated by the learners (Källkvist, 2013a; Williams, 1999, 2001). Some other studies categorize LREs by their outcomes and examine whether they are resolved correctly, resolved incorrectly or left unresolved (Swain and Lapkin, 1998; Lesser, 2004; Kim and McDonough, 2008, 2011) and whether LRE resolution has any impact on students' subsequent proficiency, mostly measured by post-tests. The most prevailing classification of LREs is perhaps by their nature, such as lexical or grammatical LREs (Swain and Lapkin, 1998, 2001; Storch 1998, 2013; Williams, 1999, 2001; Leeser, 2004), though the definition and terms vary.

Swain and Lapkin (1998, 2002) define lexis-based LREs and form-based LREs as instances where L2 learners talk about lexical items and instances where learners address aspects of spelling, morphology and syntax respectively. To Williams (1999) and Leeser (2004), lexical LREs refer to instances where learners discuss spelling, pronunciation and meaning and grammatical LREs refer to instances where learners discuss morphology and syntax. Some studies suggest that learners focused more on lexis than grammar, as manifested by the prevalence of lexical LREs over grammatical LREs (e.g. Williams, 1999; Storch, 2007; Kim and McDonough, 2011), whereas some show that grammatical LREs outnumbered lexical LREs (e.g. Swain and Lapkin, 1998, 2001; Leeser, 2004; Storch, 2008).

For instance, in her study of learner-learner interaction involving eight adult ESL

students, Williams (1999) examined the LREs produced from a range of naturally occurring classroom activities and found that as high as 80% of the LREs in her data were focused on vocabulary rather than grammar (20%). In their studies on learners' interaction with advanced peers rather than with intermediate peers, Kim and McDonough (2008, 2011) found that learners produced more LREs, but with a greater proportion of lexical LREs. In comparing the LREs generated by two types of writing tasks (data commentary report and argumentative essay), Storch and Wigglesworth (2007) found that there were more lexical LREs (54% on reports and 52% on essays) than grammatical LREs.

In contrast, in examining the discussions on a text reconstruction task, Storch (2008) found that learners dealt with a range of grammatical and lexical items, with much more focus on the grammar (i.e. morphology and syntax) than on lexis (word meanings and word choice) and mechanics (punctuation and spelling). This observed tendency was consistent with the findings of the studies by Swain and Lapkin (2001) and Leeser (2004), who examined the LREs generated from dictogloss/jigsaw tasks and dictogloss/passage reconstruction tasks respectively. In both studies, approximately 60% of the LREs were grammatical and 40% were lexical. A more extreme case was found in García Mayo's (2002a) study, where an extremely high proportion of grammatical LREs was found in the text editing (97%), text construction (96%), cloze (96%) and dictogloss tasks (75%). These conflicting results can be due to the nature of the tasks used in the experiments (Storch and Wigglesworth, 2007; Storch, 2008).

2.4.2 Translation as a Communicative Task

A communicative task, according to Nunan (1989: 10), is 'a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting

in the target language while their attention is principally focused on standing alone as a communicative act in its own right'. However, Swain (1997a: 119) points out that there is no reason why communicative tasks cannot be tasks that encourage students to communicate about language use, such as grammar:

> …it is certainly feasible for a communicative task to be one in which learners communicate about language, in the context of trying to produce something they want to say in the target language.

Swain (1997b: 2) expands the definition of tasks in communicative classrooms to suggest that tasks 'can equally as well be focused on form' as long as students 'engaged in the act of meaning-making', such as in the case when L2 learners encounter difficulties in how to best express their ideas or deciding on lexical or grammatical choices. According to Swain, the attempt to solve these linguistic problems jointly in collaborate dialogue is an attempt to 'make meaning' and this kind of interaction in co-constructing linguistic knowledge serves communicative purposes. In a series of studies, Swain (1995, 1997a, 1997b, 1998, 2000) has demonstrated how communicative acts and interaction can take place with students paying attention to language use while establishing 'their own goals and agenda as to what they focused on' (1997b: 17). As Coughlan and Duff (1994: 190) put it, 'any event that generates communicative language is unique – an activity born from a particular constellation of actors, settings, tasks, motivations, and histories'.

The notion 'communicative' has often been tied to the spoken language and because of the ways translation was traditionally used, such as in the case of the Grammar-Translation Method, translation is often considered unhelpful, if not

detrimental, for developing students' oral fluency and communicative competence. As Gnutzmann (2009: 55) remarks:

> Since translation is said to favour reading and writing, critics have described it as un-communicative. Translation was also considered as an individualistic and non-interactive procedure because students, when translating, generally used to work on their own and not in the discursive atmosphere of a group.

However, Gnutzmann (2009: 55) points out that translation in fact can be effectively used for communicative purposes because it can easily engender discussions ranging from 'linguistic correctness' to 'stylistic adequacy'. In fact, there has also been increasing voices pointing to the potential benefits of using translation in a communicative way and for communicative purposes, with more emphasis placed on enhancing students' listening and speaking proficiency. Carreres and Noriega-Sánchez (2011: 295) highlights the communicative function of translation in real-world practice:

> Translation as it takes place in the real world constitutes, in essence, a communicative activity. Indeed, the various definitions that have been given of translation competence back up the notion of the translator as an expert communicator. Therefore, the use of translation activities in language teaching, far from being incompatible with a communicative framework, can work to support and enhance communicative classroom practices.

Whereas the claim that translation is uncommunicative still remains a theoretical assertion, a few recent studies have provided empirical evidence to the potential of using translation for communicative purposes (Danan, 2010; Källkvist, 2013a, 2013b).

Danan (2010: 448) examines L2 learners' language gains through working on dubbing tasks, where students translated from L1 to L2 and used software to record their translations. Her findings show that translation tasks helped students to expand their vocabulary and sentence structure and develop better oral fluency and pronunciation. Meanwhile, the translation tasks also engendered 'interesting class analysis and discussion' and high levels of enthusiasm among students. Danan's study shows how translation can be exploited as communicative and motivating tasks to be used in L2 classrooms, with benefits extended from linguistic gains such as vocabulary expansion to improvement in the spoken language. This seems to counter the theoretical assumption that translation sacrifices listening and speaking skills.

However, as noted earlier, in order to have a fairer evaluation of using translation as a pedagogical tool, the results of translation tasks should be compared with those of non-translation tasks (Pym, Malmkjær and Plana, 2013). The most relevant empirical work that examines the potential for using translation for communicative purposes by comparing it with non-translation tasks is perhaps the two recent studies carried out by Källkvist (2013a, 2013b), which examine the outcomes of exploiting translation as a communicative task in L2 classrooms and reveal that translation can effectively encourage the use of language to discuss language aspects, as measured by language-related episodes (LREs).

Källkvist (2013a: 219) examined classroom 'languaging' - the use of language to discuss language-related issues - engendered by translation tasks compared to several grammar-focused tasks (i.e. non-translation tasks), particularly with involvement of difficult structures in the use of which 'even advanced-level L2 users continue to commit errors despite 9-10 years' classroom instruction'. The participants were undergraduates of English from a Swedish University. They were divided into two

experimental groups ('Translation Experimental Group' and 'No Translation Experimental Group') using a matched-pair design[19] and randomly assigned to different tasks. The translation tasks required students to translate from Swedish (L1) into English (L2). They were designed using isolated sentences which contain tokens of the target structures covered in the course and resemble those in grammar workbooks commonly used in Swedish universities. The non-translation tasks were gap-filling, noticing, composition and text-editing tasks that mirrored the translation tasks in terms of their linguistic content. The gap-filling task included gapped single sentences to be filled, left blank or rearranged. The noticing task required students to underline and provide meta-linguistic comments on the target structures. The composition task required students to write a short essay in the L2 on a given topic using certain target structures provided, while the text-editing task required students to revise a text containing errors in the target structures. In designing the tasks, Källkvist selected certain grammatical structures (hereinafter known as target structures) which were often used inaccurately by advanced Swedish-speaking learners of English in a placement test completed by the students earlier in the semester. The target structures were introduced in class before the tasks were assigned to the students and whole-group discussions took place upon completion of the tasks.

Källkvist's data was drawn from 19 audio-recordings collected during class time over 7 weeks. In analyzing her data, Källkvist (2013a: 222) operationalized languaging as the quantity of LRE turns. Each 'utterance about language' was coded as an LRE. Each LRE 'deals with one linguistic issue'. LRE turns that dealt with the target structure were distinguished from LRE turns that concerned other language features.

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[19] This is a kind of randomized block design, with the subjects being grouped into pairs based on some blocking variables and subjects within each pair randomly assigned to different treatments. In Källkvist's study, both experimental groups contained students who were low, middle and high performers as measured in a multiple-choice placement test of L2 grammar.

LREs uttered by teachers and students were coded as 'teacher LRE turns' and 'student LRE turns' respectively. A student LRE turn was categorized as 'student-initiated' or 'teacher-prompted'. The former refers to an instance where the student took the initiative to produce an LRE without being prompted by the teacher, while the latter refers to a situation where a student produced an LRE after being prompted by the teacher. According to Källkvist (2013a: 222):

> Student-initiated LRE turns may arise due to a number of factors. They may signal developmental readiness to attend to a particular feature […] the LRE may reflect a gap in their L2 interlanguage […] in translation they may reflect aspects of language that are particularly difficult to translate…or the LRE turn may be a reflection of more scope for variation in English for certain lexical items, expressions, or structures […] Such cases may lead to a range of possible alternatives and equally correct vocabulary items or expressions.

The findings show that, during the whole-class discussions carried out upon completion of the tasks, translation tasks elicited higher proportions of student-initiated languaging turns, as measured by LREs, than any of the four non-translation tasks that targeted the same grammar structures. This suggests that translation can encourage high levels of student engagement and attention, which are conducive to L2 learning. In contrast to the anti-translation argument that the presence of L1 will hamper L2 learning and detract students' attention from L2 as noted earlier (see Section 2.2.1.3), the empirical evidence in Källkvist's study (2013a) suggests that the reverse is true, i.e. the presence of both L1 and L2 encourages learners to closely observe L2.

In terms of content, the results show that the languaging engendered by translation tasks is more focused on the lexical level than the grammatical level. The LRE turns generated by students who worked on translation tasks (35%) show significantly less focus on the targeted grammatical structures, compared to gap-filling (97%) and noticing tasks (95%), and instead concern a wider range of language features, particularly vocabulary. As Källkvist (2013a: 229) observes:

> The translation tasks turned out to provide a forum where students raised questions relating to a range of language features, covering anything from aspects of lexical meaning, grammar, the use of dependent prepositions, variability across different standard English varieties, to punctuation and writing conventions.

Composition tasks (19%) and text-editing tasks (42%) also had a relatively low percentage of LREs focusing on the target structures. Such results suggest that translation may not be as suitable as gap-filling and noticing tasks in focusing students on grammar, except, as Källkvist (2013a: 229) suggests, that when the texts 'are devoid of challenging vocabulary or expressions or vocabulary that is rich in near-synonyms', there may perhaps be a stronger focus on grammar. In other words, translation tasks are more helpful in facilitating the learning of L2 vocabulary or expressions than L2 grammar. This phenomenon is interesting if taking into consideration the general association of translation with the Grammar-Translation method. Overall, based on her findings, Källkvist (2013a: 230) sees a positive relationship between translation and L2 learning due to 'its potential to engender student-initiated interaction':

Translation tasks may be a suitable choice when the teacher's main priority is to facilitate and stimulate student interaction in general, for example as classroom ice-breaking tasks.

Building on this study, Källkvist (2013b) compared student-teacher interaction initiated by translation and composition tasks. The data were sourced from 3 of the 19 recorded lessons, where student-initiated LRE turns in a teacher-led whole-class discussion were examined. The results show that the questions raised by the translation and non-translation groups were similar in nature but different in frequency. Similar student-initiated interaction was engendered by the translation and composition task, but students who engaged in discussions about translation tasks raised questions more frequently. This, according to Källkvist (2013b: 128), may be a task-type effect:

The analysis suggests that there are two task-inherent factors that impacted on students' readiness to initiate questions relating to the two prominent discourses in place, accuracy and variation: firstly, there is a comparison phase between the source language text and the target language text that is not necessarily present in a composition task, and secondly, there was challenging vocabulary in the translation task, leading to numerous student-initiated questions concerning that.

Overall, Källkvist's findings (2013b: 129) suggest that direct L2 tasks (non-translation tasks such as composition) can generate student-initiated interaction but 'there are fewer matters that give rise to student comments and questions'. Translation tasks, on the other hand, seem to have greater potential to contribute in this regard. This corroborates Carreres' claim (2006) that translation tasks can help to invite discussion as students naturally defend their versions; it also accords with the findings of Danan's study (2010:

448) that translation tasks can lead to 'interesting class analysis and discussion' where students show a high level of enthusiasm.

2.4.3 Theoretical Perspectives: LRE-inducing Tasks in L2 Classrooms

Pedagogical reasons for using LRE-inducing tasks in L2 classrooms can be traced to a variety of constructs that have emphasized the importance of attention for L2 learning/acquisition. Particular consideration can be given to the Noticing Hypothesis (Schmidt, 1990), the Output Hypothesis (Swain, 1985), and the Interaction Hypothesis (Long, 1983, 1996).

The Noticing Hypothesis asserts that noticing a language item is a necessary condition for L2 learning. According to Schmidt (1990: 32), noticing is a 'conscious attention to input'; it helps an input be consciously processed and acquired (also see Robinson, 1995; Skehan, 1998). This notion was built on Schmidt's own experience in learning Portuguese and his recognition that the L2 items he was able to produce was the ones he consciously attended to (Schmidt and Frota, 1986). Schmidt therefore argues that conscious learning that involves noticing enhances L2 learning: 'those who notice most learn most, and it may be that those who notice most are those who pay attention most'. Schmidt thus supports the inclusion of L2 activities that can raise learners' conscious attention to input. Although consensus has not been reached regarding the 'necessity' of noticing (e.g. Truscott, 1998), it has been widely perceived that noticing is facilitative of L2 development.

The role of attention (noticing the gap) is also reflected in Swain's (1985) Output Hypothesis, which was proposed as a reaction and in deliberate contrast to Krashen's (1985) Input Hypothesis, which states that language input such as reading and listening comprehension is most essential in promoting L2 acquisition and through

comprehending input learners will develop sufficient competence in the target language and thereby naturally develop fluency in writing and speaking. In short, Krashen (1985) asserts that comprehensible input - input that is slightly beyond learners' current L2 knowledge (i.e. 'i+1' level) - is central to L2 acquisition. However, some studies argue that comprehensive input alone is not sufficient for L2 acquisition. In conducting research in a French immersion education setting in Canada, Swain (1985) found that the L2 learners were extensively exposed to L2 input but failed to develop target-like L2 morpho-syntactic production. She suggests that this phenomenon can be attributed to a lack of L2 output and puts forward the Output Hypothesis, a construct built on the notion that L2 learning takes place when learners encounter problems, notice gaps and make efforts to modify their L2 output. The Output Hypothesis proposed by Swain (1985: 125-126) states that saying or writing something in the target language allows learners to (1) 'notice a gap between what they want to say and what they can say', (2) test their hypotheses about the accuracy of their linguistic formation against feedback from the interlocutor, and (3) reflect on their use of the target language, such as discussing the meaning or appropriateness of certain linguistic items or correcting each other. Swain (1993, 1995) suggests that one function of output[20], especially when learners talk about language use (also known as 'metatalk' and often operationalized as LREs), is that it creates opportunities for learners to reflect on their linguistic deficiency, triggers their attention, and may lead them to enhance their linguistic accuracy. Although Schmidt (1990) and Swain (1985) used the term 'noticing' in different senses and with different foci, where Schmidt's concept of 'noticing' concerns learners' conscious noticing of the input's formal feature and Swain's 'noticing of the gap' (1985,

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[20] In her more recent works, Swain points out that the term output may easily be misinterpreted as a product that learners are able to produce and thus proposes alternative terminologies such as collaborative dialogue (2000) and languaging (2006) to reflect its function as a cognitive activity used to build linguistic knowledge.

1995, 1998, 2001) refers to learners' awareness of the gap between what they want to say and what they are able to say, both hypotheses have highlighted the importance of attention to L2 learning.

Long's Interaction Hypothesis (1983, 1996) also highlights the importance of attention for L2 development, though to Long noticing is operationalized as selective attention. The early version of the Hypothesis (1983) emphasizes that conversational interactions can enhance L2 learning. The revised version of the Hypothesis includes attention to form as one of the benefits of conversational interaction for L2 learning:

> It is proposed that environmental contributions to acquisition are mediated
> by selective attention and the learner's developing L2 processing capacity,
> and these resources are brought together most usefully, although not
> exclusively, during negotiation for meaning (Long, 1996: 414).

According to Long, interaction not only provides learners with opportunities to notice language features or problems, but pushes learners to modify their output whenever necessary. For instance, when learners say something but their interlocutors do not understand, meaning-negotiating strategies such as clarification requests, comprehension checks, paraphrasing or different forms of modification may be adopted. Meanwhile, in receiving feedback on their L2 output learners may be encouraged to improve the comprehensiveness of their language productions. Long's study (1996) has placed more emphasis on the role of learner-teacher interaction as dialogues between learners and teachers may guarantee more opportunities for learners to obtain comprehensible input from native-like interlocutors (the teacher). However, a growing body of literature has given weight to investigation into the role of learner-learner interaction, where learners 'engage in problem solving and knowledge building' during

collaborative dialogues with their peers (Swain, 2000: 102), and pointed out that collaborative dialogues between peers motivate learners to solve linguistic problems and mediate L2 learning (Swain, 1995, 1998, 2000; Pica *et al.* 1996; Swain and Lapkin, 1998; Mackey *et al*. 2003; Adams, 2007; Watanabe and swain, 2007).

The above theoretical perspectives offer some justification and rationale for adopting tasks that can draw learners' attention to language, create opportunities for learners to produce output, and encourage interaction in L2 classrooms, all of which seem to be manifested in tasks that engender language-related episodes (LREs). To date LREs have received growing attention and are often used as a measurement to quantify learners' attention to linguistic forms across different tasks and under different settings (Swain, 1995, 1998; Storch, 1998, 2008, 2013; Swain and Lapkin, 1998, 2001; Williams, 1999, 2001; García Mayo, 2002a, 2002b; Leeser, 2004; Alegria de la Colina and García Mayo, 2007; Mennim, 2007; Kim, 2008; Basterrechea and García Mayo, 2013; Källkvist, 2013a, 2013b). They have been considered a sign of learners' attention to their own L2 output and it has been assumed in a considerable body of research that learners' attention to form is conducive to L2 learning (Schmidt, 1990; Doughty, 1991; Larsen-Freeman and Long, 1991; Ellis, 1993, 1994; Fotos, 1993; Swain, 1995, 1998, 2005; Swain and Lapkin, 1998; Norris and Ortega, 2000; Spada and Tomita, 2010). LREs may be signs of L2 learning in progress (Swain, 1998; Swain and Lapkin, 2001; Gass and Mackey, 2007) and, as Swain (1998: 69) puts it, 'may serve the function of helping students to understand the relationship between meaning, forms, and functions in a highly context-sensitive situation'.

2.4.4 Collaborative Dialogue and Language Development

In recent years, there has been increasing call for the use of form-focused tasks

featuring collaborative dialogue as it is believed that by verbalizing the problems they encountered and receiving feedback from their peer learners may gain more attention to form (e.g. Kowal and Swain, 1994; García Mayo, 2002a, 2002b). Focus on form, according to Long and Robinson (1998: 23), 'refers to how focal attention resources are allocated…during an otherwise meaning-focused classroom lesson, focus on form often consists of an occasional shift of attention to linguistic code features – by the teacher and/or one or more students – triggered by perceived problems with comprehension or production'. Collaborative dialogue, as defined by Swain and Lapkin (1998: 102), is 'dialogue in which speakers are engaged in problem solving and knowledge building'. Swain (1995) suggests that language tasks can be designed and devised in a way that allows learners to discuss the language they produce themselves and such collaborative dialogue may enhance their awareness of linguistic forms. Languaging, collaborative dialogue and LREs (also referred to as metatalk) are subtly different concepts that are sometimes used interchangeably in literature in this area. Collaborative dialogue is a kind of languaging, but a narrower concept in that it does not include 'self-directed speech to explain concepts to the self' (Negueruela and Lantolf, 2006: 86), whereas LREs are segments of collaborative dialogue where learners deliberate about language use such as vocabulary and grammar. They are popular measurements of collaborative dialogue/languaging[21].

The benefits of collaborative dialogues have been manifested in the opportunities they offer learners to communicate with each other while co-constructing knowledge about language, thus promoting L2 development. For instance, Kim (2008) examined the LREs of the same task that was performed in different ways (i.e. individually versus

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[21] In this study, the terms languaging and collaborative dialogue are all used in same sense as adopted in Källkvist's study (2013a: 218) as instances where learners use language to 'discuss various aspects of language use, for example, whether a word or expression is formally correct and stylistically appropriate', with attention drawn to LREs as their unit of measurement.

collaboratively), with the objective to compare the effectiveness of collaborative tasks with individual tasks on L2 vocabulary acquisition. A total of 32 learners of Korean as a second language (KSL) were randomly divided into two groups. One group completed the assigned dictogloss task individually while thinking aloud (i.e. there was no collaborate dialogue). The other group completed the same task but in pairs (i.e. collaborate dialogue took place). Their LREs were identified using transcripts of their think-aloud protocols and collaborative dialogue respectively. In this study, a pre-test and two post-tests were used as an instrument to measure the participants' learning of L2 vocabulary. In the pre-test, the learners were asked to select unfamiliar words from a list of 50 vocabulary items selected from the dictogloss text. The immediate post-test and the delayed post-test were administered upon completion of the dictogloss task. Both post-tests were adapted using Paribakht and Wesche's (1997) Vocabulary Knowledge Scale (VKS), which consists of self-report and performance items to assess learners' self-perceived and demonstrated knowledge of given target words. The findings show that a similar number of lexical LREs were produced by the Individual group and the Collaborative group, but the Collaborative group had more correctly resolved LREs than the Individual group and also showed significantly better performance in the vocabulary tests. Such findings suggest that tasks that allow for collaborate dialogues may be more conducive to L2 vocabulary learning than individual tasks where no collaborate dialogues take place, lending further support to the positive relationship between collaborative dialogue and L2 development (Swain and Lapkin, 1998, 2001).

In the literature, collaborative dialogue has been manifested in different settings, such as whole-class discussions (Källkvist, 2013a, 2013b) and interactions between small groups or dyads (pair work) who are assigned collaborative tasks, such as

dictogloss (Kowal and Swain, 1994; Storch, 1998; Leeser, 2004; Kim, 2008; Kim and McDonough, 2008), story completion (Swain and Lapkin, 1998) and collaborative writing tasks (Storch, 2001; Watanabe and Swain, 2007), etc. A number of studies on the focus-on-form have examined how different types of tasks elicit LREs from L2 learners, though the attention has mainly been on monolingual tasks. For instance, many studies have pointed to the effectiveness of dictogloss[22] (Wajnryb, 1990; Kowal and Swain, 1994; Swain, 1998; Swain and Lapkin, 2001; Leeser, 2004) and text reconstruction tasks[23] (Storch, 1998, 2008; García-Mayo, 2002a, 2002b) in facilitating collaborative output production and discussions of grammatical or lexical problems, as reflected in the quantity of LREs produced during the task.

Swain (1998) assigned dictogloss tasks to 48 students from two grade-8 classes of a French immersion program and analyzed their negotiation on form. A post-test formulated using the language problems discussed in the LREs was administered to the students to evaluate the effect of the dictogloss tasks on their L2 learning. The findings show that the students tended to have correct responses to questions that had been discussed and correctly resolved during the dictogloss tasks. This suggests that solutions generated to linguistic problems during LREs were transferred to subsequent L2 performance. In this sense, LREs may promote L2 learning by creating opportunities for learners to consciously reflect on language problems. As Swain (1998: 79) notes, 'increasing the frequency of LREs in pedagogical contexts' can be helpful in 'promoting second language learning'.

Swain and Lapkin (1998) examined the LREs occurring in the dialogues of 12 pair of French immersion students who completed a jigsaw task. A pre-test designed based

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[22] Dictogloss is a task where learners listen to a preselected text read by the teacher, take notes of key words, and pool together their resources to reconstruct the text so that it resembles the original text.
[23] Text reconstruction is a task that provides learners with content words and requires learners to insert necessary grammatical words or change verbs wherever to reproduce 'a meaningful and grammatically accurate' text (Storch, 1998: 191).

on the students' interactions in a pilot study and a post-test tailor-made based on the LREs discussed in the dialogues were administered. The findings point to a positive correlation between the quantity of LREs and the posttest scores. In carrying out a close qualitative analysis on the conversation of a pair of students, Swain and Lapkin (1998: 333) observed how the dialogue promoted communication and L2 learning, with the dyad 'using language to co-construct the language they need to express the meaning they want and to co-construct knowledge about language'.

In their more recent study, Swain and Lapkin (2001) focused on two French immersion classes, comparing learners' task performance across a dictogloss and a jigsaw task, which shared similar content but differed in format. Each class was assigned one of the tasks. A pre-test and pro-test created using linguistic items discussed in the LREs were included to measure the impact of the two communicative tasks on L2 learning. The findings show that there was no significant difference in the number of LREs across the two tasks (also see Lapkin, Swain and Smith, 2002), which means that the degree of attention learners paid to language form was similar in both the dictogloss and jigsaw tasks. No significant gain was found in comparing the average scores of the pre-test and post-test of both classes. However, Swain and Lapkin reported on many cases where learners gave correct answers to post-test items tailor-made from their discussed LREs, suggesting that this is a sign of learners being able to retain the knowledge co-constructed in their collaborative dialogues.

Storch (1998: 177) compared L2 learners' attention to grammatical forms across four different types of tasks, including 'multiple choice', 'rational deletion (cloze)', 'text reconstruction' and 'short composition', which were completed collaboratively in dyads (one triad due to uneven student number). The multiple choice asks learners to choose the most appropriate grammatical form to complete the given text; the cloze

requires learners to fill in the gaps with an appropriate word; the text reconstruction asks learners to insert appropriate function words or inflectional morphemes so that the text with given content words becomes grammatically correct and meaningful; the short composition requires learners to describe the English course they had completed. The audio-taped collaborative pair talk is used as the primary source of data in Storch's study, with LREs being coded and used as units of analysis. Retrospections, where students first listened to the recording of their pair talk before they reflected on and provided feedback on the tasks, and the researchers' observation notes were used as supplementary data. Overall, the findings show that the text reconstruction task was most effective in eliciting grammatical LREs, i.e. drawing learners' attention to grammatical choices and accuracy. The findings show tasks with more overt focus on grammatical forms, including the multiple choice, cloze and text reconstruction tasks, elicited a larger proportion of LRE turns than the composition, which is devised with least focus on grammatical form. The percentage of LREs to the total LRE turns in multiple choice, cloze, text reconstruction and short composition was 81%, 71%, 85% and 28% respectively. This suggests that the more structured the task is, the more LREs that task can elicit. As Storch (1998: 187) observed, 'it seems that when composing the students were more concerned with getting the content right than with ensuring that the text produced was accurate'. Meanwhile, the feedback from the students shows that 'it was the lack of familiarity with collaborative writing and the composition topic which contributed to the difficulty students experienced with this task'. Hence, Storch suggests that in designing tasks the topic choice needs to be taken into consideration.

Williams (2001: 333) investigated the relationship between LREs and L2 development by examining the LREs and post-test scores of eight learners. The posttest items were tailor-made including questions drawn from the learners' correctly resolved

LREs. The findings indicate a close connection between LREs and L2 learning, where 'most LREs appear to be closely linked to accurate performance on the test, with overall scores ranging from 40-95%' and correctly resolved LREs almost always led to correct responses on the post-test. As Williams describes, attention to form can emerge in different ways, such as learners requesting help, negotiating with their peers or offering peers feedback and such attention in LREs seems to help learners acquire the concerned linguistic feature. Williams (2001: 338) therefore sees a positive tie between LRE-inducing tasks and L2 learning:

> There was clearly an enormous benefit derived from the interaction and collaborative practices in these classrooms. Learners profited considerably from the responses and input provided by their classmates as well as being pushed to greater autonomy. The findings point to a learner-centered approach that is broadly understood as responding to the needs of the learner, one that includes a balance in the roles of teachers and learners and the active participation of all in classroom interaction.

2.4.5 The Impact of Engagement Level on L2 Learning

Storch (2008) later conducted a study focusing on the metatalk (LREs) of 22 Asian ESL learners who completed a text reconstruction task in self-selected pairs. One major finding arises upon a close analysis of the quality of learners' engagement, which shows that the nature of LREs range from 'elaborate engagement' to 'limited engagement'. Storch (2008: 100-101) defines 'elaborate engagement' as instances where learners 'deliberated over the language items, sought and provided confirmation and explanations, and alternatives', whereas 'limited engagement' is instances where learners 'simply stated the linguistic item without further deliberation', such as in the

case where one participant makes a suggestion but the other does not respond or only responds with a phatic utterance or repeats what was suggested. Storch's findings show a close connection between the quality of attention and its impact on L2 learning, which was measured by examining whether the participants were able to apply the knowledge about a certain linguistic choice co-constructed during their pair talk in dealing with the assigned text reconstruction task to the subsequent individually reconstructed text. The learners were assigned two versions of a text reconstruction task. They completed Version A in the first week in pairs, with the pair talk being audio-recorded, and then completed an isomorphic version of Version A, known as Version B, individually in the subsequent week. The two versions share the same theme and have approximately 14 matching grammatical items. It was found that learners' engagement with linguistic choices at both elaborate and limited level contributed to learning or consolidation of the targeted structures, but elaborate engagement was more beneficial to both participants in the pair talk than limited engagement in this regard. Thus, while suggesting that language tasks which require written output and involve collaborative dialogue such as pair discussions and text reconstruction may benefit L2 learning by creating opportunities for learners to 'verbalise and deliberate about language', Storch (2008: 111) points out that students' engagement level also has an impact on L2 learning. In particular, 'it is deeper attention to language reflected in elaborate engagement over language choices that seems more effective in leading to language learning or in the very least to a more robust memory of learnt forms'.

2.4.6 Task Effects of Translation for Communicative Purposes

While much existing literature on LREs (or languaging/metatalk) has examined the task effects of monolingual tasks, investigation into the task effects of translation is limited. Suzuki and Itagaki (2009) carried out a study on the effects of translation tasks on languaging, where translation was treated as two types of de-contextualized grammar exercises. The comprehension-oriented grammar exercise requires students to translate from L2 (English) into L1 (Japanese), whereas the production-oriented exercise requires students to translate from L1 (Japanese) to L2 (English). Their results show that the comprehension-oriented exercise elicited a significantly greater amount of languaging about grammar than the production-based exercise. However, their study examines the written mode rather than the oral mode of languaging and hence does not provide much evidence about the communicative outcomes of the tasks.

To date, the only evidence we can draw on is to be found in Källkvist's pioneering studies (2013a, 2013b) on the effects of translation on engendering LREs in comparison with other types of tasks. The strong presence of LREs elicited from discussions of the translation in Källkvist's empirical studies suggests that translation can help to draw learners' attention to language use, allow for collaborate dialogue, and enhance interaction in L2 classrooms. Such empirical results can be linked to theoretical discussions on the benefits of attention, collaborate dialogue (output) and interaction.

Källkvist's experimentation (2013a, 2013b) on the use translation as a form-focused task in collaborate dialogues (in the form of whole-class discussion) has demonstrated how translation can be devised as a communicative task, where L2 learners were able to produce and interact in the L2. Her findings that translation can engender LREs, which represent a form of interaction in the target language, have

provided some empirical evidence on the potential for using translation as a communicative task in L2 classrooms.

2.5 Learners' Perceptions about the Use of Pedagogical Translation

The discussion above concerns theoretical arguments or empirical results presented by scholars, educators, teachers, theorists or researchers. However, multiple voices should be taken into consideration. A number of studies show that although the use of translation in language learning has been discouraged by many teachers, it is still widely employed by learners to learn L2 (O'Malley et al. 1985; Chamot et al. 1987; Omura, 1996; Liao, 2002). This phenomenon can be attributed to learners' preconceived beliefs about the effectiveness of translation in language learning.

Ajzen and Fishbein's theory (1980: 7) of reasoned action suggests that 'attitudes are a function of beliefs'. According to the theory, behaviours stem from behavioural intentions, which are in turn triggered by attitudes and subjective norms concerning the behaviour (Ajzen and Fishbein, 1980). If a person believes that a certain behavior will yield positive outcomes, he or she will have a good attitude when performing that behavior. The theory can be applied to language learning. If learners have positive feelings toward the use of translation for language learning, they are more likely to be motivated and to benefit from it; the opposite is true if translation is negatively perceived. An understanding of learners' beliefs about language learning facilitates appropriate language planning or instruction (Horwitz, 1999).

In recent years, an increasing number of scholars have begun to investigate learners' beliefs about language learning and a consensus is developing to the effect that learners' beliefs can influence the outcomes of language teaching and learning (O'Malley et al, 1985; Horwitz, 1988, 1999; Yang, 1992; Kern 1995; Park, 1995; Truitt,

1995; Oh, 1996; Kunt, 1997; Liao, 2006). According to Wenden (1986: 4), learners' beliefs 'work as a sort of logic determining consciously or unconsciously what they did to help themselves to learn English'. Wenden (1987) also observes that learners' beliefs have a significant impact on their approach to foreign language learning.

Interestingly, different language groups have different views about the use of translation for L2 learning. Horwitz (1988) found that the majority of Spanish and German students considered that 'learning to translate from their native language to their target language was the most important part of language learning', but most French students did not share the same opinion. Subsequently, Horwitz (1999) examined beliefs about language learning among different cultural groups through reviewing the studies conducted by Horwitz (1988), Yang (1992), Kern (1995), Park (1995), Truitt (1995), Oh (1996), and Kunt (1997)[24]. The comparison offers an overview of the beliefs held by students from a wide range of nationalities, including French, German, Spanish, Japanese, Turkish, Korean, and Taiwanese. Results revealed that 'most of the EFL students and the American students of Spanish, German, and Japanese believed that learning to translate was the most important part of language learning, although there was wide variation in the amount of support' (p.566).

In recent years, there have been more studies on L2 learners' perspectives on the use of translation for language learning. Sewell (1996:137) carried out a survey on the teaching of translation at universities in Great Britain and found that nineteen of the twenty-one institutions which responded to her questionnaire indicated using translation "as a way of improving students' linguistic proficiency", such as consolidating students'

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[24] These studies were chosen for comparison because they all used the BALLI (Beliefs About Language Learning Inventory) developed by Horwitz (1985) as a major instrument to assess teachers' and students' opinions about issues related to language learning.

L2 constructions. It was observed that many of the respondents favored[25] the use of translation:

> It would seem that very many lovers of languages love to translate, it is a very motivating activity, more so perhaps than some other language learning activities conducted exclusively in the target language. This feature is perhaps something teachers can capitalize on. (Sewell, 1996: 139)

In a second study, Sewell (2004) reports that college students in Britain considered translation activities to be close-ended and predictable and therefore felt comfortable and rewarded when they completed the activity.

Carreres (2006) distributed a questionnaire to thirty-one Spanish-language students at the University of Cambridge. Their responses show that most learners had positive attitudes to the use of translation exercises, and all of her respondents from the University of Cambridge gave overwhelmingly positive feedback on the use of translation for L2 learning; they considered translation one of the most effective methods to learn L2. Carreres notes that this feedback convinced her to adopt translation exercises more substantially in L2 classrooms.

In conducting the study that compared the quality of direct writing and translated writing by 48 Japanese university students, as mentioned earlier, Kobayashi and Rinnert (1992) also administered a questionnaire to the same group of participants. Most of the subjects, especially those with higher proficiency, reported that they preferred direct composition rather than translation because the former allowed them to use more familiar words and structures, while the latter imposed more difficulty in conveying

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[25] However, it should be noted that the actual results of Sewell's (1996) survey study, as reported in the Appendix of her article, show that 2 out of the 6 responses given by her students appear to be clearly in favour of translation, 1 out of the 6 appears to be in between the two positions, but the remaining responses appear to provide a critical evaluation of pedagogical translation.

certain expressions. However, the participants generally acknowledged that translation gave them more opportunity to develop their ideas and express their views. Some felt that translation played a vital role in their vocabulary acquisition because they could search for words from the dictionary without much difficulty.

Similarly, in her study of L2 learners' writing and translation processes, Uzawa (1996: 288) also interviewed her 22 Japanese participants in the prewriting sessions. Most students in her study perceived writing and translation tasks as helpful for learning and improving their L2. Interestingly, students who performed better in the L2 writing tasks of her study considered translation tasks more helpful than L2 writing in that they forced them to 'use words and expressions that are slightly beyond their levels'.

Wen and Johnson (1997) conducted an in-depth qualitative study on 10 Chinese students majoring in English to examine differences between high and low achievers. The data from interviews and diary studies show conflicting results. Lower-level students did not consider translation a hindrance to their progress, while higher-level students asserted that L1 impeded their L2 learning. This suggests that less advanced L2 learners have positive views on translation while more advanced L2 learners have negative views.

Hsieh (2000) surveyed the attitudes towards and thoughts about translation held by 52 Taiwanese college students. The majority of the respondents reported that translation benefitted their L2 learning, by raising their awareness of the multiple meaning of English words and extending their vocabulary knowledge.

Liao (2006: 208) investigated L2 learners' views on the use of translation for language learning, using both quantitative and qualitative methods. A total of 351 Taiwanese colleges students were involved in his study. It was found that Taiwanese college students frequently used translation as an approach to understanding and

producing English. In particular, junior college students generally 'endorsed the belief that translation played a positive role in their L2 (English) learning experiences despite their acknowledgement of the negative effects of translation'.

These survey results suggest that translation is widely perceived as an effective language learning tool in both Western (Sewell, 1996, 2004; Carreres, 2006) and Asian context (Kobayashi and Rinnert, 1992; Uzawa, 1996; Wen and Johnson, 1997; Hsieh, 2000; Liao, 2006) although in some cases (Kobayashi and Rinnert, 1992; Wen and Johnson, 1997) the perception of students with different proficiency levels varied greatly. Moreover, one caveat should be taken into account: The perception of 'translation' may not be the same to participants in the studies mentioned about. Their experiences may differ with respect to the amount, type and form of exposure they have had to translation, and therefore it is difficult to make broad generalizations. Nonetheless, learners' positive beliefs about and attitudes to the use of pedagogical translation constitute a good reason for further research into how translation can be used to optimal effect in L2 classrooms.

Chapter 3 Methodology

This chapter presents the methodology of the present study, including the research design, instruments, samples, settings, and data collection. It also details the procedures of handling and analysing Data A, Data B and Data C, which concern (1) students' engagement in class discussions (Data A), (2) students' improvement in writing proficiency (Data B) and (3) students' perspectives on the use of different tasks (Data C).

3.1 Introductory Remarks

This study was inspired by a writing and class discussion session carried out in an English lesson. A L1-L2 translation assignment was distributed to 12 students and a L2 writing assignment with the same topic was allocated to another 12 students in the same class. After collecting their completed work, a class discussion session was carried out and the students were encouraged to share their views on the assignments and raise questions or discuss challenges related to language usage they had encountered while working on the assignments. Most of the students pointed out that the main challenges lay in their lack of knowledge of expressions involved. The translation group indicated that they had much difficulty in expressing a Chinese (L1) concept or word in English (L2), and even with the help of a dictionary they did not know how to use the unfamiliar terms appropriately. They reported that their limited lexical knowledge impeded them from translating smoothly and was the source of some of their grammatical mistakes. The writing group highlighted the same problem and considered that one of their major obstacles in completing the assignments was their lack of lexical knowledge related to

the topic. They had to spend a great deal of time looking for a certain term and even when they found the term in a dictionary, they did not know how to use it properly in the relevant context and that eventually led to more grammatical mistakes. This feedback tallies with the results of their work. In examining the students' L1-L2 translation and L2 writing, it was found that most mistakes were incorrect or inappropriate lexical choices and the top five grammatical mistakes were subject-verb agreement errors, fragments (incomplete sentences caused by missing verbs or subjects, or using dependent clauses alone), incorrect use of parts of speech, incorrect use of punctuation, and incorrect ways of writing relative clauses. Table 3.1 shows some typical mistakes frequently found in the class assignments, with the mistakes underlined.

Table 3.1 Example of grammatical mistakes

Types of mistakes	Translation assignment	Writing assignment
Subject-verb agreement	▪ Small and medium enterprises **plays** an important role in promoting the city's economic development.	▪ It's true that some of the measures **helps** to solve the problem of poverty.
Parts of speech	▪ The government should **broad** the road to let more cars pass through.	▪ Social status may be able to bring you other extra benefits, but it can't **representative** your worth.
Fragment	▪ Independent clause used alone: **Although the new trade agreement may bring economic benefits and job opportunities on Taiwan.**	▪ Subject missing: **Wish the government can solve this problem as soon as possible.**
Punctuation	▪ Macau was once a fishing village**,** it focused on primary industry such as fishing and farming at the olden days.	▪ Hong Kong and Macau are international cities**,** a lot of tourists come to enjoy their vacation.
Relative clause	▪ The large number of the imported labour has led to housing problems, **which the rent of some regions soar heavily these years.**	▪ As the policy is bringing us a great source of tourism, it attracts many investors to Macao to invest **which provides our citizens many job vacancies and opportunities for advancement**.[26]

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[26] The relative clause '*which provides our citizens…*' is additional/explanatory information and therefore should be written as a non-defining clause (i.e. set off by a comma); It would be ambiguous and problematic if this relative clause was meant to be a defining one. In this study, this type of error is considered a 'relative clause' mistake rather than a 'punctuation' mistake because it shows that the student either did not know when to use the two types of relative clauses or how to write them properly.

In total, 114 grammatical mistakes were found in the translation assignments, of which 27 were subject-verb agreement mistakes and 23 were incorrect uses of parts of speech, followed by 19 mistakes in fragments, 17 in punctuation, 15 in relative clauses, and 13 other mistakes such as tenses, passive/active voice, articles, etc (see Figure 3.1).

Grammatical mistakes in translation assignments

- Other mistakes 11%
- Relative clauses 13%
- Punctuation 15%
- Fragments 17%
- Parts of speech 20%
- Subject-verb agreement 24%
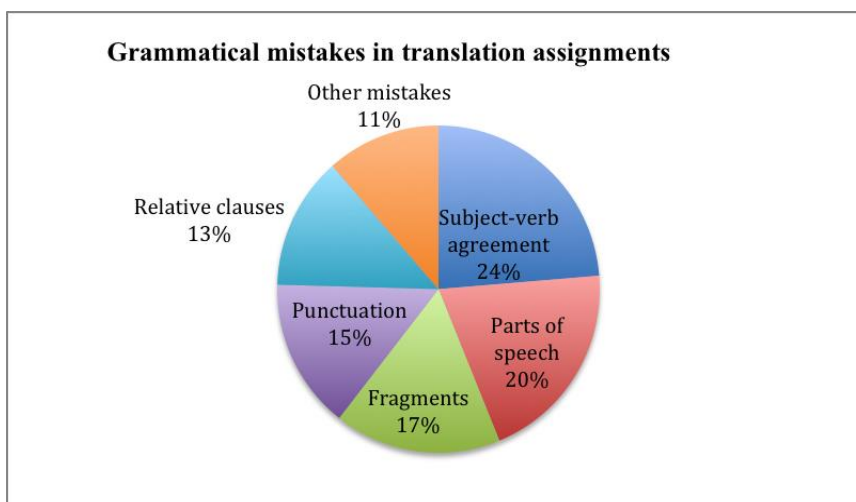
Figure 3.1 Proportion of grammatical mistakes in translation assignments

Similarly, a total number of 119 grammatical mistakes were found in the writing assignments, with 26 subject-verb agreement mistakes, 25 mistakes in parts of speech, 22 in punctuation, 20 in fragments, 14 in relative clauses, and 12 other mistakes (See Figure 3.2).

Grammatical mistakes in writing assignments

- Other mistakes 10%
- Relative clauses 12%
- Punctuation 18%
- Fragments 17%
- Parts of speech 21%
- Subject-verb agreement 22%
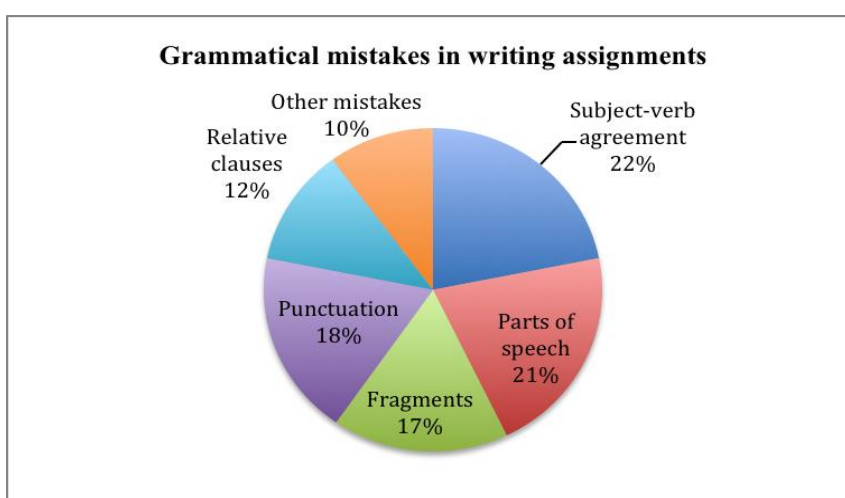
Figure 3.2 Proportion of grammatical mistakes in writing assignments

The students also provided constructive feedback on the suitability and helpfulness of the assignments, which helped to establish more well-developed tasks to be tested in this study. Regarding the appropriateness of the materials, the writing group pointed out that the topic, which was adapted from IELTS academic writing materials, was too general and rather unrelated to their studies and therefore they spent a great deal of time thinking about what to write. The translation group suffered less in this matter but also attributed some of their difficulties in completing the assignment to their unfamiliarity with the topic or content. In view of this, it was considered that more relevant topics and sources should be chosen when designing the translation and writing tasks in the main study. The topics should be narrowed down and be as specific as possible so that the writing group would not need to waste too much time on brainstorming what to write and would have more time to improve their writing proficiency instead. Otherwise, the results of the translation and writing groups might be less comparable due to the different degrees of efforts required. Bearing these essential criteria in mind and in consideration of the students' academic background, it was decided that news articles that comment on social issues would be adapted (for reasons please see Section 3.2.2.1) to design the translation and writing tasks in the main study.

With regard to the usefulness of the assignments, both groups said that they did not learn anything at all because the assignments seemed more like testing their ability to translate from Chinese (L1) into English (L2) or write directly in English (L2), rather than helping them to enhance their L2 writing proficiency and therefore they did not consider the assignments helpful. Given such feedback, it was considered essential to integrate treatments that could allow students to acquire language knowledge or skills in the translation and writing tasks of the main study.

Another deficiency revealed in the class activity was the lack of success in attempting to get students involved in discussions on language-related issues. Only one-third of the discussion among those who worked on the translation assignment was related to word choice and sentence formation. Many of them simply pointed out that the assignment was challenging or it was difficult for them to translate many terms, without giving concrete examples, and hence the issues discussed were often left unattended. Likewise, the writing group did not come up with very concrete questions related to language usage. One third of the responses were basically echoing other classmates' opinion, such as 'I agree with student A' or 'I have the same concern as student B'. The remaining discussions were mainly content-related issues, such as the difficulty in brainstorming ideas to address the given topic or assignment or the difficulty in organizing their paragraphs. The fact that the class discussion sessions did not work well showed that more instructions for the class discussion sessions would be necessary in the main study so that the discussions could be more tied to language-related issues. Another possible reason for the students' reluctance to take part in the class discussion and their tendency to echo others' opinions was probably two aspects of the classroom settings. First, in order to better capture the content of the students' discussions, the students were advised to use a microphone. Most did not use it because they felt uncomfortable, while those who used it also showed nervousness when holding the microphone. The recorded audio-files had uneven sound levels and it was difficult to generate accurate transcriptions. Second, there were too many participants, so the students felt less comfortable in expressing themselves and many echoed the opinions of other classmates. It was therefore considered that an important criterion for the class discussion in the main study was to maintain a smaller group discussion.

3.2 Research Design

In order to address the three research questions, it is critical to use both translation and non-translation (writing) tasks in the experiments. Thanks to the experience gleaned from the above class activities, it was decided that there would be three criteria for setting up this research design:

1. The tasks should be sourced from materials related to the participants' studies to reduce translation or writing difficulty derived from the content.

2. The tasks should include treatments that would allow the participants to acquire or strengthen L2 knowledge or skills.

3. The class discussion settings should be managed in such a way that the participants would be comfortable while not affecting the quality of the audio recording, which provides critical data for this study.

3.2.1 Educational Context and Participants

The study was conducted in a natural learning environment, the classroom. The participants were twenty-six college students who were enrolled in the public administration programme in Macao Polytechnic Institute (MPI), one of the five major higher education institutions in Macao Special Administrative Region[27]. These students were in their third year of learning English at this Institute and enrolled on an authentic course unit 'English V' during the first semester of the 2014/2015 academic year. Their age varied from 20 to 22 years old, with a mean of 21 years old. Among this sample group, 17 were female and 9 were male. They were randomly assigned to the translation

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[27] Macao is one of China's two special administrative regions (Hong Kong being the other). It was formerly administered by Portugal and the official languages are Chinese and Portuguese. However, over 95% of the population are ethnic Chinese and hence the Chinese language is used by the majority. In contrast, Portuguese is used by only approximately 1.8% of the residents. Although Macao has retained various elements of the Portuguese culture and possesses a special environment, the Chinese language has become more dominant since Macao's return to China in 1999.

group ('T-group') and the non-translation group ('NT-group') in the Experiments but with a similar distribution of male and female participants to reduce potential gender effects as much as possible.

Only those who had 100% attendance rate over all 10 sessions were included as participants in this study. The class activities and discussions described above were integrated as part of the course's writing module and were all carried out in a regular college classroom setting. The public administration courses offered English lessons to first-year, second-year and third-year students. The language proficiency of students in their first year and second year varies greatly, probably due to their different background in primary/secondary education, as can be noted in the continuous assessment of students in year 1, 2 and 3 between 2011 to 2014, as shown in Table 3.2.

Table 3.2 Overview of score range of freshmen and sophomores in PA Program

Academic year	Grade	Continuous assessment (range of scores)
2011-2012 Semester 1	Year 1	20.4-90.2
2011-2012 Semester 2		31.7-89.3
2011-2012 Semester 1	Year 2	55.9-88.6
2011-2012 Semester 2		57.7-89
2011-2012 Semester 1	Year 3	65-88.6
2011-2012 Semester 2		62.3-89.6
2012-2013 Semester 1	Year 1	56.3-90
2012-2013 Semester 2		58-88.7
2012-2013 Semester 1	Year 2	52-88.9
2012-2013 Semester 2		64.3-92.1
2012-2013 Semester 1	Year 3	63.5-88.1
2012-2013 Semester 2		69.8-92.3
2013-2014 Semester 1	Year 1	52.7-88.5
2013-2014 Semester 2		50.3-82.6
2013-2014 Semester 1	Year 2	51.5-86
2013-2014 Semester 2		57.8-89.9
2013-2014 Semester 1	Year 3	69.7-88
2013-2014 Semester 2		64.2-91.7

The juniors were selected over freshmen or sophomores as they demonstrate the least difference in proficiency level after having received two years of English lectures delivered in the same way to all of them by the same teacher.

The participants share similar language backgrounds, with Chinese as their first language and English as their second/foreign language ('L2' in this study). English is generally regarded as a foreign language in Macao, but there is no absolute consensus on whether English is a second or foreign language in Macao. In the second language context, the L2 is a language used in the community and L2 learners have easy access to the target language outside the classroom. In the foreign language context, L2 is not a language of the community and L2 learners are not exposed to it in the environment. Although English is not an official language of Macao, it is widely used as a lingua franca and for business purposes. It has become especially important in recent years due to the surge of foreign investors in view of the thriving gaming industry. There has also been an increasing number of foreigners working in Macao, and English is widely used in the workplace; English is also widely used as a medium of instructions in Macao; many students have been looked after by Philippine maids for years and they communicate with each other in English. Hence, it is disputable whether English is a second or foreign language for Macao students. This study does not intend to seek a clear distinction in this matter as the result can vary according to different individuals with different family and educational backgrounds. In this study, the 'L2' simply refers to English.

All of the participants had received at least twelve years of formal English education in Macao before entering the Institute for tertiary education. However, they have different levels of English proficiency due to the variety of curricula at the non-tertiary level. In Macao, primary and secondary education can be divided into five types:

English-medium schools, Chinese-medium schools, English-Chinese schools (these schools have English-medium and Chinese-medium streams), Luso-Chinese schools, and Portuguese-medium schools. Of these, the first three types are most common in Macao. English-medium schools or English sections of Chinese-English schools place more emphasis on English and English textbooks are often used for other students as well. Hence, students from these schools often have relatively better command of English as they have more exposure to the language (Bray and Koo, 1999). As English is merely one of the several components of admission exams to universities and colleges in Macao, admitted students may exhibit extremely different levels of English proficiency. The participants, however, share similar proficiency in the L1, which is Chinese in this context. The Chinese language features many different varieties and Cantonese is one of these, which is mainly used in Southern China. It is the most common spoken language in Macao. Nevertheless, the written language used for formal education in Macao is still Modern Standard Chinese (Mann and Wong, 1999; Sheng, 2004). Hence, although Cantonese[28] is spoken by the majority of the population in Macao, the participants, who are ethnically Chinese and have been receiving formal education in Chinese, are considered native users of the Chinese language, which is referred to as L1 in this study.

At the beginning of the semester, the participants were notified[29] about the aims of the research and the procedures involved. It was clear to them that participation in the study was voluntary. They had the right not to participate or to withdraw from the research at any time and this would have no bearing on their course grade. They all gave their permission for using their writings and recordings of their discussions in this

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[28] There is a noticeable difference between Cantonese and Mandarin in terms of how a word is pronounced. However, since this study only examines written language, this is not a problem because standard written Chinese is taught in all schools.

[29] The participants were given a Participant Information Sheet and consent form (Appendix 3) and verbal explanations were given in class.

research and signed a consent form (see Appendix 3). They understood that all of the information collected for the study would be kept confidential and anonymous. Names of the thirteen participants in each group were replaced by number S1-S26 to preserve anonymity.

3.2.2 Materials and Instruments

Bearing the above criteria in mind, the main study adopted the following instruments:

1. Translation assignments developed from L1 (Chinese) texts commenting on social problems;

2. Writing assignments developed using the same topic as in the translation assignments;

3. Parallel texts developed from the news genre in English (L2);

4. Two sets of questionnaires: 'T-questionnaire' for the translation group and 'NT-questionnaire' for the writing group.

3.2.2.1 Translation assignments and writing assignments

As noted in Chapter 2, many arguments against the use of translation in L2 classrooms derive from its task design being de-contextualized, such as using single and isolated sentences, being too unauthentic. Hence, in designing the instruments, contextualized and authentic materials were adopted. Ten translation assignments were developed using news articles in Chinese newspapers that comment on topics related to social problems; ten writing assignments (see Appendix 1B for details) were developed using the same topics as the translation assignments, with simple instructions requiring participants to comment on a given news topic in L2. For instance, if the translation assignment was a L1 text commenting on the impact of the Sunflower Student

Movement[30] on democracy, the writing assignment would require that the participants express their opinions about the Movement, with L2 writing instructions like 'In your opinion, what are the impacts of Sunflower Student Movement on democracy?' The rationale for using the same topics as much as possible in both the translation and writing tasks was to enhance the comparability of participants' final outcomes.

These texts were considered suitable resources to develop the class activities because they are easy to understand and do not involve extremely technical language. Moreover, the participants may be more expressive and interested in these topics because they major in public administration and often have to discuss social issues in their other subjects, such as Sociology and Public Policy. As for topic selection, topics that were controversial were prioritized because they allow more room for discussion. Besides, as this study involves making comments on an issue (in the case of writing) and understanding people's comments (in the case of translating), the participants' familiarity with the topic may affect their results. This also conforms to Storch's (1998: 187) suggestion that task topics should be ones that students are familiar with, so that they will not need to concentrate excessively on the content. To ensure the participants have a basic understanding of the topics in the assignments, a 15-minute warm-up session was provided beforehand, in which all participants were shown a relevant L1 video available on YouTube and encouraged to brainstorm on the topic in whatever language they were comfortable with. This pre-setup procedure does not form a part of the experiment but is used as a means to reduce possible misinterpretation of the source texts in the translating process or excessive cognitive efforts in the writing process.

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[30] A student-led protest which took place in Taiwan between March 18 and April 10, 2014. The movement undertook an unprecedented occupation of Taiwan's legislature and became the subject of a hot debate.

Hence, another criterion was that the topics had to be up to date or regularly discussed in local newspapers[31].

As this study was carried out in an authentic class environment, it was important that the time set aside for these in-class activities was appropriate, realistic and feasible. Given this consideration, the word count for both assignments was 200 words. To achieve this, the writing assignments included instructions telling the participants to write 200 words, while the translation assignments were deliberately modified so that the total number of words produced from the source texts could most likely amount to 200 words[32].

The preparation of the source texts for the translation assignments manifests judicious use of translation materials. The source texts were adapted from several authentic L1 news items in such a way as to include challenging expressions. For instance, in the first translation task in Experiment II, the first sentence '假如在高峰時段開車進入市中心需付費，相信部份人會考慮調整其出行模式' (If motorists are/were charged for entering the city centre during peak hours, some will/would probably consider adjusting their travel patterns) could pose a challenge to the students because they had to decide whether to use the future conditional (type 1) or the present conditional (type 2). Likewise, expressions that were predicted to be unfamiliar to the

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[31] Here 'local' does not refer to Macao, but to newspapers circulating or published in the Chinese (L1) community, with preference given to popular newspapers in Macao, Hong Kong and the mainland of PRC that show views of the Chinese community (for details see Appendix 1A).

[32] Based on my past experience as a translator, the English and Chinese versions of a texts have a word count ratio of 2:3, so a source text with approximately 300 Chinese characters generates a target text with about 200 English words. Even if the source texts have the same number of words, it is hard to guarantee the number of words produced in the target text. However, a target text with one or two more sentences will not cause a serious problem since in analyzing the data, the draft translation will be compared with the revised translation to examine the increased/decreased number of changes and it is the proportion that will be used to compare with that of the writings. In case the target text exceeds the word count by more than two sentences, those additional sentences (in both the drafts and revised versions) would be excluded from the study.

students, such as 高峰時段 (peak hours), 緩解交通擁堵 (ease traffic congestion) and 公交承載量 (capacity of public transportation), were included in the source text.

The writing assignments were prepared using the same topics as the translation assignments as far as possible. The instructions given in the writing assignments were in English and participants were asked to write directly in L2. The same description given in the writing instructions was also included in the instructions for the translation assignments, in order to avoid bias or unfairness caused by one group having more L2 information than another.

3.2.2.2 Parallel texts

In each session, three parallel texts were chosen and provided as a treatment integrated in the tasks concerned (see Appendix 1C). In this study, 'parallel text' refers to a text in the target language (L2) that represents a similar genre or has a similar topic as the activity concerned. Using the same example given in the assignment settings, if the translation and writing assignments were about the Sunflower Student Movement, three L2 (English) texts of the news genre would be sourced from different online media resources to serve as parallel texts to be distributed to both the translation and writing groups during the treatment stage.

Parallel texts, as defined by Nord (2010: 9), are 'authentic, non-translated texts chosen from the target-culture text repertoire because they represent the genre the target text is expected to belong to'. Nord identifies parallel texts as one of the three types of auxiliary texts that serve as valuable tools in the translation process as they provide linguistic information such as expressions, collocations, idiomatic usage, style and register, etc. However, in the field of corpus studies, some regard parallel texts as translations of the source texts. Nord (2010: 9) also notes the confusion that this term may arouse.

This use of the term may cause confusion because (a) the Coseriu school of contrastive linguistics has used originals and their translations as "parallel texts" for the analysis of source and target language usage, arguing that no other texts are equally "parallel" with regard to communicative functions, and (b) the concept of parallel corpus used in corpus-based translation studies usually refers to a corpus of translations, which is compared to the corresponding source texts, whereas a corpus of non-translated texts for comparison with translated texts is called "comparable corpus".

The rationale for using parallel texts as a treatment for the tasks concerned is fourfold. Firstly, as Nord (2010) puts it, parallel texts are authentic materials that contain a wide range of reference resources for language usage in the target language (L2). This meets the criterion of providing students with some helpful input when working on the tasks. In the practice of translation, parallel texts are strategic resources (Askehave, 2000; Zanettin, 2002; Nord, 2005, 2010; Biel, 2011) for many translators and translation trainees, allowing them to verify or improve their language use, especially terminology and colloquial expressions in a certain field. Theoretically speaking, given their helpfulness to translation trainees and professionals, they may also play a facilitating role for general L2 learners in acquiring new lexical expressions, or in other ways yet to be established,[33] and findings of this study may provide certain insights in this respect.

Secondly, practically speaking, parallel texts are inexpensive, easily accessible materials and could therefore be adapted as teaching materials or class activities for special purposes without much difficulty. The accessibility of materials to be adopted in

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[33] In fact, the effects of 'parallel texts' on language or translation pedagogy is in itself a significant research topic worthy of extensive investigation. However, this study does not intend to examine the effects of 'parallel texts' but simply uses them as a treatment within the tasks concerned to see whether and in what way translation can benefit L2 classrooms.

designing the class activities for this study is an essential factor that cannot be ignored because it, to some extent, determines the value of the findings of this study. If the tasks involved overly specific sources that are not accessible to most teachers, whether they are helpful for L2 learners or not would matter less because of the difficulty in replicating or designing similar class activities.

Thirdly, unlike treatments such as lectures, the use of parallel texts promotes more independent and self-reliant learning because students will have to make their own efforts in searching for relevant expressions and learn through observing how lexicogrammatical [34] phenomena are used in context. Compared to treatments like lectures where students are most likely to acquire knowledge or skills introduced by the teacher, parallel texts allow for more varied types of benefits for L2 learners because different individuals may be inspired by the same materials in different ways and thus have different gains.

Fourthly, from the perspective of SLA, the inclusion of parallel texts offers input to L2 learners. According to Pulido, (2007: 157),

Vocabulary development through reading…first involves noticing that particular word forms are unfamiliar and that there exist gaps in one's knowledge. Then, in the absence of dictionaries or human assistance, it requires inferring meaning from context (lexical inferencing), using linguistic and extralinguistic knowledge.

This description seems to aptly explain how vocabulary learning can take place with the use of parallel texts as treatment.

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[34] This is a term used by Halliday (1985) to describe the continuity between lexis and grammar.

Another advantage of using parallel texts in this particular study is that they can be used by both the translation and writing groups in a very similar way and thus allow the results to be more comparable. Since this study compares the effectiveness of using the two types of tasks, it is important to achieve close comparability in order to obtain more valid data.

In this study, the primary criterion for selecting parallel texts was that the content had to be closely related to, but not exactly the same as, the translation and writing assignments. They were also selected according to the following three criteria. First, the texts should contain some expressions equivalent or related to the assignments so that they could offer help at the lexical level. This is an example of judicious use of this treatment. Second, they should be of the news genre, but possibly a combination of editorials and news articles as one might contain more difficult expressions than the others or one might contain more relevant ideas about the selected topics. Third, the parallel texts should be chosen from different sources to ensure a more varied degree of difficulty. For instance, native English newspapers often contain more complicated expressions or structures than those in non-native ones as they have a very different target audience. The maximum length of each text was two pages. Those that exceeded this limit were either discarded or modified.

3.2.2.3 Questionnaires

Two questionnaires (see Appendix 2A and 2B) were designed to collect information about the participants' perspectives on the use of the two types of tasks. The 'T-questionnaire' included questions probing the helpfulness of the translation tasks, while the 'NT-questionnaire' was composed of questions that probe the participants' views on the helpfulness of writing tasks. These questionnaires were designed with questions that ask for participants' specific views on the three tasks they

had taken part in, including drafting, discussion and revision stages, in addition to their perspectives on the helpfulness of translation and writing tasks in L2 classrooms in general. There was a total number of 26 questions. The questionnaires were written in English and Chinese explanation was given to the participants when necessary. A few procedures were carried out to verify the readability and validity of the questionnaires. First, it was piloted with six students who were not participants in this study but had similar language proficiency as the participants to see if the questions were unclear or ambiguous to them. Upon receiving feedback from the students, the questionnaires were slightly revised – with some more explanation included in certain items. Second, they were reviewed by an academic staff member who specializes in statistics to check for the relevance of items and possible interpretation problems, particularly if there were any biased or leading questions. They were then reviewed by an L2 language teacher to check for language use and clarity of instructions.

3.2.3 Procedures

3.2.3.1 Experiments

This longitudinal[35] study features experimentation with the use of translation tasks and L2 writing tasks with two groups of participants over ten repeated sessions. The first five repeated sessions, each comprising 4 stages, were regarded as Experiment I and the other five sessions were regarded as Experiment II. One session took place every two weeks throughout the Academic Year 2014/15. The 26 participants were randomly allocated to the T-group and the NT-group, but I made an effort to maintain gender balance across the two groups.[36] Each session, both groups were assigned the activity concerned and participated in class discussions (See Table 3.3).

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[35] This study is regarded as longitudinal because the research design involves repeated sessions throughout one academic year.

[36] One group was comprised of 9 females and 4 males; the other consisted of 8 females and 5 males.

Table 3.3 Allocation of tasks in both experiments

Experiment	Translation	Writing
Experiment I (Sessions 1 – 5)	Participants 1-13	Participants 14-26
Experiment II (Sessions 1 – 5)	Participants 14-26	Participants 1-13

In Experiment I, the T-group was assigned the translation tasks, while the NT-group was assigned the writing tasks. The same procedures were repeated in Experiment II, with the two groups of participants swapping roles. In other words, participants who had worked on translation in the first experiment worked on writing instead in the second experiment and vice versa. This repetition was essential in that it allowed for comparison of the performance of the same participants under different conditions (when given different tasks) and thus reduced the impact of individual differences.

3.2.3.2 Tasks

Both the 'translation task' and the 'writing task' were composed of four activities[37], 1) Drafting; 2) Class discussion; 3) Treatment; 4) Revising.

Stage 1: Drafting. In the drafting stage, the T-group was given a L1 text to translate from the L1 to the L2, while the NT-group was given a L2 writing topic and instructed to write directly in the L2. These assignments only required L2 learners to translate or write with their existing competence and involved no treatments, training or other aids. Both groups were given 30 minutes to complete the drafts. The translation and writing assigned at this initial stage were known as the first assignment ('Assignment I') and the work produced at this initial stage was referred to as draft translation ('Translation I') and draft writing ('Writing I') respectively. Dictionaries and internet resources were not allowed at this stage, The rationale was 1) to avoid slowing

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[37] In this context, 'activity' simply refers to the assignment allocated to the participants in each stage. It is used to differentiate from the term 'task', which integrates the four stages.

down the translation or writing process and keeping the participants over-concentrated on one or two single words or spending excessive time on searching for relevant information (this was likely to happen among the writing group); 2) to leave more room for participants to discuss the difficulties they had experienced or how they had overcome the obstacles in the process of translating or writing when it came to the class discussion stage; 3) to maximize the use of the parallel texts in stage 3.

Stage 2: Class discussion. Upon completion of the drafts, two discussion sessions were arranged to examine the participants' engagement in class discussions after they completed the first assignments. The discussion session simply aimed to help the participants to reflect on their work through making comments, raising questions, sharing opinions or expressing concerns. The teacher did not make any attempt to answer questions or make comments at this stage to avoid intervention which might invalidate the results, since the way the teacher responds to participants in the T-group and NT-group may vary greatly due to the different nature of the assignments. The participants were informed that in the class discussions they should raise concrete difficulties or questions related to the language usage in their translation or writing. The participants were also told that they could share opinions, raise several questions, or make several comments, but one at a time. Each discussion session lasted for 20 minutes, which were allotted to the T-group and the NT-group separately. One group took a 20-minute break while the other participated in the discussion session and vice versa. The rationale for having the class discussions arranged separately was that the same group of students shared the same assignment and it was easier to record the students' discourse. In order to avoid possible bias caused by the order of the discussion sessions arranged, the T-group took part in the discussion first during odd-numbered sessions and the NT-group took part first in even-numbered sessions. The class

discussions with both groups were initiated in the same way and were managed by the same teacher (the researcher) to avoid different teaching styles affecting the interaction between the teacher and participants. The teacher encouraged the participants to 'take the initiative' to raise questions or make comments on the assignments, such as any difficulties or challenges they had encountered in completing the drafts, as well as concerns or uncertainties they had about the use of language. Sufficient pausing was maintained to allow participants to initiate questions or make comments. The teacher invited the participants to respond by rephrasing their responses or asking others if they had similar or other concerns.

Stage 3: Treatment. Three L2 parallel texts were distributed to both groups as treatments within the tasks. Both groups were given 25 minutes to read through the parallel texts to obtain linguistic information. They were advised to highlight lexical or grammatical usages which they considered helpful to complete their translation or writing. At this stage, the students were allowed to use dictionaries for clarification.

Stage 4: Revising. Finally, the participants were allotted 40 minutes to revise their translation or writing with the help of the given parallel texts and rewrite it on another piece of paper. This stage was necessary to encourage the participants to improve their drafts and minimize the possibility of participants making no efforts to revise their work. It was also necessary for data collection afterwards, allowing the researcher to compare the results of their work at the initial stage and the final stage of the task and examine whether there was significant improvement. It was made clear to the participants that when revising their work they should keep the content or paragraph organization as original as possible and focus on improving grammar and vocabulary. It was also made clear to them that the parallel texts were only meant to provide them with linguistic information and they could not copy the exact same sentences, otherwise

it would be considered plagiarism. Plagiarism was unlikely to happen in the translation tasks as the content would never be exactly the same; it may happen in writing tasks if the students copy exact sentences from the parallel texts given to them, but this was unlikely to happen given that the students were informed about the rules and understood that all copied work could be detected very easily. In the last resort, plagiarized work would be excluded from this study. The translation and writing assigned at this final stage were referred to as the second assignment ('Assignment II') and the work produced was known as the revised translation ('Translation II') and revised writing ('Writing II') respectively. In short, both the translation and writing followed the same procedures, with the same amount of time allocated[38], as illustrated in Table 3.4.

Table 3.4 Research procedures and time distribution

Stages	Translation task	Writing task	Duration	Classroom setting
I) Drafting	Translate a news article that comment on a social-related topic.	Write a paragraph commenting on the given topic in the L2.	30 minutes (*Concurrently*)	Rows and columns
II) Class discussion	Discuss language-related challenges, problems or concerns experienced in the translation process.	Discuss language-related challenges, problems or concerns experienced in the writing process.	▪ T-group: 20 minutes ▪ NT-group: 20 minutes (*Separately*)	U-shape
III) Treatment	Read three L2 parallel texts related to the source text provided.	Read three L2 parallel texts related to the source text provided (same texts as those distributed to the T-group).	25 minutes (*Concurrently*)	Rows and columns
IV) Revising	Revise and rewrite the translation with the help of the parallel texts.	Revise and rewrite the writing with the help of the parallel texts.	40 minutes (*Concurrently*)	Rows and columns

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[38] The duration of the tasks was solely determined on the basis of the time available for each lesson. This framework had been trialed with two non-participants in addition to the researcher and proven feasible.

These four stages enable the translation and writing tasks in this study to integrate training in the four skills, and of course, allow for investigation into whether translation has a place in both L2 oral communication and writing instruction. Obviously, the emphasis is placed on the writing and speaking skills, which can be practiced during the 'drafting/revising' and discussion stages respectively. The parallel texts offer reading practice, though it is acknowledged that the time allocated may not be sufficient for in-depth reading. Nevertheless, as Pulido (2007) points out, students may 'notice' how new or unfamiliar expressions are used with the aid of the context. Listening skills may not necessarily be enhanced in this task design, but practice in this respect inevitably takes place during the discussions in the L2. In order to optimize the tasks assigned in this study, two seating arrangements were used at different stages depending on the nature of the tasks because some research shows that classroom seating arrangements may influence students' behavior and interaction in class. Wannarka and Ruhl (2008) suggest that when the activities emphasize individual work, teachers should adopt the rows and columns layout as it can help to minimize interaction between students and allow students to focus on their work. In contrast, if the activity aims for interactive discussions among students and the teacher, U-shaped seating arrangements provide students with more opportunity to share and exchange ideas (Wengel, 1992) and may play a more facilitative role in fostering student engagement, especially oral response (Rosenfield et al., 1985; Hastings and Schweiso, 1995). Hence, in this study, the rows-and-columns seating arrangement was used in stage 1 (drafting), stage 3 (treatment) and stage 4 (revising) of both tasks, while the U-shape table arrangement was used in stage 2 (class discussions) to optimize the impact of both tasks.

The data collection commenced in September 2014 and continued until June 2015. All of these data were collected during class time. The three sets of data came from the following sources:

A) Audio-recordings and transcriptions of discourse during class discussions;

B) Participants' written work, including draft and revised translations and writing;

C) Two sets of questionnaires (one collected upon completion of Experiment I and another collected upon completion of Experiment II).

3.2 Data A

3.3.1 Data Collection

The first set of data (hereinafter referred to as Data A) aims to examine the participants' engagement in class discussions after producing the drafts (Translation I and Writing I), a stage when both groups may have most questions or concerns in mind regarding the use of language. The data was sourced from audio-recordings obtained throughout the class discussions in the two experiments. Half of the data came from recordings of class discussions with the T-group, and another half came from class discussions with the NT-group. Comparison of these data allows for investigation into the question: in what way does translation compare to writing assignments in engendering class discussions on language-related issues?

3.3.1.1 Recordings

The discourse between students and teachers during class discussions was audio-recorded using digital recording equipment. In order to optimize the sound quality of the recording, it is essential to use devices that can maximize the participants' volume.

However, it is also important that the equipment is of a lower-profile appearance to minimize the participants' nervousness caused by the existence of the electronic devices. Two omni-directional microphones[39] were chosen to achieve this. These conference microphones allow for more even sound-capturing compared to general microphones. The audio-recordings were then transcribed verbatim and double checked by a third party to increase the accuracy of the transcriptions. However, as the study aims to look at how frequently the students participate in class discussions and the kind of concerns, comments or questions they have, minor errors in the transcriptions will not have serious consequences.

The participants were given clear instructions that the class discussion should be carried out in English (L2). However, as the translation group was handling a translation task, it was conceivable that some Chinese (L1) would be quoted or used occasionally. It was also possible for both groups to use Chinese (L2) occasionally to elaborate their ideas when they had trouble expressing them in English. Given the nature and objectives of this research, absolute use of English (L2) was not considered necessary and hence occasional use of Chinese expressions was allowed during the discussions. However, when Chinese (L1) was overused, the teacher would remind the participants to speak in English. Each recording of the class discussions lasted for 15 minutes. A brief instruction was given beforehand to remind the participants what they should be doing to avoid occupying excessive time of the discussions, but it was not included in the recordings in view of the short duration of each discussion:

'You have just worked on a translation/writing task. Here I would like you to discuss some of the concerns, problems or difficulties you had in the process of translating/writing and offer your solutions. The rest of you are welcome to share

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[39] Olympus Boundary Microphone Model ME33 was used in this study.

your opinions. I will not intervene in the discussion and give you answers because this is meant to be a discussion between you all and you may be able to find some solutions to your queries or doubts in the following revision process with the help of the three texts given. I will only step in if you have made something unclear. Please try to share your thoughts one at a time and try to speak loudly so that everyone can hear you.'

After the above introduction, the teacher started recording. For smoother transition, approximately 10 seconds were devoted to opening and closing phrases such as 'let's get started' and 'okay, that's all', but they occupied a very insignificant portion of the time (about 0.01%) of each discussion and therefore were not considered a significant influence.

The aim of this study is to compare the results of the T-group and the NT-group. As the experiments involved a series of procedures (draft, discussion, reading and revision), any intervention from the teacher at any stage, such as responding to participants' questions, might influence the participants' results in the subsequent tasks. For example, it might lead to very different results when investigating the frequency of participation and eventually influence the results of Data A. Moreover, by giving clues or answers to certain questions, the teacher may influence the results in the final stage of the tasks (i.e. revising), and thus make it less reliable to compare the participants' writing proficiency in the drafts and revised work, affecting the results of Data B. For this reason, intervention was purposely avoided as much as possible. It was clearly explained to the participants that the class discussions were aimed at providing them with chances to discuss some of their concerns with their peers rather than a question-and-answer session between students and teachers. It was noted that the teacher would be playing 'an invisible role' as much as possible to avoid giving them excessive hints

and reducing their desire to reflect on the uncertainties or problems and make improvement with their own efforts in the following stages. Hence, the teacher would not respond to their questions or difficulties raised in the discussions. This arrangement was necessary for this study because there was a possibility that participants would get hints or gain inspiration during the process of discussion because participants might offer suggestions or challenge each other. Yet, the responses from other participants may not necessarily be correct and hence the uncertainties would still exist or may even increase. Participants would still need to make verification themselves. If the teacher gave participants answers or affirmative responses, the participants would be more likely to treat them as accurate answers and no longer need to reflect on the uncertainties or problems afterwards.

Meanwhile, it was pointed out that the teacher would give them feedback after the completion of each experiment. Giving feedback to the participants during the tasks was out of the question in this study because it might affect the comparison of the results between groups. However, the teacher still gave feedback after the completion of the experiments given its benefits to the participants. It was presented in the form of a brief report addressing some of the major problems in their written work and key concerns in the class discussions, which was made possible by the existence of the transcriptions. Moreover, although the participants were not given any training at the beginning, some basic aspects of translation were explained to them after the experiments.

3.3.1.2 Transcriptions

All recordings were transcribed so that in-depth analysis of the frequency of students' participation and patterns of discussions was made possible. The transcriptions for all the recordings were as accurate as possible, but absolute accuracy

of transcription was not considered necessary in this research because the main objective was to examine the frequency of participation and identify patterns in the discussion. However, to ensure optimal accuracy, the transcriptions were verified three times by the researcher and once by another language teacher. In transcribing the recordings, it was necessary to provide some additional information and different symbols were used to indicate their functions (Table 3.5). The standards described below were observed to ensure consistency in preparing the transcriptions.

Table 3.5 Meanings of symbols used in transcriptions

Meaning	Symbol
Clarification by teacher and responses by participants	<… >
Correction of pronunciation	{Pronunciation: … }
Repetition	{Repetition: …}
Interruption	*Interruption: **continued after interruption
Translation reference	[…]
Correction of mistakes and supplementation of information	(…)

I) Teacher intervention in the class discussions

In view of the short duration of the discussions and in order to reduce influence on the results, intervention by the teacher was avoided as much as possible during the class discussions, but some interventions were still inevitable or deemed necessary. While the student discourse varied greatly, the teacher discourse was deliberately limited to clarifications, repetitions and pronunciation corrections.

i) Clarification of meaning: First of all, when the messages conveyed by the participants were considered unclear, confusing or misleading, the teacher asked

short questions to seek clarification. < > was used to indicate clarifications made by the teacher (researcher) and responses from the participants.

ii) Correction of pronunciation and repetition of participants' words aimed at clarifications for other participants: These interventions were almost done concurrently, so the influence on the discussions was insignificant. The symbols {Pronunciation: } and {Repetition: } were used respectively.

iii) Opening, closing and invitations: The teacher gave instructions such as 'let's get started', 'one last question', and 'that's all for today's discussion' to start, signal the end of the discussion, and end the discussion. There were also invitations like 'yes?', 'uh…huh…', 'anyone else?', 'anything else?' or 'has anyone got similar problems or other difficulties?' when the discussions paused. Instructions such as 'one by one' were given when necessary, especially in cases of heated debate where several participants tried to share their opinions at the same time.

II) Interruptions by the participants

Interruptions made by the participants were indicated as '*interruption' and whether they were considered as a LRE was based on the content and situation. In this research, interruptions by participants were categorized into three types:

i) Participants tried to express their opinions related to the discussion while another participant was still talking, and there was no successive discussion shortly after the interruption. This kind of interruption probably happened when participants did not notice another participant was talking, when the two spoken discourses practically overlapped, or when there was such a heated debate going on

that participants' enthusiasm surpassed their discipline. This kind of interruption was marked by (*interruption) and was treated as one LRE.

ii) Participants tried to express their opinions related to the discussion while another participant was still talking, but the same discussion continued shortly after the interruption, i.e. continued what they had not finished during the interruption. In such circumstances, the interruption and the successive discussion made shortly after the preceding speaker finished talking were marked as (*interruption) and (**continued after interruption) respectively, and were only treated as one LRE. However, if the participants interrupted someone and then brought up something else[40] instead of continuing the same discussion soon after the interruption, they were treated as separate LRE turns.

iii) Participants interrupted with irrelevant content, such as laughter or discussions of issues that were not related to language usage or the tasks assigned. This was not treated as a LRE turn, but noted for reference.

III) Use of L1 in class discussions

During the discussions, many participants quoted parts of the source text to express their concerns or used their mother tongue (Chinese) to elaborate their ideas. In such cases, a loose translation was provided as reference in the transcriptions, with the symbol [ ] used to indicate L2 translations of the students' L1 discourse. For instance:

i)   Use of L1 by participants in the translation group:

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[40] This was decided by examining the functions and types of LREs, which were the two main themes found in this study and will be discussed in Chapter 4.

In line 1, '假如在高峰時段開車進入市中心需付費，相信部份人會考慮調整其出行模式' [If motorists are/were charged for entering the city centre during peak hours, some will/would probably consider adjusting their travel patterns]. This seems like a conditional sentence to me; I am not sure if I should use first conditional or second conditional, but in my sentence I used 'would'. (Turn 13, Experiment II: T-group)

ii) Use of L1 by participants in the writing group:

I don't remember how to write 排放有毒氣體 … 汽車尾氣 …[emissions of toxic gases…automobile exhaust…], so I write vehicle exhaust or toxic gas. (Turn 3, Experiment II: NT-group)

However, these references only provide literal meanings closest to that in the context. There might be situations where the same words could be interpreted in a different way or function as a different part of speech. This was especially true when the participants in the writing group expressed their concerns about certain words or phrases.

IV) Ungrammatical and unclear speech

As the participants were all non-language major students, it was not surprising to see flaws in their discussions. This is not a problem since this study is interested in looking at the potential of using translation tasks versus corresponding writing tasks to engender class discussions rather than the development of L2 oral skills or proficiency in classroom practice. However, to ensure better readability of the transcriptions and allow for effective verification of the data, in the cases where participants' conversation was difficult to understand due to ungrammatical usage, mispronunciation or unclear

speech, a more accurate form of expression or conceivable supplementary information was provided[41] on its right hand side, indicated by the symbol ( ). For instance:

   i)   Correction of grammar or vocabulary:

       I think this sentence is talk about (talks about) the phenomenon of now, so I will choose to use …(Turn 18, Experiment II: T-group)

   ii) Supplementation of information:

       I also have written something like this... I …(write) 'in order to monitor the behavior of civil servants the Chinese government has to form a judicial department'. (Turn 47, Experiment II: NT-group)

However, minor mistakes in their translation and writing, which were represented by quotation marks ('…'), were left as they were as much as possible unless readability was seriously affected.

3.3.2 Data Analysis

Data A was used to compare the frequency and patterns of the discussions carried out by the two groups of participants and this was measured by identifying the 'quantity' and 'features' of the language-related episodes (LREs). This study aims to examine learner-learner interaction rather than teacher-learner interaction. Hence, the language-related episodes in focus are 'student-initiated LREs', i.e. language-related[42]

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[41] Only the slightest forms of corrections and information were provided to maintain the originality of the discussions by the participants as much as possible.

[42] Language-related questions or concerns here refer to those that are related to 'language use'. Other aspects such as content and organization are not considered as a LRE turn. They are, however, included in the transcription but regarded as 'others' and examined separately in case noteworthy patterns emerge.

questions, expressions of opinions, or comments initiated by learners. They may appear when learners are willing to deal with a certain language feature (Williams, 1999) or have the desire to expand their understanding of certain expressions or structures (Källkvist, 2013a).

Other types of LREs, such as 'teacher-prompted LREs', which are questions, expressions of opinions or comments by learners in response to the teacher's questions or comments, were not of concern here because this study mainly aimed at analyzing the frequency and patterns of discussions among students, with a minimum of teacher intervention. All LRE turns were identified and analyzed along two dimensions:

3.3.2.1 Quantity

The frequency of 'student-initiated LRE turns' was measured quantitatively. Each question, opinion or comment about language use generated by the learner was measured as one LRE turn, which hereinafter refers to student-initiated LREs in particular, regardless of its duration. Clarifications given by participants in response to teacher intervention – which would normally fall in the category of teacher-prompted LREs – were not measured as a separate LRE in this study. In other words, when participants initiated something and were asked to make clarifications, this was only considered as one LRE turn. In contrast, multiple questions or comments raised concurrently by the same student were treated as separate turns in the case where they were of completely different functions, nature or content (rare cases were noted in the transcripts). In the transcripts (example as shown in Appendix 4[43]) for each group and each experiment, LRE turns were numbered in chronological order. Discussions that

[43] Appendix 4 only provides an example of class discussion (transcripts) by each group from each Experiment. The full transcripts for all five class discussion sessions in Experiment I and II can be provided upon request.

were not related to language usage were still noted in the transcriptions for reference but were not counted as a LRE turn.

3.3.2.2 Recurrent features

Each LRE was categorized, labeled and coded to identify common and recurring patterns and report interesting features across the data. The coding was not predetermined and was grounded in the data. The themes were reviewed across Data A, refined, and given an informative name. This approach falls in the framework of a qualitative analytic method known as 'thematic analysis', which, according to Braun and Clarke (2006: 79), 'is a method for identifying, analyzing and reporting patterns (themes) within data' and (2006: 87) 'involves six phases: 1) familiarizing with the data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes; 6) producing the report'. Comparison of results between groups and experiments was then carried out.

In analyzing this set of data, the transcriptions were examined repeatedly - together with the recordings - to avoid missing features or patterns that were less obvious in written form. Following this, three comparisons were carried out:

(i) The results for the T-group and the NT-group in Experiment I;

(ii) The results for the T-group and the NT-group in Experiment II (where the participants swapped roles; and

(iii) The results for the same group of participants in both Experiments.

The first two comparisons showed the two groups' overall engagement in class discussions after working on translation and writing tasks and would allow us to generate conclusions about the relationship between task and engagement. The third comparison, on the other hand, focuses on the engagement of the same group of

participants when given translation and writing tasks and would also permit us to address the issue of subject variability.

3.4 Data B

3.4.1 Data Collection

This set of data included all drafts and revisions completed by the T-group and NT-group across Experiment I and Experiment II. In total, there were 130 samples of Translation I, 130 samples of Translation II, 130 samples of Writing I and 130 samples of Writing II (See Table 3.6). The drafts and revised works were collected at the same time by the end of each activity, so that participants could refer to the draft during the class discussions and during the revision stage. The participants were informed that they should not make any changes to the drafts.

Table 3.6 Data collected from both experiments

Data B collected from Experiment I				
Session	Translation (13 participants)		Writing (13 participants)	
	Draft	Revised	Draft	Revised
1	Translation I $_1$	Translation II$_1$	Writing I $_1$	Writing II$_1$
2	Translation I $_2$	Translation II $_2$	Writing I $_2$	Writing II $_2$
3	Translation I $_3$	Translation II $_3$	Writing I $_3$	Writing II $_3$
4	Translation I $_4$	Translation II $_4$	Writing I $_4$	Writing II $_4$
5	Translation I $_5$	Translation II $_5$	Writing I $_5$	Writing II $_5$
Quantity	65	65	65	65
Data B collected from Experiment II				
Session	Translation (13 participants)		Writing (13 participants)	
	Draft	Revised	Draft	Revised
1	Translation I $_1$	Translation II$_1$	Writing I $_1$	Writing II$_1$
2	Translation I $_2$	Translation II $_2$	Writing I $_2$	Writing II $_2$
3	Translation I $_3$	Translation II $_3$	Writing I $_3$	Writing II $_3$
4	Translation I $_4$	Translation II $_4$	Writing I $_4$	Writing II $_4$
5	Translation I $_5$	Translation II $_5$	Writing I $_5$	Writing II $_5$
Quantity	65	65	65	65

3.4.2 Data Analysis

This set of data aims to establish the extent to which the translation tasks 'encourage' and 'help' learners make improvements[44] in language usage[45], as compared to the corresponding writing tasks. To serve this purpose, both the quantity and quality of the changes made between the drafts and revisions were measured. Detailed procedures are shown as follows, with the rationale and example(s) provided in parenthesis whenever necessary:

3.4.2.1 Attempted improvements

In this study, the quantity of changes was used as a measurement of participants' attempted improvements. Specifically, all changes in the revisions were identified to measure the participants' attempts to make improvements. Each change was considered as 'one attempt to make an improvement', regardless of whether it was successful (see Example 3.1) or unsuccessful (see Example 3.2). Specifically, the rules below were applied in measuring the quantity of the changes:

i) Each grammatical change was considered as one attempt to make improvement. Punctuation was also treated as a change as it reflects grammatical accuracy.

Example 3.1: Attempted grammatical improvement (successful attempt, S18, T1, Experiment I)

Draft   If you want congestion charging to be **success**, the society should have …

Revision   If you want congestion charging to be **successful**, the society should have …

---

[44] It was hypothesized that the participants would make some changes in their revisions, given that they had a second chance to work on the same piece of translation/writing with the help of relevant treatment and dictionaries.

[45] Here 'improvement in language usage' was specifically limited to 1) lexical accuracy and range and 2) grammatical accuracy and range; No efforts were made to analyze the content, organization and style of the participants' writing and translation.

Example 3.2: Attempted grammatical improvement (unsuccessful attempt, S22, T1, Experiment I)

Draft   Before the congestion charging **success**, we need to have a high quality public

          system…

Revision Before the congestion charging **successful,** we need to have a high quality public

          system…

ii) Each lexical change[46] was considered as one attempt to make improvement.

Example 3.3: Attempted lexical improvement (successful attempt, S2, NT1, Experiment)

Draft   Although congestion charging can bring many benefits to us, I think it is so difficult

          to be **used** in city.

Revision Although congestion charging can bring many benefits to us, I think it is so difficult

          to be **implemented** in city.

iii) Each change could be a single word or several words clustered together.
Expressions clustered together were treated as one unit until the presence of
identical words in both the draft and revision.

Example 3.4: Measurement of clustered units (Four changes)

Draft   If the price **too** high, the public road resources will become the **special** region of

          people with high income and buses and **speed up** the social unfair problem.

Revision If the price **is** too high, the public road resources will become the **exclusive** region of

          high earners and buses and **aggravate** the social unfair problem.

In Example 3.4, there were four changes. The missing verb in the if-clause was
added in the revision and this was treated as one grammatical change. Then the
expression 'special' was replaced by an alternative 'exclusive' and this was treated

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[46] By change I refer to any differences found between the draft and the revision, including alteration,
omission or addition of expressions.

as a lexical change. When 'people with high income' was replaced by 'high earners', the whole noun phrase was regarded as one unit until the word 'and' appeared in both the draft and the revision. Finally, the verb phrase 'speed up' was replaced by a more appropriate word choice 'aggravate'.

Because clustered expressions may involve both lexis and grammar, in setting the standards for measurement before data analysis, it was decided that overlapping grammatical and lexical changes would be considered as separate changes if a grammatical change was not made due to the lexical change. For instance, in Example 3.5, the expression 'a usuable bus system' was revised as 'an effective transport system'.

Example 3.5: Overlapping changes, S18, T1, Experiment I

Draft   …the society should have **a usuable (useable) bus system**

Revision   …the society should have **an effective transport system.**

The change of article from 'a' to 'an' was apparently made in consideration of the word 'effective' and thus this change from one noun phrase to another was simply treated as a lexical change.

However, hypothetically, if in Example 3.4, the if-clause 'if the price too high' was revised as 'if the price is unaffordable', the inserted main verb 'is' would be considered as one grammatical change, while the expression 'unaffordable' (as an alternative for 'too high') would be considered as one lexical change, because the grammatical change was not made based on the lexical change but represented two attempts to improve the original use of grammar and lexis that happened to cluster together. A hypothetical example is given here because this noteworthy phenomenon did not emerge in the data in this study, where the students either

focused on changing the lexis or the grammar, rather than revising both at the same time.

iv) In case of repeated changes (same change with the same expression, such as the word 'thing' being revised as 'substance' more than once), up to three changes were credited, because each change still reflects the students' awareness of their lexis or grammar and efforts in making improvements and thus it is reasonable to give some credit for repeated changes. To avoid excessive credit for the same attempt, it was decided that only the first three changes would be considered. This standardization may vary depending on what the teacher regards as appropriate credit for repeated changes, as long as consistent measurement is used in assessing both tasks.

v) Changes in word order that did not affect the grammaticality of a clause were not considered; for example, a change from 'Recently, the government has implemented a new policy' to 'the government has recently implemented a new policy'.

vi) Alternations between abbreviated and full forms were not considered, such as changes from "doesn't" to 'does not', because they do not affect grammaticality or lexis, the foci of this study.

vii) Changes where an appropriate choice was changed for inappropriate one were still considered as changes, because this first level of coding does not reflect whether the change was successful or not, but concerns the students' efforts in making an improvement.

3.4.2.2 Improvements

The quality of changes, on the other hand, was used as a measure of participants' improvements. 'Improvements' differ from 'attempted improvements' in that they only refer to successful changes. Cases where inappropriate usages were changed to inappropriate ones or where appropriate ones were changed to inappropriate ones were not treated as 'improvements'. In this study, 'improvements' refers to changes in two situations, including (1) instances where learners corrected their grammatical or lexical mistakes (i.e. inaccurate or inappropriate usages), (2) instances where learners replaced grammatical structure or a lexical choice with an alternative one that is equally accurate and meaningful in the context.

For correction of mistakes, obvious improvements can be evident in the revision as compared to the draft, at least on the grammatical and lexical level. However, for the use of alternatives, obvious quality change may not necessarily be reflected in the revision, such as in the case where 'break the law' was revised as 'violate the law' (both equally appropriate in the context) or where 'introduce a new policy' was changed to 'implement a new policy' (slight changes in meaning but equally meaningful in the context). However, the reasons that these kinds of changes were still considered 'improvements' were threefold. First, it is reasonable to assume that when learners make changes, they are trying to improve their writing rather than making it worse, so there must be an underlying reason why they make the lexical or grammatical changes. The changes may be a more expressive or precise way to convey the students' intended message (think-aloud protocols may merit investigation in this area but this is beyond the scope of this study). Or, the changes may be an indication of learners' expansion of knowledge in lexicogrammar. Thirdly, the inclusion of lexical or grammatical alternatives as improvements helps to reduce subjective measurement of expressions

being 'right' or 'wrong', such as in the case where a lexical choice is not incorrect but simply looks awkward or unnatural in the context (which is particularly difficult to determine in writing tasks because the student could mean what he or she wrote). For instance, in Example 6, the idea of an idol being illegal is rather strange and awkward, whereas the revised version 'celebrity offenders' seems more precise and probably better conveys what the student actually meant. However, one cannot completely reject the possibility that the student really intended to say 'illegal idols' (in the sense of idols staying or working illegally) because this expression can arguably fit in the context.

Example 3.6: Lexical alternatives (S5, T1, Experiment I)

Draft   Some people think that **illegal idols** will *be* a bad example for teenagers.

Revision   Some people think that **celebrity offenders** will *set* a bad example for teenagers.

Given all these considerations, alternative lexis or grammar was considered a kind of improvement, as long as the revised version remained equally (or more) appropriate, accurate and meaningful in the context. Although the quantity of successful changes may not equate to a qualitative difference in the revised writing, to some degree it indicates an enhanced and improved understanding of the lexis or grammar concerned. Specifically, all identified changes were evaluated to decide whether they were 'actual improvements' and coded as 'grammatical improvement [G]' and 'lexical improvement [L]'. Each coded improvement was considered as one improvement. Changes that fell into any of the following categories were considered as improvements (with the rationales explained in parenthesis):

i) Correction of grammatical mistakes, including punctuation (this means that the participants could differentiate between right and wrong.

Example 3.7: Grammatical correction (S8, T1, Experiment I)

Draft   Recently, Taiwanese star Kai Ko and Jackie Chan's son Jaycee Chan **have detained** in

               Beijing…

Revision   Recently, Taiwanese star Kai Ko and Jackie Chan's son Jaycee Chan **have been**

               detained in Beijing…

ii) Use of different grammatical structures that have a similar or different interpretation

than the original version in the context, but are still grammatically correct or

acceptable in the context (this means the participants reflected on the function and

other possible usage of the grammatical structures).

Example 3.8: Grammatical alternatives (S11, T1, Experiment I)

Draft   (The) entertainment industry should sack artists who **take** drugs…

Revision   (The) entertainment industry should sack artists who **took** drugs…

In Example 3.8, 'artists who take drugs' refers to celebrities who have this habit,

while 'artists who took drugs' refers to those who had it before. Both are equally

possible and meaningful, but presumably the student considered that the revised

version better conveyed his/her thoughts. In the case of translation tasks, it is

possible for the teacher to evaluate the accuracy of these two usages by checking

against the source text, but this may not work well if the source text is Chinese,

given that time is not indicated by way of tense markers (as it is in English) on the

verb. Moreover, translation tasks in this study are mainly used to enhance learners'

accuracy in language usage, rather than demanding absolute accuracy between the

source text and the target text; hence, in analyzing the data the same assessment

rubric was used to evaluate the changes in the revised translation. This consistency

is essential to maintain consistency in comparing the use of translation tasks with

monolingual tasks as means to help students make lexical or grammatical improvements.

iii) Correction of inappropriate or inaccurate word choices and spelling mistakes (this again means that the participants could differentiate between right and wrong), such as in Example 3.9 where the problematic collocation 'do crime' was revised as 'commit crime':

iv) Use of new expressions that are equivalent or function equally well as the original versions (this means the participants tried to employ a variety of vocabulary), such as in Example 3.9 where the expression 'famous people' was replaced by 'celebrities' or in the case where the vague expression 'very very bad' is revised as the more precise 'terrible'.

Example 3.9: Lexical correction and alternatives (S6, T1, Experiment I)

Draft   Someone say that **famous people** who **do** crime are **very very bad** example to the society.

Revision   Someone say that **celebrities** who **commit** crime are **terrible** example to the society.

I carried out the assessment for this part in the first place. In order to reduce subjectivity, the same procedures were independently undertaken by one native speaker of the L2 who was a member of the teaching profession and a bilingual NAATI certified translator with ten years of translation experience. The inter-rater agreement was 97% for the quantity of improvements and 98% for the category of the improvements (lexical or grammatical) but all reached 100% consensus upon discussions. The results for the two groups in both experiments were compared,

followed by a comparison of the results of the same group of participants across different tasks.

3.5 Data C

3.5.1 Data Collection

The third set of data, hereinafter referred to as Data C, was collected from the questionnaires (both T-questionnaires and NT-questionnaires) which I designed to analyze the participants' perspectives on the outcomes of using the translation tasks and writing tasks. The questionnaire survey was administered in session 5 upon completion of Experiment I, and in session 10 upon completion of Experiment II so that all participants were enabled to retain fresh memories and make fair judgments regarding their perspectives on the tasks they had experienced in class.

To ensure that the participants fully understood all the questions in the questionnaire, Chinese explanation was given verbally to the participants. It took approximately 20 minutes for the participants to complete the questionnaires. It was clearly explained to the participants that there were no right or wrong answers to any question and that all information would be used for research purposes only and would remain confidential and anonymous. 26 questionnaires were collected upon completion of Experiment I, with 13 completed by the T-group and 13 by the NT-group, and the same applied to Experiment II.

3.5.3 Data analysis

To store and interpret the questionnaire responses, the data were transferred on to a single grid, which comprises of the respondent (columns) and the number of

questions (rows). Each answer was translated into a numeric code. For example, the last question in both questionnaires was 'After taking part in the series of translation activities over the past 5 weeks, do you think that translating from Chinese into English helps you to learn English?'. The five options 'very helpful', 'helpful', 'somewhat helpful', 'not very helpful' and 'not helpful at all' were coded as '1', '2', '3', '4' and '5' respectively. The coding of all the results was quite straightforward as the questionnaires were comprised of closed questions and most of the options were based on a Likert scale (See Appendix 2A and 2B). After inputting all the questionnaire results in an Excel spreadsheet, the frequencies and percentages of the response items for each question were calculated using Microsoft Excel 2003. The frequencies of students' responses for each item in the questionnaire were converted into percentages and the results were presented as graphs for ease of comparison of perspectives of the T-group and the NT-group.

Chapter 4 Results

This chapter presents the results of the data analyses. The chapter is organized into three sections. The first section presents the results of the analysis of Data A to address the first research question, which asks how translation compares with direct L2 writing in engendering class discussions among L2 learners. The second section reports the results of the analysis of Data B to address the second research question, which concerns how the designated translation tasks compare with corresponding writing tasks in encouraging L2 learners to improve their writing and help them to improve their L2 proficiency. The last section reports the findings of the analysis of Data C to address the third research question, which aims to examine non-language major students' perspectives on the helpfulness of the translation and writing tasks after they have engaged in them.

4.1 Findings of Data A

4.1.1 Finding 1: Quantity of LREs

One of the primary aims of the study is to examine the outcomes of using different tasks in L2 classrooms to engender discussions by comparing the LREs produced by the T-group and the NT-group in Experiment I and Experiment II. The first stage of the analysis of Data A consisted of identifying the quantity of LREs. The unit of analysis was the LRE turn.

Figure 4.1 provides an overview of the number of LREs produced by the T-group and the NT-group in the five discussions in Experiment I, while Figure 4.2 presents the same for Experiment II. The results show that the LREs produced by the T-group

consistently outnumbered those produced by the NT-group across the five tasks (i.e. discussions) in both experiments. The same results were obtained no matter which group of students[47] engaged in discussions of translation tasks.
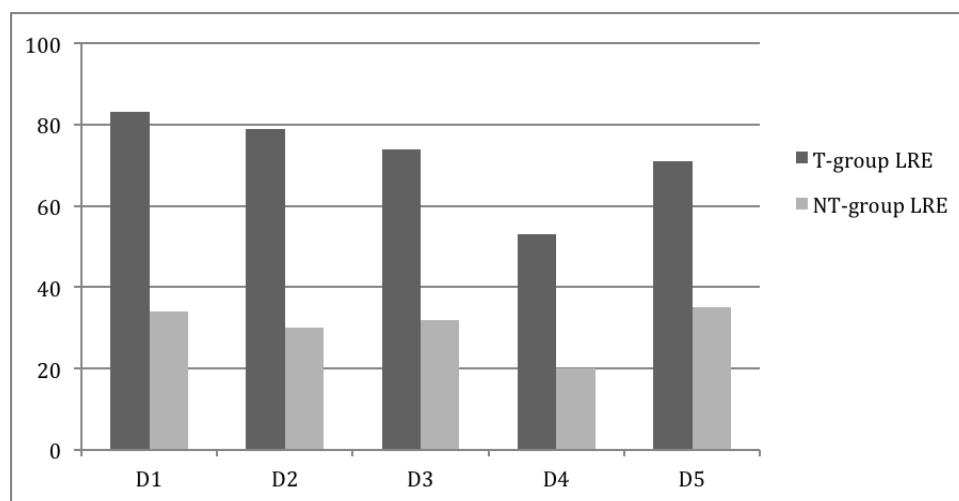
Figure 4.1 LRE turns in Discussions 1-5 in Experiment I
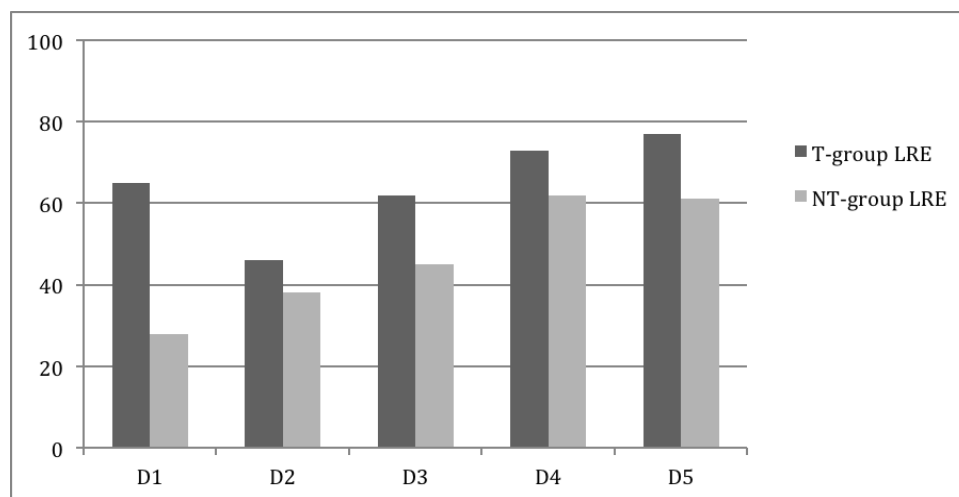
Figure 4.2 LRE turns in Discussions 1-5 in Experiment II

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[47] This study involved two experiments. In Experiment I, students 1-13 worked on the translation tasks while students 14-26 worked on the writing tasks. In Experiment II, the two groups of students worked on reverse tasks, i.e. students 1-13 and students 14-26 worked on writing and translation tasks respectively. This design aims to minimize possible impacts arising from individual/group difference.

I) Results for T-group and NT-group across experiments

Table 4.1 shows that in Experiment I the total number of LREs produced by the T-group (360) in all five discussions was more than twice as many as that of the NT-group (151). The contrast between the results for the two groups in Experiment II was not as great as that in Experiment I, but the total number of LREs in the T-group (323) still exceeded those in the NT-group (234).

Table 4.1 LREs in T-group and NT-group across discussions in both experiments

		Sum	Mean	SD	t	*p*-value
Experiment I	T-group	360	27.69	14.05	3.16	0.002113
	NT-group	151	11.62	5.86		
Experiment II	T-group	323	24.85	13.42	1.17	0.127312
	NT-group	234	18	7.77		

To see whether the differences between the results for the T-group and the NT-group are statistically significant, the results from all discussions in each experiment were pooled together and independent sample t-tests were performed. As there was no evidence to form strong hypotheses about whether the two groups were going to be different and in what way they might differ, two-tailed t-tests were adopted (n=13). The level of significance (alpha) was set at 0.05. Results reveal the same trend in both experiments in that the T-group produced more LREs than the NT-group. The difference was statistically significant in Experiment I ($p<0.05$) but statistically insignificant in Experiment II ($p>0.05$).

II) Results for the same group of students across tasks

This study was composed of two experiments to allow the same group of students to take part in both translation tasks (T-tasks) and writing tasks (NT-tasks). In short,

students 1-13 took part in translation tasks in Experiment I and writing tasks in Experiment II, while students 14-26 took part in writing tasks in Experiment I and translation tasks in Experiment II. Table 4.2 shows the number of LREs produced by the same group of students in discussions of T-tasks and NT-tasks, that is, how the results for the same group differ when engaged in discussions of different tasks.

Table 4.2 LREs produced by the same group across tasks

		Sum	Mean	SD	t	*p*-value
Students 1-13	Translation tasks	360	27.69	14.05	2.51	0.013746
	Writing tasks	234	18	7.46		
Students 14-26	Translation tasks	323	24.85	12.89	4.08	0.000765
	Writing tasks	151	11.62	5.86		

In total, students 1-13 produced more LREs when engaged in discussions of T-tasks (360) than in discussions of NT-tasks (234). A paired-sample t-test (two-tailed) was performed and the results were statistically significant ($p<0.05$). Likewise, overall, participants 14-26 produced more LREs in discussions of T-tasks (323) compared to NT-tasks (151) and the results were statistically significant ($p<0.05$). It should be noted that the two groups of students differed in the overall level of engagement, with students 1-13 displaying higher levels of engagement, but this is not significant for the study because both groups showed the same trend, i.e. they showed higher engagement in class discussions of translation tasks than in discussions of writing tasks.

Measuring the quantity of LREs produced by the T-group versus the NT-group provides a comparison of students' engagement levels in discussions of translation tasks and writing tasks. The comparisons show that students engaged more frequently (measured by LRE turns) in class discussions of translation tasks than in class discussions of writing tasks. However, in the above measurements and comparisons, the

content of the LREs was not taken into consideration. Hence, the data was reviewed in depth to better understand how task types (translation versus non-translation) impacted on the discussions.

4.1.2 Finding 2: Recurrent features

Coding was grounded in the data and not predetermined. By means of inductive thematic analysis, two overarching themes were identified as regular and recurring features shared in discussions in both groups in both experiments. The first theme identified was the 'discourse type' of the LREs and the second theme was the 'linguistic focus' of the LREs.

4.1.2.1 Finding 2a: Concern-based and response-based LREs

The first recurring theme was the 'discourse type' of LREs, which could be categorized as (1) concerns or (2) responses. The codes are illustrated in Table 4.3.

Table 4.3 Classification and coding of concern-based and response-based LREs

Category	Sub-category	Code
Concerns (C)	Students raised concerns	C
	i) Students showed agreement or disagreement to peers' opinions	RA
	ii) Students sought for or provided clarification in case of communication breakdown	RF
	iii) Student sought for or provided explanation	RE
Responses (R)	iv) Students offered suggestions to concerns raised by peers	RS
	v) Students commented on peers' opinions	RC
	vi) Students commented on peers' opinions and offered their own suggestions	RCS

The first category, 'concerns', covers turns where the students initiated concerns, questions or doubts (hereinafter 'concerns') about language use. This includes instances where the students talked about difficulties experienced in the tasks assigned, language-related questions raised or uncertainties about their language usage expressed, as exemplified in the following examples.

Example 4.1: Concern-based LREs

(T-Group, Experiment I)

| 30 | S5 | I find it's very difficult to translate the sentence in line 7: 採取包容的態度 [tolerate]. I only write 'give mercy'. |

| 322 | S12 | And then (for the phrase) 營造有利環境 [create a conducive environment]. I am not sure about this, but I write…'can create profit-gaining environment', but I want to write 'atmosphere' because 'environment' is the real thing, but Chinese is different from English, so I want to say 'profit-gaining atmosphere'. |

| 35 | S10 | I want to know ….the (for the term) 格外嚴懲 [harsher punishment], how do you guys translate this? I just write 'more guilty'. |

| 22 | S2 | I find it very difficult to translate the line 5 謹言慎行 [be more careful with their speech and behavior]. |

(NT-group, Experiment I)

| 20 | S21 | I have a difficult to write (difficulty in writing) 普世價值 [universal values], but I don't know how to express it, so I used 'main values' to express it. |

| 14 | S25 | I want to write …if they punish in a different way, this is something like 剝奪人權 [deprive human rights]. I don't know how to express 剝奪 [deprive], and then I write 'against the humanity'. I am not sure …certain (about) the exact meaning (expression for) 剝奪 [deprive]. |

| 57 | S17 | (For the term) 明確 [clear]…so can (we) use 'specifically'? Do you think it's okay…correct? Or obviously? Because obviously in Chinese it's 明顯 [obvious], so |

I think it's very similar to 明確[clear], so I think 'obviously' is suitable…

| 30 | S25 | I have a vocabulary problem. I want to write 身體虐待[physical abuse] and then I don't know how to write the standard vocabulary, so I skipped it… |

In most cases when the students raised a concern, they included their solutions or opinions because they had been told to do so in the briefings, but at times they simply raised concerns without including their solutions, possibly because they had none.

The second category refers to turns where the students responded to their peers' concerns. These can be divided into six sub-categories based on their characteristics: (1) showing agreement or disagreement with peers' questions or solutions, (2) seeking for or providing clarification, (3) seeking for or providing explanations, (4) offering suggestions in response to questions or concerns raised by peers, (5) commenting on peers' solutions or opinions, and (6) commenting on peers' solutions or opinions and offering own insights, ideas or suggestions at the same time.

The first sub-category 'showing agreement or disagreement' (RA) includes turns where students gave simple responses such as 'I agree/disagree with you', 'me too', 'good point!' to reinforce what their peers said, while no concrete ideas or suggestions were provided:

Example 4.2: Response-based LRE – RA

(T-Group, Discussion 1, Experiment I)

| 1 | S12 | I am not sure what tense I should be using in line 2 有人認為明星犯法給社會樹立 |
[…]

壞榜樣 [Some people think that celebrities who violate the law set a bad example to society]. I am using the 'the law will set up bad example'. I don't know is it right (if it is right to express it as) 'will set up'?

| 4 | S5 | Future tense. 'The stars break the law[48] will build a bad impression for society'. |

| 5 | S12 | *Interruption: <u>I agree with you.</u> |

The second sub-category 'seeking for or providing clarification' (RF) includes turns where students sought or provided clarification in cases of ambiguity, unclear pronunciation or other kinds of lack of clarity. In Example 4.3, student 13 tried to correct the grammatical mistake of student 4, but her comment appeared all of a sudden without clear explanation and therefore confused student 13, who then sought clarification. A clarification was provided by student 10, who noted that what she meant was that 'their donation beyond their need' was a mistake with the absence of the verb 'are'.

Example 4.3: Response-based LRE – RF (Lack of clarity)

(T-group, Discussion 3, Experiment I)

221	S6	Yes… I want to know how (to) translate '遠大於'[may have far exceeded]…
[…]		
		I don't know how (to) translate '遠大於'[may have far exceeded]…

| 224 | S4 | I use 'their donation beyond their need'. |

| 225 | S13 | <u>'are' …'are beyond'.</u> |

| 226 | S7 | *Interruption: <u>What do you mean?</u> |

| 227 | S13 | <u>I always have such a mistake</u> during my secondary school period. |

Situations where students sought clarification and provided clarification were classified as one category because they were not a dominant feature in either experiments within either groups, and they share a similar function. The following category was handled in

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[48] To preserve the originality of the discussions, grammatical and vocabulary mistakes in the students' were left in the way they were as much as possible, but a more comprehensible version was given in parenthesis when the readability was deemed seriously affected.

the same way in this regard for the same reason. In Example 4.4, student 10 was trying to clarify the expression 'hidden name' suggested by student 12 because it was mispronounced.

Example 4.4: Response-based LRE – RF (Mispronunciation)

(T-Group, Discussion 4, Experiment I)

241 […]	S2	For 可匿名發言 [can leave messages anonymously], I am not sure if it's okay to say 'hide their real name to leave a message'.
244	S12	What about 'hidden name'? 'We can leave a comment hidden name at the internet'…
245	S10	*Interruption: Do you mean 'hidden name'?

Note. Students whispering the pronunciation for 'hidden'.

In cases of mispronunciation, the teacher often corrected the students promptly once able to comprehend them, so situations like this, where students sought clarification because of wrong pronunciation, mostly appeared when the students interrupted before the teacher spoke.

The third sub-category, 'seeking or providing explanation' (RE), refers to turns where students sought or provided explanation or more detailed information:

Example 4.5: Response-based LRE - RE

(T-Group, Discussion 1, Experiment II)

| 13 […] | S22 | And…In line 1 假如在高峰時段開車進入市中心需付費,相信部份人會考慮調整其出行模式 [If motorists are/were charged for entering city centre during peak hours, some will/would probably consider adjusting their travel patterns.] – This seems like a conditional sentence to me; I am not sure if (I) should use first conditional or second conditional. |

16	S23	In my paragraph, I used conditional 1: 'people will consider to change'.
17	S14	<u>Why</u>?
18	S23	<u>Because I think this sentence is talk about (talks about) the phenomenon of now, so I will choose to use conditional one.</u>

In Example 4.5, Turn 17 student 14 asked for an explanation from student 1 regarding the decision to use the first conditional, followed by an explanation provided by student 23 in Turn 18. This sub-category has similar features as the previous category 'RF' and may appear to be overlapping, but it differs from RF in that it shows no sign of communication breakdown but simply reflects students' desire to elicit more detailed information from their peers regarding a concern or proposed language usage. Sometimes, the explanation may involve comments, and hence some LREs may appear to be both RE and RC. This categorization was decided by looking at the nature of the LREs. In cases where the students made comments as exemplification for their own usage rather than as an evaluation or critical analysis of others' usage, the LREs still fall into the category of RE.

The fourth sub-category 'offering suggestions' (RS) refers to instances where students shared their opinions with each other, offering suggestions to a concern raised, as illustrated in Example 4.6.

Example 4.6: Response-based LRE - RS

(NT-Group, Discussion 1, Experiment I)

20	S1	I have a difficult to write (difficulty in writing) 普世價值[universal values], but I don't know how to express it, so I used 'main values' to express it.
21	S22	<u>'Common values'.</u>
22	S24	<u>How about 'simple values'?</u>

This sub-category may appear to overlap with the first sub-category, 'RA', when the students start off with responses like 'I agree with you' or 'I disagree with you' and then proceed to present their own ideas or suggestions, as shown in Example 4.7:

Example 4.7: Special cases of Response-based LRE – RS

(T-Group, Discussion 5, Experiment I)

342	S11	I find it difficult to translate 政府可鼓勵企業推行彈性上班時間等家庭友善措施…
343	S13	Can I translate as 'free working time'?
344	S9	*Interruption: <u>Yes, I agree with you</u>. Give me five! <u>Mine is 'work hour be more free'</u>.
345	S3	*Interruption: <u>I agree with you</u>. <u>My solution is 'free duty time'</u>.

In other common seemingly overlapping cases, students offered a similar or exactly the same suggestion as the preceding speaker. In both of these cases, the responses were regarded as 'offering suggestions' rather than 'showing agreement or disagreement' because new ideas were provided. These two criteria were observed across all data to maintain coding consistency.

The fifth sub-category, 'making comments' (RC), includes turns where the students commented on classmates' opinions. This category may appear to be similar to the forth sub-category, 'offering suggestions', when the comments contained suggestions. However, the previous category, RS, only includes situations where the students offered suggestions of their own. In the 'RC' category, suggestions were made in addition to or based on the usage or opinion of peers and were therefore treated as comments. Occasionally this category contained elements of the first sub-category 'RA', where students uttered their agreement or disagreement, but it differs from it in that students made comments after doing so. In general, LREs that are evaluative in nature or involve critical analysis of others' language usage or opinions fall into this category.

As illustrated in Example 4.8, the students were evaluating the appropriateness of using terms like 'celebrity', 'famous people' and 'public people' to express the Chinese concept, 公眾人物, which means 'public figures', with one commenting on the usage of another.

Example 4.8: Response-based LRE - RC

(NT-group, Discussion 1, Experiment 1)

24	S17	I have a vocabulary problem. When I want to express 公眾人物 [public figures], but I cannot figure out the vocabulary, so I just used 'public people' to express it, but I don't know is it correct (if it is correct).
25[…]	S22	'Celebrity'?
29	S26	I think 公眾人物 is (does) not mean they (are) sure famous, so I think you use 'public people' …is better. You see what you write in that sentence and you use different word. If you only want to write 公眾人物 [public figure], I think you use 'public people'… is better.

The sixth category 'making comments and offering suggestions' emerges when the turn features a combination of both the forth and fifth categories. It refers to instances where the students commented on their peers' usage or opinion and at the same time offered suggestions, ideas or insights of their own, as illustrated in Example 4.9.

Example 4.9: Response-based LRES - RCS

(T-Group, Discussion 4, Experiment I)

| 241 […] | S2 | For 可匿名發言 [can leave messages anonymously], I am not sure if it's okay to say 'hide their real name to leave a message'. |
| 244 | S12 | What about 'hidden name'? 'We can leave a comment hidden name at the |

internet'…

246   S10   I've written as 'they can hide their identities'. It's the same as 'hidden name', because I think 'identity' is higher level than 'hidden name'; just a name you can name any name, but identity is what is important…

I) Results for the T-group and the NT-group in Experiment I

Table 4.4 presents the concern-based and response-based LREs produced by both groups in Experiment I. Response-based LREs consistently outnumbered concern-based LREs in the T-group by a large proportion across the five discussions, accounting for 83.9% (302/360) of the total LREs. In contrast, the NT-group had very similar proportions of concern-based LREs (76/151) and response-based LREs (75/151).

Table 4.4 Proportion of concern-based and response-based LREs in Experiment I

	T-group		NT-group	
	Concern-based LREs	Response-based LREs	Concern-based LREs	Response-based LREs
Discussion 1	16	67	11	23
Discussion 2	12	67	16	14
Discussion 3	11	63	19	13
Discussion 4	7	46	16	4
Discussion 5	12	59	14	21
Total (Sum)	58 (16.1%)	302 (83.9%)	76 (50.3%)	75 (49.7%)
Mean	4.46	23.23	5.85	5.77
SD	3.05	11.75	2.74	4.42
NOTE: % = percentage of total LREs				

Unlike the T-group case, in the NT-group, neither of the two types of LREs consistently outnumbered the other in the five discussions. There were more concern-based LREs in three out of the five discussions and there were more response-based LREs in the other two discussions. This suggests that the discussions in the T-group were composed of

more responses than concerns and the trend was consistent in all five translation tasks, while the discussions in the NT-group had a similar share of responses and concerns but there was no consistent trend over all five writing tasks.

In comparing the results of the two groups, it was observed that the T-group consistently produced more response-based LREs than the NT-group. The T-group produced a total of 302 response-based LREs, while the NT-group only produced a total of 75 response-based LREs. In contrast, the number of concern-based LREs found in the NT-group (76) was slightly more than that of the T-group (58), but the difference was not as salient as in the case of response-based LREs. This shows that students in the T-group responded to each other's concerns much more frequently than the NT-group and the difference was statistically significant (t=4.08, p=0.0002). The T-group raised fewer concerns than the NT-group, but the difference was statistically insignificant (t=0.67, p=0.2540).

II) Results for the T-group and the NT-group in Experiment II

As shown in Table 4.5, the results of Experiment II were similar to those of Experiment I. In the T-group, there were consistently far more response-based LREs than concern-based LREs across the five discussions. On the whole, the NT-group also produced more response-based LREs than concern-based LREs, but there were no signs that concern-based or response-based LREs consistently dominated across the five discussions.

Table 4.5 Proportion of concern-based and response-based LREs in Experiment II

	T-group		NT-group	
	Concern-based LREs	Response-based LREs	Concern-based LREs	Response-based LREs
Discussion 1	7	58	19	9
Discussion 2	6	40	15	23

Discussion 3	10	52	16	29
Discussion 4	8	65	22	40
Discussion 5	8	69	31	30
Total (Sum)	39 (12.1%)	284 (87.9%)	103 (44%)	131 (56%)
Mean	3.00	21.85	7.92	10.08
SD	2.18	12.46	4.50	5.30
NOTE: % = percentage of total LREs				

In sum, 87.9% (284/323) of the total LREs in the T-group were response-based LREs, while 56% (131/234) of the total LREs in the NT-group were response-based LREs. This indicates that overall the discussions in the T-group were comprised of many more responses than concerns and the trend remained consistent across the five translation tasks, whereas the discussions in the NT-group contained slightly more responses than concerns in general but the trend fluctuated across the five writing tasks.

The T-group produced a total of 284 response-based LREs and 39 concern-based LREs, while the NT-group produced a total of 131 response-based LREs and 103 concern-based LREs. This shows that the T-group responded to each other's concerns more frequently than the NT group and the difference was statistically significant (t=2.58, p=0.008). Meanwhile, the T-group (39) raised many fewer concerns than the NT-group (103) and the difference was statistically significant (t=2.98, p=0.003).

III) Results for the same group of students across different tasks

Figure 4.3 shows that students 1-13 produced many more response-based LREs than concern-based LREs in discussions of T-tasks and slightly more response-based LREs than concern-based LREs in discussions of NT-tasks; but response-based LREs produced in T-tasks outnumbered those produced in NT-tasks by a large proportion and the difference was statistically significant (t=4.73, p=0.0002).
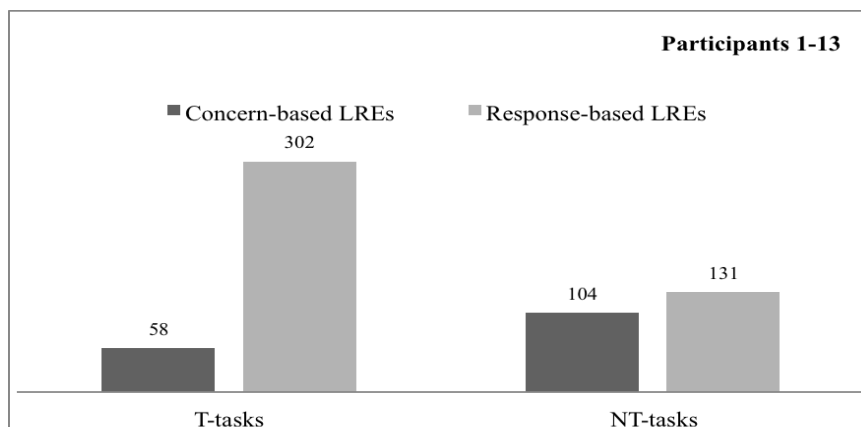
Figure 4.3 Proportion of C/R LREs of Students 1-13 in T-tasks versus NT-tasks

Likewise, as illustrated in Figure 4.4, students 14-26 produced many more response-based LREs than concern-based LREs in discussions of T-tasks but slightly more concern-based LREs than response-based LREs in NT-tasks. The total number of response-based LREs produced in T-tasks outnumbered those produced in NT-tasks by a large proportion and the difference is statistically significant (t=4.75, *p*=0.00016).
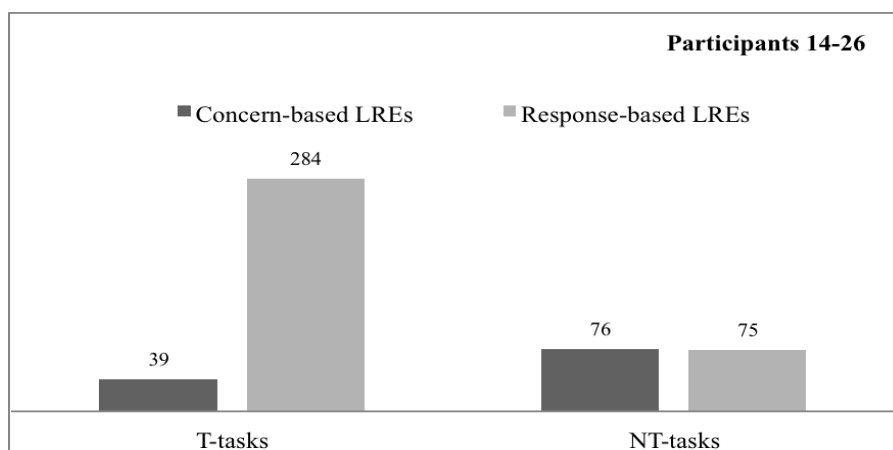
Figure 4.4 Proportion of C/R LREs of Students 14-26 in T-tasks versus NT-tasks

The results indicate that both groups of students focused more on responding to each other than on raising concerns and this tendency was much stronger when they were working on T-tasks (translation) than when they were working on NT-tasks (writing).

4.1.2.2 Finding 2b: Proportion of response-based LREs

Because the above results show that response-based LREs played a dominant role in discussions in the T-group, it was considered necessary to present more details in this regard. In this study, response-based LREs were classified into six sub-categories according to their discourse type, namely RA, RF, RE, RS, RC, and RCS (see above). Their proportion by group and experiment is displayed in Table 4.6.

Table 4.6 Distribution of response-based LREs

Response type	RA	RF	RE	RS	RC	RCS
Experiment I						
T-group	14 (4.6%)	5 (1.7%)	5 (1.7%)	252 (83.4%)	21 (7.0%)	5 (1.7%)
NT-group	0 (0.0%)	1 (1.3%)	4 (5.3%)	57 (76.0%)	12 (16.0%)	1 (1.3%)
Experiment II						
T-group	10 (3.5%)	3 (1.1%)	14 (4.9%)	133 (46.8%)	97 (34.2%)	27 (9.5%)
NT-group	0 (0.0%)	11 (8.4%)	6 (4.6%)	105 (80.2%)	8 (6.1%)	1 (0.8%)

NOTE: the number presented here is total number (sum) of that type of 'R' in five discussions

% = Percentage of total number response-based LREs in five discussions (See Table 4.3 and 4.4)

I) Results for the T-group and the NT-group in Experiment I

In Experiment I, the most common type of responses found in the T-group was suggestions (RS), followed by comments (RC) and agreements (RA), accounting for 83.4%, 7% and 4.6% of the response-based LREs respectively. As for the NT-group, the most common type of response-based LREs was suggestions (RS), comments (RC) and explanations (RE), accounting for 76%, 16% and 5.3% of the response-based LREs. The groups were similar in that the majority of responses were RS and RC, but the actual number of RS and RC produced by the T-group was much greater than the number of RS and RC produced by the NT-group.

II) Results for the T-group and the NT-group in Experiment II

In Experiment II, the most prevalent type of response-based LREs in the T-group was suggestions (RS), followed by comments (RC) and a combination of suggestions and comments (RCS), accounting for 46.8%, 34.2% and 9.5% of the total number of response-based responses. As for the NT-group, the most common type of responses was also suggestions (RS), followed by clarifications (RF) and comments (RC), accounting for 80.2%, 8.4% and 6.1% of the total number of response-based responses respectively. In general, Experiment II produced similar results as Experiment I in that suggestions (RS) still accounted for the highest proportion of response-based LREs in both the T-group and the NT-group. However, there were some noticeable differences. First, the proportion of RS and RC produced by the T-group was less uneven. Second, a combination of comments and suggestions (RCS) was rare in Experiment I for both groups but became one of the most prevailing types of responses in the T-group in Experiment II.

III) Results for the same group of students across different tasks

The same phenomenon held true even in comparing the results for the same group working on different tasks. Students 1-13, who were assigned to the T-group in Experiment I and to the NT-group in Experiment II, produced more RS and RC in discussions of translation tasks than in discussions of writing tasks, but in discussions of writing tasks they produced more RF. On the other hand, students 14-26, who were assigned to the NT-group in Experiment I and to the T-group in Experiment II, produced a greater number of RS, RC and RCS in discussions of translation tasks than in discussions of writing tasks.

4.1.2.3 Finding 2c: Discussion patterns

The above section compared the results for the T-groups and the NT-groups in terms of their quantity and discourse type. Upon closer examination, it was observed that the discussion patterns of the two groups were strikingly different (see Appendix 5A and 5B for details).

I) Results for the T-Group and the NT-Group in Experiment I

Table 4.7 below provides an overview of the concern-response patterns in discussions 1 to 5 of the T-Group and the NT-group in Experiment I. In the discussions within the T-Group, the majority of concerns raised by students were followed by a number of responses, ranging from 1 to 17.

Table 4.7 Patterns of concern-based and response-based LREs in Experiment I

	T-group		NT-group	
Patterns	Counts	Percentage	Counts	Percentage
C	3	5.17%	42	55.26%
C→R	5	8.62%	13	17.11%
C→R→R	2	3.45%	10	13.16%
C→ R→R→R	8	13.79%	6	7.89%
C→ R→R→R→R	8	13.79%	2	2.63%
C→ R→R→R→R→ R	10	17.24%	2	2.63%
C→ R→R→R→R→ R→R	5	8.62%	1	1.32%
C→ R→R→R→R→ R→R→R	4	6.90%	0	-
C→ R→R→R→R→ R→R→R→R	6	10.34%	0	-
C→ R→R→R→R→ R→R→R→R→R	2	3.45%	0	-
C→ R→R→R→R→ R→R→R→R→R→R	1	1.72%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R	0	-	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R	3	5.17%	0	-
C→more than 12R	1	1.72%	0	-

Only on three occasions were there concerns left with no responses. The most prevalent patterns [49] were '1C+5R', '1C+3R', '1C+4R' and '1C+8R', accounting for approximately 17%, 14%, 14% and 10% of the overall patterns in the five discussions.

Example 4.10 shows a pattern with one concern and five responses (with coding within parenthesis). In turn 209, student 7 expressed her uncertainty about the expression for 活動呈現過度娛樂化的傾向 [the campaign has become overly entertaining]. Student 13 offered her suggestion and that inspired student 7 to offer another suggestion, followed by three suggestions from other students. Discussion on this issue stopped at turn 215 when student 12 raised her concern about the choice of verb tense in translating the sentence concerned, which prompted another five responses:

Example 4.10: Typical patterns among the T-group in Experiment I

209	S7	I think it's very difficult to translate 活動呈現過度娛樂化的傾向[the campaign has become overly entertaining], and at the moment I am using 'the activity presented and turn to more entertainmental (entertaining)'. [C]
210	S13	(How about) Entertainmentally (entertaining)? Too complicated? [RS]
211	S7	Then 'entertainment'? [RS]
212	S9	'Some people join Ice Bucket Challenge just for fun'. [RS]
213	S13	I use 'it haven't (hasn't) been taken in a serious way'. [RS]
214	S2	I used 'Ice Bucket Challenge becomes a show but not a donation'. [RS]
215	S12	I am not sure what tense I should be using in the sentence in line 5: 大部份人只是想看名人明星當眾表演將冰水澆在自己頭上[Most people simply want to watch celebrities pouring ice water on their heads]. I used past tense. [C]

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[49] Unlike the NT-group's discussion, the T-group's discussion featured a variety of patterns fairly evenly distributed in both experiments. For consistency, only those with occurrences at at least 10% were treated as 'prevalent' patterns.

216	S10	I used present tense. I didn't put the focus in grammar because I just translated it as 'people only put their focus on celebrities watered by ice water'. [RS]
217	S3	I used present tense: 'Most people just want to see celebrities show dumping ice water over their head', because I think most people want to see and they not just focus for (on) one time…it's usually… (Something that happens regularly). [RS]
218	S11	I think this is a fact, so I used the present tense. [RS]
219	S5	I used past tense because I think this is a fact, but in the past. [RS]
220	S1	Past tense. I think past tense should be used, because…same (reasons) as S5. [RS]

There were also many instances (36% of the overall patterns) where a concern was followed by 6 to 12 responses, and in one case a concern was followed by as many as 17 responses[50]. More details can be seen in Appendix 5A.

As for the NT-group, almost the opposite trend was observed. Only in a few instances was a concern followed by 5 to 6 responses, and there were no instances in which a concern was followed by more than 6 responses, which was common in the T-group. The most prevailing pattern was '1C alone', '1C+1R' and '1C+2R', accounting for approximately 55%, 17% and 13% of the overall patterns. In other words, more than half of the concerns raised were not followed by any response and even when there were responses, they were very limited, as illustrated below:

Example 4.11: Typical patterns among NT-group in Experiment I

110	S19	I don't know how to say 自殺 [commit suicide], so I say 'the people kill themselves'… [C]
111	S21	I don't know how to say 二次創作[second creation], so I only said 'some people use their creative (creativity) to make new pictures or videos', so this is my problem. [C] *(Silence)*

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[50] This refers to turns 50-67 of the T-group in Experiment I (see Appendix 5A). Full transcripts can be provided upon request.

112	S23	I have a problem. I think the biggest problem of me is still vocabulary, such as 報 復[take revenge], I use 'wrong idea' to express it...報復性的思維 [Revengeful thoughts] [C]
113	S21	Too many vocab (vocabulary) problems, so I have a grammar problem. For example, I want to express 'have become a big problem everywhere', but I don't know I should use 'have become' or 'become'…I don't know…yes… yes grammar problem… 'become' is okay? Or..? [C]
114	S24	I think we should use 'has become' because this phenomenon is continue….從前 到現在 [from the past till present], from the past to now, so we should use present perfect tense. [RS]
115	S17	But I think it depends on what do you want to mean in your essay, because I think simple present tense and present perfect tense is (are) okay; it just depends on what do you want to express in your article, because you want to say…it's a situation, so 'become' is okay…just depend on what you want to say. [RC]
116	S14	errr…. I don't know how to say 失業青年[unemployed youth], so I translate to 'unemployed young'. [C]

In Example 4.11, in turn 110, student 19 expressed her uncertainty about the expression for the word '自殺', which means 'commit suicide' in English, but her concern was left unattended and in turn 111, student 21 simply moved on and talked about his uncertainty about the expression for 二次創作 [second creation]. Again there was no response to his concern and after a moment of silence, student 23 brought up a new problem in turn 113, which was again not responded to by any of her peers. Finally, in turn 114 student 21 raised her concern which was followed by two responses in turn 114 and 115. However, very soon the issue was left behind and student 14 raised a new concern in turn 116.

These findings show that concerns raised in discussions of T-tasks often prompted responses and the topics discussed were more likely to be addressed by several students, while concerns raised in NT-tasks often failed to prompt responses from peers and even when they were responded to, the discussion did not last long. This finding suggests that discussions in the T-Group were more interactive than those in the NT-group.

II) Results for T-Group and NT-Group in Experiment II

Table 4.8 shows the concern-response patterns of the T-Group and NT-group in Experiment II. In discussions within the T-Group, all of the concerns were followed by response(s), ranging from 1 to 21. Not once were the concerns left unattended. The most common pattern was the '1C+4R' pattern, accounting for almost 13% of the patterns, but patterns like '1C+5R', '1C+7R', '1C+8R' and '1C+11R' were also very common, each accounting for about 10% of the patterns.

Table 4.8 Patterns of concern-based and response-based LREs in Experiment II

	T-group		NT-group	
Patterns	Counts	Percentage	Counts	Percentage
C	0	0.00%	37	35.92%
C→R	2	5.13%	33	32.04%
C→R→R	1	2.56%	13	12.62%
C→ R→R→R	3	7.69%	13	12.62%
C→ R→R→R→R	5	12.82%	5	4.85%
C→ R→R→R→R→ R	4	10.26%	1	0.97%
C→ R→R→R→R→ R→R	3	7.69%	0	-
C→ R→R→R→R→ R→R→R	4	10.26%	1	0.97%
C→ R→R→R→R→ R→R→R→R	4	10.26%	0	-
C→ R→R→R→R→ R→R→R→R→R	3	7.69%	0	-
C→ R→R→R→R→ R→R→R→R→R→R	2	5.13%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R	4	10.26%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R	1	2.56%	0	-
C→more than 12R	3	7.69%	0	-

Example 4.12 is an exemplification of a heated debate on the appropriateness of using 'financial problem' to express the term 資金緊絀, which means 'short of money'.

Example 4.12: Typical patterns among the T-group in Experiment II

312 S16 And I have a new problem in line 5: 資金緊絀 [short of money]…then I translate it 'capital shortage'. Does anyone have any suggestions? [C]

313 S24 I use 'money is not enough'. [RS]

314 S15 I use 'financial problem'. [RS]

315 S14 I agree with you. [RA]

316 S17 I use 'shortage of money' but I think 'financial problem' may be suitable than 'shortage of money' or others. [RCS]

317 S23 I don't agree <with financial problem> because 資金緊絀 [short of money] means people still have money, but 財務困難[financial difficulty] is means (means) the lack of money. 財務困難[financial difficulty] is more complex situation. [RC]

318 S17 You mean the level is different? Yes, maybe it's right. [RC]

319 S15 I don't think so…財務困難 [financial difficulty] means you don't have enough money to pay something, so that means 資金緊絀 [in short of money]. [RC]

320 S25 I don't agree with you. 'Financial problem' means you are struggling in the capital…or other things like loan; but 資金緊絀 [in short of money]…Maybe your job or incomes (are) not enough, so it's different. [RC]

321 S15 I disagree, because sometimes we also say 最近錢不夠用 [not having enough money to spend], we also have (the expression) 經濟困難 [financial difficulty] because you think it's too serious, but sometimes we can also say that… [RC]

322	S16	I don't agree with you. If you replace 財務困難 [financial difficulty] in this sentence '能夠避免資金緊絀的人隨便買房 [buy a property with little consideration]' then I think (with) 'financial problem' you can't 隨便買房 [buy a property with little consideration]… [RC]
323	S24	I agree with all of you because 財務困難 [financial difficulty]…資金緊絀 [in short of money]…all of this situation is they cannot buy a house…so I think if we want (to be) more accurate, we should not use 財務困難 [financial difficulty]. [RC]

There were many instances where the T-group had heated debates, as in Example 4.13. On three occasions, there were patterns with one concern plus 13 responses, 16 responses and 21 responses respectively[51] and these special cases are analyzed in Chapter 5.

As for the NT-Group, the most typical pattern was '1C alone', followed by '1C+1R', '1C+2R' and '1C+3R', accounting for approximately 36%, 32%, 12.6% and 12.6% respectively. None of the concerns were followed by more than 7 responses. There were again many concerns left unattended, as in Example 4.13.

Example 4.13: Typical patterns in discussions among NT-group in Experiment II

191	S12	I don't know how to express 差價[price gap]. I write 'different'…會不會有點過份 [Is this too much]? [C]
192	S11	I don't know how to express 還款 [repayment]…I use 'returnment' …

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[51] This refers to turns 204-217 (See Appendix 4), 40-56 and 277-298, respectively, in transcript for T-group in Experiment II. Full transcripts can be provided upon request.

<div align="center">我自己作的 [I coined this word] . [C]</div>

193	S12	I don't know how to express 收緊按揭[tighten mortgage]…. [C]
194	S7	'Narrow'…'narrow…the range of this noun…mortgage'… [RS]
195	S11	I don't know how to translate (express) 供款人[mortgage payer] 或債務人[debtor], so I use 'people'. [C]

In Example 4.13, student 12 raised a concern about the word choice for 差價 [price gap] but student 11 proceeded to another concern instead. Student 11 then brought up another question and this prompted one response from student 7, but the matter was not addressed again, and student 11 raised another new concern. This result echoes that of Experiment I and shows that concerns in discussions in the T-group were frequently addressed by a number of students while those in discussions in the NT-group were either followed by no response or just a handful of responses. This suggests that discussions of T-tasks were more enduring and tended to encourage better interaction between students than discussions of NT-tasks.

III) Results for the same group of students across different tasks

The striking contrast can also be seen by comparing the results for the same group of participants across different tasks. Both Students 1-13 and Students 14-26, as can be see in Table 4.9 and 4.10 respectively, frequently had one concern plus five or more responses in discussions of T-tasks but rarely did their concerns in NT-tasks prompt more than five responses. The '1C-alone' pattern was rarely found in their discussions of T-tasks but very common in their discussions of NT-tasks.

Table 4.9 Patterns of concern-based and response-based LREs of S1-13 across tasks

	T-tasks		NT-tasks	
Patterns	Counts	Percentage	Counts	Percentage
C	3	5.17%	37	35.92%
C→R	5	8.62%	33	32.04%
C→R→R	2	3.45%	13	12.62%
C→ R→R→R	8	13.79%	13	12.62%
C→ R→R→R→R	8	13.79%	5	4.85%
C→ R→R→R→R→ R	10	17.24%	1	0.97%
C→ R→R→R→R→ R→R	5	8.62%	0	-
C→ R→R→R→R→ R→R→R	4	6.90%	1	0.97%
C→ R→R→R→R→ R→R→R→R	6	10.34%	0	-
C→ R→R→R→R→ R→R→R→R→R→R	2	3.45%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R	1	1.72%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R	0	-	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R→R	3	5.17%	0	-
C→more than 12R	1	1.72%	0	-

Table 4.10 Patterns of concern-based and response-based LREs of S14-26 across tasks

	T-tasks		NT-tasks	
Patterns	Counts	Percentage	Counts	Percentage
C	0	0.00%	42	55.26%
C→R	2	5.13%	13	17.11%
C→R→R	1	2.56%	10	13.16%
C→ R→R→R	3	7.69%	6	7.89%
C→ R→R→R→R	5	12.82%	2	2.63%
C→ R→R→R→R→ R	4	10.26%	2	2.63%
C→ R→R→R→R→ R→R	3	7.69%	1	1.32%
C→ R→R→R→R→ R→R→R	4	10.26%	0	-
C→ R→R→R→R→ R→R→R→R	4	10.26%	0	-
C→ R→R→R→R→ R→R→R→R→R	3	7.69%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R	2	5.13%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R	4	10.26%	0	-
C→ R→R→R→R→ R→R→R→R→R→R→R→R→R	1	2.56%	0	-
C→more than 12R	3	7.69%	0	-

4.1.5 Finding 3: Grammatical and lexical LREs

There were two types of linguistic focuses: grammatical and lexical. Grammatical LREs (coded as 'G') are students' discussions about grammatical features, usage or conventions of English, including aspects of morphology (e.g. parts of speech and affixes), syntax[52], punctuation, prepositions[53], and conjunction.

Example 4.14 is an illustration of grammatical LREs (with coding provided within parenthesis), where students discussed the appropriate tense for the main verb in the context.

Example 4.14: Grammatical LREs
(T-group, Discussion 3, Experiment I)

195　S7　I am not sure what tense I should be using in the first sentence 最近「冰桶挑戰」風靡全球，在各大社交網站上似病毒般的傳播開來 [Recently, the Ice Bucket Challenge has become popular and gone viral on social media], so I just used simple present tense: 'Recently, Ice Bucket Challenge is popular around the world'. [G]

196　S13　I used past tense, because I think the influence now is (has) stopped already, so I used 'had': 'Ice Bucket Challenge had a big impact in every social website like virus'. [G]

197　S2　Present tense…my sentence is same as S7 because I think that this action is a fact and until now I also see somebody challenge (challenging) others. [G]

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[52] Discussions about sentence variety were at first categorized as a separate type of LREs, syntactic LREs, but as there were only two examples of this type of LREs throughout the data, it was deemed unnecessary to classify it as a separate category. Hence anything related to syntax, including sentence variety, was classified as grammatical LREs too.

[53] There are variations in the categorization of prepositions. This study adopted the practice of Kim (2013) and categorized prepositions as grammatical LREs because it was observed that when students talked about prepositions they were mostly concerned about the grammatical convention rather than having the realization that words or phrases with different preposition have different meanings. However, the categorization may be different if evidence showed that the students' focus was on semantic meaning.

Lexical LREs (coded as 'L') refer to instances in which students focused on discussions of lexical items, with deliberation on semantic meaning, expressions of a word, phrase or clause, word choice, or spelling, as exemplified in Example 4.15.

Example 4.15: Lexical LREs

(T-group, Discussion 2, Experiment I)

106　S13　I just want to ask about 公眾諮詢 [public consultation]…what you guys use… I used 'have to ask for residents' opinion'.[L]

107　S6　…I am using 'to ask for people's opinion'.[L]

108　S7　I used 'the government have (has) to ask the opinion of (the) public'. [L]

109　S2　Just use 'the support from public'. [L]

In categorizing the linguistic focus of LREs, some special cases emerged and it is worth mentioning how such cases were dealt with. Typical ambiguous examples were found in discussions related to 'prepositions' and 'affixes'. For instance, in Example 4.16 below, student 12 raised concerns about the expression for 在法律面前,人人平等 [Everyone is equal before the law]，so this was categorized as a lexical LRE, but when her peers suggested using 'before the law', 'under the law' and 'in the law' respectively in the following three turns, the focus was shifted to 'preposition'. Therefore, the three LREs were categorized as grammatical.

Example 4.16: Deliberation on grammatical conventions (Preposition)

(T-group, Discussion 1, Experiment I)

68　S12　I want to know how to express 在法律面前, 人人平等[Everyone is equal before the law]　*continued after being interrupted: I used 'However, everyone is equal in front of law'. [L]

69	S10	*Interruption: 'Everyone is equal before the law'. **Continued after interruption: 'before the law'. [G]
70	S7	'Everyone is equal under the law'. [G]
71	S2	I wrote 'in the law'. [G]

These expressions in fact have different semantic meaning, which language users with greater knowledge of linguistics or English may realise, but in this context there was no evidence that the students realised it and thus a more reasonable assumption was that the students were simply concerned about the grammatical conventions. Hence, while turn 68 was categorized as a lexical LRE, turns 69 to 71 were classified as grammatical LREs.

In contrast, even when the focus was on 'preposition', which appears to be a grammatical LRE, if evidence showed that the students' focus was on semantic meaning rather than grammatical conventions, the LRE was categorized as a lexical one. In Example 4.17 below, in response to the concern raised, student 14 suggested expressing 如期 [in time] as 'in time'. This was no doubt a lexical LRE because the focus was still on the expression.

Example 4.17: Deliberation on semantic meaning (Preposition)

(T-group, Discussion 5, Experiment II)

255	S15	I translate to …translate the …line 3 (I have difficulties in translating line 3) 甚至 無法如期還款 [repay their loans as scheduled]...[L]
256	S14	'In time' I think. [L]
257	S16	I used 'on time'. [G]
258	S15	*Interruption: 'on time' is better. [G]
259	S20	*Interruption: I used 'on time' also…[G]

260	S24	I use 'before the deadline'. [L]
261	S15	I think it's very good! [L]
262	S17	Yes, it's very good! [L]
263	S23	I think 'on time' is (more) suitable than 'in time'. [G]
264	S16	Yes, because they have different meaning. [L]

However, in turn 257, student 16 considered that the preposition 'on' should be used instead and two other students offered similar suggestions in turn 258 and turn 259. These were all grammatical LREs because there was no proof that the students understood the different meaning of 'in time' and 'on time' and they were more likely concerned about grammatical accuracy. However, in turn 264, student 16 commented that 'on time' was more suitable because 'they have different meaning'. This proved that she was considering the semantic meaning of the expression and her primary concern was not grammatical even though the talk revolved around 'preposition', so this was classified as a lexical LRE.

The same applied to other instances. For instance, remarks about morphology were generally considered grammatical LREs, but only if the focus was on grammar. There were cases where affixes were discussed but the focus was on their meaning rather than form. For instance, in Example 4.18, the students were talking about the prefix 'anti' and this morphological concern was normally treated as grammatical LREs:

Example 4.18: Deliberation on semantic meaning (morphology)
(NT-group, Discussion 1, Experiment I)

16	S16	禁毒 [Anti-drug] and I used 'ban drugs'…Do you have another idea? [L]
17	S23	I have…'anti-drugs'? [L]
18	S26	I think 'anti-drugs' and 'no drugs' (are) also okay because when we saw the logo I always saw these two words. [L]

| 19 | S17 | But I think 'zero drugs' and 'anti-drugs' is (are) different. 'Zero' is didn't have this; 'anti' is you don't agree. [L] |

Turn 16 and turn 17 obviously expressed a concern and suggestion on the lexical level, but turn 18 and turn 19 were also treated as LREs because their explanation – even though a bit vague – showed that their focus was not on grammatical convention but on the semantic meaning of 'anti-'. An opposite case is exemplified in Example 4.19:

Example 4.19: Deliberation on grammatical convention (morphology)
(T-group, Discussion 4, Experiment II)

218	S24	I have an idea…the answer to this question is so clear, so we should have another topic. I have some problem in line 4, I don't know how to express 分配不均 [*uneven distribution (of wealth)]. I used 'unaverage'. 'Average' mean 平均 [average]…if opposite is it 'unaverage', 'disaverage' or something like that…? [L]
219	S15	I think don't have this word…or maybe you can change it to a verb. [L]
220	S20	I used 'unbalanced'. [L]
221	S25	'Unbalanced'…is it incorrect? Is it 'imbalanced'? [G]
222	S24	Or 'disbalance'…? [G]
223	S17	I agree with her (S25). 'Imbalance', and I think the others is (are) wrong, because I know 'imbalance' is the opposite form for 'balance'. [G]
224	S14	Imbalance…I agree with you. [G]
225	S24	I agree with you too. [G]

In turn 218, student 24 raised a concern on the lexical level, followed by two suggestions in turn 219 and 220. However, in turn 221-225 there was a shift from deliberation on word choice to form, in which the students began to discuss the correctness of the affixes 'un-', '-im-' and 'dis-'. Hence, while turns 218-220 were categorized as lexical LREs, turns 221-225 were all considered grammatical LREs.

There were quite a number of cases where the discussions were first concerned with lexical expressions and then suddenly shifted to concerns about grammatical features or usages like that in Example 4.19. They were coded correspondingly and the subsequent discussions on the same matter shared the same categorization unless there was proof of a shift in focus. Take Example 4.19: Turn 218 was considered as a lexical LRE and so were turns 219-220, but in turn 221 there was a shift in focus from meaning to form and turns after that were still about the same matter, so they were all categorized as grammatical LREs.

All LREs across the data were coded using the above categorization, followed by investigation into the proportion of these two types of LREs (i.e. grammatical and lexical LREs) within and between the T-group and the NT group. The LRE proportion of the same group of participants across different tasks was also compared.

I) Results for the T-group and the NT-group in Experiment I

Table 4.11 shows the occurrence of lexical LREs and grammatical LREs produced by both groups during the five discussions in Experiment I. The lexical LREs and grammatical LREs produced by the T-group consistently outnumbered those of the NT-group across the five discussions in Experiment I. In total, the T-group produced 192 more lexical LREs than the NT-group and the difference was statistically significant ($t=3.41$, $p=0.00114$). The total number of grammatical LREs in the T-group and the NT-group were 41 and 24 respectively, but this difference ($t=1.06$, $p=0.15044$) was not statistically significant. However, there was a clear trend. For both the T-group and the NT-group, lexical LREs were the most frequently produced LREs in the discussions.

Table 4.11 Grammatical and lexical LREs in Experiment I

	T-group		NT-group	
	Grammatical LREs	Lexical LREs	Grammatical LREs	Lexical LREs
Discussion 1	15	68	4	30
Discussion 2	8	71	6	24
Discussion 3	14	60	9	23
Discussion 4	3	50	5	15
Discussion 5	1	70	0	35
Total (Sum)	41 (11.4%)	319 (88.6%)	24 (15.9%)	127 (84.1%)
Mean	3.15	24.54	1.85	9.77
SD	2.57	11.97	1.61	4.90
NOTE: % = percentage[54] of total LREs				

Precisely, 88.6% (319/360[55]) of the total LREs in the T-group were lexical LREs and the results for the NT-group were almost identical, with its lexical LREs accounting for 84.1% (127/151) of its total LREs. This suggests that both the T-group and the NT-group tended to focus on discussions on the lexical level rather than on the grammatical level.

II) Results for the T-group and the NT-group in Experiment II

Table 4.12 displays the results of both groups in Experiment II. The total number of lexical LREs in the T-group and the NT-group was 284 and 223 respectively, while that of grammatical LREs in the T-group and the NT-group was 39 and 11 respectively. However, the difference between the lexical LREs in the two groups was not statistically significant (t=0.67, p=0.25466), while the difference in grammatical LREs showed statistical significance (t=3.55, p=0.00081). This opposite trend to Experiment I may be due to a rise in lexical concerns along with a reduction in grammatical concerns in the NT-group.

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[54] This was provided to account for the unequal number of LREs in each context.
[55] See Table 4.4 for the total number of LREs.

Table 4.12 Grammatical and lexical LREs in Experiment II

	T-group		NT-group	
	Grammatical LREs	Lexical LREs	Grammatical LREs	Lexical LREs
Discussion 1	13	52	6	22
Discussion 2	8	38	0	38
Discussion 3	2	60	2	43
Discussion 4	10	63	3	59
Discussion 5	6	71	0	61
Total (Sum)	39 (12.1%)	284 (87.9%)	11 (4.7%)	223 (95.3%)
Mean	3	21.85	0.85	17.15
SD	1.57	11.98	1.1	6.94

NOTE: % = percentage of total LREs

Experiment II shared the same trend as Experiment I in that lexical LREs were again the most frequently produced LREs in discussions by both the T-group and the NT-group, as compared to grammatical LREs. In total, 87.9% (284/323) of the total LREs in the T-group were lexical LREs and this uneven proportion was even stronger for the NT-group, with 95.3% (223/234) of LREs being lexical LREs. Again, this suggests that both groups had a tendency to focus on lexical rather than grammatical issues in their discussions.

III) Results for the same group of students across different tasks

Table 4.13 shows the grammatical LREs and lexical LREs produced by the same group of students in different tasks. In comparing the results of the same group of participants across different tasks, it appears that participants 1-13 produced more lexical LREs and grammatical LREs in T-tasks than in NT-tasks, but statistical significance was only found in the difference in grammatical LREs (lexical: t=1.45, p=0.0798; grammatical: t=2.44, p=0.0112); it also appears that participants 14-26 produced more lexical LREs and more grammatical LREs in T-tasks than in NT-tasks,

but only the difference in lexical LREs was statistically significant (lexical: t=2.78, *p*=0.0052; grammatical: t=1.39, *p*=0.088).

Table 4.13 Grammatical and lexical LREs by same group of students across tasks

		Grammatical LREs			Lexical LREs		
		Total	M	SD	Total	M	SD
Students 1-13	Translation tasks	41	3.15	2.57	319	24.54	11.97
	Writing tasks	11	0.85	1.10	223	17.15	6.94
Students 14-26	Translation tasks	39	3.00	1.57	284	21.85	11.98
	Writing tasks	24	1.85	1.61	127	9.77	4.90

However, a consistent trend can be observed. Students 1-13 tended to produce more lexical LREs than grammatical LREs no matter whether they engaged in discussions of T-tasks or NT-tasks, and so did students 14-26. This echoes the results of the comparison between different groups of students working on different tasks (Experiment I and II) and suggests that both translation tasks and writing tasks may create more opportunities for the students to focus on lexis than on grammar.

Another interesting trend emerging from the results was that the quantity of grammatical LREs and lexical LREs generated by the T-group was similar in both Experiment I and Experiment II, while those generated by the NT-group varied greatly, as shown in Table 4.14:

Table 4.14 Grammatical and lexical LREs in both experiments

	T-group		NT-group	
	Grammatical LREs	Lexical LREs	Grammatical LREs	Lexical LREs
Experiment I	41	319	24	127
Experiment II	39	284	11	223

This suggests that translation tasks lead to more steady outcomes in engendering class discussions, while writing tasks exhibit fluctuating results.

4.1.6 Other Findings

In addition to the above prevalent features, there were also several less regular and exceptional cases worth noting, including evidence of retained memory and interruptions.

4.1.6.1 Retained memory

There were two instances where students in the T-group referred to ideas that had been discussed previously. In Example 4.20, in Turn 117 student 5 brought up her concern about the translation for 租客是以生活質素來換取較低的租金 [tenants enjoy lower rents at the expense of their living quality] and prompted a number of responses (turns 118-127). There were quite a few other concerns and responses after that until in turn 149 student 10 suddenly went back to respond to the topic raised previously in turn 117.

Example 4.20: T-group, Discussion 2, Experiment I

117   S5   <u>I have a question. I feel difficult when I translate 租客是以生活質素來換取較低</u>

[...]   <u>的租金[tenants enjoy lower rents at the expense of their living quality] in line 4.</u>

          <u>I feel difficult to express this sentence.</u>

128   S13   (For the sentence) 干預都會扭曲供求關係[any intervention on price will distort

[...]   the relationship between supply and demand] ….(the term) 扭曲 I just use 'break',

          how about you guys?

135   S13   What you guys to write 業主 [landlord/property owner], before I find the word

[…]   'landlord' then I used building owner…

141   S6   When I translate 如此一來 [in this way], I don't (know) how to translate the

[…]   conjunction[56]. I want to ask other classmates… how to translate this conjunction?

148   S12   I am not sure how to express 誘因出租樓宇[less incentive to rent out the

property]…業主可能會少了誘因出租樓宇[landlords may have less incentive to

rent out the property] **continued after being interrupted: but my solution is 'the

owner will have fewer incentives to rent their house'.

149   S10   *Interruption[57]: How about refer back to the….

**Continued after interruption: Yeah, (referring back to) the lower rate to

exchange…may be use 'return…as a return'![58]

This phenomenon suggests that the student had been deliberating on that topic, or that

that topic suddenly crossed her mind again during other discussions. Another case was

found in the fifth discussion in the T-group in Experiment II, as illustrated below:

Example 4.21: T-group, Discussion 5, Experiment II

299   S24   I have another opinion. I have a problem that I want my dear classmate to help

[…]   me. How to express 衝擊[be (negatively) affected]. It's in line 4.

303   S24   I think 'broken' is also suitable in this translation.

304   S16   'Broken' is not suitable…because somebody (may) be crashed…he may not be

[…]   broken…

---

[56] This student and his/her peers (Turns 141 – 147) were concerned about how to translate the conjunction given in the source text, which is a concern about lexical expression, rather than about how to use a conjunction in a grammatical sense. Hence, this was considered a lexis-based LRE rather than a grammatical-based one.

[57] This student interrupted S4 and tried to go back to the previously discussed topic.

[58] This student was referring back to a topic that was discussed earlier.

308	S20	我想說很久了[I wanted to say something long time ago] My opinion is 衝擊[be (negatively) impacted/ affected] is also (something) we can't see, but if you use the word 'crash' it's like car crash or something like that, but this is 比喻 [a metaphor]. I don't know how to say it in English…<metaphor> so I think can we use 'impact' or 'shock', but 'shock' also mean(s) people, so I think 'impact' is better.
309	S15	I think your problem is: if you use 'broken' (it) means you 毀壞[destroy] something, but if you use 'crash' that means two things get together and have some problem with it.
310	S20	*Interruption: (Why don't you) use 'destroy' again?

In Example 4.21, several students were debating the appropriateness of using 'broken' to express '衝擊'[59] [be (negatively) affected/ have a negative impact on…]. Student 24 insisted that 'broken' was suitable while others disagreed. In turn 310, student 20 asked student 24 jokingly about using 'destroy' again. This term could be traced back to another heated debate they had in the preceding discussion session [60] about the appropriateness of translating a term as 'destroy'. The fact that this expression was brought up again in this discussion (Discussion 5) shows that some of the topics or terms discussed had been retained in the students' memory.

Meanwhile, throughout all the discussions, there were two instances where students brought up an expression that they had acquired from the translation or writing tasks used in this study. This occurred in discussions in both groups. Example 4.22 shows an extract taken from Discussion 4 by the T-group in Experiment II.

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[59] This word can be translated in various ways, but it means 'affect' in the context concerned (Translation Assignment 10): (不少買家)隨時會因為美國加息而出現財務困難，甚至無法如期還款，到時候金融體系的穩定會受到衝擊[(Many buyers) may easily encounter financial difficulties or even fail to repay their loans as scheduled. By then, the stability of the financial system *will be affected*].
[60] See turns 205-217 in Discussion 4 of T-group in Experiment II (Appendix 4).

Example 4.22: T-group, Discussion 4, Experiment II

197   S24   hmm… I have a problem in line 2: 開徵 [introduce]. I don't know how to express

it. I used 'implement the tax policy'.

198   S17   I used 'collect' to express 開徵 [introduce], but I agree with S24 (with the usage)

[…]

implement…can (be) used to express 開徵[introduce] …

203   S21   But in here I used 'levy' because I remember (in the) last assignment 擁堵費…

(the one about [congestion charge]) …我們曾用過[we have used this term]…簡單

易記啊 [quite easy to recall].

Several students were deliberating on the best way to express 開徵 [introduce/impose (a tax)] and student 21 brought up the term 'levy' and mentioned that he had learned this from the translation tasks being discussed in Discussion 1[61]. This term was not found in any of the parallel texts given to the students and hence it was likely that he had learned it through the use of a dictionary when revising the translation in Task 1.

A similar situation was found in Discussion 4 in the NT-group. In Example 4.23, when discussing the term for 民怨 [social discontent], student 5 brought up the expression 'civil unrest' and mentioned that she had learned it from the news article (parallel texts) given to her as treatment in the previous tasks. The task she was referring to was likely to be that discussed in Discussion 3, which was about 'expression of freedom', because the term 'civil unrest' appeared in one of the parallel texts given to students as treatment in Task 3.

[61] The topics for Discussion (Task) 1 and Discussion (Task) 4 were 'congestion charges' and 'wealth inequality' respectively.

Example 4.23: NT-group, Discussion 4, Experiment II

159	S11	And I don't know how to express 民怨[social discontent]. My solution is 'complain'.
160	S5	*Interruption: How about 'dispute'?
[…]		
162	S5	<u>'Civil unrest'. I learn it from your…you gave me some paper about the Chinese… 我有看過那報紙 [I have read the news article (you gave us)].</u>

Although it was hard to determine whether they acquired the new knowledge through the treatment, through their own reflection, with the aid of a dictionary in the revising process or through other channels, the fact that they brought up the new expression they had learned from tasks previously assigned in the discussions suggests that the knowledge acquired was retained in their memory after weeks[62].

4.1.6.2 Interruptions

Interruptions occurred when two or more students tried to say something at the same time. As noted in Chapter 3, interruptions may be attributed to several factors, including students being passionate about sharing their thoughts, students not noticing that others were talking, and students not having enough self-discipline or respect for others, etc. Here 'interruption' only refers to those that were treated as LREs. Laughter and discussions of irrelevant matters were disregarded. Table 4.15 shows that there was a noticeable difference in the number of interruptions in discussions in the T-group and the NT-group in both experiments, which raises the question whether the interruptions were related to task type or group difference. A comparison of the results for

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[62] Each translation/writing task (including draft, class discussion, treatment and revision) was carried out every two weeks.

Experiment I and Experiment II shows that there was no consistent trend in terms of the occurrence of interruptions, with the T-group featuring more interruptions in Experiment I but fewer interruptions in Experiment II.

Table 4.15 Occurrence of interruption

	T-group	NT-group
Experiment I	66	8
Experiment II	19	40

However, as shown in Table 4.16, when comparing the results of the same group of students in different task types, there were more interruptions in discussions of T-tasks (66 times) than in discussions of NT-tasks (40 times) among students 1-13, and the same tendency was shared by students 14-26, with 19 interruptions in T-tasks and 8 interruptions in NT-tasks.

Table 4.16 Occurrence of interruption within the same group of students across tasks

	Students 1-13	Students 14-26
Translation (T-tasks)	66	19
Writing (NT-tasks)	40	8

The higher proportion of interruption found among students 1-13 in both T-tasks and NT-tasks suggests that this group tended to interrupt more frequently and this is likely to be attributable to group difference. However, the fact that there were more interruptions in discussions of T-tasks than NT-tasks in both groups of students suggests that task type may be a reason for the emergence of more interruptions, though it was difficult to determine or gauge whether the interruptions were caused by passion for the discussions or a lack of self-discipline.

4.2 Findings of Data B

Another aim of this study is to examine the outcomes of using translation tasks versus writing tasks to encourage students to make improvements and help students make improvements in their lexical and grammatical usages. All of the findings point to the facilitative role that translation tasks can play in encouraging and helping students make lexical and grammatical improvement.

4.2.1 Finding 1: Attempts to make improvements

Attempts to make improvements were measured by comparing the modifications between the drafts and revisions. The measurement was predetermined. Each grammatical or lexical unit was considered as one change, with expressions clustered together being treated as one unit until the presence of identical words or punctuation (for details see Chapter 3), as illustrated in Example 4.24.

Example 4.24: Example of attempted improvement

(S1, T-group, Translation Assignment 2, Experiment I)

Draft Over these few years, there is a huge increase on rent, and it is over the level that many normal families can <u>take</u>.

Revision Over these few years, there is a huge increase on rent, and it is over the level that many normal families can <u>afford</u>. (One change = one attempt)

I) Results for T-group and NT-group in Experiment I

As shown in Figure 4.5, in Experiment I, where participants 1-13 took part in translation tasks and participants 14-26 worked on writing tasks, the T-group consistently showed more attempts to make improvement than the NT-group across the five tasks.
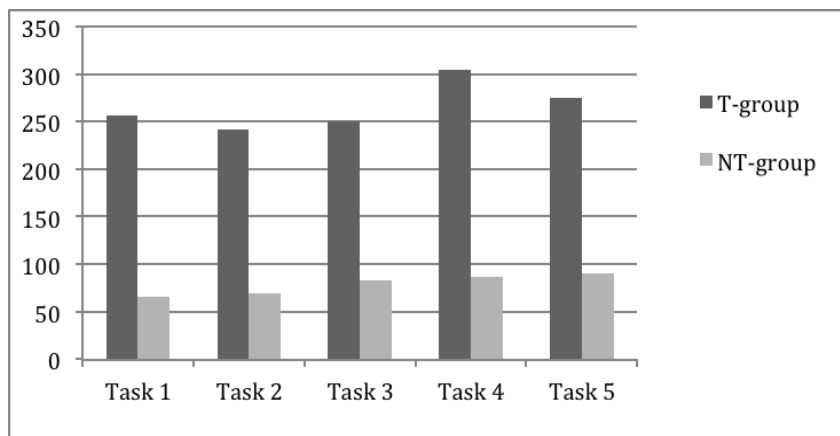
Figure 4.5 Attempted improvements across five tasks in Experiment I

The results were pooled together to compare the results of the two groups. In Experiment I, there were a total of 1328 attempted improvements by the T-group in all five tasks but only 393 attempted improvements by the NT-group, as shown in Table 4.17.

Table 4.17 Attempted improvements in Experiment I

		Sum	Mean	SD	t	*p*-value
Experiment I	T-group	1328	102.15	12.77	14.10	*p*<0.001
	NT-group	393	30.23	13.22		

Independent sample t-tests were performed. Two-tailed t-tests were adopted (n=13) and the level of significance (alpha) was set at 0.05. The results show that the difference between the T-group and NT-group in Experiment I was statistically significant (t=14.10, *p*<0.001).

II) Results for T-group and NT-group in Experiment II

In Experiment II, participants 14-26 undertook translation tasks and participants 1-13 engaged in writing tasks. However, the T-group still consistently showed more attempts to make improvement than the NT-group, as shown in Figure 4.6.
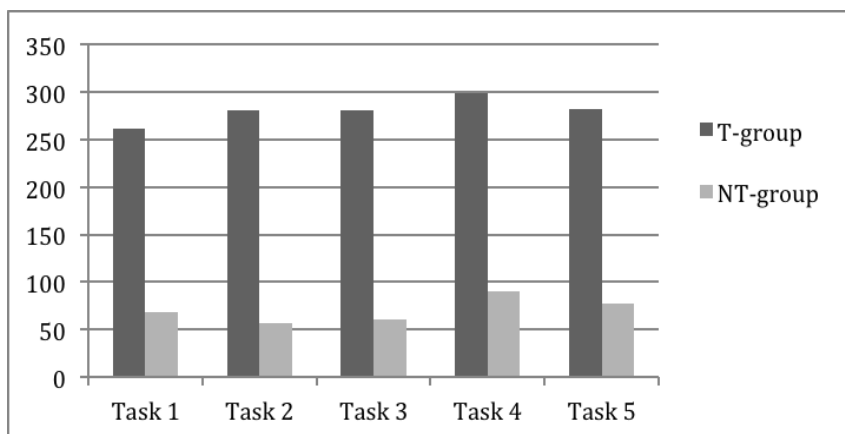
Figure 4.6 Attempted improvements across five tasks in Experiment II

The results were pooled together to compare the results of the two groups, as shown in Table 4.18. As in the case of the findings of Experiment I, the attempted improvements by the T-group outnumbered those by the NT-group by a large proportion, with a total of 1401 attempted improvements and 355 attempted improvements respectively. The difference between the two groups was also statistically significant (t=12.22, $p<0.001$).

Table 4.18 Attempted improvements in Experiment II

		Sum	Mean	SD	t	p-value
Experiment II	T-group	1401	107.77	16.37	12.22	$p<0.001$
	NT-group	355	27.31	7.92		

III) Results for the same group of students in different tasks

While this study primarily concerns the difference between the two groups of participants who were assigned translation tasks and writing tasks respectively, it is also interesting to compare the results for the same group of participants across tasks. Table 4.19 shows the number of attempts to make improvements by the same group of participants in translation tasks (T-tasks) and writing tasks (NT-tasks) to see how the results differ when they engaged in different tasks. The results show that both

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participants 1-13 and participants 14-26 showed more attempts to make improvement in T-tasks than NT-tasks.

Table 4.19 Attempted improvements by the same group across tasks

		Sum	Mean	SD	t	*p*-value
Students 1-13	Translation tasks	1328	102.15	12.77	10.39	*p*<0.001
	Writing tasks	355	27.31	7.92		
Students 14-26	Translation tasks	1401	107.77	16.37	9.85	*p*<0.001
	Writing tasks	393	30.23	13.22		

All of the above findings suggest that translation tasks have greater potential to encourage students to make improvements in their lexis and grammar compared to corresponding L2 writing tasks. When there are more attempts to make improvements, more actual improvement may be made, since the students were given relevant treatment and were allowed to consult dictionaries in the revision process. More attempts to make improvement are potentially very beneficial for L2 learning as it suggests that students have stronger motivation or willingness to seek progress.

However, in the above measurements and comparisons, the content of the changes was not taken into consideration. Hence, the data was scrutinized to better understand to what extent the two different types of tasks (translation versus writing) helped the students make actual improvements in lexis and grammar.

4.2.2 Finding 2: Improvements

All changes were evaluated to determine whether they could be regarded as 'actual improvements'. Improvements on the grammatical level were coded as 'G' and improvements on the lexical level were coded as 'L'. There were four major types of

improvements, including correction of grammatical mistakes, correction of inappropriate or inaccurate word choices or spelling, use of different grammatical structures that may express different meanings than the original versions but still be grammatically accurate in the context, and use of different expressions that function as well as the original versions, as illustrated in the following examples.

Example 4.25: Correction of grammatical mistakes

(S14, NT-group, Writing Assignment 5, Experiment I)

Draft   The government can have some punishment to force people having a baby. However, we should improve this problem, otherwise the city will be **destroy**.

Revision   The government can have some punishment to force people having a baby. However, we should improve this problem, otherwise the city will be **destroyed**.

In Example 4.25, the student wrote 'destroy' in the draft and revised it as 'destroyed' in the revision. This was considered a correction of a grammatical mistake because 'will be destroy' is always grammatically incorrect regardless of the context. This kind of corrections suggests that the students could differentiate right from wrong.

Alternative grammatical structures that function as well as the original versions were also regarded as grammatical improvements.

Example 4.26: Use of alternative grammatical structures

(S1, T-group, Translation Assignment 3, Experiment I)

Draft   The 'Ice Bucket Challenge' **is** a hot topic around the world.

Revision   The 'Ice Bucket Challenge' **has become** a hot topic around the world.

In Example 4.26, the student originally used present simple 'is' as the main verb but then decided to use present perfect 'has become' in the revision. It is possible to use

present simple 'is' in the sentence, but this usage implies that this is a situation that is generally true. Present perfect tense 'has become', on the other hand, implies that this is a past event that has present consequences. This kind of modification suggests that the students reflected on the function of different grammatical structures. It was impossible to know the reason for these modifications in the present study, but as long as the alterations were grammatically correct and logical in the context, they were considered as grammatical improvements.

Similarly, there were also two types of lexical improvements: correction and modification. In Example 4.27, the student wrote 'law's hole', which was likely meant to be 'legal loopholes'. This inaccurate word choice was modified as 'loopholes of law' in the revision and this was regarded as a lexical improvement. This kind of changes suggests that the students could differentiate right from wrong on the lexical level.

Example 4.27: Correction of inappropriate or inaccurate word choice

(S16, NT-group, Writing Assignment 2, Experiment I)

Draft   Therefore, landlords will abuse **law's hole** to earn from those who are willing to pay

             the high cost.

Revision   Therefore, landlords will abuse **loopholes of law** to earn from those who are willing

             to pay the high cost. (One change=one attempt)

In Example 4.28 below, the student used a general word 'bad' to describe 'bad comment' and 'bad language', which is comprehensible and acceptable in the context.

Example 4.28: Use of alternative word choice

(S6, T-group, Translation assignment 4, Experiment I)

Draft   Many people will use their opinion to comment and some may leave **bad** comment or

             use **bad** language to attract others before knowing the facts.

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Revision   Many people will use their opinion to comment and some may leave **malicious** comment or use **abusive** language to attract others before knowing the facts.

The word 'bad' was changed to more precise descriptions in the revision: 'malicious comment' and 'abusive language'. This kind of changes reflects that the students tried to employ a variety of vocabulary and as long as the changes are equally acceptable in the context (or even better), they were considered lexical improvements.

I) Results for the T-group and the NT-group in Experiment I

In Experiment I, the T-group made more actual lexical and grammatical improvement than the NT-group, as illustrated in Table 4.20. In Experiment I, the number of grammatical improvements made by the T-group (M=19.46, SD=4.89) greatly exceeded the number of improvements made by the NT-group (M=5.00, SD=2.94) and the difference was statistically significant (t=9.05, $p<0.001$).

Table 4.20 Grammatical and lexical improvements in Experiment I

	T-group		NT-group	
	Grammatical Improvement	Lexical Improvement	Grammatical Improvement	Lexical Improvement
Task 1	62	194	12	52
Task 2	41	197	9	55
Task 3	65	184	20	60
Task 4	51	251	5	76
Task 5	34	237	19	69
Total (pooled results)	253	1063	65	312
Mean	19.46	81.77	5.00	24.00
SD	4.89	10.50	2.94	11.27

Likewise, the T-group (M=81.77, SD=10.50) also made many more lexical improvements than the NT-group (M=24, SD=11.27) and the difference was statistically significant (t=13.47, $p<0.001$).

II) Results for the T-group and the NT-group in Experiment II

In Experiment II, as shown in Table 4.21, the number of grammatical improvements made by the T-group (M=19.15, SD=5.21) also greatly exceeded those made by the NT-group (M=5.15, SD=2.67) and the difference was statistically significant (t=8.15, $p<0.001$). Similarly, the T-group (M=87.77, SD=15.86) also made many more lexical improvements than the NT-group (M=21.77, SD=6.41) and the difference was statistically significant (t=10.30, $p<0.001$).

Table 4.21 Grammatical and lexical improvements in Experiment II

	T-group		NT-group	
	Grammatical Improvement	Lexical Improvement	Grammatical Improvement	Lexical Improvement
Task 1	62	196	17	51
Task 2	46	229	10	47
Task 3	51	227	9	51
Task 4	50	247	19	69
Task 5	40	242	12	65
Total (pooled results)	249	1141	67	283
Mean	19.15	87.77	5.15	21.77
SD	5.21	15.86	2.67	6.41

Two consistent trends can be observed from the above results. First, in both experiments, the T-group made significantly more lexical and grammatical improvements than the NT-group. This suggests that translation tasks yield better

outcomes than writing tasks in helping students make improvement in lexis and grammar. Second, in both experiments, the T-group and the NT-group had a tendency to focus on lexical rather than grammatical usage and both translation and writing tasks may create opportunities to draw students' attention to lexis rather than grammar.

III) Results for the same group of students in different tasks

Meanwhile, the outcomes were also analyzed to see how the results of the same group of participants differed across the two types of tasks. Table 4.22 shows that participants 1-13 tended to make more lexical and grammatical improvements in T-tasks than in NT-tasks and the difference was statistically significant (lexical: $t=9.67$, $p<0.001$; grammatical: $t=7.54$, $p<0.001$). The same happened to participants 14-26, where more lexical and grammatical improvements were made in T-tasks than in NT-tasks. The differences were also statistically significant (lexical: $t=8.87$, $p<0.001$; grammatical: $t=6.07$, $p<0.001$).

Table 4.22 Comparison of actual improvements by the same group across tasks

Participants	Actual improvement	Tasks	Sum	Mean	SD	t	*p*-value
S1-13	Grammar	Translation	253	19.46	4.89	7.54	*p*<0.001
		Writing	67	5.15	2.67		
	Lexical	Translation	1063	81.77	10.50	9.67	*p*<0.001
		Writing	283	21.77	6.41		
S14-26	Grammar	Translation	249	19.15	5.15	6.07	*p*<0.001
		Writing	65	5.00	2.94		
	Lexical	Translation	1141	87.77	15.86	8.87	*p*<0.001
		Writing	312	24.00	11.27		

These findings again suggest that both translation tasks and writing tasks have greater potential to draw students' attention to lexis rather than grammar and point to a positive

relationship between the use of translation tasks on the one hand and improvement on both the lexical and the grammatical level on the other.

4.3 Findings of Data C

This study also examines L2 learners' opinions about the use of translation tasks, as compared to writing tasks upon completion of each Experiment. The perspectives of participants were sought through two sets of questionnaires, known as Data C in this study (see Appendix 2A and 2B), with one targeting participants' perspectives on the translation tasks assigned and another one targeting participants' views on the writing tasks assigned. The questionnaires were distributed to students 1-13 (T-group) and students 14-26 (NT-group) upon completion of all five tasks in Experiment I and distributed to students 14-26 (T-group) and students 1-13 (NT-group) upon completion of all five tasks in Experiment II. The response rate was 100%.

A total of 26 completed questionnaires were collected from the T-group, of which 13 were from students 1-13 in Experiment I and 13 were from students 14-26 in Experiment II. Likewise, a total of 26 completed questionnaires were collected from the NT-group[63], with 13 from students 14-26 in Experiment I and another 13 from students 1-13 in Experiment II. All questionnaires from the same group category were pooled together for analysis and key findings are presented below.

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[63] For Data C, 'T-group respondents' and 'NT-group respondents' refer to all the 26 participants who participated in translation tasks and writing tasks respectively, regardless of which experiment they took part in.

4.3.1 Perspectives on the drafting process

The first part of the questionnaire concerns the participants' perspectives on the drafting process, including 1) the difficulty they experienced, 2) their deliberation, 3) the helpfulness of the tasks in helping them to enhance their writing proficiency, 4) their level of confidence and 5) their level of enjoyment in the course of drafting the translation or writing assigned.

The findings show one striking similarity (see Figure 4.7 and Figure 4.8). The vast majority of both the T-group and NT-group respondents indicated that they experienced difficulty in vocabulary (T-group=96%; NT-group=81%) and their deliberations were also mostly on vocabulary (T-group=96%; NT-group=73%).
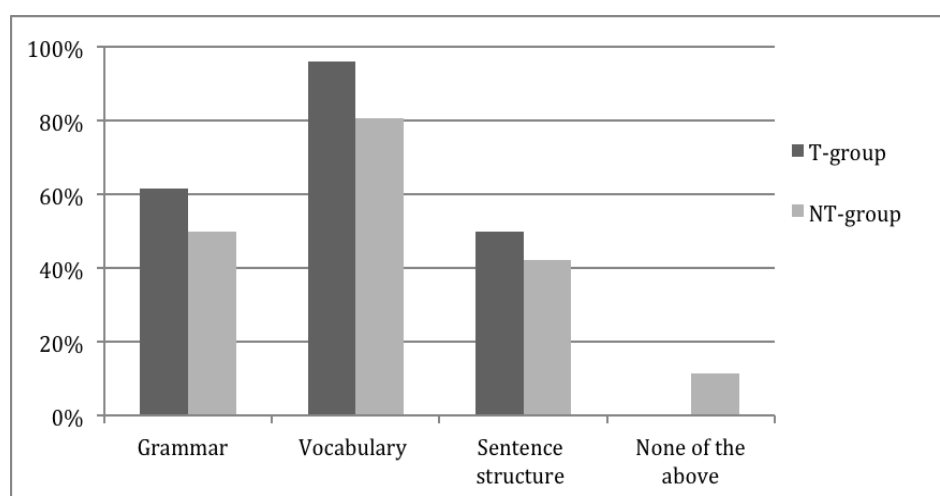
Figure 4.7 'Q1. During the drafting process, did you experience difficulty with any of the following aspects of language?' - replies as percentages of 26 respondents from T-group and 26 respondents from NT-group
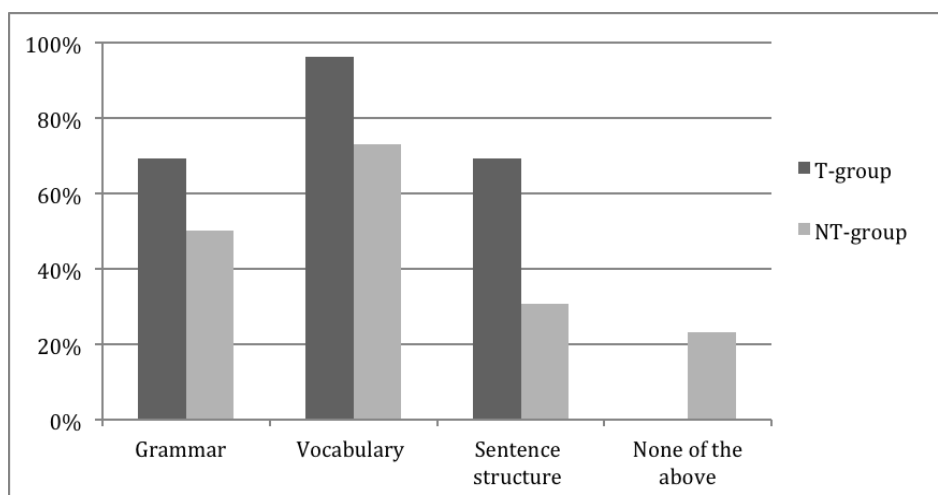
Figure 4.8 'Q2. During the drafting process, did you think about any of the following aspects of language?' - replies as percentages of T-group and NT-group

This finding reveals that vocabulary dominated students' attention when they were first asked to translate from Chinese to English or to write directly in English, suggesting that both translation and writing tasks may yield more fruitful results on the lexical level. It is also worth noting that the T-group and the NT-group had contrasting responses with respect to whether there was an absence of difficulty and deliberation in vocabulary, grammar and sentence structure. As shown in Figure 4.7 and Figure 4.8, a number of NT-group respondents indicated that they had experienced zero difficulties (12%) and had zero deliberation (23%) in the aforesaid three linguistic aspects, whereas none of the respondents from the T-group said so. This suggests that students who work on translation tasks are more likely to encounter difficulties on the lexical, grammatical or sentence level than those who work on writing tasks.

When both groups were asked whether they found the drafting process a helpful activity to improve their English writing proficiency, contrasting responses were yielded (see Figure 4.9): the majority of the T-group respondents (62%) replied that it was 'fairly helpful', while most NT-group respondents (62%) indicated that it was 'not very helpful'. This tendency is supported by an interesting phenomenon found at the

extreme ends of the scale: 12% of the T-group respondents indicated that the drafting process of the translation tasks was 'very helpful', while none of the NT-group respondents shared this view.
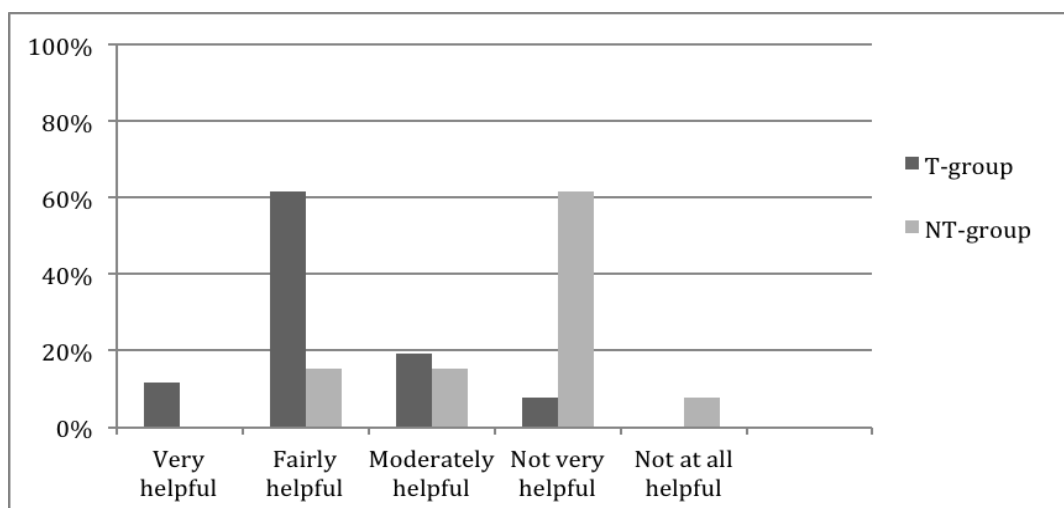
Figure 4.9 'Q3. Did you find the drafting process a helpful activity to improve your English writing proficiency?' - replies as percentages of the T-group and NT-group

Conversely, 8% of the NT-group respondents rated the drafting process of the writing tasks as 'not at all helpful', whereas none of the respondents from the T-group did so. This suggests that the process of drafting the translation was generally considered helpful in enhancing one's writing proficiency, whereas the process of drafting L2 writing was not considered helpful.

In response to the question whether they were confident about their writing proficiency during the drafting process (see Figure 4.10), the largest proportion of T-group respondents (77%) said they were 'not very confident', whereas most of those in the NT-group (69%) said they were 'moderately confident'. This suggests that during the drafting process translation tasks may have posed more challenges to the students than writing tasks did, leaving them less confident in their writing proficiency.
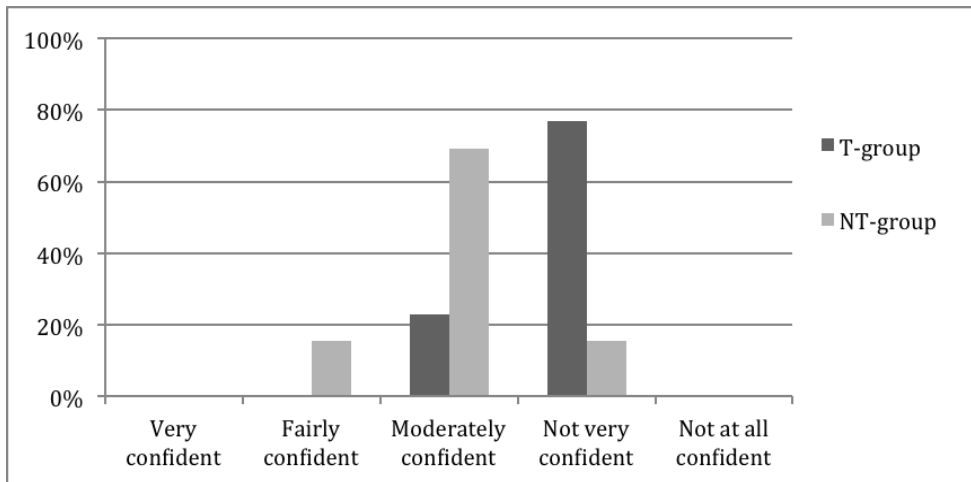
Figure 4.10 'Q4. During the drafting process, were you confident about your writing proficiency?' - replies as percentages of the T-group and NT-group

As shown in Figure 4.11, with respect to their level of enjoyment at the drafting stage, the most prevalent response among the T-group was 'quite a lot' (46%), while the most popular response among the NT-group was 'not very much' (62%). This suggests that translation was generally considered enjoyable at this stage, while writing assignments were less associated with enjoyment.
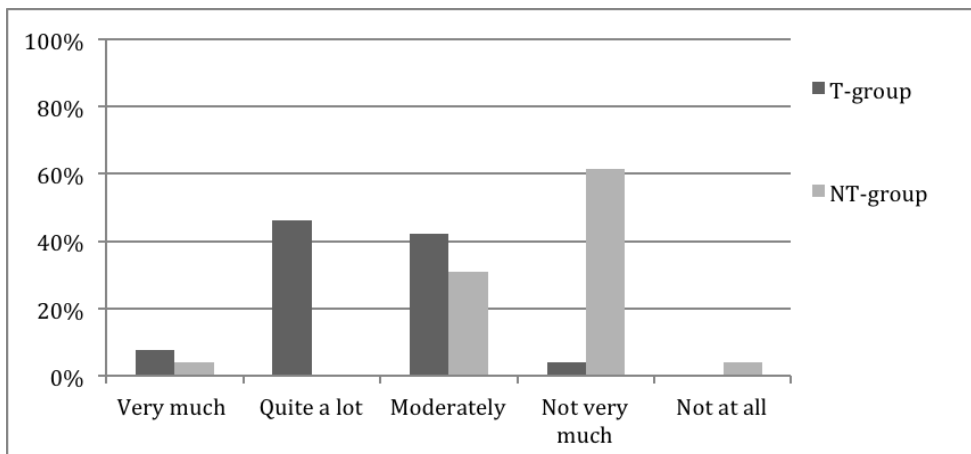
Figure 4.11 'Q5. At this stage, did you enjoy the translation/writing assignments?' - replies as percentages of the T-group and NT-group

4.3.2 Perspectives on the class discussions

The second part of the questionnaire concerns the students' perspectives on the class discussions and the findings show that students in the T-group generally had more positive feelings towards the class discussions than students in the NT-group.

When asked whether they had any language-related concerns – such as vocabulary, grammar and sentence structure – that they would like to discuss with their classmates during the discussion sessions (see Figure 4.12), half of the T-group respondents (50%) reported that they had 'quite a few' concerns, whereas more than half of the NT-group respondents (54%) answered 'not many'.
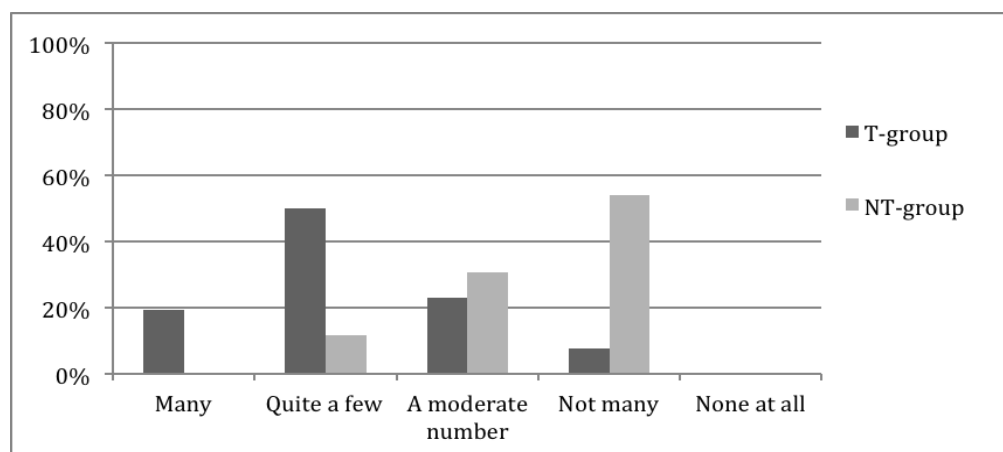
Figure 4.12 'Q6. Did you have any language-related concerns - such as vocabulary, grammar and sentence structure - that you would like to discuss with your classmates during the discussion sessions?' - replies as percentages of the T-group and NT-group

Also, 19% of the T-group respondents indicated they had 'many' language-related concerns, while none of the NT-group respondents said so. This suggests that students who worked on translation tasks were more likely to have language-related concerns than students who worked on writing tasks.

With respect to the question 'when your classmates raised language-related concerns in the discussions, were you eager to share your opinions?' (see Figure 4.12), most T-group respondents answered 'somewhat eager' (42%) and 'eager' (35%), while

most NT-group respondents replied 'not very eager' (42%) and 'somewhat eager' (31%). 19% of the T-group respondents chose the positive end of the scale ('very eager'), but none chose the negative end of the scale ('not eager'). In contrast, there were an equal number of NT-group respondents who chose the positive (8%) and negative (8%) end of the scale. This suggests that translation tasks have a greater potential than writing tasks to enhance students' eagerness to share their opinions in class discussions.
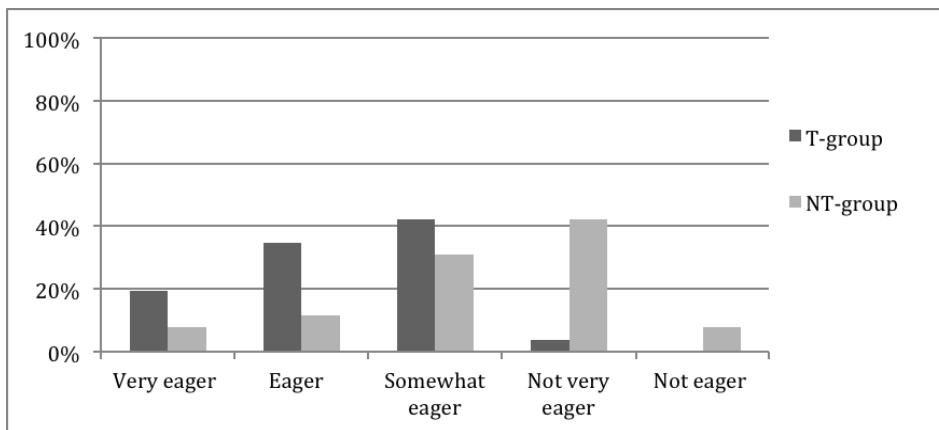
Figure 4.13 'Q7. When your classmates raised language-related concerns in the discussions, were you eager to share your opinions?'- replies as percentages of the T-group and NT-group

As for the reasons that contributed to their eagerness (see Figure 4.14) and lack of eagerness (see Figure 4.15) to share their opinions in the discussions, the majority of the T-group respondents (62%) indicated that they were eager to share their opinion 'because they had similar problems when working on the translation tasks', while the prevalent responses from the NT-group (38%) was that they were not eager to share their opinions 'because they did not have similar problems in working on the writing tasks'.
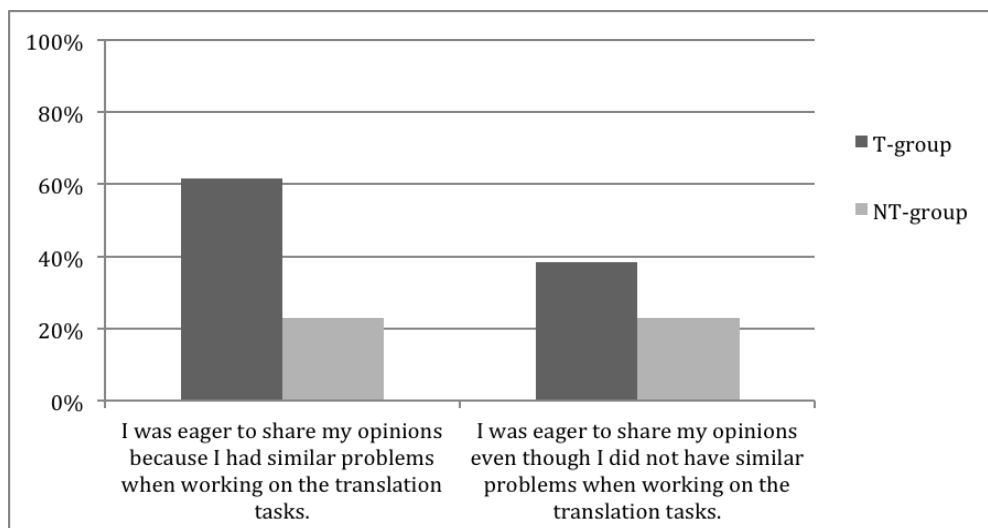
Figure 4.14 'Q8a. If you have indicated that you were eager to share your opinions, which of the following was true?' - replies as percentages of the T-group and NT-group
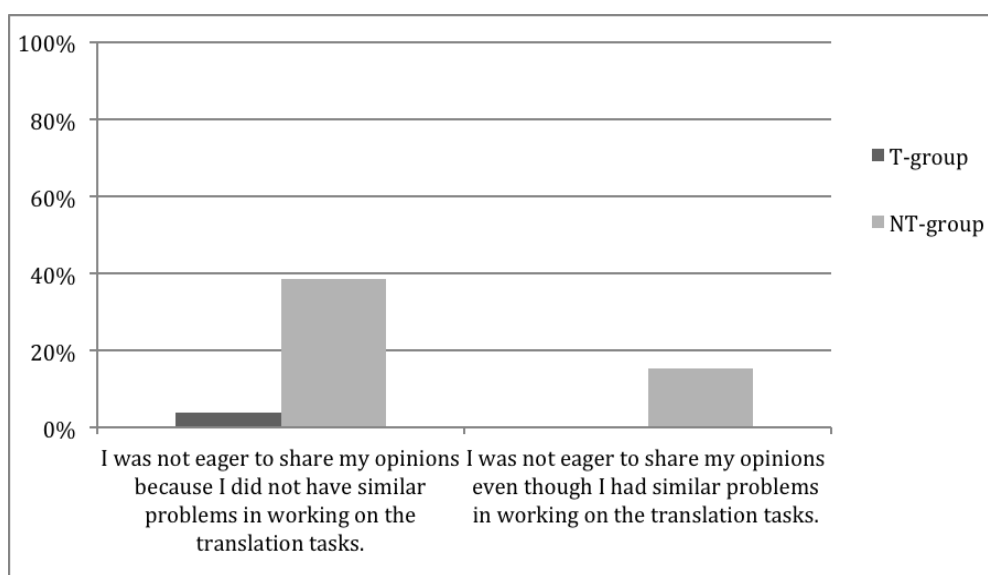
Figure 4.15 'Q8b. If you have indicated that you were not eager to share your opinions, which of the following was true?' - replies as percentages of the T-group and NT-group

This suggests that the main reason why translation tasks have better potential to enhance students' eagerness to share their opinions in class discussions than writing tasks is that translation tasks allow students to share similar problems, and judicious planning of the translation tasks could have played a vital role in this. It is also worth noting that there were considerably more respondents from the T-group (38%) than the NT-group (23%) who indicated that they were eager to share their opinions 'even

though they did not have similar problems when working on the translation tasks', which would suggest that even under the circumstances that the students did not encounter similar problems, translation tasks still yield better results in encouraging students to share their opinions than writing tasks.

When asked whether they gained more confidence in speaking in English through discussing problems they faced in the translation/writing tasks (see Figure 4.16), the prevalent response from the T-group (50%) and the NT-group (46%) was 'moderately more'. An opposite response pattern is also observed from the two extreme ends of the scale: 8% of the NT-group respondents replied 'not at all', but 0% of the respondents from the T-group gave this reply. In contrast, 8% of the T-group respondents indicated that they gained 'very much more confidence' and yet 0% of the respondents from the NT-group gave this reply. These findings suggest that both translation and writing tasks can be designed in a way that enables students to gain more confidence in speaking in English, with translation tasks having slightly more fruitful outcomes.
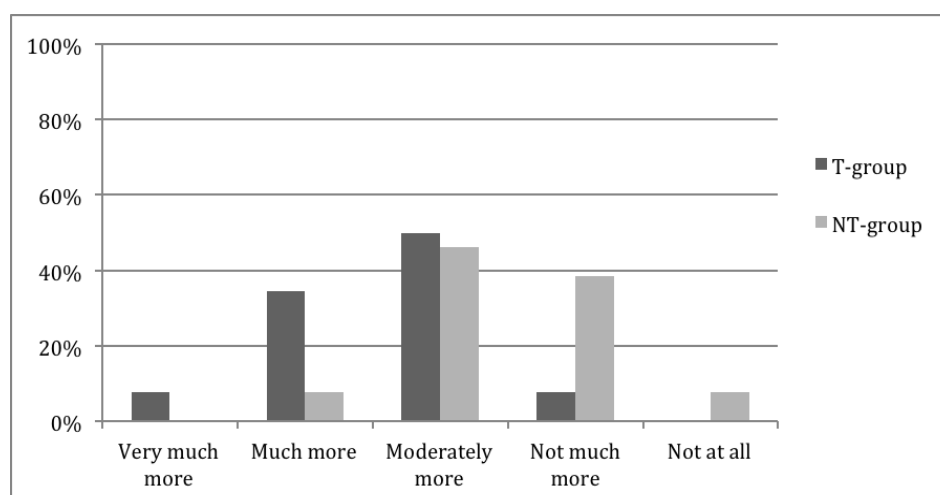
Figure 4.16 'Q9. Did you gain more confidence in speaking in English through discussing problems you faced in the translation tasks with your classmates?' - replies as percentages of the T-group and NT-group

In response to whether discussions with their classmates raised their awareness of certain aspects of language use, the majority of T-group respondents (69%) replied 'quite a lot', whereas most NT-group respondents (46%) replied 'not much'. This reveals that discussions of translation tasks can yield better outcomes in raising students' awareness of language use than discussions of writing tasks.
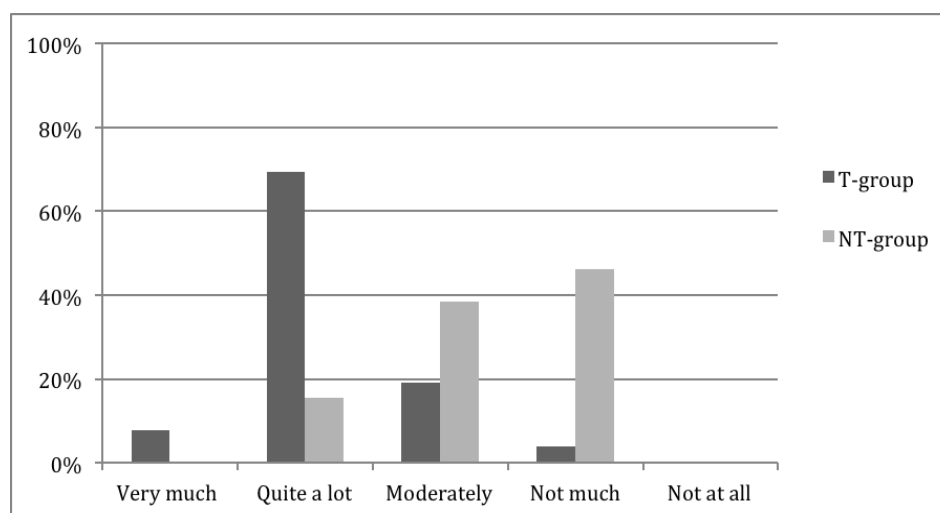
Figure 4.17 'Q10. Did the discussions with your classmates raise your awareness of certain aspects of language use?' - replies as percentages of the T-group and NT-group

As to the question whether the discussions helped to enhance their class participation (see Figure 4.18), most T-group respondents indicated that the discussions 'kept them focused' (62%) and 'attracted their attention' (54%); about one third of them said the discussions 'made them feel less nervous in expressing their opinions' (35%) and 'encouraged them to play a more active role in class' (31%); less than one tenth of them (8%) reported that the discussions were 'not helpful at all' in enhancing their class participation. On the other hand, the majority of the NT-group respondents (38%) also indicated that the discussions 'kept them focused', but there were also 31% of them who said that the discussions 'were not helpful at all'. This suggests that the discussions of translation tasks and writing tasks were both helpful in keeping students focused, but

translation tasks had stronger impact in this regard and could also yield more desirable results in attracting students' attention, reducing students' nervousness in voicing their opinions, and encouraging students to play a more active role in class.
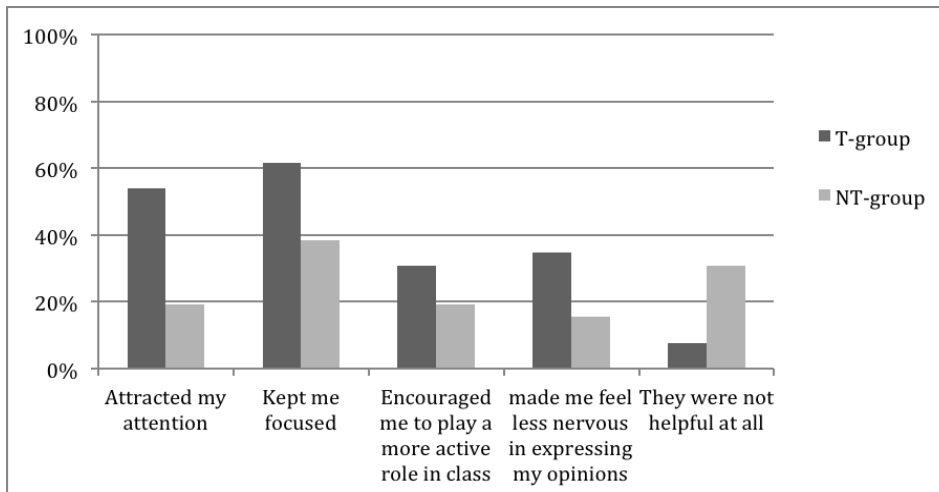
Figure 4.18 'Q11. Did the discussions help to enhance your class participation in any of the following ways? Mark all that apply.' - replies as percentages of the T-group and NT-group

When asked whether they enjoyed the discussions as class activity, the majority of the T-group respondents (50%) and the NT-group respondents (58%) replied 'quite a lot' and 'not much' respectively (see Figure 4.19).
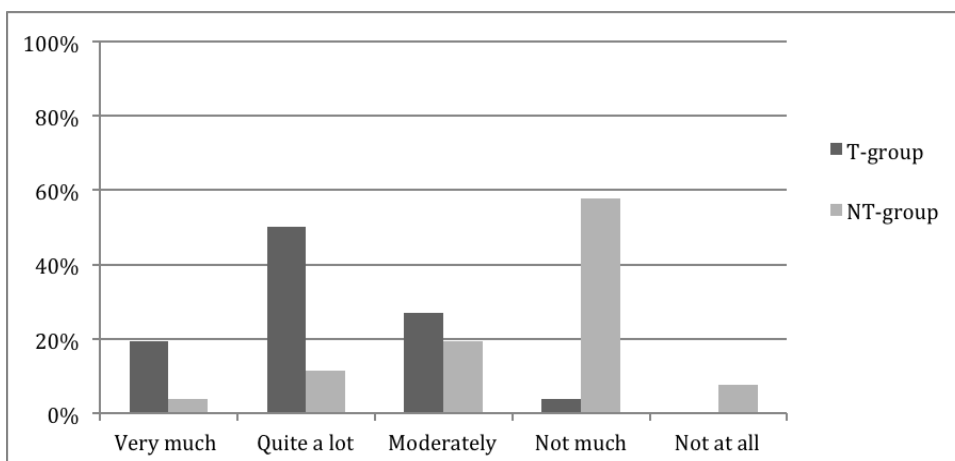
Figure 4.19 'Q12. Did you enjoy the discussion as class activity?' - replies as percentages of the T-group and NT-group

Specifically, 8% of the respondents from the NT-group considered the discussions 'not at all' enjoyable, but none of the T-group respondents chose this answer. In contrast, 19% of the T-group respondents answered 'very much', but only 4% of those from the NT-group chose this answer. This suggests that the translation tasks are more enjoyable than the writing tasks.

4.3.3 Perspectives on the revising process

The third part of the questionnaire concerns students' perspectives of the revising process of their tasks. So far, the findings show that the translation tasks were perceived as more helpful than writing tasks in various aspects in the drafting and discussion stages. This tendency remains true in the revising stage, as elucidated below.

The vast majority of the T-group and the NT-group indicated that they had deliberated on vocabulary (T-group=92%; NT-group=73%) during the revising process (See Figure 4.20). A noticeable difference between the two groups is that 19% of the respondents from the NT-group indicated they experienced zero difficulties in vocabulary, grammar and sentence structure, whereas none of the respondents from the T-group chose this option. This suggests that vocabulary still dominates students' attention when they are given time to revise their work.
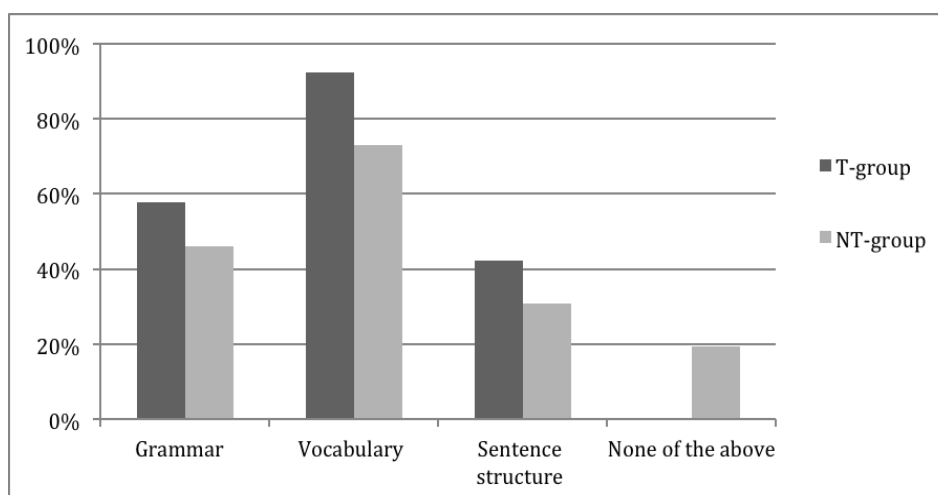
Figure 4.20 'Q13. During the revising process, did you think about any of the following aspects of language use? Mark all that apply.' - replies as percentages of the T-group and NT-group

When asked whether and in what way they were able to improve the vocabulary they used in their translation/writing (See Figure 4.21), most T-group respondents (81%) said that they 'learned new vocabulary' and 'recalled words', half of them (50%) said they 'learned new collocational knowledge for known words', and nearly half of them (46%) said they 'corrected spelling mistakes' and 'gained collocational knowledge for new words'. The number of NT-group respondents who indicated the same improvement is far fewer, except in the case of 'correcting spelling mistakes' (see Figure 4.21). This suggests that translation tasks yield better outcomes than writing tasks in helping students to enhance their vocabulary acquisition in a variety of ways, including learning new vocabulary, gaining collocational knowledge for new words, recalling words, and gaining new collocational knowledge for known words.

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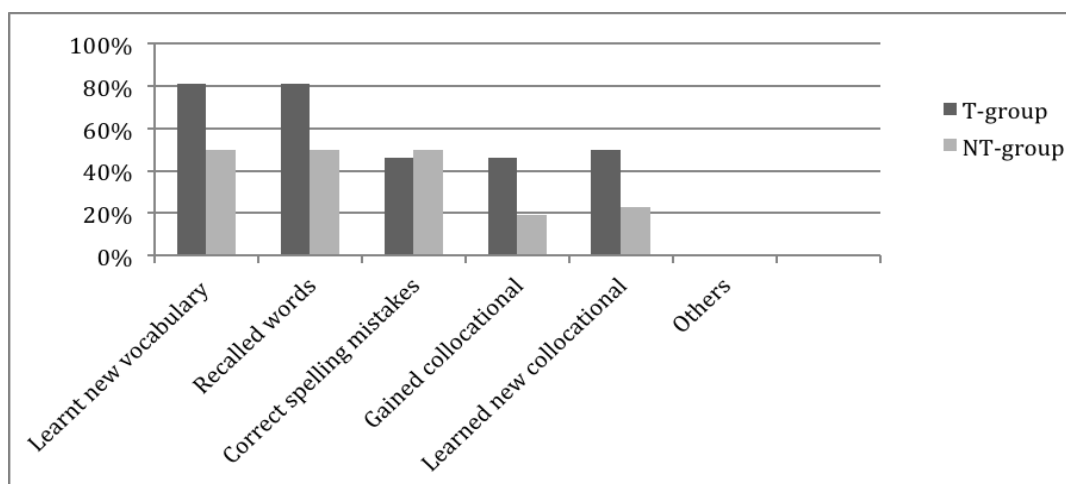
Figure 4.21 'Q14. In revising your work with the help of the texts you were given, were you able to improve the vocabulary you had used in your writing in any of the following ways? Mark all that apply.' - replies as percentages of the T-group and NT-group

In response to whether and in what way they were able to improve grammatical aspects of their translation/writing, the majority of both the T-group respondents and the NT-group respondents answered 'parts of speech' (T-group=73%; NT-group=58%) and 'verb tenses' (T-group=65%; NT-group=54%). 12% of the NT-group respondents indicated that they did not make any improvement in grammar, while none of the T-group respondents chose this option.
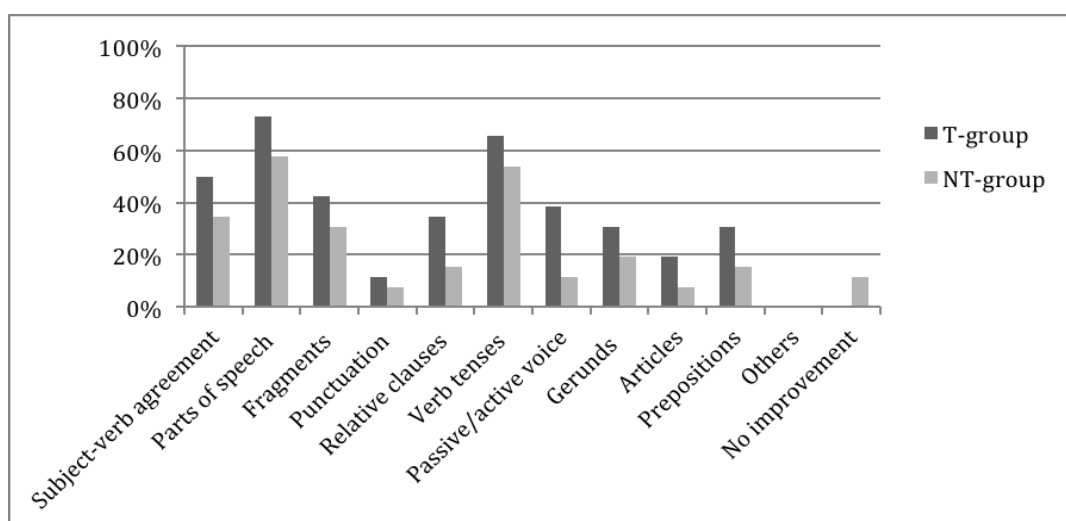
Figure 4.22 'Q15. In revising your work with the help of the texts you were given, were you able to improve any of the following grammatical aspects of your writing? Mark all that apply.' - replies as percentages of the T-group and NT-group

When asked whether they were able to improve their writing on the sentence level (see Figure 4.23) in the revising stage, most T-group respondents (58%) indicated that they were able to 'correct a wrong sentence structure', while most NT-group respondents (50%) said they had 'no improvement' in this regard. This suggests that writing tasks have less potential to help students make improvement on the sentence level.
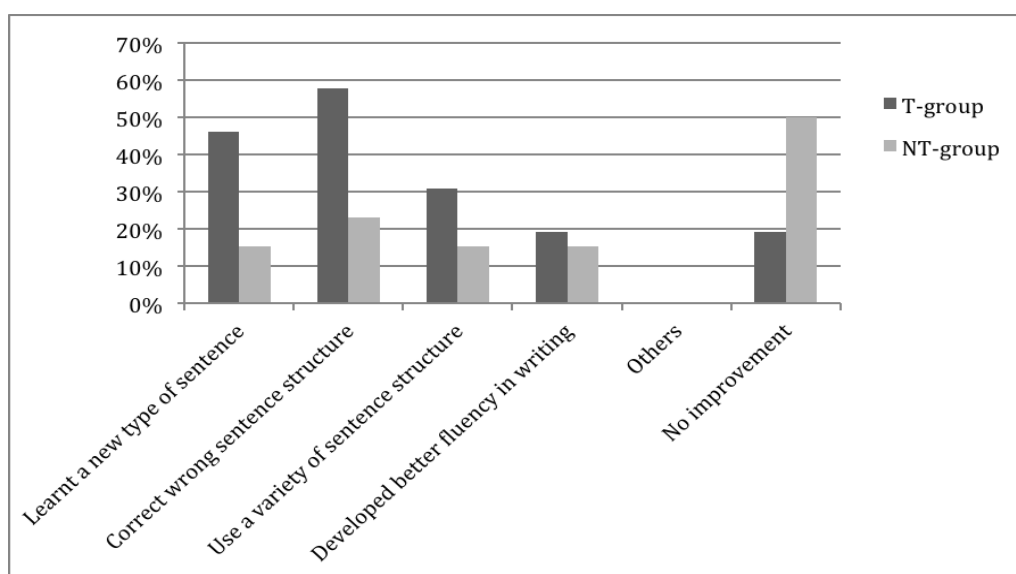
Figure 4.23 'Q16. In revising your work with the help of the texts you were given, were you able to improve your writing on the sentence level in any of the following ways? Mark all that apply.' - replies as percentages of the T-group and NT-group

In fact, by comparing the results in Figure 4.21, Figure 4.22 and Figure 4.23, it can also be observed that both translation and writing tasks seem to be less helpful for students to make improvement on the sentence level than on the lexical and grammatical levels.

With respect to the helpfulness of the revising process in improving their English writing proficiency (see Figure 4.24), the majority of the T-group respondents (73%) replied 'quite helpful', while most NT-group respondents (65%) answered 'not very helpful'. Some T-group respondents had very positive feelings towards the revising process of the translation tasks, with 8% of them considering it as 'very helpful', while none of those from the NT-group chose this option. This suggests that the process of

revising their translation was generally considered more helpful in enhancing their writing proficiency than revising their writing.
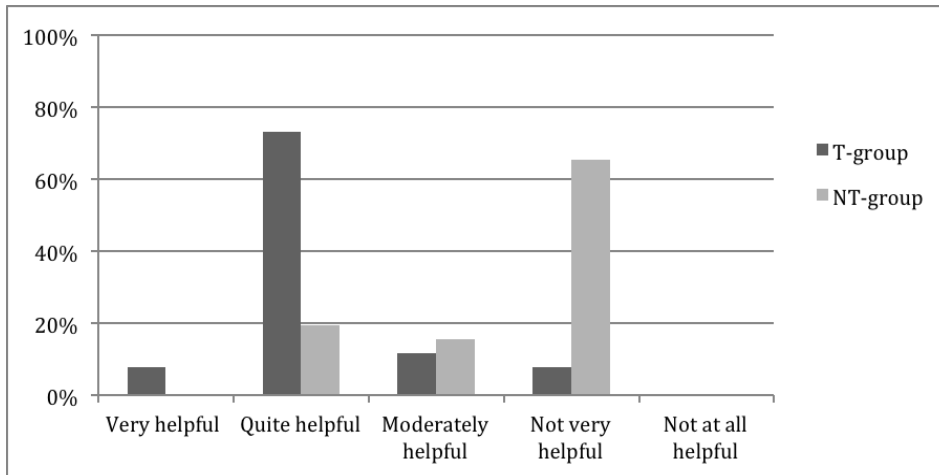
Figure 4.24 'Q17. Did you find the revising process helpful in improving your English writing proficiency?' - replies as percentages of the T-group and NT-group

Meanwhile, the findings suggest that the revising process of the translation tasks has more favorable results in enabling students to gain confidence about their English writing proficiency than the writing tasks (see Figure 4.25), with 65% of the T-group respondents indicating that they felt 'much more' confident and 62% of the NT-group respondents indicating that they did not feel 'much more' confident after the revising process.
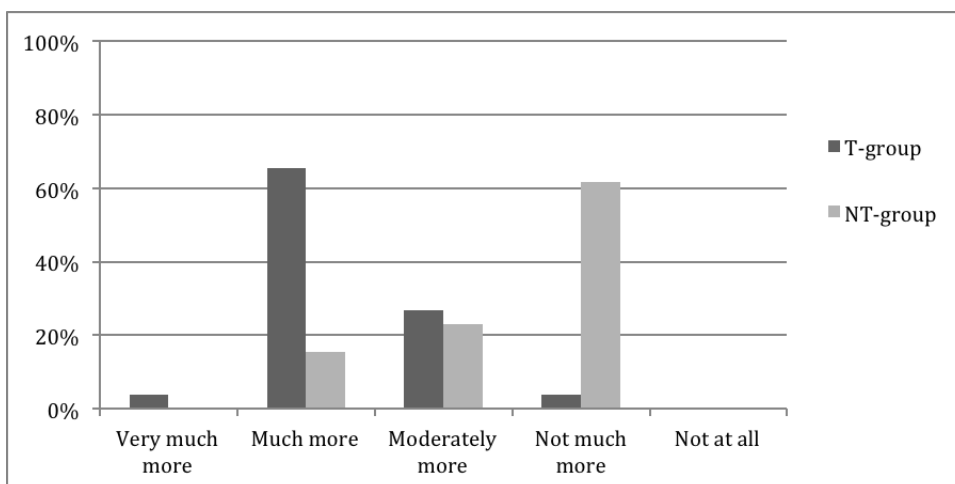
Figure 4.25 'Q18. After the revising process, did you feel more confident about your English writing proficiency?' - replies as percentages of the T-group and NT-group

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The results of the questionnaires also suggest that, after the revising process, translation assignments were generally considered more enjoyable English writing activities than writing assignments (See Figure 4.26).
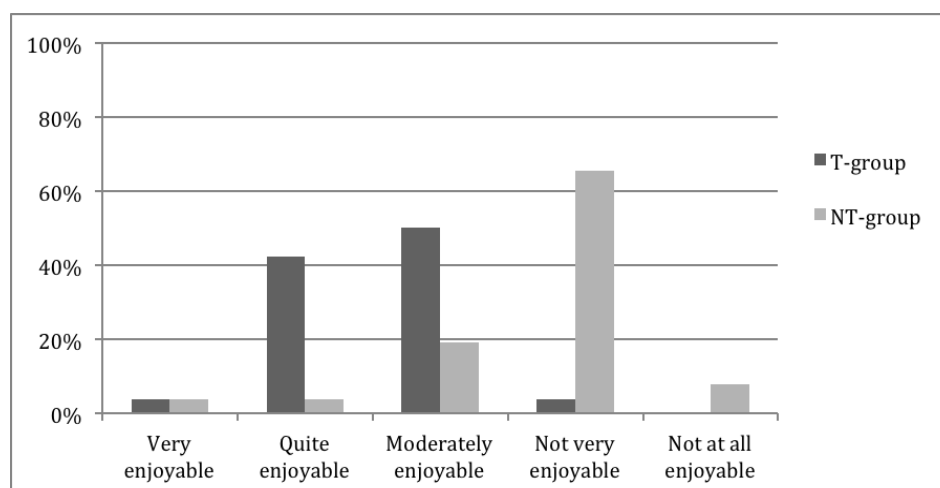
Figure 4.26 'Q19. After the revising process, did you consider the translation/writing assignments to be enjoyable English writing activities?' - replies as percentages of the T-group and NT-group

50% and 42% of the T-group respondents described the translation assignments as 'moderately enjoyable and 'quite enjoyable' respectively, while 65% of the NT-group respondents considered the writing assignments as 'not very enjoyable'. Again, negative feelings towards the writing assignments were found among the NT-group, with 8% of them considering the writing assignments as 'not at all enjoyable', but none of the T-group respondents considered the translation assignments in the same way.

In response to the question whether the revising process motivated them to improve their English writing (see Figure 4.27), the majority of the T-group respondents (69%) replied 'quite a lot', while most of the NT-group respondents (54%) answered 'not much'. Contrastive responses were also elicited, with 12% from the T-group but only 4% from the NT-group replying 'very much' respectively, and 0% from the T-group but 8% from the NT-group choosing 'not at all'. This suggests that, during the

revising process, the translation assignments were considered more helpful in motivating students to improve their English writing than the writing assignments.
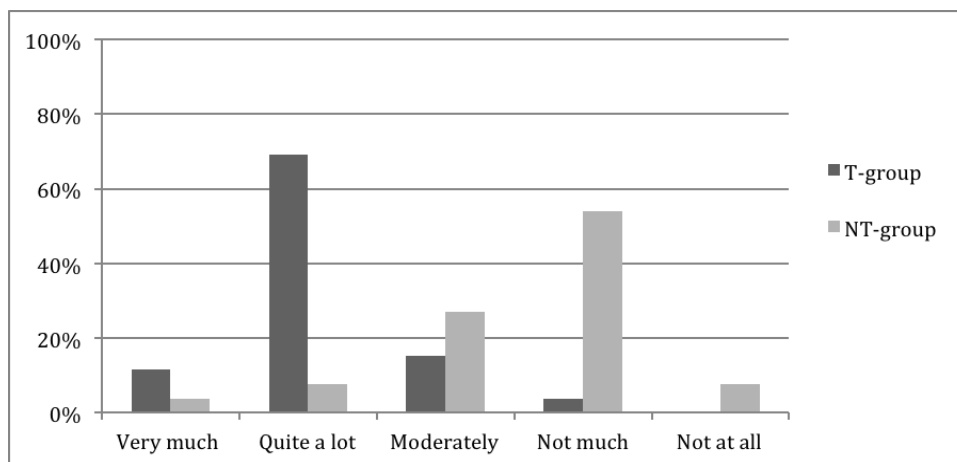
Figure 4.27 'Q20. Did the revising process motivate you to improve your English writing?' - replies as percentages of the T-group and NT-group

4.3.4 Perspectives on the use of translation/writing tasks

The last part of the questionnaire concerns the students' overall view on translation/writing tasks in L2 classrooms. The results generally show that the translation tasks were considered more helpful than writing tasks in 1) improving students' English writing proficiency, 2) encouraging them to participate in class discussions, 3) building their confidence in English writing and 4) building their confidence in taking part in English class discussions, with the majority of T-group respondents indicating the tasks as 'helpful' and most NT-group respondents indicating the tasks as 'not very helpful' in these four aspects (see Figure 4.28-4.31).
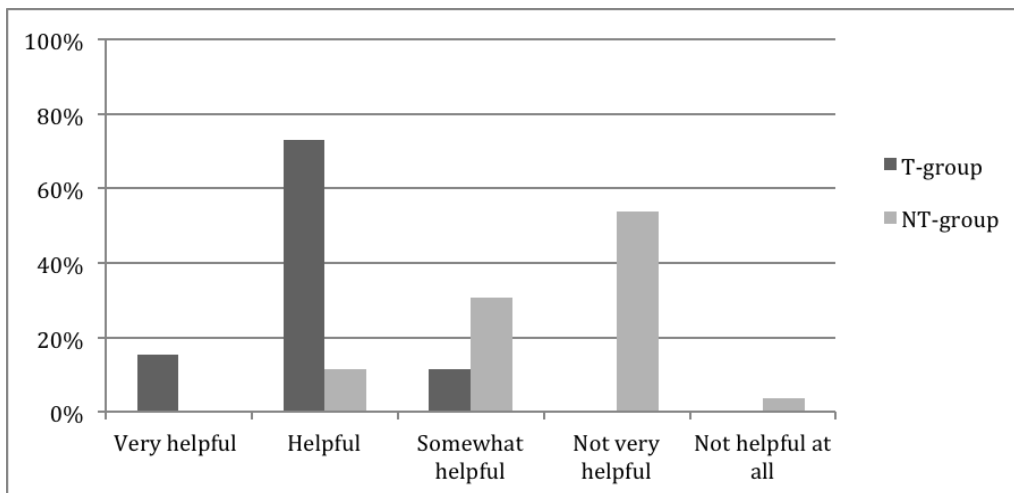
Figure 4.28 'Q21. Overall, how would you rate the helpfulness of the translation/writing activities in improving your English writing proficiency?' - replies as percentages of the T-group and NT-group
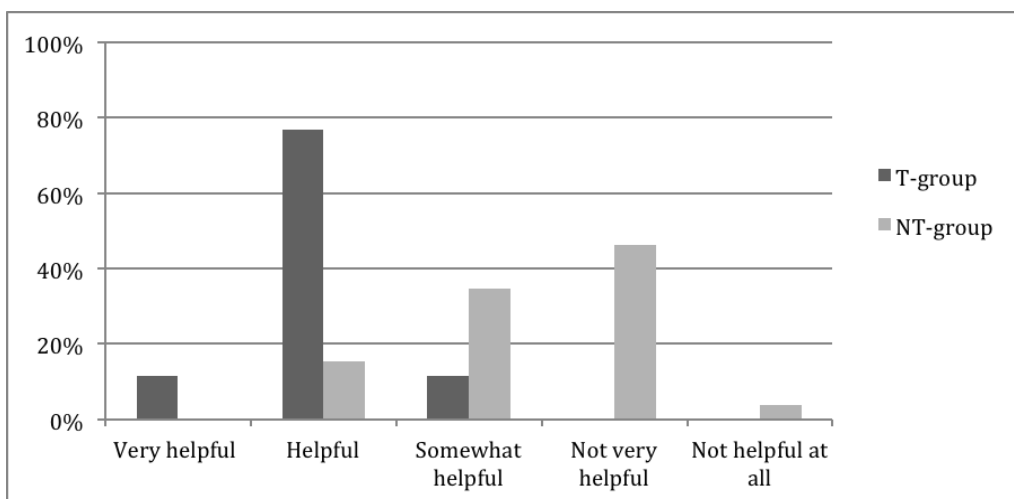
Figure 4.29 'Q22. Overall, how would you rate the helpfulness of the translation/writing activities in encouraging you to participate in class discussions?' - replies as percentages of the T-group and NT-group
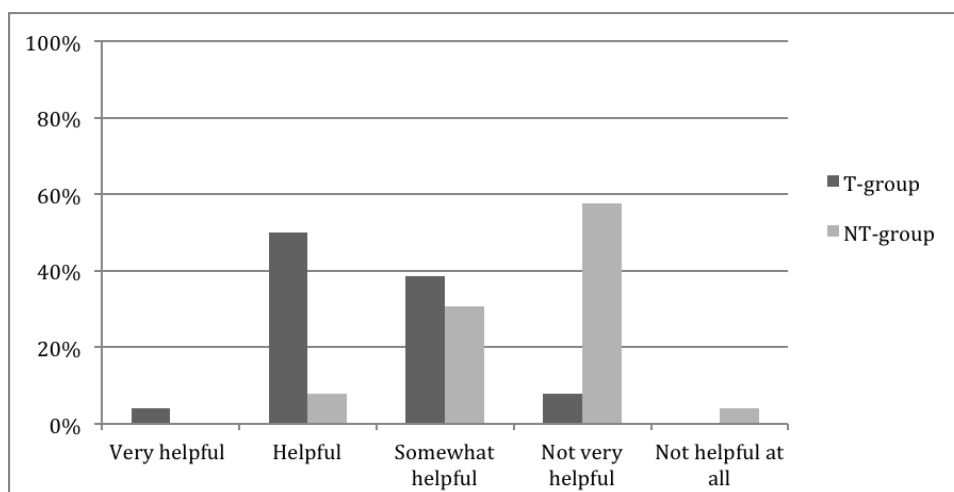
Figure 4.30 'Q23. Overall, how would you rate the helpfulness of the translation/writing activities in building your confidence in English writing?' - replies as percentages of the T-group and NT-group
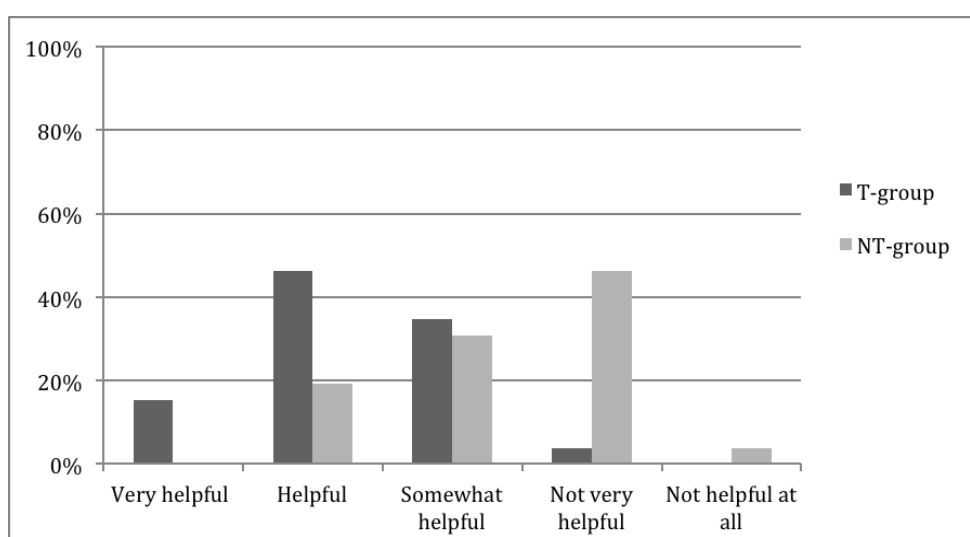
Figure 4.31 'Q24. Overall, how would you rate the helpfulness of the translation/writing activities in building your confidence in taking part in English class discussions?' - replies as percentages of the T-group and NT-group

When asked to describe the series of translation/writing tasks assigned in class (see Figure 4.32), most of the T-group respondents chose rather positive descriptions, including 'motivating' (69%), 'thought-provoking' (65%), 'challenging [64]' (58%),

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[64] The description 'challenging' may be considered neutral, but it is considered positive in this context to contrast with the option 'too demanding'. To avoid confusion, it was explained to the students that 'challenging' here is considered something that is difficult in an interesting or enjoyable way, as opposed to a more negative description 'too demanding'.

'interesting' (42%), and 'attention-grabbing' (35%). In contrast, most NT-group respondents selected comparatively negative descriptions, including 'tedious' (62%), 'boring' (58%), 'nerve-racking' (58%) and 'uninteresting' (35%). This suggests that most of the students were more in favour of translation tasks than writing tasks.
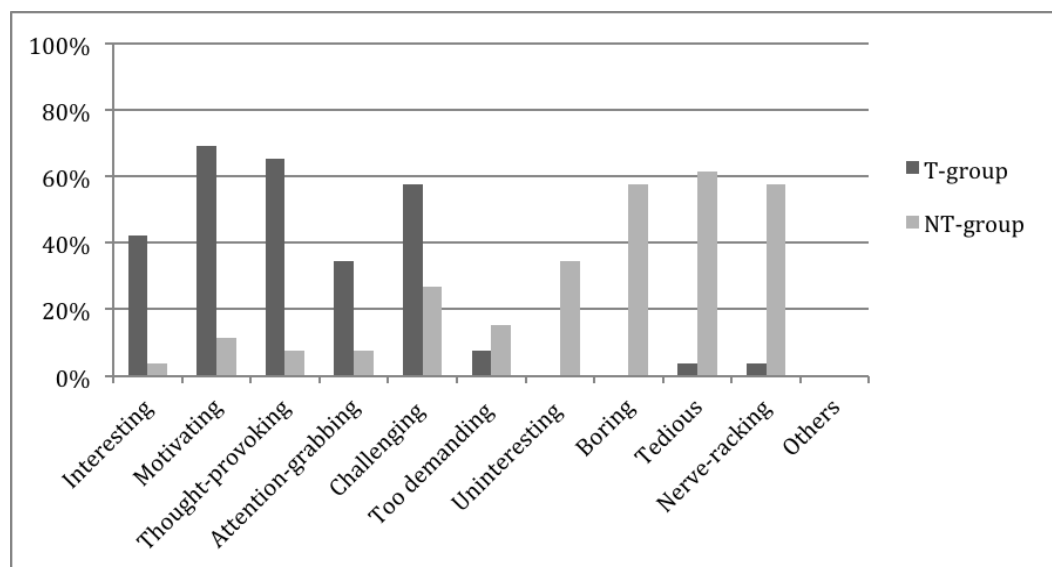
Figure 4.32 'Q25. Overall, how would you describe the series of translation/writing activities assigned in class? Mark all that apply.' - replies as percentages of the T-group and NT-group

When asked whether they considered translating from Chinese into English had helped them to learn English after taking part in the series of translation tasks over the past 5 weeks, the vast majority of the T-group respondents (81%) indicated that it was 'helpful'. On the contrary, when asked whether they considered writing directly in English had helped them to learn English after taking part in the series of writing tasks, most NT-group respondents (69%) said it was 'not very helpful' (see Figure 4.33). This suggests that after experiencing translation/writing tasks themselves, students still generally perceived translation tasks as more helpful than writing tasks in helping them to learn English.
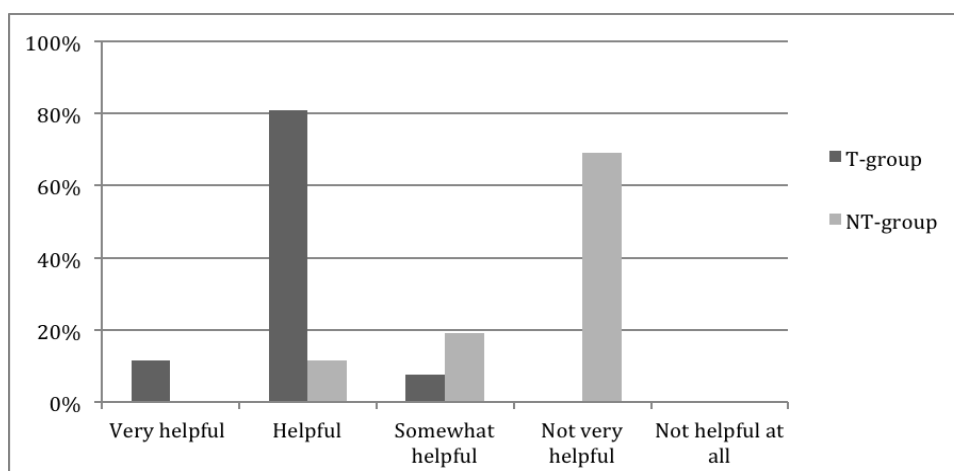
Figure 4.33 'Q26. After taking part in the series of translation/writing activities over the past 5 weeks, do you think that translating from Chinese into English/writing directly in English helps you to learn English?' - replies as percentages of the T-group and NT-group

In sum, the findings of Data A shows that translation tasks induced more LREs, particularly responses, than writing tasks and thus may have greater potential to engender class discussions. The findings of Data B indicate that L1-L2 translation tasks are more likely than direct L2 writing tasks to encourage and help students to improve their lexis and grammar. The findings of Data C show that translation tasks were perceived more positively than writing tasks in encouraging class discussions and helping students to make improvements on the lexical and grammatical levels. Together, the three sets of data suggest that translation tasks can yield more desirable outcomes in L2 classrooms than writing tasks in engendering class discussions and helping students to make lexical and grammatical improvements.

Chapter 5 Discussions

The impact of translation tasks on L2 classrooms is an underexplored area. The present study set out to investigate the effectiveness of using translation tasks to engender class discussions and encourage improvement in writing. L2 learners' perspectives on the use of translation in L2 learning were also examined. This Chapter is mainly devoted to the analysis and discussion of the three sets of data (known as Data A, Data B and Data C) that aim to address the three research questions of this study.

5.1 Data A: Analysis and Interpretation of Findings for Research Question 1

Research question 1: How does translation compare with direct L2 writing in engendering class discussions among L2 learners?

The first question posed in this study is how translation tasks compare with L2 direct writing tasks in engendering class discussions. The interest lies in the quantity and type of LREs encouraged by the two different types of tasks: translation and writing (non-translation). To answer this question, two experiments were carried out, with students 1-13 and students 14-26 working on T-tasks and NT-tasks respectively in Experiment I and the two groups of students swapping tasks in Experiment II.

5.1.1 Finding 1: Quantity of LREs

Overall, translation tasks induced significantly more LREs than writing tasks. Results of Experiment I show that 209 more LREs were produced by the T-group than the NT-group and the difference was statistically significant ($p<0.001$). Results of Experiment

II reveal that 89 more LREs were elicited from the T-group, but no statistically significant difference was found ($p>0.05$). However, comparison of the results within the same group of participants across different tasks shows that participants 1-13 produced 126 more LREs when engaged in discussions of translation tasks than writing tasks, and the difference was statistically significant ($p<0.05$). Likewise, participants 14-26 generated 171 more LREs in discussions of translation tasks than writing tasks, and the difference was statistically significant ($p<0.001$). In sum, translation tasks outperformed writing tasks in engendering class discussions, as measured by the number of LREs generated by the two task types. Five possible explanations for this phenomenon are discussed below based on the empirical evidence from the data.

5.1.1.1 Explanation 1: Encountering linguistic difficulties

First, it is possible to plan translation tasks judiciously, to include lexical expressions or grammatical structures that teachers consider unfamiliar or challenging to students; as a consequence the students may encounter difficulties and this helps to prompt discussions. Students who work on translation tasks cannot easily resort to 'avoidance strategies' as freely as students who work on writing tasks because they are constrained by the source text. For writing tasks, even though the topics can be made very specific, it is impossible to control what students actually write or anticipate what kind of linguistic difficulties they may encounter. They may simply have no difficulties or the difficulties have simply been unconsciously or consciously avoided. Supporting this reasoning is the following non-LRE statement by student 24 from the NT-group, which was captured in between turn 29 and turn 30 in Experiment I:

> S24: I have no difficulty, because I have skipped all the difficulty (difficulties).....hmmm.....

This statement was not regarded as an LRE because it was not a discussion on a language-related matter and does not comply with the definition of LREs provided in Chapter 1. However, it is worth noting because it reveals the possibility that students may have encountered no problems in their writing tasks simply because they avoided them. In fact, there were 11 instances where students in the NT-group noted that they had 'skipped' certain expressions because they did not know them and simply did not use them, as Example 5.1 suggests.

Example 5.1: Avoidance in the NT-group
(Experiment I)

1   S14   Yes, I think some vocabulary...I don't know how to spell (express) it... <The vocabulary...鴉片戰爭[Opium War] …Yes...I just write because of the history and skipped the (term) 鴉片戰爭 (Opium War)>

30   S25   I have a vocabulary problem. I want to write 身體虐待 [physical abuse] and then I don't know how to write the standard vocabulary, so I skipped it...

70   S19   如何表達跟風...跳過 [How to express follow the trend? I skipped this...]

81   S21   I have another problem. I know the activity's Chinese meaning, but I can't use English to explain, so I skipped it…

117   S22   I don't know how to express) 養育 [raise a child])... <I can't solve it....空了 [so I skipped it]>

123   S16   I don't know how to (express) 老年化[population ageing], so I just skipped it.

129   S16   I have a problem in 雙職婦女[working wives/mothers] and I don't know how to translate it. <No, I just skipped it. I wanted to write down the points, but I don't know how to translate 雙職婦女[working wives/mothers], so I skipped it. I used other points. Yes.>

(Experiment II)

187	S4	I don't how to translate...express 按揭再按揭 [remortgage]. I have no idea <u>so I haven't write (written) it</u> <yes(I skipped it)>.
193	S12	I don't know how to express 收緊按揭 [tighten mortgage]...<<u>I skipped it</u>>.
196	S3	I don't know how to explain 炒樓 [property speculation], so my solution is...<u>my solution is...I skipped it...</u>
201	S12	I don't know how to express 樓奴(房奴) [home mortgage slaves]... <u>(I) skipped it.</u>

In contrast, there were only 4 instances where students in the T-group mentioned that they had skipped certain expressions, as exemplified in Example 5.2.

Example 5.2: Avoidance in the T-group

(T-group, Experiment II)

78	S22	I translated it[65] to 'can't bear the benefit', <u>so I skipped 抵受不住誘惑 [may easily be tempted to], 繼續 translate 下一句 (and continued to translate the following sentence).</u>
117	S26	And Also in line 1, I don't know how to translate 遊行示威 [protest]...I write: 'there are more than three million people go (going) on street' <u>and I skipped 示威 [protest]</u> . <yes>
143	S26	I think 公然 [blatantly] is not important to this sentence, so <u>I skipped it and I write 'step (insult) other country's culture'.</u>
149	S16	I agree with her (S26), <u>公然 [blatantly] is not important so I skipped it</u>; And I think 踐踏 [trample]...I used 'harm', yes.

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[65] The student was referring to the expression 抵受不住誘惑 [may easily be tempted to].

However, unlike the situation in the NT-group, students in the T-group did not skip expressions to avoid them. In turn 78, student 22 avoided a word-for-word translation of the expression 抵受不住誘惑 [may easily be tempted to] but rephrased it as 'can't bear the benefit', while in turn 117, student 26 skipped the exact term 示威 [protest] but was able to paraphrase the meaning and wrote 'there are more than three million people go (going) on street'. In turns 143 and 149 the students skipped the word 公然 [blatantly] because they felt that in that context it was unnecessary to include it in their translation, so this was a case of decision-making rather than avoidance.

One of the advantages of using translation in L2 classrooms - compared to tasks like compositions – which is well illustrated in the examples above, is that translation tasks may enrich students' linguistic knowledge by reducing chances of avoidance. The above examples seem compatible with the views expressed by Schjoldager (2004) and Zojer (2009) that translation is a valuable pedagogical tool because its constraints on the writing process forces students to expand their range of expressions rather than limiting themselves to known areas.

5.1.1.2 Explanation 2: Encountering similar problems

A second reason why the translation tasks engendered more LREs may be that translation tasks allow students to work on the exact same piece of text, so they may have met similar linguistic difficulties in the translation process, and when it comes to discussions, they may feel more familiar with the issues discussed and therefore may have more confidence or interest in expressing their views whether the issue was a difficulty to them or not. Evidence of this reasoning can be supported by phrases like 'I think it is okay because…', 'I agree with you because…', and 'I disagree with you

because…' that were recurrently found in discussions among the T-group in both Experiment I and II, as illustrated in Example 5.3.

Example 5.3

(T-group, Discussion 1, Experiment II)

66 S22 In the text there are several similar terms, such as 腐敗 [corruption], 貪污 [corruption] and 受賄 [bribery]. I am not sure if I should translate all of them as 'corruption'?

67 S23 <u>I think it's ok. I think</u> corruption <u>can mean</u> three different words in Chinese.

68 S24 <u>I agree with you, because</u> corruption means 腐敗[corruption], 貪污 [corruption] and 受賄 [bribery]. It is a verb.

69 S16 <u>I don't agree with you, because</u> the three vocab (vocabularies) are different. […] [These three types of crime have different punishment, so we should use different words to express them].

70 S23 <u>I think</u> bribery is a part of corruption, so it's okay to use corruption.

71 S19 <u>I think</u> 貪污 [corruption] and 受賄 [bribery]…meaning is (their meanings are) very similar in Chinese, so I agree to use corruption (to express the three ideas).

72 S22 <u>But in my opinion</u>, 貪污 [corruption] and 受賄 [bribery] is (are) included in 腐敗 [corruption]. I think that is more specific […]

In contrast, in writing tasks, students are free to express what they want concerning the given topic. The narrower the topic is, the higher the chance that students will talk about similar issues or raise similar examples in their writing. Despite this, the writing tasks cannot be as strategically planned or manipulated as translation tasks, and there is not as much control of the grammatical structures and linguistic expressions that students may use in writing tasks as in translation tasks. Therefore, students in the NT-group might not necessarily have encountered similar problems in their writing process, so when their peers brought up an issue that they had not

pondered over, they might not be able to formulate ideas and have any views instantly, thus discouraging discussions.

As can be seen in Example 5.4 below, concerns expressed in the NT-group prompted several responses on some occasions but were left unattended at other times. For instance, in turns 123-125 the students managed to continue a discussion, possibly because they had by chance encountered the same expressions. In turn 125 the way student 24 responded – 'I expressed …as' - seems to suggest that she had used or reflected on the same term in her writing.

Example 5.4
(NT-group, Discussion 5, Experiment I)

121　S19　I don't know the vocabulary 晚婚 [late marriage], so I write 'marry late'.

122　S14　I don't know how to express 鼓勵生育 [encourage people to give birth], so I used a long sentence: the government should encourage us to bring baby to the world.

123　S16　I don't know how to (express) 老年化 [population ageing], so I just skipped it.

124　S23　I think it's 'aging population'

125　S24　<u>I expressed 老年化 [population ageing] as</u> 'it makes our society age structure to be old'.

However, in turns 121 and 122 the concerns were simply left unattended, and this phenomenon was frequently found in the NT-group (for details see Appendix 5A). This suggests that the results of the NT-group may vary depending on whether the students shared similar problems by chance.

5.1.1.3 Explanation 3: Sharing the same context

When students have a clear picture of what their peers are talking about, it may be easier for them to express their views and engage in the discussions - whether or not they have experienced the same problem. Translation tasks allow students to share the exact context and thereby gain a better understanding of concerns raised by their peers and then share their views of certain language usages based on the same context.

In contrast, writing tasks do not offer all students the exact same context. In some cases, an expression can be used very differently depending on the context, and the same applies to grammatical structure. In Example 5.5, students were able to discuss the suitability of using 'destroy' to express the term '打擊', which literally refers to 'combat/fight' but means 'deter' in this context.

Example 5.5
(T-group, Discussion 4, Experiment II)

204	S15	And I have a new problem. I don't know how to express 打擊企業創新[deter business innovation], so I said 'hit the company to create new things', but I think it's …I have a little bit problem…
205	S17	'Destroy the creative (creativity) of company'.

[…]⁶⁶

| 207 | S15 | […] I think 'destroy' has a little a bit problem. I think 'distract' may be better. 'Destroy' is too serious …it means …it's totally don't have the creativity. |
| 208 | S17 | But I think 打擊企業創新 [deter business innovation] is a very serious thing. It will cause the economy become worse, so I think it's a serious problem, so I use 'destroy'…it's better… |

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⁶⁶ This symbol was used to indicate that some less relevant LREs were left out here in consideration of the length. For details, refer to the full transcriptions in Appendix 4.

209	S20	But I think 'destroy' in Chinese means 毀滅 [destroy]. It's different with (from) 打擊 [deter]…I can't agree with you.
210	S23	I don't agree with him (S17) too. I think 'destroy' is not suitable in this sentence.
211	S24	I don't agree with him (S17). I agree with both of them (S23 and S15): 'destroy' means something disappear, so I used 'punch'.
212 [...]	S17	I totally disagree all with you! 'Destroy' maybe can mean 毀滅[destroy], but it also can mean 打擊 [*literally combat, but in this context this verb refers to something like 'deter']
217	S20	In English, you won't use 'destroy the ISIS', you will just say 'strike the ISIS or hit the ISIS'…you know…as she (S15) said, if you use 'destroy', it means totally disappear. It's different, okay…

When student S17 suggested expressing this term as 'destroy', several students showed disagreement and discussed why the term was considered unsuitable in the context. In short, most students considered this expression too strong for the context, in which the Chinese term means 'deter business innovation', and in turn 217, student 20 provided a slightly clearer explanation. This kind of language mediation was regularly found in discussions among groups who worked on translation tasks. It seems reasonable to suggest that this tendency for the T-group to mediate and debate language usages may be one pedagogical advantage of translation tasks, which is consistent with Carreres's (2006) claim that translation tasks are effective in inviting class discussions.

In striking contrast, there were many fewer in-depth discussions among the NT-group. In many instances the concerns expressed simply failed to elicit responses from others or only induced one or two responses, as in Example 5.6:

Example 5.6

(NT-group, Discussion 5, Experiment II)

| 213 | S5 | I have some difficulty to express 壓制…抑制 [suppress]…(How about) 'suppress'? |
| 214 | S9 | I think 'restrain' is better'… |

One possible reason is that students may not have a clear idea of the exact context of the concern raised. In Example 5.6, for instance, the word 壓制 can generally be expressed as 'suppress', but it may also entail other meanings and can be conveyed in other ways depending on the context. It can be expressed as the verb 'stop', as in stopping the spread of bacteria, or be used as the verb 'suppress', as in suppressing a person's feelings. Hence, by just mentioning an expression all of a sudden with no further background information about how the word is used in the context, it can be difficult to proceed to further discussions, not to mention in-depth ones.

It can be argued that the nature of writing tasks simply does not invite or encourage discussions. However, the empirical results of the present study show that there were occasions where discussions in the NT-group were as enduring as those of the T-group, as in Example 5.7:

Example 5.7

(NT-group, Discussion 1, Experiment I)

| 24 | S17 | I have a vocabulary problem. When I want to express 公眾人物 [public figures], but I cannot figure out the vocabulary, so I just used 'public people' to express it, but I don't know is it correct (if it is correct). |
| 25 | S22 | 'Celebrity'? |

26	S16	But <u>I think 'celebrity' means 名人 and you…I think 'celebrity' cannot explain 公眾人物 [public figures]</u>.
27	S22	'Famous people'? 'Celebrity'….<I think 'celebrity' is better than 'famous people'>
28	S17	But I think 'famous people' is better than 'celebrity' because 'celebrity' means 名人[celebrities]…明星 [stars]…can include other people.
29	S26	<u>I think 公眾人物 is not mean they (are) sure famous, so I think you use 'public people' …is better. You see what you write in that sentence and you use different word. If you only want to write 公眾人物 [public figure], I think you use 'public people' is better.</u>

The students were able to discuss the appropriateness of expressing 公眾人物 [public figures] as 'celebrity'. This is probably because the meaning of the expression is rather straightforward and context does not seem to matter so much. However, such enduring discussions where a concern prompted a number of responses (this will be discussed in the context of Finding 2) were not as frequently found in the NT-group as in the T-group. This varying level of engagement could be attributed to whether the issue being discussed requires contextual information to enable students to engage in more in-depth discussions; this could also be a reason why there were fewer LREs found in the NT-group. All in all, this suggests that translation tasks may more consistently encourage a high level of student engagement as they allow students to share the same context, whereas the context of terms used in writing tasks may vary widely.

5.1.1.4 Explanation 4: Higher level of concentration

Another possible explanation is the T-group may have devoted higher levels of concentration and attention to the discussions than the NT-group. Support for this

reasoning can be elicited from one notable feature observed throughout the discussions. In four instances students were found to have retained memory of earlier discussions or tasks. In Experiment I, a student in the T-group suddenly offered suggestions about an issue that was discussed before (see Example 4.20 in Chapter 4); in Experiment II, students in the T-group were hotly debating the appropriateness of an expression (see Example 4.21 in Chapter 4) when suddenly one student brought up a term which had been hotly debated in a discussion session two weeks before. Both cases suggest that matters discussed in the past had been retained in the students' memory. This was possibly due to the students' characters, their strong memory capacity, their determination to find better solutions, or their high level of concentration on the language usage that was being discussed. This phenomenon also suggests that students' level of engagement in matters discussed in T-tasks helps them to remember certain language usages, and this is crucial for L2 learning because students do not learn what they do not remember.

Meanwhile, there were two instances where students brought up expressions that they had acquired from tasks assigned to them weeks before. One was found in the T-group and another case was found in the NT-group. This suggests that both translation and writing tasks could be helpful for students to acquire and retain knowledge of new language usages they have encountered. However, the fact that three of the four cases of retained memory found in all the discussions throughout both experiments were associated with the T-group suggests that perhaps translation tasks have greater potential or may create more opportunities to focus students' attention on a language usage and promote more lasting memory than writing tasks. In addition to higher levels of concentration, this phenomenon may have arisen due to what Hummel (1995) describes as the impact of 'elaborateness of processing', where the heavy cognitive load

imposed by the translation processes causes the expressions to be better recalled and more enduring in memory. If this is so, the longer retention of memory in the above instances supports the argument that translation tasks involve more difficulties than writing tasks given their constraints, which in turn allow certain lexical and grammatical forms to be more durable in memory.

5.1.1.5 Explanation 5: Higher level of enthusiasm

Another possible explanation is that the T-group had a higher level of enthusiasm about the tasks than the NT-group did. This insight is derived from another noteworthy feature observed from Data A, i.e. the occurrence of interruptions during the class discussions. In comparing the results for the same group of students in different task types, it was found that interruptions that occurred in discussions of T-tasks (66 times) outnumbered those in discussions of NT-tasks (40 times) among students 1-13, and the same trend was shared by students 14-26, with 19 interruptions and 8 interruptions found in T-tasks and NT-tasks respectively. This finding suggests that task type may have a role to play. It could mean that students are more likely to lack self-discipline or lose control in discussing translation tasks. If this is the case, teachers need to be more alert and seek ways to reduce chances of interruptions that may affect class discussions, such as reminding students of class etiquette prior to discussions. However, it is also possible that the students were simply very passionate about voicing their opinions and this is another indication of their high level of enthusiasm about translation tasks, which is good for L2 development because dedicated engagement helps to build active participation. This last speculative account is interesting because it may provide relevant insights into efforts to develop and maintain students' enthusiasm about class activities, which is certainly a pedagogical goal for many educators. These

two irregular patterns – retained memory and interruptions - are beyond the scope of the current study but merit future investigation.

In the following discussions, recurring features identified (Findings 2a, 2b, 2c and 3) will be examined. When interpreting the findings that the T-group produced many more LREs than the NT-group (Finding 1), consideration of other findings is not only helpful, but critical as they provide further explanation of Finding 1, (i.e. for what reason the T-group produced many more LREs than the NT-group in both experiments).

5.1.2 Finding 2a: Concern-based and Response-based LREs

In addition to the quantity of LREs, the content of LREs was investigated and one recurring theme identified was the 'discourse type' of the LREs. All LREs of the present study can be categorized as either 'concern-based' or 'response-based'. Results reveal that discussions in the T-group were comprised of many more responses to concerns compared to the NT-group. The T-group produced more response-based LREs than the NT-group in both Experiment I (227[67]) and Experiment II (153) and the differences were statistically significant (Experiment I = $p<0.001$; Experiment II = $p<0.05$).

On another dimension, when comparing the results for the same group of students (S1-13 and S14-26) in different tasks, the same results emerged. For Students 1-13, response-based LREs accounted for 83.8% and 55.7% of the total LREs in discussions of T-tasks and NT-tasks respectively. As for Students 14-26, 87.9% of their LREs were response-based in discussions of T-tasks, but only 49.6% LREs were responses in discussions of NT-tasks. These differences were all statistically significant (S1-13 = $p<0.001$; S14-26 = $p<0.001$). In general, the data of this study suggests that

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[67] Figures are provided in parentheses as a reminder of the results. For details see Chapter 4.

the T-group focused more on responding to their peers' concerns instead of raising new concerns than the NT-group.

Responses allow the circulation of ideas among students and can help to generate class discussions. Raising concern is also necessary for a discussion because someone has to raise a concern before anyone can respond, but a discussion cannot be considered as a discussion if it only contains concerns and fails to elicit responses. Compare the scenario where a group of students raise concerns and respond to each other, as opposed to the scenario where a group of students simply keep raising their own concerns. The first scenario is preferable because 'more responses' indicates a stronger interaction between students in class discussions. In the light of this reasoning, the finding that there were more responses in discussions among the T-group than among the NT-group suggests that translation tasks can yield better outcomes in engendering interactive class discussions than writing tasks.

Interestingly, the proportion of responses and concerns may explain why the difference in the number of LREs generated in the T-group and the NT-group was statistically significant ($p<0.05$) in Experiment I but not ($p>0.05$) in Experiment II, despite their parallel trend, while results for each group across tasks were statistically significant ($p<0.05$). Scrutiny of the t-test results of responses (R) and concerns (C) reveals why three out of four results were statistically significant as displayed in Table 5.1 and Table 5.2. In Experiment I, the number of concern-based LREs (mean=5.85) in the NT-group exceeded the number in the T-group (mean=4.46) but the results were not statistically significant ($p>0.05$), which suggests that the difference was not salient; on the other hand, response-based LREs in the T-group (mean=23.23) outnumbered those in the NT-group (mean=5.77) by a statistically significant proportion ($p<0.05$). Hence, the fact that the trend of more responses (T>NT) overrides that of more concerns

(NT>T) makes it explicable why in total the T-group (mean=27.69) produced statistically significantly more LREs than the NT-group (mean=11.62, $p<0.05$).

Table 5.1 Concern-based and response-based LREs in Experiment I

Concern					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
4.46	3.05	5.85	2.74	0.67	0.254088268
Response					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
23.23	11.75	5.77	4.42	4.08	0.000213426
LRE (total)					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
27.69	14.05	11.62	5.86	3.16	0.00211317

In Experiment II, as shown in Table 5.2, the results of response-based LREs tallied with those in Experiment I, with the T-group producing many more responses (mean=21.85) than the NT-group (mean=10.08) and the difference was statistically significant ($p<0.05$).

Table 5.2 Concern-based and response-based LREs in Experiment II

Concern					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
3.00	2.18	7.92	4.50	-2.98	0.003245452
Response					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
21.85	12.46	10.08	5.30	2.58	0.00818826
LRE (total)					
T group		NT group		t	*p*-value
Mean	SD	Mean	SD		
24.85	13.42	18.00	7.77	1.17	0.127612099

However, unlike in Experiment I, concern-based LREs in the NT-group (mean=7.92) outnumbered those in the T-group (mean=3.00) by almost half, and the difference was statistically significant ($p<0.05$).

Here an opposite trend was observed, in which the NT-group had significantly more concern-based LREs than the T-group, whereas the T-group had significantly more response-based LREs than the NT-group. This is one plausible reason why the difference between the LREs in the two groups was not statistically insignificant ($p>0.05$), though both experiments manifested the same trend where the T-group produced more LREs than the NT-group.

This is also why it is necessary to look at what kinds of LREs were produced in addition to examining the quantity of LREs. As discussed earlier, it is desirable to see responses in discussions and not simply concerns, because responses allow ideas to circulate among students and indicate a stronger interaction between students in class discussions (Finding 2c provides further support for this observation). Therefore, although there was no significant difference between LREs in the T-group and the NT-group in Experiment II, it is worth noting that in fact the difference between the number of response-based LREs occurring in the two groups was statistically significant ($p<0.05$).

Overall, the results from both experiments across the T-group and the NT-group and results of the same group of participants across different tasks all manifested the same trend, suggesting that translation tasks have greater potential to encourage students to respond to their peers in class discussions than writing tasks.

5.1.3 Finding 2b: Proportion of Response-based LREs

The responses found in the data were categorized as agreements (RA), clarifications (RF), explanations (RE), suggestions (RS), comments (RC), and a combination of suggestions and comments (RCS). The dominant responses in the T-group were suggestions (RS) and comments (RC), with 252 RS and 21 RC in Experiment I and 133 RS and 97 RC in Experiment II. The prevailing ones in the NT-group were RS (57) and RC (12) in Experiment I and RS (105) and RF (8) in Experiment II, but they constituted a much smaller proportion of the LREs in the NT-group than in the T-group. One noteworthy result is that a combination of suggestions and comments (RCS) was rare for both the T-group (5) and the NT-group (1) in Experiment I as well as the NT-group (1) in Experiment II, but grew to be the third most prevailing type of responses in the T-group (27) in Experiment II.

RA can be considered to be the one requiring the least critical thinking; however, it is inevitable when students coincidently have the same view as their peers. These situations are only likely to emerge when students share similar problems, as evidenced in Table 4.6 in Chapter 4, which shows that RA was only found in the T-group. This finding lends support to the explanation for Finding 1 that students in the T-group may more frequently encounter similar problems.

RF and RE can be signs of a lack of clarity, where the speakers fail to explain their point clearly. They could also be signs of engagement, where students seek clarification or explanation because they have been listening to their peers and they would like to gain a better understanding of the point made by their peers. Either way, it signals students' interest in the discussions. The rationale is that the students would not bother to ask for clarification if they were not listening to their peers or had no interest

in what they were saying. Offering clarifications and explanations are positive training for the students because they provide opportunities to re-organize expressions.

RS can be considered as the standard type of responses that most students may produce because it is an opportunity to share their own solutions to problems that they have pondered over, while RC can be considered as responses that involve more critical thinking because students need to digest the concerns raised and analyze whether they are right or wrong before they can reason with their peers. It also involves more language mediation and elicits more responses from peers. Both RS and RC may emerge when students have encountered similar problems, when students have knowledge of the problem, or when students try to think instantly to respond to their peers. Either way, these two types of responses are more likely to emerge when students have similar problems or the same context. This assumption can be supported by the phenomenon that in this study RS and RC produced by the T-group consistently outnumbered those produced by the NT-group in both experiments. These results, again, support the second and third explanations provided for Finding 1, i.e. translation tasks play a facilitative role in engendering class discussions in that when students encounter similar problems or share the same context, they may feel more ease, confidence or interest in giving 'responses', which play an important role in encouraging enduring, interactive discussions.

Among all kinds of responses, RCS can be considered most welcome for L2 classrooms because it requires critical thinking and involves the students not only commenting on others' language usage, but also offering suggestions of their own. It is worth noting that RCS was rarely found in either group in Experiment I, rarely found in the NT-group in Experiment II, but was prevalent in the T-group in Experiment II. One possible explanation of the rise of RCS in the T-group in Experiment II might be the

effect of practice, because the students who worked on translation tasks had already become used to the procedures of this type of class discussions (when they worked on writing tasks in Experiment I) and thus were able to be more comprehensive and more critical. Another reason may be that the students showed more interest in the assignment topics devised for Experiment II, which is also why a longitudinal study is necessary to compare task effects.

The above explanations for the emergence of the six different types of responses lend some support to the explanation of Finding 1, and the fact that RS, RC and RCS in the T-group consistently outnumbered those in the NT-group by a large proportion suggests that the nature of translation tasks may create more opportunities for the students to offer suggestions and comments on each other's suggestions than writing tasks do.

While all responses were considered good signs of engagements in discussions among students, they may indicate different types of attention, which, according to Storch (2008) can have different impacts on L2 learning. RA seems to fall into what Storch describes as 'limited engagement', where students simply repeat the matter being discussed or respond with phatic utterances. The remaining five types of responses seem to be what Storch categorizes as 'elaborate engagement' as they reflect students' deliberation over the problems being discussed. Having found that students who engaged at the elaborate level demonstrated better use of the targeted structures in a subsequent task, Storch (2008: 111) suggests that although both types of engagement are beneficial, 'elaborate engagement' has a much stronger impact on L2 learning.

The findings in this study are consistent with Storch's claim that LREs that can be described as 'elaborate engagement' may have stronger impact than those that show 'limited engagement'. Although it is beyond the scope of the current work to determine

whether and in what way the LREs on the limited and elaborate levels relate to subsequent L2 development, an interesting finding pertaining to the impact of LREs in the RC and RS (and therefore applicable to RCS) categories emerges from observation of the discussion patterns, suggesting that LREs in these categories contribute to more enduring, sustainable and interactive discussions.

5.1.4 Finding 2c: Discussion Patterns

A remarkable finding of this study is the diverging discussion patterns found in the T-group and NT-group (for details see Appendix 5A and 5B). The majority of discussions among the T-group in both experiments featured patterns with one concern followed by a number of responses, reaching a maximum of 17 and 21 responses in the first and second experiment respectively. In sharp contrast, the dominating discussion patterns in the NT-group were either a concern alone with zero responses or a concern that was only followed by a few responses, with a maximum of 8 responses in rare cases. The one-concern-alone pattern was rare in the T-group but very common in the NT-group. These patterns further explain why there were more LREs in the T-group than in the NT-group and suggest that the nature of translation tasks create more opportunities for enduring and interactive discussions than writing tasks.

In order to understand what leads to more enduring discussions (with more responses), the three longest discussions in both groups in Experiment I and Experiment II were examined. As shown in Table 5.3, RS and RC played a dominant role in the three longest discussions in each group.

Table 5.3 Top three most enduring discussions in T-group and NT-group

T-group	NT-group
Experiment I	Experiment I

(1) 1C+17R: C → RA → RS → RS → RS → RS → RS → RS → RS → RS → RS → RS → RE → RS → RS → RS → RS → RS (Turns 50-67)

(1) 1C+6R: C → RS → RS → RS → RS → RS → RC (Turns 140-146)

(2) 1C+12R: C → RS → RS → RS → RS → RS → RS → RA → RA → RC → RS → RS → RS (Turns 93-105)

(2) 1C+5R: C → RS → RS → RC → RC → RCS (Turns 132-137)

(3) 1C+12R: C → RS → RS → RS → RS → RS → RE → RE → RC → RC → RS → RC → RS (Turns 182-194)

(3) 1C+5R: C → RS → RC → RS → RC → RC (Turns 24-29)

| Experiment II | Experiment II |

(1) 1C+21R: C → RS → RS → RS → RS → RF → RC→ RC → RC → RC → RC → RC → RC→ RC → RA → RC → RC→ RC →RA → RC → RC→ RC (Turns 277-298)

(1) 1C+8R: C → RS → RS → RS → RS → RS → RC→ RF→ RS (Turns 97-105)

(2) 1C+16R: C → RS → RS → RE → RE → RC → RC→ RS → RCS → RC → RC → RC → RC→ RC → RCS → RC → RA (Turns 168-173)

(2) 1C+5R: C → RS → RS → RS → RS → RF (Turns 168-173)

(3) 1C+13R: C → RS → RC → RCS → RC → RC → RC→ RCS → RC → RCS → RC → RC → RCS→ RC (Turns 135-139)

(3) 1C+4R: C → RS → RS → RC → RS (Turns 135-139)

This suggests that if the tasks are able to invite suggestions or comments, the discussion is more sustainable. This finding seems to provide further support for Storch's (2008) claim that the quality of attention (i.e. whether the LREs are at limited or elaborate level) affects impact. Instead of showing how attention affects students' subsequent L2 performance, the present data suggests how it may affect the discussion itself.

The longest discussion was found in the T-group in Experiment II, where a concern was followed by 21 responses, as shown in Example 5.8. Note that there were only 13 participants but 21 responses.

Example 5.8: Enduring discussions of the T-group

(Turns 277-296, Discussion 5, Experiment II)

S24	I don't know how to express 積蓄 [savings].	C
S15	I think the translation of 積蓄[savings] is saving…	RS
S14	I think 'save money' is okay…	RS
S20	I use the word 'deposit'.	RS
S18	And I used 'storage'.	RS
S17	存貨 [storage]?	RF
S24	I don't agree with you. 'Storage' is not 精確 [accurate] accurate in this sentence. If I have one kg of banana, it is storage, but (here in this context) it means the money; banana is not the money, so we cannot use the 'storage'.	RC
S14	I think 積蓄[savings] is means (means) all our wealth, including money, your property and the car and everything…	RC
S23	I don't agree with you. I think 積蓄[savings] is only mean our money, not include (it doesn't refer to) our car or other items.	RC
S14	But I think the car can become money…you sell	RC
S17	*Interruption: Car can become money.	RC
S23	I think you can't think in this way, because if I have….just like S24 say, if I have a package of banana, I can show them and they can become our money, but I can't say banana is my 積蓄[savings].	RC
S24	I have an opinion that I want to share. We can see the whole sentence…it mention(s) about bank…but it's not the trade and business. If the whole sentence is talk about the trade and business, 積蓄[savings] can mean banana or other storage, but it's is express bank…and capital…money, so I think we use 'saving' is suitable.	RC
S19	S14 say car or house. I think it's fixed assets and current assets and not money.	RC
S24	*Interruption: I agree with you.	RA

S17	*Interruption: But I have another opinion…like property cars …a lot of goods …they can be sold and become money…they just can't immediately become money.	RC
S24	You ignored the whole sentence's content. We will not save banana to buy a house; we are saving money to buy a house. Do you agree with me?	RC
S18	*Interruption: I don't agree with you…I think the banana can exchange...**Continued after being interrupted: I said 'banana can exchange…it's trade I think…they can exchange…	RC
S17	*Interruption: I don't agree with you.	RA
S16	積蓄[savings] means you can 現成拿出來的 money [money that be available for use] …not you must selling (sell) something then you can become money (to get money)…	RC

This discussion began from concerns about the accurate expression for '積蓄 [savings]' and then shifted to a debate on the concept of saving. There are three interesting phenomena worth noting. First, 9 out of 13 students took part in the discussion, and three of them spoke 2 to 3 times and two of them spoke 4 to 5 times. While it is good to see nearly 70% of the students participating in the discussion, it is equally encouraging to see nearly 40% of them sharing their opinions multiple times because this is a sign of interaction. Moreover, their eagerness to voice their opinions or convince others enables them to practice using L2 and build more confidence in using it. Second, this discussion was full of comments (RC). This could be one of the reasons why there was such a hot debate, suggesting that tasks that are able to encourage comments have higher potential to engender enduring and interactive discussions. The phenomenon that more RS and RC were found in discussions in the T-group than in the NT-group can again be associated with the previously mentioned argument that the nature of translation tasks may (1) ensure that students encounter some level of linguistic difficulties, (2) allow

students to experience similar problems, and (3) enable students to share the exact same context.

In addition to examining the most enduring discussions, it is also essential to explore reasons why some concerns failed to elicit any response. Upon scrutiny of the data, it was found that the concerns that elicited zero responses share several features, which may explain the emergence of the 1C-alone pattern:

1)   The concerns raised were about something specific – such as expressions for a specific term, sentence, collocation or grammatical usage – that other students may not have encountered in the same piece of writing.

> Example 5.9: Concern about something specific[68]
>
> S21: I don't know how to say 二次創作 [second creation], so I only said 'some people use their creative (creativity) to make new pictures or videos', so this is my problem.

The writing topic was 'cyberbullying' and it was unlikely that other students working on this topic would come up with a specific term like 二次創作 [second creation]; this may be the reason why this concern did not elicit any responses.

2) The concerns raised were too broad and general to be further discussed in depth without knowledge of the context.

> Example 5.10: Concern about a general issue[69]
>
> S11: I have one question…(How to express the term) 福利 [welfare/benefits]?

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[68] Turn 111, NT-group, Experiment I
[69] Turn 152, NT-group, Experiment II

In this example, the term 福利 [welfare/benefits] can be expressed differently depending

on the context. If the student was talking about society, then it would most likely be

'welfare'; if he/she was talking about a company, it could be '(fringe) benefits'.

3)　　The concerns raised were rather unclear to the audience in that the students failed

to make their points precisely and explicitly.

Example 5.11: Unclear concerns[70]

S14: Yes, I think some vocabulary …I don't know how to spell it. I think the drugs in

China…the drugs….because of the history … but the history is very long so I don't know how to

write down in this paper. <The vocabulary …鴉片戰爭[Opium War]…Yes…I just write

because of the history and skipped the 鴉片戰爭>

In this example, the student failed to express her concern clearly to others. It was simply

hard for others to guess what she was trying to say. As a result, her peers may have lost

interest in giving any response.

In discussions among the T-group, there were 3 1C-alone patterns in Experiment

I but none in Experiment II. In striking contrast, there were a total of 42 and 37 '1C-

pattern' in discussions among the NT-group in Experiment I and Experiment II

respectively. These 1C-alone patterns generally share at least one of the three features

mentioned above, as shown[71] in Table 5.4 below (for details see Appendix 5A and 5B).

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[70] Turn 1, NT-group, Experiment I
[71] Only the turn numbers are presented as including all the examples would make the table very large and

Table 5.4 Features of 1C-alone patterns in T-group and NT-group

Features	T-group		NT-group	
	Experiment I	Experiment II	Experiment I	Experiment II
Feature 1: Too specific			Turns 34, 50, 76, 77, 86, 88, 98, 99, 101, 110, 111, 112, 116, 121, 122, 126, 147, 151	Turns 3, 7, 10, 11, 14, <u>22</u>, 23, 26, 40, 48, <u>53</u>, 80, 81, 84, 96, 126, 165, 191, 192, 195, 210, 228, 229, 230, 233, 234
Feature 2: Too general	Turns 21, 80, 81		Turns 36, 37, 39, 42, <u>45</u>[72], <u>72</u>, 75, 87, 89, 90, <u>91</u>, <u>92</u>, 96, <u>97</u>, <u>100</u>, 104, 105, <u>109</u>	Turns 1, 2, 4, 13, 152, 232
Feature 3: Unclear			Turns 1, 35, 38, <u>45</u>, 56, <u>72</u>, 81, <u>91</u>, <u>92</u>, <u>97</u>, <u>100</u>, 106, <u>109</u>	Turns 12, <u>22</u>, 47, <u>53</u>, 67, 231

It is worth noting that under similar circumstances - when concerns were too specific or general - discussions in the T-group were still maintained. Consider the discussions in Table 5.5.

Table 5.5 A comparison of two groups' reactions to specific concerns

	NT-group (Turn 147, Experiment I)	T-group (Turns 305-314, Experiment I)
Feature 1: Specific concerns	S23: I think government should hold some 聯誼會 [matchmaking campaigns] to help some busy workers to recognize (meet) opposite gender, but I don't know how to express 聯誼會 [matchmaking campaigns], so I write 'speed dating'. →(followed by zero response)	S10: (How about the expression for) 聯誼活動 [matchmaking campaigns]? **Continued after being interrupted: Orginally I write 'the single-night party', afterwards…use 'socialize parties'. →S8: *Interruption: 'dating movement'. →S12: How about use 'parties'? →S10: <u>You can organize all kinds of parties…which one you want to organize?</u> →S12: …How about use 'gathering'? →S11: Yes, I used 'gathering'. →S9: I used 'date' …very easy word.

unwieldy. For details refer to Appendix 4. Full transcripts can be provided upon request.
[72] The categorization was carried out based on the primary feature. However some turns may have overlapping features. They are underlined for reference.

	→S10: <u>'Date' is for … 'date' more like one boy and one girl, but now it's the whole group of people, so better use 'party'.</u>
	→S12: *<u>Interruption: 'Date' is couple…</u>**Continued after interruption: <u>How about 'speed party'…'speed dating'?</u>
	→S10: <u>Oh 'speed dating'!</u>

Here students in both groups raised a similar concern, i.e. how to express the term 聯誼 [matchmaking], which is a specific term that was likely to be unfamiliar to most of the students. The NT-group did not discuss after the student raised the concern. However, in the T-group, a number of responses were successfully elicited. It seems reasonable to associate this phenomenon with the second explanation for Finding 1 (see 5.1.1.2), i.e. the T-group shared similar problems in the translation process and hence they had better clues, interest or confidence in voicing their opinions. The third explanation for Finding 1 (see 5.1.1.3) could also be a key factor, i.e. the T-group shared the same context and therefore when the concern was raised other students were able to develop new ideas spontaneously, as in turns 308, 312, and 313 (see underlined sentences in Table 5.5).

Similarly, as exemplified in Table 5.6, both the T-group and NT-group interestingly expressed concerns about the use of modal verbs: when to use 'will' or 'would'.

Table 5.6 A comparison of two groups' reactions to general concerns

	NT-group (Turn 104, Experiment II)	T-group (Turns 13-23, Experiment II)
Feature 2: General concerns	S16: I always have a grammar problem. When I was writing, sometimes I don't know when should I use 'can' or 'could', 'will' or 'would'...Most of the time I just follow my feeling...	S22: And…In line 1 假如在高峰時段開車進入市中心需付費,相信部份人會考慮調整其出行模式 [If motorists are/were charged for entering city centre during peak hours, some will/would probably consider adjusting their travel patterns.] – This seems like a conditional sentence to me; I am not sure if (I)

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→ (followed by zero response)	should use first conditional or second conditional.
	→ S18: I used 'it is believed that if driving your car into downtown at rush hours need to pay money, some people will change their method of going out'.
	→ S22: But in my sentence I used 'would'…
	→ S23: In my paragraph, I used conditional 1: 'people will consider to change'.
	→S14: Why?
	→S23: Because I think this sentence is talk about (talks about) the phenomenon of now, so I will choose to use conditional one.
	→S26: I use conditional one.
	→S16: I will use 'will' because it is possible to happen..
	→S24: I don't agree with you, because ' would' is to express…not a true phenomenon...this is imagine (an imagination of) that it will happen.
	→S22: Yes, I also think this is the imagination situation, so...
	→S19: I agree with S16, I think this is a thinking…phenomenon now (imaginative phenomenon at present).

In the case of the NT-group, the concern raised by student 16 was not supported by any contextual information and hence conceivably it was left unattended. In contrast, student 22 in the T-group asked a similar question (but in the case of conditional sentences) - whether 'will' or 'would' should be used - but it was followed by 10 responses. This was possibly because the T-group shared the same context and thus there was more room for others to join the discussion. This, again, is consistent with the third explanation for Finding 1 (see 5.1.1.3) and reveals one major advantage of using translation tasks for discussions. Students can easily refer to a problem and others can follow with ease. For writing tasks, students can summarize the context but it is more time-consuming and there are higher chances other students may lose track of it or simply lose interest in it.

The third feature – a lack of clarity - reveals that inexpressiveness was frequently found in discussions among the NT-group. However, this situation was rarely found in the T-group. The data show that even when it happened it did not lead to zero responses as frequently as in the case of the NT-group, given the fact that there were only three 1C-alone patterns in the T-group in Experiment I and none in Experiment II. The probable reason is that even when there was a lack of clarity, other students were able to understand their peers' concerns given that they shared the same context. This reinforces the analysis for Finding 1 (see 5.1.1) and highlights the benefits of using translation tasks for class discussions.

5.1.5 Finding 3: Grammatical and lexical LREs

Another recurring theme identified in this study was the linguistic focuses of the LREs. The LREs were either grammatical or lexical. Overall, the T-group generated more lexical and grammatical LREs than the NT-group, which is not surprising as the total LREs of the T-group far exceeded those of the NT-group in both experiments (see 4.1.5). However, consistent results were not found in checking the statistical significance of the differences between lexical LREs and grammatical LREs in the T-group and the NT-group. Statistically significant difference was only found in lexical LREs of the two groups in Experiment I and grammatical LREs in Experiment II. It is thus difficult to conclude whether students who work on translation tasks would generate significantly more lexical LREs or grammatical LREs in class discussions than those working on writing tasks. This inconsistency could be due to several factors, such as the content of the assignments, the actual writing produced by the students, the kind of questions that the students raised (whether it posed similar challenges to other students), etc.

However, two emerging trends are noteworthy. First, in both experiments, over 80% of the LREs in the T-group and the NT-group were lexical and the same trend was found when comparing the results of the same group across tasks. This indicates that both groups tended to focus on discussions on the lexical level rather than on the grammatical level, suggesting that both translation and writing tasks may create more opportunities for students to reflect on lexical rather than grammatical issues. One possible explanation is that grammar may generally pose fewer challenges for students because all of them have acquired common grammatical knowledge by the time they reach tertiary education, though there may still be difficulties or uncertainties when actually applying the knowledge to the tasks. In contrast, it is unlikely that the students have attained the same level of knowledge and familiarity with lexis, and therefore lexis may appear more difficult to them in the process of translating/writing.

Second, it was found that the number of grammatical LREs and lexical LREs produced by the T-group in Experiment I (G=41, L=319) and Experiment II (G=39, L=284) were very similar, while those generated by the NT-group in Experiment I and Experiment II varied greatly – with grammatical LREs reduced from 24 to 11 and lexical LREs increased from 127 to 223 across the two experiments. The reason why a similar level of lexical LREs and grammatical LREs could be maintained in both experiments (with different groups of participants in the T-group) could be that the ten translation assignments adopted for the present study were designed in a purposeful way to be more beneficial to students (for details see Chapter 3). This supports the first explanation provided for Finding 1 (see 5.1.1.1), i.e. translation tasks can allow teachers to have some degree of control of their level of difficulty and increase the likelihood of students encountering linguistic difficulties. Conversely, writing tasks may be less controllable in this regard.

In the LRE literature, many studies have shown that some tasks yield more grammatical LREs (e.g. Swain and Lapkin, 1998, 2001; Leeser, 2004; Storch, 2008), while others elicit more lexical LREs (e.g. Williams, 1999; Storch, 2007; Kim and McDonough, 2011). Storch and Wigglesworth (2007) attribute the conflicting results to the nature of the tasks involved in the studies and in particular they found that the writing tasks yield more lexical than grammatical LREs. Likewise, Källkvist's (2013a, 2013b) findings show that translation tasks also yield more lexical LREs. My results agree with both of these sets of findings and show that both translation and writing tasks lead to more lexical LREs, providing further evidence to that in the existing LRE literature as to what types of LREs are likely to be produced in these two types of tasks.

In sum, the findings of Data A adhere to Swain's (1997a) view that communicative tasks can create opportunities for students to communicate about language use and co-construct linguistic knowledge. One of the anti-translation arguments, as summarized by Carreres (2006), is that translation 'has no place in a communicative methodology' and should be confined to reading and writing practice. However, this study shows how translation can be used in effective communicative tasks in L2 classrooms and the results agree with the findings of Källkvist's studies (2013a, 2013b) that translation tasks are advantageous in inviting student-initiated LREs, especially on the lexical level.

My findings are also consistent with those reported in the literature review (e.g. Swain, 1998; Swain and Lapkin, 2001; Williams, 2001) that LRE-inducing tasks can promote L2 learning. As manifested in many of the examples in this Chapter, the students paid attention to their own language use and took the initiative to communicate with their peers about the appropriateness of different lexical and grammatical choices. In addition to producing more LREs in their discussions, the translation group also

showed 'a deeper level of engagement' in their discussions compared to the writing group, a phenomenon which Storch (2008) describes as 'elaborate engagement'. This higher frequency of LREs, according to Swain (1998), can be useful in fostering L2 learning and there has already been evidence showing that linguistic knowledge co-constructed during LREs was retained and reflected in subsequent L2 performance (Swain, 1998; Swain and Lapkin, 2001; Williams, 2001), especially when students showed 'elaborate engagement' (Storch, 2008).   All of this supports the use of translation tasks to foster communication in L2 classrooms.

5.2 Data B: Analysis and Interpretation of Findings for Research Question 2

Research Question 2: To what extent do the designated translation tasks encourage and help learners make grammatical and lexical improvement compared to corresponding L2 writing tasks?

In addition to investigating how translation tasks compare with L2 writing tasks in engendering class discussion, this study also sets out to examine the outcomes of using translation tasks versus writing tasks to help students make improvements in lexis and grammar.

5.2.1 Finding 1: Attempts to Make Improvements

The findings of Experiment I show that when students working on translation tasks (T-group) and writing tasks (NT-group) are given recourse to dictionaries and given the same treatment, the T-group (1327) had more attempts to make improvement than the NT-group (393). Similar results were found in Experiment II, where the T-group (1938) had more attempts to make improvement than the NT-group (355).

Moreover, a comparison of the results within the same group of participants across different tasks shows that both participants 1-13 (T-tasks=1327 attempts; NT-tasks=355 attempts) and participants 14-26 (T-tasks=1399 attempts; NT-tasks=393 attempts) had more attempts to make improvement in translation tasks than writing tasks, and the difference was statistically significant ($p<0.001$).

5.2.2 Finding 2: Improvements

Results of Experiment I show that the T-group made 186 more grammatical improvements and 752 more lexical improvements than the NT-group and the differences were statistically significant ($p<0.001$). Likewise, in Experiment II, the T-group made 180 more grammatical improvements and 859 more lexical improvements than the NT-group and the differences were statistically significant ($p<0.001$). Similar results were found when comparing the results of the same group of participants across different tasks. Participants 1-13 made 186 more grammatical improvements and 780 more lexical improvements in translation tasks than in writing tasks. Similarly, participants 14-26 made 182 more grammatical improvements and 829 more lexical improvements in translation tasks than in writing tasks. In general, results of Data B suggest that students tended to make more attempts to make improvements and were able to make more lexical and grammatical improvements when engaged in translation tasks than in writing tasks.

As discussed in Chapter 2, one of the arguments against the use of translation in L2 classrooms is that it may induce more errors (Lado, 1964; Weller, 1989; Carreres, 2006). In her summary, Carreres (2006: 5) states that one of the accusations against pedagogical translation is that 'it seems an exercise designed to elicit mistakes, rather than accurate use of language', whereas Vermes (2010) considers it illogical and unfair

to associate translation exercises with L1-induced errors since the same kind of errors may come from monolingual tasks. Empirical evidence from Källkvist's (1998) study shows that the translation tests induced more lexical errors than the free compositions. However, it is worth noting that Källkvist also acknowledged that the reason that more lexical errors were found in the translation tests than the composition tests could be because translation leaves less room for students to resort to avoidance strategies, which echoes the arguments by those who favor pedagogical translation (Barhoudarov, 1983; Schjoldager, 2004; Zojer, 2009) that compared to monolingual tasks such as free composition translation leaves fewer chances for students to avoid problems and force them to venture into unknown areas. If this is the case, a task that elicits fewer errors cannot be regarded as more conducive to language learning.

For this reason, it may be more sensible to compare the number of improvements – rather than the number of errors - induced in different task types. The results that the translation tasks induced more attempts to make improvement and more actual improvement on both the lexical and grammatical level than monolingual writing tasks offers three refreshing insights into some existing literature. Firstly, while investigation of proportion of errors in translation and writing tasks seem to show negative proof (e.g. Källkvist 1998) in favour of the use of translation for language learning, a comparison of the proportion of improvements in the two types of tasks in this study shows positive evidence to the use of translation. Secondly, the findings of this study are consistent with the claims by Schäffner (1998) and Zojer (2009) that translation helps to expand students' range of expressions, possibly due to the constraints imposed by the source texts (Barhoudarov, 1983; Schjoldager, 2004; Zojer, 2009). Thirdly, students must have been aware of the 'problem' or noticed the 'shortcoming' of their original version before they seek for an improvement and

successfully make one. Hence, the higher proportion of improvements found in the T-group than the NT-group in this study supports the pro-translation argument that translation is an awareness-raising pedagogical task (Tudor, 1988: 364, in Gnutzmann, 2009) and allows for conscious learning (Kopczynski, 1983; Weller, 1989; Uzawa, 1994), which is beneficial for L2 learning (Schmidt, 1990). It would therefore be rational to consider that translation tasks are conducive to language learning. Several possible explanations for the findings of this set of data are discussed below.

5.2.2.1 Explanation 1: Different level of linguistic difficulties

Translation tasks can be designed judiciously to include lexical expressions or grammatical structures that teachers consider unfamiliar or challenging to students, thus ensuring a certain degree of linguistic difficulties in the tasks. As noted by Schjoldager (2004: 135), translation is a valuable tool for the L2 classroom because 'it involves a beneficial constraint on the writing process: the learner is not free to choose the meanings that s/he must express and therefore may be forced to venture into unknown areas of the L2 system'. Students who work on translation tasks cannot freely avoid problems because they are constrained by the source text. In contrast, writing tasks are not constrained in this way and thus the results are less controllable and may vary. No matter how specific the topics are made, it is difficult to control what exactly the students write or anticipate what kind of linguistic difficulties they may encounter. They may simply unconsciously or consciously avoid difficulties by limiting themselves to the store of lexical and grammatical knowledge that they are familiar with and this could impede progress. This reasoning is supported by one of the findings and ensuing discussions of Data A. Students in the NT-group, compared to students in the T-group,

were more frequently found to have avoided mentioning certain concepts because they did not know how to express them (see Example 5.1 in discussions for Data A).

Tasks that pose more linguistic difficulties may have two impacts: 1) arousing students' curiosity about accurate L2 usage and 2) leaving more room for L2 improvement. First, when students face problems in grammar and lexis, it may arouse their curiosity and increase their desire to find solutions. As long as they attempt to make improvements, there is a chance that they will make improvements, especially with the aid of relevant treatments and dictionaries. In contrast, if students do not find any difficulties in the process of writing because they play safe by limiting their language usage to their store of linguistic knowledge, they may have less motivation to improve their lexical or grammatical usages when working on the revisions. This may explain why the attempts to make improvements and the actual improvements made by the T-group significantly outnumbered those by the NT-group. Without attempts to make improvement, there cannot be actual improvements.

Second, students who work on translation tasks may be more likely to end up with inappropriate/less appropriate usages or even mistakes when encountering or handling difficult lexis or grammatical structures due to the constraints of the tasks. The disadvantage is that these students may make more mistakes or use inaccurate/inappropriate expressions because they have to venture into unfamiliar/unknown areas; however, the advantage is that they may have more room for improvement when given recourse to treatments or dictionaries. In contrast, students who work on writing tasks can often skip linguistic difficulties or unfamiliar usages by limiting themselves to a narrow range of lexis or grammar. This may mean that they encounter fewer problems or make fewer mistakes, but it may also leave them less room for improvement.

I) Case study I

A closer observation of the works of students from the T-group and the NT-group lends some support to this reasoning. The following case study compares the changes found in Student 8 from the T-group and Student 22 from the NT-group in Experiment I. Example 5.12 shows the draft and revised translation made by Student 8, who worked on a translation assignment about cyberbullying (Task 4) in Experiment I. All changes are underlined and bold faced, with codes [L] and [G] indicating lexical and grammatical improvements respectively.

Example 5.12 (S8, T-Group, Translation Assignment 4, Experiment I)

Draft:

Social network has become common. Therefore, cyberbullying also has become more and more serious. People can easily use internet to **say something bad***, insult, disturb and **threat** others. People usually share some movies which make other people **embarase**. And they don't need to take any responsibility with their **saying** because they **don't need to write down the true name** in the internet. Most people comment some bad* things, **use some bad* words** to attack others and even publish the personal information of the **victems** in the internet before they even know the fact of **the argue things**. In fact, cyberbullying may be more **serious** than the traditional bully. The messages of the internet can spread so fast and do not easy to delete. Thus, people who is bullied usually bear a large pressure and **their mood always feel bad***. It **affect** their lives directly. People whose mind is weak may get **ill** and **then they may kill themselves** because **they always unhappy.** Government should **make** a law to fight **cyberbully** and protect the **victems**. In addition, Government can **crime** the behaviors which violate others' privacy, **say something not true about** others or threaten others.

Revision:

Social network has become common. Therefore, cyberbullying also has become more and more serious. People can easily use internet to **spread rumours [L]**, insult, disturb and **threaten [G]**

others. People usually share some movies which make other people **embarrassed [L]**. And they don't need to take any responsibility with their **saying and behavior [L]** because they **can stay anonymous [L]** in the internet. Most people comment some bad things, **say something insulting [L]** to attack others and even publish the personal information of the **victims [L]** in the internet before they even know the fact of **controversial issues [L]**. In fact, cyberbullying may be more **harmful [L]** than the traditional bully. The messages of the internet can spread so fast and do not easy to delete. Thus, people who is bullied usually bear a large pressure and **negative emotion [L]**. It **affects [G]** their lives directly. People whose mind is weak may get **depressed [L]** and **commit suicide [L]** because **of continuous mental suffering [L].** Government should **enact [L]** a law to fight **cyberbullying [G]** and protect the **victims [L]**. In addition, Government can **criminalize [G]** the behaviors which violate others' privacy, **defame [L]** others or threaten others.

A total of 15 lexical improvements and 5 grammatical improvements were found in this student's revised version. All of these changes were considered improvements because they fell into one of the following categories predetermined in the methodology of this study, including (i) correction of grammatical mistakes, (ii) correction of inappropriate/inaccurate word choices and spelling mistakes, (iii) use of new expressions that are equivalent to or function as well as the original versions, (iv) use of different grammatical structures that have a similar or different interpretation as the original version in the context, but are still grammatically correct or acceptable in the context (for details and rationales see Chapter 3). For instance:

(i) Expressions such as 'threat (incorrect part of speech)', 'affect (subject-verb agreement error)', 'cyberbully (incorrect part of speech)' and 'crime (incorrect part of speech)' that were grammatically inaccurate in the context were corrected in the revised version as 'threaten' (converted into verb), 'affects' (singular form), 'cyberbullying' (converted into gerund) and 'criminalize' (converted into verb) respectively.

(ii) Misspelled words like 'victems' and 'embarase' were corrected in the revision as 'victims' and embarrassing' and inappropriate word choices like 'the argue things' and 'make a law' were revised as 'controversial issues' and 'enact a law'.

(iii) Simple expressions such as 'say something bad', 'don't need to write down the true name', 'use some bad words (to attack others)', 'they may kill themselves' and 'say something not true about' were most likely attempts to express '散播謠言[spread rumours]', '可匿名發言 [can say anything on the Internet under the veil of anonymity]', '以辱罵性言詞攻擊他人 [attack others with abusive language]', '自殺 [commit suicide]', and '誹謗 [defamation]' respectively in the source text (see Task 4 of Experiment I in Appendix 1A). They were successfully improved as the more accurate expressions, 'spread rumours', 'can stay anonymous', 'say something insulting', 'commit suicide', and 'defame others' respectively in the revision. A contrast can be seen in Example 5.13, which shows the draft and revision of a student (S22) who worked on the corresponding writing assignment.

Example 5.13
(S22, NT-group, Writing Assignment 4, Experiment I)
Draft:
Cyberbullying is a bad* behavior in Internet. Nowadays, people can express all their thought, whatever that's positive or negative. They express what they think **exactly**, but most of the people wouldn't think cyberbullying can affect one's mind. Cyberbullying is very common in internet, but why people always do such a bad* thing to other people? I think one of the reasons is more and more young people nowadays do not respect other's personal issue, and they don't care about other's feeling, I think that's a big failure in education. Cyberbullying

can cause a serious result, it may affect one's confidence or children's growing, when cyberbullying become more and more serious, it could become a society problem. Finally, I think government should **give** a good example to young people from education, school should tell them that's a really bad* behavior. Government should also establish **a law** to attack cyberbullying so that fewer and fewer people will be hurt by this bad* behavior and people will not easily try this action. I think we should all support this no matter what because it is influencing too many people around the world nowadays.

Revision:

Cyberbullying is a bad behavior in Internet. Nowadays, people can express all their thought, whatever that's positive or negative. They express what they think **directly [L]**, but most of the people wouldn't think cyberbullying can affect one's mind. Cyberbullying is very common in internet, but why people always do such a bad thing to other people? I think one of the reasons is more and more young people nowadays do not respect other's personal issue, and they don't care about other's feeling, I think that's a big failure in education. Cyberbullying can cause a serious result, it may affect one's confidence or children's growing, when cyberbullying become more and more serious, it could become a society problem. Finally, I think government should **provide [L]** a good example to young people from education, school should tell them that's a really bad behavior. Government should also establish **a particular law [L]** to attack cyberbullying so that fewer and fewer people will be hurt by this bad behavior and people will not easily try this action. I think we should all support this no matter what because it is influencing too many people around the world nowadays.

In this example, only 3 lexical improvements were made. One possible explanation is that this student could enjoy more flexibility in lexical and grammatical choices, as compared to the translation task. This lack of constraint may have enabled her to avoid mentioning something difficult to express and limit herself to her own store of linguistic knowledge to 'play safe'. Because of this flexibility, linguistic difficulties confronting

students in the T-group may not have troubled students in the NT-group in the same way because the NT-group could have easily skipped the problems rather than dwelling on them, a phenomenon which was pointed out by several students in the class discussions (See Example 5.1 and 5.2). In turn, the concern may have attracted less attention by the student when it came to the revising process and thus there were only a few improvements in the revised version.

Another interesting phenomenon is worth noting. Coincidently, the general term 'bad*' was used four times in the draft of both Student 8 (See Example 5.7) and Student 22. However, three out of four instances were changed to more precise and accurate expressions in the revision by Student 8 (T-group), whereas all of them remained unchanged in the revision by Student 22 (NT-group), as illustrated in Table 5.7.

Table 5.7 A comparison of revision for the expression 'bad' among S8 and S22

Student	Draft	Revision
S8 (T-group)	*say something bad	Spread rumours
	*comment some bad things	(no change)
	*use some bad words	Say something insulting
	* their mood always feel bad	Negative emotion
S22 (NT-group)	*a bad behavior	(no change)
	*do such a bad thing	(no change)
	*a really bad behavior	(no change)
	*this bad behavior	(no change)

This phenomenon suggests that Student 8 was able to expand her linguistic knowledge and learn more precise and accurate expressions after completing the translation tasks, whereas Student 22 still limited herself to her own narrow range of language use. This

reinforces the observation that translation tasks seem to leave more room for students to make linguistic improvement. Moreover, this phenomenon corroborates Duff's (1989: 7) claim that translation 'trains the learner to search (flexibility) for the most appropriate words (accuracy) to convey what is meant (clarity)' and Tudor's (1988: 364, in Gnutzmann, 2009) argument that translation can enhance learners' awareness of a 'resource gap' and encourage them to adopt 'resource expansion strategies'. The noticeable difference between the T-group and NT-group in this case study can be an example of what Gnutzmann (2009: 70) describes as learners achieving 'enhanced acquisition by self-directed inquiry based on observation'. In other words, students in the T-group may have noticed their 'resource gap' and been encouraged to find better solutions for it using available resources, such as the parallel texts provided as treatment, or a dictionary, whereas the NT-group may have been less aware of such 'resource gaps' and thus did not see the need to seek more accurate alternatives using the resources available to them.

II) Case study II

In order to determine whether the above phenomenon emerged out of individual difference or task effects (translation versus writing), it is necessary to scrutinize the works of the same pair of students in Experiment II, where Student 8 and Student 22 swapped roles and worked on writing tasks and translation tasks respectively. Interestingly, Student 22, who only made 3 lexical improvements in the writing task in Experiment I, made a total of 25 lexical improvements and 4 grammatical improvements when working on the translation task in Experiment II, as exemplified in Example 5.14.

Example 5.14 (Student 22, T-Group, Translation Assignment 4, Experiment II)

Draft:

The difference between the poor and the rich is almost a **normal** problem to all developed countries and regions. The **social resource share** is unfair, the wealth is over **attended** to a few super rich people. It contributed to **the people's opposition** easily and brought the **social disagreement**. Some people mentioned that we can decrease the **difference** between the poor and rich by **receiving** or increasing the tax from the rich. No doubt, this policy is helpful to increase the total tax, the **increased** income can be used to **help** the burden of the **middle industry** and the **basic industry**. **For the future** it may help to reduce **the problem about wealth share unfair**, and let the society more stable grow up. However, **increase tax** may promote the super rich people or **businessman** move **property** or business to **some** places which **has** low tax, and even immigrant to avoid the tax, finally cause **the capital go to other place**. At the same time, this policy is likely scare t**he foreign investor**, affect the employment market. Otherwise, if we can't block the **tax hole**, no matter how high the tax rate is, many rich people still have **method** to avoid the tax. Or the other hand, the tax rate too high will **slow** the **capital reserve** and against the **company development**, finally affect the economic prosperity.

Revision:

Income inequality [L] is almost a **common [L]** problem to all developed countries and regions. The **distribution of social resources [L]** is unfair, the wealth is over **concentrated [L]** to a few super rich people. It contributed to **social discontent [L]** easily and brought the **social unrest [L]**. Some people mentioned that we can decrease the **gap [L]** between the poor and rich by **imposing [L]** or increasing the tax from the rich. No doubt, this policy is helpful to increase the total tax, the **new [L]** income can be used to **ease [L]** the burden of the **middle class [L]** and the **grassroots [L]**. **In the long term [L]** it may help to reduce **the wealth inequality [L]**, and let the society more stable grow up. However, **tax increase [G]** may promote the super rich people or **entrepreneurs [L]** move **their assets [L]** or business to **the [G]**places which **have [G]** low tax, and even immigrant to avoid the tax, finally cause **the outflow of funds [L]**. At the same time, this policy is likely scare **potential overseas investors [L]**, affect the employment market. Otherwise, if we can't block the **loopholes [L]**, no matter how high the tax rate is, many rich people still have **methods [G]** to avoid the tax. Or the other hand, the tax rate too high will **deter [L]** the **wealth accumulation [L]** and against the **innovation of enterprises [L]**, finally affect the economic prosperity.

It can be seen that Student 22 made quite a few inappropriate or inaccurate word choices such as 'attended', 'middle industry', 'basic industry', 'the problem about wealth share unfair', 'tax hole' and 'capital reserve'. These may have been linguistic difficulties that she encountered during the translating process, but due to the constraints of the source text she had to venture into these unknown/unfamiliar areas. However, the student was able to make corresponding improvement in the revision process with the aid of dictionaries or parallel texts. More accurate terms such as 'concentrated', 'middle class', 'grassroots', 'wealth inequality', 'loopholes' and 'wealth accumulation' were adopted.

In contrast, Student 8, who made 15 lexical improvements and 5 grammatical improvements in the translation task in Experiment I, only made a total of 4 lexical improvements and 1 grammatical improvement when working on the writing task in Experiment II, as exemplified in Example 5.15 below.

Example 5.15

(Student 8, NT-Group, Writing Assignment 4, Experiment II)

Draft:

Nowadays, the rich get richer and the poor get poorer. This phenomenon has become more and more serious. Therefore, the consequences of this phenomenon are people may **get** dissatisfied and poor people will get hard to live. Some people think collect more tax from the rich can solve the problem. There are some positive impacts of collecting more tax from the rich. This way may make poor people **get** happier. Because the poor think the rich have a lot of money, they need to pay more tax to **give back** the society. In addition, collecting more tax from the rich can increase the income of government. After that, the government can use the money to help the poor. On the other hand, the rich may feel dissatisfied about this policy. They think it is unfair to them. Then, the rich and their **company** many move to other country because of the tax. There are both advantages and disadvantages of collecting more tax from the rich. If government really want to **use** this policy, they need to consider more.

Revision:

Nowadays, the rich get richer and the poor get poorer. This phenomenon has become more and more serious. Therefore, the consequences of this phenomenon are people may **feel [L]** dissatisfied and poor people will get hard to live. Some people think collect more tax from the rich can solve the problem. There are some positive impacts of collecting more tax from the rich. This way may make poor people **feel [L]** happier. Because the poor think the rich have a lot of money, they need to pay more tax to **contribute to [L]** the society. In addition, collecting more tax from the rich can increase the income of government. After that, the government can use the money to help the poor. On the other hand, the rich may feel dissatisfied about this policy. They think it is unfair to them. Then, the rich and their **companies [G]** many move to other country because of the tax. There are both advantages and disadvantages of collecting more tax from the rich. If government really want to **implement [L]** this policy, they need to consider more.

Again, this phenomenon could be attributed to a lack of linguistic difficulties due to the limited constraints writing tasks place on language usage. The result of 'not encountering problems' or 'not having concerns' could be a lack of curiosity and attention to the accurate form of language use. This may explain why the statistical findings show that the actual improvements made by the T-group significantly outnumbered those by the NT-group in both experiments.

5.2.2.2 Explanation 2: Different types of cognitive efforts

Another explanation for Finding 1 and Finding 2 is that translation tasks and writing tasks involve different dimension of cognitive efforts, which has already been acknowledged in the literature on translation as a cognitive process (Immonen, 2006, 2011). Compared to writing tasks, translation tasks are more likely to encourage or enable students to concern themselves primarily with aspects of lexis and grammar.

One plausible explanation is that when students work on translation tasks, they do not need to brainstorm what to write or how to optimize the organization of their writing in the way that those who work on writing tasks must. Instead, translating may involve more careful selection of lexical and grammatical expressions, so the students' cognitive efforts may be more clearly focused on language usage, including the appropriateness of a lexical or grammatical expression in the context. In contrast, writing tasks may require more cognitive efforts devoted to what to write and how to write.

This reasoning can be traced back to early observations in Data A, as illustrated in Example 5.16, which captured instances where students in the NT-group raised concerns about content-related issues in the class discussions, such as how to write better topic sentences or conclusions, how to organize paragraphs, or whether certain contents could be included in the writing, as exemplified in the following non-LRE statements[73]:

Example 5.16: Students' concerns over content-related issues
(NT-group, Experiment I)

S23   I think it's difficult to begin and conclude the paragraph. <Sometimes I don't know how to conclude the paragraph...last paragraph...I don't know how to conclude...> (Between turn 35-36)

S14   Sometimes I write in ...the last paragraph, I will say another thing...and that thing maybe is not about this title <topic>...(Between turn 37-38)

S14   Another problem: I am not sure if some 粗俗性問題…可否寫出來? [Can we write things that involve vulgar issues?] For example, this government...control the range...how to control and which to control....no people to solve this problem...so have some negative impacts....<yes> (Between turn 55-56)

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[73] They were regarded as non-LRE statements because they were discussions about content rather than language usage.

S24   My topic sentence includes all the contents of my passage...my topic sentence is talking about...many people use social and they can recall your voice or video and put your silly things into internet...and every content is include in my topic sentence and I have no idea how to write next...(Between turn 90-91)

S14   Sometimes I want to think...write some uncommon ideas in my topic, but I think...so many topic is very usual...very common...I can't write some very special things in this. (Between turn 108-109)

(NT-group, Experiment II)

S2   Yes...in the structure...have two conditions, one is benefit, another one is challenge...so...I... I use benefit... such as A1, A2, A3 and the challenges is B1, B2, B3...(Between turn 3-4)

S13   I have no difficulty in vocabulary, but I think the difficulty is in the paragraph structure. I wasted some time to think about how to step by step to talk about the positive and negative points. <Yes, just have to think about when we carry out such measure... what problem will we face (we will face) or what benefit we will got (get) it's the most difficult thing for me.> (Between turn 9-10)

Despite being told to focus their discussions on language usage rather than content, students in the NT-group constantly raised concerns about the content or organization of their writing. This phenomenon did not occur in discussions among the T-group. This suggests that the cognitive efforts of students who work on writing tasks may be drawn to the content and in turn deliberation on language use may be derived. Students who work on translation tasks may be less likely to be troubled by content or organization. Instead, their difficulties may lie in grammatical or lexical expressions due to the constraints of the source texts.

This account tallies with Storch's (1998) observation that students focus more on content than language accuracy in composition tasks and Uzawa's (1996) observation that students' attention to language use in translation tasks were

significantly closer than in L1/L2 monolingual writing tasks upon analyzing the think-aloud protocols.

5.2.2.3 Explanation 3: Different impact of parallel texts

Another possible reason why the translation tasks yielded better results in encouraging and helping students to make improvements can be attributed to the impact of the parallel texts, which were integrated in the tasks as treatment. Although both the T-group and the NT-group were given a very similar topic, parallel texts may have been more helpful for the T-group because the translation tasks were judiciously designed to include language usage that may be challenging or less familiar to the students, and the parallel texts revolved around the topics selected and hence were likely to offer help to some extent. In contrast, the content of the NT-group's tasks was less controllable and anticipatory and therefore the impact of the same treatment on the NT-group may vary. For this reason, parallel texts may be more helpful in connection with translation tasks than in connection with writing tasks, especially on the lexical level.

This reasoning can be supported by evidence from Data B. A summary of the lexical improvements[74] in the first tasks of both experiments is presented below for illustration[75]. Table 5.8 shows an extract of lexical expressions that appeared in the parallel texts and were concurrently adopted by four or more students in the T-group (participants 1-13) and occasionally used by students in the NT-group (participants 14-26) in their revisions in the first task of Experiment I.

For instance, 'detain' was used to replace expressions like 'arrest', 'suspect', 'jail' and 'put into jail'; the expression 'tolerant' and words with the same derivation, like

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[74] Note that grammatical improvement is not scrutinized in the same way because similar grammatical changes were rarely found in students' work.

[75] Only results of the first tasks are presented in detail here as including all the examples from ten tasks would make this section too lengthy and unwieldy. Details of lexical improvement in the other tasks of both experiments can be seen in Appendix 6A-B.

'tolerance' and 'tolerate', were used to replace less accurate ones like 'accepted attitude', 'silent attitude', 'acceptance', 'keep silence' or more informal ones like 'cannot stand (something)'; the term 'obligation' (people have the obligation to do something) was used to replace expressions like 'responsibility', 'duty', 'need', 'have to' and 'should'; in the context of 'it does not mean celebrities could be exempt from punishment', the expression 'exempt (from punishment)' was used by ten students in their revisions to replace less accurate terms like 'to be excused', 'have amnesty' or 'a privilege to escape' and wordy expressions such as (it does not mean) 'avoid any penalty', 'do not have to be guilty', 'cannot run away', 'should have no punishment', 'can be free', 'shouldn't be not given punishment'. This expression was not adopted by any of the students in the NT-group.

Table 5.8 Improved terms in parallel texts and students' revisions in Task 1 in Experiment I

Improved terms	Replaced terms	T-group	NT-group
detain	arrest, suspect, jail, put into jail; caught, caught	S7, S10, S11, S13	S14, S22
tolerant	accepted attitude, attitude of acceptable, silent attitude, cannot stand, be silent, keep silence;	S3, S4, S6, S8, S9, S10	
obligation	responsibility, duty, need, have to, should	S3, S5, S7, S9, S12, S13	
exempt	excused, don't have to be guilty, avoid any penalty, cannot run away, crime excuse, should have no punishment, be free from, a privilege to escape, amnesty, not given punishment	S1, S3, S4, S5, S7, S8, S9, S10, S12, S13	
celebrity	stars, stars, stars, idols, famous people, artists, star, artists, famous stars; famous person, famous people, stars	S2, S3, S4, S5, S6, S7, S8, S9, S11	S16, S17, S25
marijuana	*durg*, drugs, weed, drugs, drugs, poisonous drugs, drugs, drugs, weed, drug; poison-drug	S2, S3, S4, S6, S7, S8, S9, S11, S12, S13	S22

Note. Misspelled words and words that do not exist are italicized.

A possible explanation is that students who worked on writing tasks simply did not include this idea in their content and hence expressions like 'exempt' and 'exemption' did not appeal to them. This could mean a lower impact of the same treatment on the NT-group. However, at times, the parallel texts were helpful to the NT-group as it was to the T-group. For instance, 'celebrity' was spontaneously grasped by nine students in the T-group and three students in the NT-group as replacement for 'stars', 'idols', 'famous people' and 'artists'.

The term 'marijuana' is worth discussing. It was anticipated during the task design that this comparatively specific term would be unfamiliar to students, who would be more likely to know only the general term 'drugs'. In particular, students who worked on writing tasks would be unlikely to encounter this term on their own, and even if this L1 term came to their mind, it was likely that they might avoid mentioning it in the L2 language because, as previously suggested, L2 learners may subconsciously or consciously avoid difficulties by limiting themselves to their familiar store of knowledge rather than venturing into unknown areas, a rationale which explains why it was found in the class discussions (Data A) that there were many occasions where students in the NT-group said they had skipped certain expressions because of unfamiliarity (See Example 5.1). Results show that this anticipation held true, i.e. the precise term 'marijuana' did not appear in any of the drafts of either group. However, when both groups of students were given the parallel texts as treatment and allowed to resort to dictionaries, the term was adopted by ten students in the T-group in their revisions to replace more general terms like 'drugs', 'poisonous drugs' or a less accurate term like 'weed'. In contrast, only one student from the NT-group used the term 'marijuana' to replace 'drugs'. One possible explanation is that the L1 term in the source text '大麻' (marijuana) drew the attention of students in the T-group in the first

place and they were able to capture the precise expression 'marijuana' when it appeared in the parallel texts. Students could easily capture the term given the similar context, or they could double check the term using dictionaries. However, the specific term 'marijuana' did not come to the mind of students in the NT-group and hence even when the expression appeared in the parallel texts, the students were unaware of it or they did not see the need to use a more specific term. This suggests that translation tasks may be more likely to draw students' attention to specific terms.

Overall, results in Task 1 of Experiment II show a similar tendency, i.e. the parallel texts seem more helpful to the T-group than to the NT-group in that the T-group were able to grasp lexical expressions that appeared in the parallel texts and to apply them in their revisions. Table 5.9 shows the lexical expressions that were coincidently adopted by four or more students in the T-group (participants 14-26) in their revisions but only occasionally appeared in those of the NT-group (participants 1-13) in the first task of Experiment II.

Table 5.9 Improved terms in parallel texts and students' revisions in Task 1 in Experiment II

Improved terms	Replaced terms	T-group	NT-group
impose (charges)	receive, collect, take, introduce	S15, S20, S22, S23, S25	S5, S6
implement	do, introduce, issue, process, provide, use	S14, S15, S16, S22, S23	S1, S2, S8, S12, S13
ease	improve, solve, reduce, will be better, relieve	S14, S15, S18, S20, S21, S25, S26	S7, S12
emission	pollution, pollution caused by cars, waste	S15, S16, S18, S20, S21, S22, S23	S4, S6
capacity	volume, loading, load, amount of bus, amount of loads, bus could take more and more people, *capesity*	S14, S15, S18, S19, S20, S22, S23, S24	S10, S11

For instance, in the context of 'imposing congestion charges', five students in the T-group and two in the NT-group coincidently used 'impose' to replace expressions like 'receive', 'collect', 'take' and 'introduce'; the term 'exclusive' was spontaneously used to replace expressions like 'unique', 'only', 'specific', 'special', 'private' and 'particular' by seven students in the T-group; likewise, the term 'implement' was adopted to replace terms such as 'do,' 'introduce', 'issue', 'process', 'provide' and 'use' in the context of 'implementing a policy'; in the context of 'easing traffic congestion', a more accurate term 'ease' was used to replace terms like 'relieve' and 'reduce' that are equally suitable, which suggests that students were able to add variety to their lexical selection. The term 'ease' was also used to replace wordy and less precise expressions like '(traffic jam) will be better' and expressions like 'improve' and 'solve' which have slightly different meaning. Seven students in the T-group and two in the NT-group demonstrated this lexical improvement. Similarly, 'emission' was used to replace more general terms like 'pollution' and 'waste' and wordy expression like 'pollution caused by cars' by, again, seven students in the T-group and two in the NT-group. In the context of 'carrying capacity', eight students in the T-group and two in the NT-group adopted the precise term 'capacity' to replace less appropriate/accurate expressions like 'volume', 'loading', 'load', 'amount of bus', 'amount of loads', wordy expressions like 'bus could take more and more people' and misspelled word 'capesity'.

The above results echo the findings of Experiment I that more students from the T-group seem to be able to adopt expressions that could be found in the parallel texts. Similar results were observed in all the tasks, which can be seen in Appendix 6B. At times parallel texts could be equally helpful to students who worked on writing tasks. For instance, the term 'implement' was adopted in the revisions of five students in the T-group and five in the NT-group. However, in general, the parallel texts seem to have

a steadier and stronger impact on students who worked on translation tasks but more fluctuating effects on students who work on writing tasks.

It is possible that the fruitful outcomes of the translation tasks in the present study can in some measure be attributed to the inclusion of parallel texts as treatment in the tasks. If so, this reflects a potential advantage of using translation tasks as compared to writing tasks, i.e. they allow teachers to control the content to a certain extent and develop more facilitative treatments. The fact that the T-group seems to have picked up more new expressions from parallel texts than the NT-group illustrates rather well Gnutzmann's (2009: 70) claim that translation can enhance L2 learners' awareness of a resource gap and encourage them to adopt 'resource expansion strategies', which in turn help learners to make improvement through observation. This again reflects a potential advantage of using translation task compared to writing task, i.e. it not only allows the teacher to impose certain linguistic difficulties on the source texts, but also enables teachers to develop more helpful treatment.

However, the use of parallel texts as treatment can also be a disadvantage and limitation of the methodology of this study in that the treatment may have steadier impacts on the T-group than the NT-group because for students working on writing, the contents are far less constrained than it is for those who work on translation. This is also why it was considered necessary to allow both groups to consult dictionaries in the revision stage. In this way, the possibility of bias was reduced because both groups could make changes with the aid of dictionaries if the parallel texts were not sufficiently helpful. In fact, the evidence reveals that even if the lexical expressions were not found in the parallel texts, the T-group had still improved their original versions using similar lexical expressions more frequently than the NT-group, as illustrated in Table 5.10.

Table 5.10 Other improved terms in revisions of both groups in Experiment I

Task	Improved terms	Replaced terms	T-group	NT-group
1	distort	change, twist, mislead	S2, S8, S9, S12	
	ruin	destroy, broken, got no more future, over	S3, S8, S10, S11	S20
2	implement	take, use, use, use; run	S2, S6, S8, S12	S18
	feasible	working, can carry out, going to work, work	S2, S4, S6, S12	
3	innovative	progressive change, brand-new, creativity, new way	S2, S3, S7, S8	
	environmentally -friendly	environmentally, environmental protection, eco-friendly, good for the environment	S2, S4, S11, S12	
4	allowance	bonus, bonus, money, bonus, money	S3, S7, S8, S12, S13	
	fertility	giving-birth ability, ability to have babies, production, female's birth ability, birthing, ability of giving birth a baby of women, give birth ability	S1, S2, S3, S5, S6, S7, S11	
	flexible	free, free, free, freer, elastic, free, elastic, *flxisble,* free	S2, S3, S5, S6, S7, S8, S9, S10, S12	
	aggravate	worsen, lead to, worsen, heavier	S6, S7, S9, S10	

Note. This list only shows expressions that are not found in the parallel texts and are adopted four times or more in the revisions.

These lexical expressions were not found in parallel texts and hence their use is likely to have resulted from the use of dictionaries. In other words, similar results were found no matter whether parallel texts or dictionaries were consulted.

A similar phenomenon emerged in Experiment II, as shown in Table 5.11[76] (for details see Appendix 6B).

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[76] Note that only expressions adopted by four or more students in either group were selected for display in Appendix 6B and this table.

Table 5.11 Other improved terms in revisions of both groups in Experiment II

Task	Improved terms	Replaced terms	T-group	NT-group
1	adjust	change, reset	S14, S15, S16, S22	
	exclusive	unique, only, specific, special, privacy, special, particular	S14, S19, S20, S22, S23, S24, S25	
	deter	stop, discourage	S15, S16, S19, S20	
2	controversial (problem)	argue, which was discussed intensely, arguable, big, argumentative, very arguable, which full of argue, *agrued*, hit	S14, S15, S16, S18, S20, S21, S22, S23, S24	
	personal gain	personal benefit, earn the self benefits, get own wealth by themselves, earn personal things	S14, S18, S19, S24	
	remuneration	salary, wealth, pay, salary	S16, S19, S24, S26	
3	civilized	*civalised*, *curtural*, culture, educated, culture, *civalised*	S14, S15, S17, S18, S19, S20	
	trample	step, defile, step on, step on, harm, destroy	S14, S17, S18, S20, S23, S25	
	demonstrate	protest, go against, go to streets, fight, parade	S14, S16, S17, S24, S25	
	tragedy/tragic	*trajedy*, nightmare, disaster, sad, disaster, sad ending, conflict, sad ending, unhappy incident	S14, S15, S16, S17, S19, S20, S21, S23, S24	
	massacre	culture, killing, kill incident, murder, violent behavior	S18, S19, S23, S25, S26	
	launch (attacks)	occur, make, make, make, create, create	S15, S16, S17, S18, S21, S26	
5	burst	blow up, break, broken, blow, bomb, bomb, blow up	S14, S15, S17, S19, S21, S22, S26	

The only difference is that none of these expressions that were widely adopted by students from the T-group were picked up by students from the NT-group, whereas in Experiment I there were two occasions where a student from the T-group revised the same expression, probably by coincidence.

However, in general, lexical expressions found in the parallel texts were commonly adopted by both the T-group and the NT-group. This suggests that parallel

texts can be helpful for both kinds of tasks. In fact, the effect of the use of 'parallel texts' on language or translation pedagogy is in itself a research topic worthy of extensive investigation. However, this is beyond the scope of this study, which simply integrates parallel texts as a treatment within the tasks to see whether and in what way translation can benefit L2 classrooms.

5.2.2.4 Explanation 4: Inspiration from class discussions

It is possible that the students' improvements were partly attributable to inspirations from the class discussions that took place between the process of drafting and revising. Take Task 1 of Experiment I as an example. Upon scrutiny of Data A, it was found that three of the six lexical expressions that appeared in both the parallel texts and four or more students' revisions (see Table 5.8) - including 'tolerant', 'marijuana', and 'exempt' - were concurrently concerns raised in Discussion 1 of Experiment I among the T-group, while the expression 'celebrity' was raised in Discussion 1 among the NT-group, as shown in Table 5.12.

Table 5.12 Improved terms in Task 1 that appeared in class discussions in Experiment I

Improved terms	Concerns raised in class discussions	Source
exempt	S12: I think it's very difficult to express 免罪金牌 [be exempt from punishment]…	Turns 8-16, T-group
tolerant	S5: I find it's very difficult to translate the sentence in line 7: 採取包容的態度[tolerate]…	Turns 30-34, T-group
marijuana	S5: How to express 大麻 [marijuana]? …	Turns 76-79, T-group
celebrity	S7: I have a vocabulary problem. When I want to express 公眾人物 [public figures], but I cannot figure out the vocabulary, so I just used 'public people' to express it, but I don't know is it correct (if it is correct).	Turn 24-29, NT-group

Likewise, many improved lexical terms found in Task 1 of Experiment II, including 'impose', 'emission', 'ease' and 'capacity' were concerns raised in corresponding class discussions in the T-group, as exemplified in Table 5.13.

Table 5.13 Improved terms in Task 1 that appeared in class discussions in Experiment II

Improved terms	Concerns raised in class discussions	Source
Impose	I don't know what verb collocates best with the noun 'charge'? I wrote 'charge traffic congestion charges' when I first translated the expression 徵收擁堵費[implement/impose congestion charges], but it sounds repetitive. It sounds really strange to say 'charge charges'.	Turns 24-30, T-group
emission	S21: Umm… I am quite uncertain about the translation for the term 污染排放 [automobile emissions] in line 2. I know the term 'pollution', but what about 排放[emission]? Is it pollution release?	Turns 31-39, T-group
ease	S17: I am not sure how to express 緩解 [ease]. At the moment I am using 'reduce', but I feel like there could be better choices…Do you have other better choices?	Turns 40-47, T-group
capacity	S26: In line 5…Hmm… I wonder how do all of you translate the term 承載量[capacity]? 'Volume' doesn't seem to be the right expression…	Turns 57-60, T-group

This evidence points to a connection between students' concerns raised in class discussions and their lexical improvements in translation/writing tasks. It suggests that class discussions can complement translation tasks in a way that draws students' attention or arouses their curiosity to certain aspects of language use, which may help them make improvements. This also shows that the benefits of translation tasks can be optimized by integrating class discussions and relevant treatment.

5.2.2.5 Other points for discussions: Unsuccessful Changes

Existing literature has placed much emphasis on the negative impacts of translation on students' writing, one of which is the concern that translation may lead to negative transfer, i.e. errors caused by interference from the L1 (Lado, 1957). Källkvist (1998), for instance, investigated the proportion and types of lexical errors found in translation and direct writing completed by Swedish EFL learners and her findings suggest that translation, when administered as tests, elicited a higher proportion of lexical errors than direct writing did. My study also examines the outcomes of translation tasks and writing tasks, but from a different perspective, i.e. focusing on the positive impact of translation on students' writing in terms of students' improvements rather than their errors. While Källkvist's (1998) findings reveal that translation induces more lexical errors than writing tasks do, my findings show that translation tasks prompt more lexical (and grammatical) improvements than direct writing tasks do.

Although this study focuses on analysis of successful changes and does not directly address the unsuccessful changes, unsuccessful changes are noteworthy because pedagogically speaking analysis of their causes and effects may offer some insights into the obstacles to improvement. In this data, there were two types of unsuccessful changes, including 1) changes from incorrect usages to incorrect ones and 2) changes from correct usages to incorrect ones.

The first phenomenon is fairly normal, as students' efforts to make improvement may not always result in successful changes. For instance, in Example 5.17, the student tried to correct the misspelled word 'concerate' but failed to correct it properly, though 'concenrate' was a closer step to the correct form 'concentrate'.

Example 5.17: Unsuccessful changes from incorrect to incorrect usage

(S25, T-group, Translation assignment 4, Experiment II)

Draft   The wealth (of the nation) is **concerate** on those very rich.

Revision   The wealth (of the nation) is **concenrate** on those very rich.

The second phenomenon still shows students' efforts to make improvement but is undesirable because it implies an adverse consequence. For instance, in Example 5.18, the student tried to find a more precise term for 'good'. He/she may have recalled the word 'benefit', checked the term in a dictionary, or noticed it in the parallel texts, but failed to use the proper word class 'beneficial'. Consequently, his/her attempt to make improvement was unsuccessful.

Example 5.18: Unsuccessful changes from correct to incorrect usage

(S4, T-group, Translation assignment 2, Experiment I)

Draft   …rent control is not **good** for poor tenants…

Revision   …rent control is not **benefit** for poor tenants…

This second type of unsuccessful changes could be attributed to many reasons. First, the students may have misspelled the expressions due to carelessness or because they became confused about the correct usage. For instance, it is interesting to note that in Example 5.19, the student changed the verb 'encourage' from third person singular (with –s) to the form used for other persons. It could be argued that the student was confused about subject-verb agreement, but given that the second main verb 'passes' was kept in the third person singular form it could also be argued that the student was not confused but simply carelessly left out the 's' in the revision. This could also mean that the time allocated for revision was insufficient.

Example 5.19: Unsuccessful changes from correct to incorrect usage

(S19, T-group, Translation assignment 3, Experiment I)

Draft Then it **encourages** ALS's patients and passes people's love to everywhere.

Revision Then it **encourage** ALS's patients and passes people's love to everywhere.

Another possible reason for unsuccessful changes could be 'negative transfer', i.e. L1 interference, which has often been thought of as a detrimental effect of the use of translation for L2 learning. Example 5.20 arguably illustrates this possibility. In Example 5.20, Student 22 used 'if we have to pay money to enter the centre' to express the L1 expression '假如開車進入市中心需付費' (If motorists are/were charged for entering city centre) in the draft. This was semantically and grammatically correct.

Example 5.20: Unsuccessful changes from correct to incorrect usage

(S22, T-group, Translation assignment 1, Experiment II)

Draft If **we have to pay money to enter the centre** in the peak period, I believe some people will consider *to change the style of driving*[77].

Revision If **entering the city need to pay to drive** in the peak period, I believe some people will consider *adjusting their travel patterns.*

However, it was later revised to the incorrect 'if entering the city need to pay to drive'. This incorrect form seems to be a paraphrased L1 expression 假如進入市中心需付費 才可以開車, which is understandable in Chinese (L1) and semantically similar to the expression given in the source text. In other words, the student may have made this mistake by trying to transfer her L1 habits to the target language.

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[77] In presenting the changes in question, it was inevitable that other changes would be included to provide the context. I have underlined the changes under discussion and italicized other changes for reference.

Interestingly, this phenomenon was not only found in the work of students from the T-group. In Example 5.21, Student 15 from the NT-group also turned the correct expression 'make more people rent the apartments' into a problematic one by adding the preposition 'to':

Example 5.21: Unsuccessful changes from correct to incorrect usage

(S15, NT-group, Writing assignment 2, Experiment I)

Draft   (The) third negative impact of rent control is that rent control will make more people **rent** the apartments when the rent becomes lower.

Revision   (The) third negative impact of rent control is that rent control will make more people **to rent** the apartments when the rent becomes lower.

The inclusion of the preposition 'to' in the revision may be an influence from the Chinese (L1) expression '租金管制會使更多人去租房子', in which the word '去' can be literally translated as 'to'. If this unsuccessful change was indeed caused by negative transfer, mental translation may have occurred while the student was working on the L2 writing task, though he/she was expected to compose directly using the L2. This speculative account is interesting if we take into consideration that the findings of this study show that far more writing improvements were found in the work of students who worked on 'translation' tasks than in the work of students who worked on 'writing' tasks; this suggests that even mental translation yields less fruitful outcomes than overtly set L1-L2 translation tasks.

Another possible reason for unsuccessful changes is that the students have acquired partial knowledge of an expression they have just learned from the parallel texts or dictionaries or that they have recalled an unfamiliar expression. In Example

5.22, the student from the NT-group tried to use an alternative for the term 'impact' but failed to use the right form 'effect'.

Example 5.22 Unsuccessful changes from incorrect to incorrect usage

(S29, NT-group, Translation assignment 4, Experiment II)

Draft   This *approach* has both positive and negative **impact** at the same time.

Revision   This *method* has both positive and negative **affect** at the same time.

The reason why the student made this attempt is uncertain, but the reason why the change turned out to be unsuccessful may have been that the student did not know the noun form, 'effect' or that they were being careless, or it could be an example of negative transfer, given that in Chinese (L1) there is one term for both 'affect' and 'effect', namely '影響'. Similarly, in Example 5.23, the student from the T-group replaced 'clearer' with 'transparency', which is semantically more precise but grammatically inaccurate in the context.

Example 5.23 Unsuccessful changes from incorrect to incorrect usage

(S22, T-group, Translation assignment 2, Experiment II)

Draft   If you want to succeed in fighting corruption, at the same time of pay rise, the government should try their best to ensure that the salary level of civil service be **clearer**.

Revision   If you want to succeed in fighting corruption, at the same time of pay rise, the government should try their best to ensure that the salary level of civil service be **transparency**.

Regardless of their causes, unsuccessful changes were very rare in this study. A comparison between the participants' attempted improvements (Table 4.17 and Table

4.18) and actual improvements (Table 4.20 and Table 4.21) reveals that the vast majority of the changes were successful, as illustrated in Table 5.14.

Table 5.14 Comparison of attempted improvements and improvements

Experiment		T-group	NT-group
I	Attempted Improvements	1328	393
	Improvements (successful changes)	1316 (99.1%)	377 (95.9%)
	Unsuccessful changes from wrong to wrong	4 (0.3%)	7 (1.8%)
	Unsuccessful changes from right to wrong	8 (0.6%)	9 (2.3%)
II	Attempted Improvements	1401	355
	Improvements (successful changes)	1390 (99.2%)	350 (98.6%)
	Unsuccessful changes from wrong to wrong	6 (0.4%)	2 (0.6%)
	Unsuccessful changes from right to wrong	5 (0.4%)	3 (0.8%)

In Experiment I, unsuccessful changes accounted for 0.9% of the total changes (1328) made by the T-group and 4.1% of the total changes (393) made by the NT-group. In Experiment II, unsuccessful changes accounted for 0.8% of the T-group's total changes (1401) and 1.4% of the NT-group's total changes (355). The difference between attempted improvements (changes) and improvements (successful changes) in both groups and experiments were all statistically insignificant ($p>0.1$).

The much higher proportion of successful changes (see Table 4.21) shows that the positive impact of both tasks outweighs the negative impact. However, it should be noted that in this study, only 'changes' found in the drafts and revisions were examined. Errors that were not reflected in the changes were not examined. On the other hand, this is also how this study differs from Källkvist's (1998) study that compares errors in translation and writing tasks. Instead of comparing the negative impact of the two types

of tasks, this study compares the positive impact, which is reflected in the higher proportion of successful changes.

A further interesting issue arises in connection with the expression 'transparency'. This expression was considered as a challenging term for the students when the researcher was compiling the source texts (see Appendix 1A) and, at the same time, happened to appear in two of the three parallel texts given to them, once as a noun and once as a verb, as illustrated in Table 5.15. Although the use of parallel texts as treatment may have provided a great deal of input for the students, it cannot be guaranteed that students were able to gain full command of the newly acquired expressions. There are occasions where students only gained partial knowledge from the input (parallel texts or dictionaries) and made unsuccessful changes from correct usages to incorrect ones, as in Example 5.23 where the student from the T-group adopted the term 'transparency' in her revision but failed to use it grammatically accurately as 'transparent'.

Table 5.15 The use of 'transparency' in parallel texts

Parallel text 1, T2, Experiment II	Higher salaries, the thinking goes, means less temptation to take advantage of a position of power. This is not necessarily the case; there also have to be mechanisms in place to ensure honesty, **transparency** and proper compensation for work done. Those who work for the public good have to be treated fairly.
Parallel text 3, T2, Experiment II	Mainland officials have promised wages will be reviewed every year or so, but a system like that in Hong Kong, where salary movements in the private sector are taken into consideration, would be a worthwhile part of the process. Similarly, pay levels should be **transparent** and the integrity of potential employees considered, while ultimately, there has to be better worker oversight and legal institutions.

The underlying reasons for such unsuccessful changes may appear to support the argument that translation tasks may lead to L2 errors due to L1 interference. The undesirable change (from correct to incorrect) also indicates the possibility that the parallel texts as input may not be helpful enough to enable students to use newly acquired expressions properly or may even mislead students and cause wrong usages (in cases where students fail to learn from the context).

However, this appears less worrying if we take into account the fact that in 12 instances the expression 'transparency' and its adjective form were coincidently adopted in the revisions made by the T-group to replace less precise terms such as 'clear', 'clean and clear', 'opened to public' and 'obvious' (see Appendix H and Table 5.16). This phenomenon, if not pure coincidence, suggests that the expression may have been acquired through the aid of parallel texts and this indicates that parallel texts can serve as helpful input[78] (treatment).

Table 5.16 Cases of successful changes with 'transparency'[79]

Group	Student	Draft	Revision
T	S14	The government should be *sure* the salary level of civil servants have **visibility** while raise (raising) the salary.	The government should be *ensure[80]* the salary level of civil servants have **transparency as far as possible** while raise (raising) the salary.
	S15	If the governments want(s) to *hit* corruption, it should *make sure* the **clear** *view* of civil servants' wage levels while increasing salary.	If the government want(s) to *fight* corruption, it should *ensure* the **transparency** of civil servants' wage levels while increasing salary.
	S16	The government should try to ensure the pay level of civil servants to be **clean and clear**.	The government should try to ensure the pay level of civil servants to be **transparent**.

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[78] Although a dictionary may have played a role in the acquisition of this item of vocabulary, it is reasonable to assume that the students acquired this expression from the parallel texts.

[79] Sourced from Translation Assignment 2 and Writing Assignment 2 from Experiment II.

[80] Other changes in the same sentences that are irrelevant to this case study are italicized for reference.

	S17	If we want to *attack* corruption *successful*, the government can improve their rewards and show the rewards pricing to public so that everything is **clearer**.	If we want to *combat* corruption *successfully*, the government can improve their rewards and show the rewards pricing to public so that everything is **more transparent.**
	S18	…the government should also ensure the **transparention** of salary level of civil servant.	…the government should also ensure the **transparency** of salary level of civil servant.
	S19	…the government should make sure civil *servants'* salary have **clarity** when give them pay rise.	…the government should make sure civil *servants'* salary have **transparency** when give them pay rise.
	S20	…it also ensures that the *salary* level of civil servants is **clear**.	…it also ensures that the *pay* level of civil servants is **transparent**.
	S21	…the government should ensure the pay levels are **opened to public** while the salaries are rising.	…the government should ensure the pay levels are **transparent** while the salaries are rising.
	S23	…it (the government) should try their best to ensure that the salary level of civil servants has **invisibility**.	…it (the government) should try their best to ensure that the salary level of civil servants has **transparency**.
	S24	The government should be able to make sure civil servants' income be **obvious**.	The government should be able to make sure civil servants' income be **transparent**.
	S25	…government should also make sure that civil servants' salary is **clear**.	…government should also make sure that civil servants' salary is **transparent**.
	S26	…the government should *be sure* the salary level of public servants is **clear**.	…the government should *ensure* the salary level of public servants is **transparent**.
NT	S3	Government can order civil servants must to **show their all property.** Civil servants must show (the) public what house they live, what car they drive…	Government can order civil servants must to **show their all property to ensure transparency**. Civil servants must show (the) public what house they live, what car they drive…

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More importantly, this phenomenon shows that although translation tasks may induce errors, they also lead to gains (i.e. prompt improvements). The former phenomenon has received much more attention than the latter in the early literature (Lado, 1957, 1964; Källkvist, 1998; Vermes, 2010), and in this respect this study offers new insights. Another contrast is that, while 12 students from the T-group captured the expression 'transparency/transparent' from the parallel texts, only one student from the NT-group did so. This supports the suggestion that the T-group gained more relevant input from the parallel texts than the NT-group (see 'Different impact of parallel texts').

5.2.3 Finding 3: Lexical versus Grammatical Improvements

Another interesting finding of this set of Data is that the majority of the improvements in both the T-group and the NT-group were lexical in both experiments and the same trend was found when comparing the results for the same group across tasks. This reveals that both groups tended to focus on improvements on the lexical level rather than the grammatical level. One possibility is that both the treatments and dictionaries may offer new insights into lexical rather than grammatical usage, especially given the limited amount of time for revision. Parallel texts may have a role to play in this. Although it is not impossible that students are reminded of the proper usage of certain grammatical structures whilst reading the parallel texts, it is more likely that students' attention is drawn to new knowledge on the lexical level. First, as shown in the results of the class discussions (Data A), the students tended to have more concerns over lexical expressions. Second, the parallel texts share a similar context as the assignments and hence, to some extent, they contain more precise or appropriate lexical expressions that students were uncertain of or curious about in the drafting process and thus may be more likely to appeal to the students.

Another possible explanation is that grammar may generally pose fewer challenges for students because all of them have acquired common grammatical knowledge by the time they reach tertiary education, though there may still be difficulties or uncertainties when actually applying the knowledge to the tasks. In the case of lexis, in contrast, it is unlikely that the students have attained the same level of knowledge and familiarity because the vocabulary students have acquired could vary depending on their exposure to different readings, whereas all typical grammatical rules and concepts, such as verb tenses, subject-verb agreement, passive and active voice, relative clauses, and conditionals, were introduced systematically using textbooks of similar levels in their primary and higher education and the rules do not vary much. Therefore lexis may appear more difficult or unfamiliar to them in the process of translating/writing. Hence, their attention may be drawn to lexical issues in the first place during the revision process. Moreover, most grammatical mistakes, such as mistakes in subject-verb agreement and verb tenses, may result from carelessness instead of ignorance. Most students may simply not have realized their grammatical mistakes and therefore have not attempted to correct them. In contrast, when encountering unfamiliar or difficult lexical expressions, students often have doubts about their own usage, or realize that there may be better expressions. This could be one reason why most of the students' improvements were lexical. This account is speculative and would benefit from further research to examine whether/why translation and writing tasks help to draw students' attention to lexis more than to grammar, preferably with a different context.

5.3 Data C: Analysis and Interpretation of Findings for Research Question 3

Research Question 3: What are non-language major students' perspectives on the helpfulness of translation versus L2 writing activities?

Data C is composed of two sets of questionnaires, one concerning the translation tasks and another concerning the writing tasks that were assigned to the participants in this study. The questionnaires were designed to seek participants' perspectives on different stages of the tasks after experiencing them. The results show that students generally had more positive views on the use of translation than writing tasks in L2 classrooms (see Figure 4.28-4.33), which is clearly reflected in their responses to the last section[81] of the questionnaires. These results are compatible with many previous findings reported in Chapter 2 (Sewell, 1996; Uzawa, 1996; Hsieh, 2000; Carreres, 2006; Liao, 2006).

Analysis of this set of data is particularly interesting when taking the findings of the two other sets of data into account as it was found that some of the questionnaire results attest to the findings of Data A (class discussions) and Data B (students' translation and writing), providing stronger evidence to some suggestions in earlier discussions. Below is a discussion on the connection of Data C to Data A and Data B.

5.3.1 Helpfulness to Engender Class Discussions

First of all, a finding[82] drawn from Data C shows that more T-group respondents reported being eager to share their opinions when their classmates raised language-related concerns in the class discussions (see Figure 4.13). This result is consistent with the major finding[83] of Data A (class discussions) that there were more LREs in the T-

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[81] See Questions 21-26, Appendix 2A and 2B.
[82] See Question 7, Appendix 2A and 2B.
[83] This refers to Finding 1 (Section 4.1.1), i.e. there were more LREs in the T-group than the NT-group.

group than the NT-group (see Finding 1, Chapter 4) and reinforces the suggestion that translation tasks have a greater potential to engender class discussions than writing tasks. Interestingly, some of the findings of Data C accord with the explanations given for the major finding of Data A, making the reasonings suggested in earlier discussions more compelling, as illustrated in Figure 5.1 in the following page.

Finding 2 (Section 4.1.2) shows that the T-group had more enduring discussions than the NT-group, with many more response-based LREs to concern-based LREs. This additional finding that emerged from Finding 1 is not discussed here as it has no direct connections to the results from Data C.

	Finding from Data A: T-group generated more LREs than NT-group.	Finding from Data C: More T-group respondents reported being eager to share opinions in the discussions.
Observation from Data A: T-group skipped linguistic difficulties less frequently than NT-group.	Possible reason 1: T-group had more linguistic difficulties.	Finding from Data C: More T-group respondents reported having more language-related concerns.
Observation from Data A: T-group generated more responses expressing agreement/disagreement with their peers.	Possible reason 2: T-group shared similar problems.	Finding from Data C: More T-group respondents reported being eager to share opinions because similar problems were shared.
Observation from Data A: T-group's discussions were less frequently left unattended than NT-group's.	Possible reason 3: T-group shared the same context.	Finding from Data C: More T-group respondents reported being eager to share opinions even when similar problems were not shared.
Observation from Data A: T-group showed more lasting memory than NT-group.	Possible reason 4: T-group was more focused on the discussions.	Finding from Data C: More T-group respondents reported being kept focused.
Observation from Data A: T-group interrupted their peers more frequently than NT-group.	Possible reason 5: T-group was more enthusiastic about the tasks than NT-group.	Finding from Data C: More T-group respondents considered the discussions enjoyable.
	Possible impact 1: Students' awareness of language usage may be raised.	Finding from Data C: More T-group respondents considered the discussions helpful in raising their awareness of certain aspects of language use.
	Possible impact 2: Enduring discussions may enable students to build confidence in using L2.	Finding from Data C: More T-group respondents reported having gained more confidence in Speaking in English through the discussions.

Figure 5.1 Correlations between Data A and Data C

The first potential reason given for the major finding of Data A is that students who work on translation tasks may 'encounter more linguistic difficulties' than students who work on writing tasks in that the former tasks involve more constraints on the writing processes than the latter. Support for this reasoning is observations from the two groups' class discussions in Experiment I and Experiment II, where the evidence indicates that the NT-group skipped linguistic difficulties more frequently than the T-group (See Examples 5.1 and 5.2). This notion is further affirmed by the finding[84] drawn from Data C that the T-group had more language-related concerns than the NT-group (see Figure 4.12). In other words, this explanation not only holds true in observation from the class discussions, but tallies with the questionnaire results. This reinforces the suggestion that one of the benefits of using translation tasks is that they lead students to more linguistic difficulties than writing tasks due to their constraints.

The second explanation why more LREs were found in the T-group than in the NT-group is that students who work on translation tasks may encounter more similar problems than students who work on writing tasks. This reasoning is supported by the observation that concerns raised in the T-group recurrently elicited responses and phrases expressing agreement or disagreement to their peers, whereas the concerns brought up in the NT-group were frequently left unattended (see Example 5.3 and 5.4). This reasoning can be connected to another finding[85] from Data C, which shows that the T-group were more eager to share their opinions in class discussions than the NT-group mainly because they 'had similar problems' when working on the tasks (see Figure 4.14 and Figure 4.15). This underpins the observation from Data A and draws attention to the reflection that translation tasks can benefit class discussions in that they allow students to share similar problems and enhance their eagerness to take part in the discussions.

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[84] See Question 6, Appendix 2A and 2B.
[85] See Question 8a and 8b, Appendix 2A and 2B.

The third reason suggested is that translation tasks allow the students to 'share the same context' and thus they make it easier for students to engage in the class discussions whether or not they encountered the same problems during the translating process. In contrast, this advantage is unlikely to be shared by the NT-group because the context of terms used in writing tasks may vary widely. In earlier discussions, evidence for this reasoning was traced to observations that various concerns expressed in the NT-group failed to elicit as many responses as it did in the T-group (see Example 5.5 and 5.6). This reasoning is consistent with a finding[86] drawn from Data C, which shows that even when students did not encounter similar problems, translation tasks still yielded better results than writing tasks in encouraging students to share their opinions (see Figure 4.14 and 4.15). This strengthens the observation that translation tasks may more consistently encourage a high level of student engagement as they allow students to share the same context.

The forth and fifth explanations were speculative accounts based on two irregular features observed from Data A, including the occurrence of retained memory and interruptions. The former phenomenon points to the possibility that the T-group was more focused and paid more attention to the discussions, thus contributing to more lasting memory of the issues and language usage discussed. Further evidence of this can be obtained from Data C, in which a finding[87] shows that more T-group respondents provided positive feedback regarding the helpfulness of the discussions in keeping them focused and attracting their attention (see Figure 4.18). The latter phenomenon points to the possibility that the T-group was more enthusiastic about the tasks than the NT-group. This, again, can be connected to a finding[88] from Data C, which reveals that more T-group respondents reported finding the discussions 'enjoyable', while most of

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[86] See Questions 8a and 8b, Appendix 2A and 2B.
[87] See Question 11, Appendix 2A and 2B.
[88] See Question 12, Appendix 2A and 2B.

the NT-group did not find them enjoyable (see Figure 4.19). As discussed in Chapter 2, Carreres (2006: 5) mentions that one of the arguments against the use of translation in L2 classrooms is that 'translation and translation into L2 in particular are frustrating and de-motivating exercises'. The results of the present study show that the opposite is true. Together, Data A and Data C, which show different task effects in class discussions and students' responses to the two different tasks respectively, reinforce the suggestion that translation tasks may create more opportunities to promote students' enthusiasm about class discussions and focus their attention than other writing tasks.

Having discussed how some findings in Data C lend support to the potential explanations given for the major finding of Data A, it is also worth noting that some of the questionnaire results provide further evidence for some speculative accounts of the potential impacts suggested in earlier discussions of Data A. First, it was noted earlier in Finding 1 of Data A that there were more instances where the T-group showed more lasting memory (see Example 4.20 and 4.21) than the NT-group. It was suggested that one of the possible impacts of this phenomenon is that students' awareness of certain language usages may be raised. This can be supported by a finding[89] of Data C, which shows that discussions of translation tasks can yield better outcomes in raising students' awareness of language use than discussions of writing tasks (see Figure 4.17).

Second, it was mentioned earlier in Finding 2[90] of Data A that the T-group had more enduring discussions (See Table 5.3 and Example 5.8) than the NT-group. It was suggested that enduring discussion is an indication of students' eagerness to voice their opinions and may enable students to practice using L2 and build more confidence in using it. This speculative account echoes a finding[91] of Data C, which reveals that translation tasks have more fruitful outcomes than writing tasks in bolstering students'

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[89] See Question 10, Appendix 2.
[90] See Finding 2c 'Discussion patterns' in Chapter 4.
[91] See Question 9, Appendix 2.

confidence in speaking in English (see Figure 4.16). This further suggests a possible benefit of using translation tasks for engendering class discussions.

5.3.2 Helpfulness to Improve Writing Proficiency

Likewise, some of the findings of Data C correspond to the major findings of Data B (translation and writing). Scrutiny of Data B reveals that the T-group made more attempts to make improvement and made more lexical and grammatical improvements than the NT-group. Correspondingly, it was found in Data C that more T-group respondents reported that they considered the drafting process (see Figure 4.9) and the revising process (see Figure 4.24) helpful activities to improve their writing proficiency. These perceptions reinforce the observation that translation tasks have a greater potential to encourage and help students make improvement on the lexical and grammatical level. In addition, some findings of Data C tally with explanations given for the major finding of Data B, lending more support to the reasonings suggested in earlier discussions of Data B. Figure 5.2 in the following page summarizes how Data C complements Data B, followed by discussions on the connection of these two sets of data.

		Finding from Data C: More T-group respondents considered the drafting and revising processes a helpful activity to improve writing.
	Finding from Data B: T-group had more improvements than NT-group.	Finding from Data C: More T-group respondents reported being able to improve their lexis, grammar and sentence structure.
Observation from Data B: T-group made more improvements, possibly due to constraints of source texts.	Possible reason 1: Different level of linguistic difficulties.	Finding from Data C: More T-group respondents reported experiencing difficulty in language usage.
		Finding from Data C: More T-group respondents had less confidence in writing during drafting stage.
Observation from Data A: NT-group raised content-related concerns despite being told to focus on language usage.	Possible reason 2: Different types of cognitive efforts.	Finding from Data C: More T-group respondents reported having more deliberation on language usage during drafting and revision stages.
Observation from Data B: T-group seemed to have adopted more lexical expressions from the parallel texts.	Possible reason 3: Impact of parallel texts as treatment.	Finding from Data C: More T-group respondents had less confidence in writing during drafting stage but gained confidence during revision stage.
Observation from Data B: Some improved terms by both groups were concurrently raised in the class discussions.	Possible reason 4: Inspiration from class discussions.	Finding from Data C: More T-group respondents considered the discussions helpful in raising their awareness of certain language use.
	Possible reason 5: Different level of enjoyment.	Finding from Data C: T-group had more positive feedback than NT-group regarding their level of enjoyment during drafting and revision stages.

Figure 5.2 Correlations between Data B and Data C

First of all, in earlier discussions, it was suggested that one potential reason for this tendency is that the T-group experienced more linguistic difficulties than the NT-group because translation tasks are constrained by the source texts, whereas writing

tasks can allow students to avoid difficulties by limiting themselves to their store of linguistic knowledge. This speculative account obtains some support from students' response to Question 1, which reveals that there were more T-group respondents than NT-group respondents who reported experiencing difficulty in grammar, vocabulary and sentence structure during the drafting process (see Figure 4.7).

Moreover, in response to the Question[92] 'during the drafting process, were you confident about your writing proficiency', the vast majority of NT-group respondents (69%) answered 'moderately confident', whereas most T-group respondents (88%) answered 'not very confident' (see Figure 4.10). This is the only question where most NT-group respondents expressed more favorable views than most T-group respondents. This, however, lends support to the reasoning that the T-group may have encountered more linguistic difficulties than the NT-group. It is not surprising that the T-group was less confident about their writing proficiency if they had experienced many problems in the translating process. In contrast, one of the reasons that students in the NT-group felt moderately confident about their writing proficiency may be that they did not experience much difficulty, possibly because they could easily avoid problems by not venturing into unknown areas.

Another potential reason for the finding that more improvements were found in the T-group than the NT-group is that the two groups made different types of cognitive efforts. The attention of the T-group was most likely drawn to language usage, while the concern of the NT-group could be extended to content-related issues. In earlier discussions, this reasoning was supported by observations in Data A, where students embraced a number of content-related issues despite being told to focus their discussions on language usage (see Example 5.16). This explanation becomes more

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[92] See Question 4, Appendix 2A and 2B.

compelling when taking into consideration a finding[93] drawn from Data C, which shows that the T-group deliberated more on vocabulary, grammar and sentence structure than the NT-group in the drafting process (see Figure 4.8). It should also be noted that another finding[94] of Data C shows that the same tendency was found in the revising stage (see Figure 4.20), a phenomenon which suggests that the attention of the T-group was drawn to language use no matter whether they were given access to relevant treatment and dictionaries or not.

In addition, it was suggested in earlier discussions of Data B that parallel texts may be more helpful in connection with translation tasks than in connection with writing tasks. Some evidence for this reasoning can be sought by comparing the students' response to Question 4 and Question 18 in the questionnaires. It is revealed in Data C that more T-group respondents reported having less confidence in their writing proficiency during the drafting stage than NT-group respondents (Figure 4.10), but more T-group respondents reported gaining confidence about their English writing proficiency during the revising stage than NT-group respondents (Figure 4.25). This contrasting level of confidence between the drafting stage and revising stage found in the T-group suggests that the treatment may have had a stronger impact on students who worked on translation tasks than students who worked on writing tasks. This also suggests that translation assignments alone may not be able to achieve desirable results. A revising stage with treatments and dictionaries available could play a vital role in optimizing the use of translation in writing instruction by helping students to make improvement and gain more confidence in their writing proficiency.

Another explanation given for the finding of Data B was 'the impact of class discussions'. Scrutiny from Data B shows that lexical expressions that appeared in both

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[93] See Question 2, Appendix 2A and 2B.
[94] See Question 13, Appendix 2A and 2B.

the parallel texts and students' revisions were concurrently concerns raised in the class discussions and this finding suggests that class discussions can complement translation tasks in that it may help to draw students' attention to language use. This observation is consistent with a finding[95] of Data C, which shows that the T-group provided more positive feedback than the NT-group regarding the helpfulness of the discussions in raising their awareness of language use. In addition, a finding[96] of Data C reveals that translation assignments were generally considered enjoyable during the drafting stage (see Figure 4.11) and the revising stage (see Figure 4.26), while in both stages writing assignments were less associated with enjoyment by the majority. This could be another possible reason for the finding of Data B, in addition to reasons such as 'different level of linguistic difficulties', 'different types of cognitive efforts', 'different impact of parallel texts as treatment' and 'inspiration from class discussions' as elucidated above.

5.3.3 Attention to Lexis and Grammar

It should also be noted that findings of Data A and Data B both show that the T-group and the NT-group had a tendency to focus on the lexical rather than the grammatical level. These findings can be strengthened when taking into consideration students' own perspectives, as shown in Data C. It was found[97] that both the T-group and the NT-group reported deliberating more on lexis than grammar in both the drafting (see Figure 4.8) and revising (see Figure 4.20) stages, which suggests that vocabulary dominates students' attention no matter whether they are given treatment or have recourse to dictionaries or not. In discussing the results of Data A, it was noted that one possible explanation for this phenomenon is that grammar may pose fewer challenges

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[95] Refer to response to Question 10, as shown in Figure 4.17.
[96] See Question 5 and Question 19, Appendix 2A and 2B.
[97] See Question 2 and Question 13, Appendix 2A and 2B.

for students because they have been exposed to similar grammatical knowledge throughout their secondary and tertiary education, but it is unlikely that they have attained the same level of knowledge and familiarity with lexis. This speculative account can to some extent be supported by another finding[98] drawn from Data C, which shows that both the T-group and the NT-group reported experiencing more difficulty in lexis than grammar during the drafting stage (Figure 4.7). Together, the three sets of data support the observation that both translation and writing tasks may create more opportunities for students to reflect on lexical than grammatical issues.

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[98] See Question 1, Appendix 2.

Chapter 6 Conclusion

This Chapter concludes the current examination of the outcomes of using translation and writing tasks in L2 classrooms, providing an overview of major empirical findings and implications of this study. Limitations of the study are discussed and suggestions for future research are proposed.

6.1 Summary of the Findings

Several research questions have been addressed in this study and the principal findings show that translation can be used profitably in L2 classrooms. In particular, Data A answers Research Question 1 and suggests that translation tasks play a more conducive role in engendering class discussions than L2 direct writing tasks in so far as they induce more LREs, prompt more responses from students and encourage more enduring discussions. It was also found that in discussions of T-tasks some topics or expressions were still retained in students' memory after a period of time, a phenomenon which Storch (2008) suggests shows a deeper level of engagement.

Data B answers Research Question 2 and suggests that translation tasks can yield better results than direct L2 writing tasks in encouraging and helping students to improve their lexis and grammar. Although translation tasks are more beneficial than writing tasks in this regard, both types of tasks share one thing in common and that is the superiority in directing students' attention towards lexical rather than grammatical aspects.

The third research question concerns students' perspectives on the translation/writing tasks after taking part in them and Data C shows that generally the

students considered the translation tasks more helpful than the writing tasks in many ways, such as enhancing their writing proficiency, building their confidence, increasing their motivation and allowing them to enjoy L2 classroom activities. The translation tasks were perceived as 'helpful', 'enjoyable', 'motivating' and 'thought-provoking' by the majority, while the writing tasks were mostly viewed as 'not quite helpful', 'not quite enjoyable', 'tedious', and 'boring' and nerve-racking'. Many of the findings in this set of data tie in perfectly with the explanations and speculative accounts given for Data A and Data B, pointing to several advantages that translation tasks may have over writing tasks in inviting class discussions and prompting lexical and grammatical improvements, such as allowing students to encounter more linguistic difficulties, face similar problems, share the same context, and focus more on linguistic accuracy rather than content, etc.

6.2 Implications

In addition to providing empirical evidence of the outcomes of using translation in L2 classrooms, the findings of this study may contribute to the discussion of whether translation hinders L2 learning (e.g. Lado, 1964; Gatenby, 1967) or benefits L2 learning (e.g. Duff, 1989; Malmkjær, 1998) in several ways. First, the finding that students showed a high level of engagement in discussions of translation tasks in the present study echoes the findings in Källkvist's (2013a, 2013b) studies. The fact that similar results were found in a different educational and language context provides robust evidence of the effectiveness of using translation to engender class discussions.

Second, one of the anti-translation arguments is that translation provokes L2 errors (Lado, 1964); a counterclaim is that similar errors can occur in other types of tasks (Vermes, 2010). However, even if translation tasks trigger more mistakes than monolingual tasks, it is still not justified to conclude that translation tasks are inferior to

monolingual tasks in facilitating L2 learning, considering that fewer mistakes could be a result of avoidance strategies, while more mistakes could result from students' attempts to venture into unknown areas. Hence, this study investigates the outcomes of using translation in writing classrooms from the opposite perspective, that is, by examining 'improvement'. This study therefore provides a new methodology for comparing the results of translation with the results of monolingual tasks.

Third, the translation tasks adopted in this study - which comprise a series of processes, including drafting, class discussion, treatment, and revising - integrate writing, speaking, listening and reading practices in the target language. Specifically, the class discussions create opportunities for L2 oral/aural practice, the drafting and revising processes offer writing practice, and the treatment (or dictionary) could be regarded as L2 reading practice. This task design shows how translation can be used in L2 classrooms in a more comprehensive way than simply practising one skill. This is a solid example in support of the argument that translation can be inclusive of the four skills (Malmkjær, 1998; Leonardi, 2010). Given this, the arguments that translation has no place in communicative classrooms and that it is used at the expense of oral skills seem unconvincing.

The tasks used in this study were designed with two theoretical constructs in SLA research in mind, namely Swain's (1985) Output Hypothesis and Krashen's (1985) Input Hypothesis. The Output Hypothesis states that producing L2 output is essential for L2 learning because it leads students to reflect on their linguistic deficiency, catches their attention and improves their linguistic accuracy, whereas the Input Hypothesis states that input, such as reading, that is slightly beyond students' current L2 knowledge is essential for students to develop better L2 proficiency. Both the discussion and writing stages in this study are a form of output production, although in most of Swain's

studies (1995, 1998, 2000) this notion was mainly manifested in terms of speaking and particularly metatalk (LREs). The parallel texts (and dictionaries) included as treatment in the tasks are a form of input. They contain a wide range of L2 usage that may be beyond students' store of linguistic knowledge but is still comprehensible to students given help from the context. This integration of output (speaking and writing) and input (reading and listening) may be key to whether translation tasks can successfully promote L2 learning.

Meanwhile, this study offers pedagogical and methodological insights into how translation can be used profitably in L2 classrooms, if contextualized authentic materials are used as source texts with judicious selection of difficult expressions, and the inclusion of parallel texts as input, etc.

Last but not least, the findings of this study show that well designed translation tasks can outperform monolingual writing tasks in encouraging and helping students to make improvement and engendering class discussions.

6.3 Limitations of the Study
6.3.1 Sampling and Participants

The major limitation of this study is the sample size, with a total of 26 participants. The findings are based on a sample population of students at a tertiary institution in Macao SAR, and may not be generalizable beyond this context. Moreover, the small sample size also weakens the statistical power of the analysis. However, the consistent patterns and tendencies and the parallels with the earlier studies by Källkvist (2013a, 2013b) suggest some degree of transferability of the findings.

6.3.2 Task Design

Each of the ten assignments used in this study may have different impacts on the learners as they are on different topics (but all societal-related issues). For instance, one topic may be more challenging, familiar or interesting to some students than to others and in turn the students' performance in completing that particular assignment may vary. Moreover, as the translation assignments involve source texts created using contextualized authentic news, they may contain expressions of different degrees of difficulty, especially given the students' varying range of linguistic knowledge. However, a longitudinal study involving a number of tasks on different topics allows for a more reliable judgment of whether the results reflect the effects of the task type.

6.3.3 Treatment

The use of parallel texts as treatment may also be a disadvantage of the research design. As noted earlier in the discussions, the T-group were able to make more changes than the writing group because the parallel texts offered the T-group more information than was available to the writing group. This advantage arose because the teacher had control over the content in the case of the T-group. The writing group was given the same topic but the exact content of their writing was unpredictable, though there was also evidence that they benefitted from the parallel texts (Table 5.8 and Table 5.9). However, the bias in favour of the T-group was reduced because both groups were allowed to use dictionaries in the revision stage. In addition, some terms used in the improvements were not found in the parallel texts and thus were most likely acquired from dictionaries (Table 5.10 and Table 5.11). Both groups were able to make changes, so the key is whether the tasks led them to reflect on their language usage. Moreover, even if the improvements of the T-group was greater than that of the NT-group because

of the relevance of the parallel texts, this reflects a potential advantage of using translation tasks, namely that these tasks enable the teacher to control content and hence to develop more helpful treatments than writing tasks do.

6.3.4 Analysis of Data A

In analyzing the impacts of the two types of tasks on discussions, individual difference among the participants such as their English proficiency, utterance speed, personality (extrovert or introvert) or peer relationship can also be influential factors. For instance, if one group contains many participants who are extrovert and speak very fast and fluently in the L2, it is likely the discussions will have large numbers of LREs. However, these factors were controlled by the research design, where 'the participants as a group' swapped roles to work on two types of tasks. If there were individual differences, these would be the same when that group of students worked on the other type of tasks. This study incorporates class discussion and translation or writing assignments as tasks to see how translation tasks can be used fruitfully. However, as noted earlier (Table 5.12) it is possible that students' improvements were inspired by the preceding class discussions. In future studies of the impact of translation on the teaching and learning of writing, class discussions can be prevented. However, in this study, the aim was to establish how the benefits of translation can be optimized and affect more than one skill.

6.3.5 Analysis of Data B

It is possible that the writing group may be doing mental translation. Some evidence of this can be found in the analysis of unsuccessful changes in Data B

(Example 4.33). However, in this study, translation tasks and writing tasks are considered to be different in nature. In the former case students are presented with a text in the L1 and expected to produce a translation of it into the L2, whereas in the latter case students are only exposed to the L2. Moreover, the fact that the T-group and NT-group displayed significantly different levels of engagement in class discussions and different degrees of writing improvements suggests that different outcomes arise when translation is presented as an actual task (with source text given to students) and when mental translation is used as a strategy in the course of carrying out tasks with a different end goal. One possible reason is that exposure to the L1 source text offers more visual stimulus than mental translation. In future studies think-aloud protocols can be used to examine whether mental translation occurs when students work on L2 writing tasks and whether the processes involved are different from those involved when students are presented with an L1 source text to translate.

6.3.6 Analysis of Data C

In this study, the T-questionnaires and the NT-questionnaires were designed to probe students' views on the helpfulness of translation tasks and writing tasks respectively. Participants 1-13 were given the T-questionnaires upon completion of all translation tasks (i.e. Experiment I, week 5) and then given the NT-questionnaires upon completion of all writing tasks (i.e. Experiment II, week 10). Participants 14-26, on the other hand, were given the NT-questionnaires in week 5 and the T-questionnaires in week 10 after completing corresponding tasks. This arrangement allows the participants' freshest and most direct feelings towards the five tasks they had just worked on to be captured. However, bias may arise with this arrangement. First, by the time the participants were given the questionnaires upon completion of Experiment II,

their proficiency level may have improved due to many possible factors, thus affecting the way they evaluated the other type of task. Second, the same group of participants may not have been able to evaluate the helpfulness of the two types of tasks and respond to the questions in a consistent manner, given the time gap between their responses to the two questionnaires. However, this limitation was acceptable since the third research question examines the students' perspectives on the tasks.

6.4 Suggestions for Further Research

6.4.1 Participants and Sampling

This is a longitudinal study focusing on the overall trends of the two groups involved. Future studies can examine the progress of each individual and observe their improvements. Such an investigation might produce more significant results if the participants were to be judiciously selected to represent similar or different levels of English proficiency. Future studies may also use a larger sample size and different language contexts and educational settings, and participants can be grouped in a way that would allow for exploration into the impact of different genders or proficiency levels on the results of similar experimentation.

6.4.2 Task Design

The challenging expressions included in the translation task were chosen on the basis of the teacher's judgement and understanding of the students' linguistic knowledge. However, what the teacher predicted to be challenging or unfamiliar to the students may not actually be so. Hence, in this study, the results were not used to compare with the task planning, i.e. I did not examine how many of the improved

expressions were actually the same as the ones predicted to capture the students' attention, because in preparing the materials, though the teacher judiciously included a certain number of challenging expressions and structures, they were not treated as targeted expressions and structures as in Källkvist's (2008) study. Further, as the students inevitably had different proficiency levels, it was possible that some of the tasks posed more challenges to some students than to others. The findings of this study only suggest that translation tasks prepared based on the teacher's experience and understanding of the students' proficiency level can yield fruitful outcomes. Nevertheless, the task design and materials adopted in this study offer some insights concerning the methodology that may be employed to explore the judicious use of translation in L2 classrooms.

Obviously the notion of the 'challenging expressions' is not an objective one. Future studies may compare the outcomes of different translation tasks to see in what way task design may affect the results and to establish whether students focused on the targeted lexical expressions or grammatical structures. Future studies may also establish a more systematic way to choose challenging expressions and structures for the source texts (translation tasks); for example, the results of placement tests could be examined.

Many studies mentioned in the literature review focus on examining the effectiveness of collaborative tasks, i.e. when students work together on a task (e.g. Storch, 1998; Leeser, 2004; Kim, 2008; Kim and McDonough, 2008). This should not be confused with tasks that produce collaborative dialogues, in the way that the translation tasks used in this study created opportunities for whole-class discussions (also see Källkvist, 2013a, 2013b). However, literature in the area of collaborative writing tasks (Storch, 2001; Storch and Wigglesworth, 2007; Watanabe and Swain, 2007) seems to offer some refreshing insights into how translation tasks may perhaps be

devised as pair work or group work to foster L2 interaction and L2 knowledge co-construction. It would be interesting for future studies to explore the outcomes of collaborative translation tasks to establish how translation tasks completed in pairs compare with individually completed translation tasks.

6.4.3 Writing Improvements

This study did not differentiate between improvements that were corrections of mistakes and improvements that were simply alternatives, because the main objective of this study was to compare improvements found in translation with those found in non-translation task. However, future studies may examine which type of improvements, i.e. correction of mistakes or use of alternatives, are more frequently found in translation tasks than in other types of monolingual tasks. Moreover, the unsuccessful changes found in the data were briefly reported to illustrate changes that were considered as improvements (successful changes) and changes that were not. It was suggested that the unsuccessful changes seem to have been due to negative transfer, acquisition of partial linguistic knowledge, and carelessness. However, this matter was not further investigated as this study aimed to examine the positive impacts of translation tasks and writing tasks on students' lexical and grammatical improvements. Future studies may investigate the negative impact of translation and monolingual tasks by examining the mistakes or unsuccessful changes produced.

6.4.4 Class Discussions

Further investigation into the impact of translation tasks on class discussions can also examine the 'tone' of the participants in their discussions – whether the way they

spoke was full of hesitations or mainly firm statements – as may reflect the participants' level of confidence in speaking in English. It would be interesting to examine the difference in this regard between students who worked on translation and non-translation tasks. Intervals, pauses, turntaking and the length of turns can also be taken into consideration in future studies. For example, a comparison of turns of less and more than 20 seconds can be carried out and their content compared to see whether they occurred due to detailed explanation or elaboration, or whether they occurred because students had difficulty in expressing themselves.

This study did not aim to examine the relationship between the discussions and subsequent L2 learning by comparing results of Data A and Data B, though it is possible that results of writing and translation tasks (Data B) can be affected by the class discussions (Data A), as noted above. For example, a certain improved expression may have been chosen because students' attention was drawn to the linguistic item during the discussions. Many studies (e.g. Swain, 1998; Swain and Lapkin, 1998, 2001; Williams, 2001) have used pre-test and post-test to examine whether the LREs lead to subsequent L2 learning. It should be noted that the analysis of improvements in drafts and revisions was not used as a measure to compare the impact of the LREs on the students' subsequent L2 performance. However, this would be a useful focus for future studies.

6.5 Concluding Remarks

This study set out to investigate the outcomes of using translation tasks versus writing tasks in L2 classrooms among non-language major college students. The main strength of this study is its longitudinal nature and the inclusion of monolingual tasks in the comparison. Both allow for more reliable measures of the outcomes of using

translation in L2 classrooms. On the whole, this study shows that translation tasks can yield fruitful outcomes in fostering in-class communication and writing improvement and, at the same time, are positively perceived by L2 learners. These three pedagogical values of translation tasks may constitute a good reason for their presence in L2 classrooms.

APPENDICES

Appendix 1A: Translation Assignments⁹⁹

Experiment I (Task 4 of 5)

Translation Assignment I (Draft)

Instructions: The following text¹⁰⁰ discusses some views on cyberbullying: What is cyberbullying? Why is it so common? What could happen to those who are bullied? What should the government do? Translate it into English. The paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

隨著社交網站日漸普及，網絡欺凌亦日益嚴重。人們能輕易地利用互聯網散播謠言、羞辱、騷擾、恐嚇他人。 由於在網絡上可匿名發言，大家往往無須為自己的言行負上責任，可刻意在網上分享令他人尷尬的影像，加以嘲笑。當發生具爭議性事件時，很多人在未了解內情前便對他人的私事妄下定論，有些則發表惡意評語、以辱罵性言詞攻擊他人，甚至將受害者的個人資料在網上公開。事實上，網絡欺凌可能比起傳統的面對面欺凌更具殺傷力 。由於網上訊息傳播得很快且不易移除，被欺凌者往往會承受巨大壓力及情緒困擾，直接影響其日常生活。心靈較脆弱的人，更可能會患上抑鬱症，最後因持續的精神折磨而自殺。為了打擊此類網上暴力，政府有必要透過立法來保護遭受網絡欺凌的受害者，可考慮將在網上侵犯他人私隱，誹謗或恐嚇等行為刑事化。

Translation assignment II (Revision)

Instructions: Please revise your translation with the help of the three given texts.
Pay special attention to your language usage. (Duration: 40 minutes)

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⁹⁹ An example of translation assignment from each Experiment is included in this Appendix. The remaining eight translation assignments can be presented upon request.

¹⁰⁰ The text is adapted from the following sources:

Lianhe Zaobao [United Morning Paper, 聯合早報] (2013) 'Zhizhi wangle saorao he qiling xingwei [制止网络骚扰和欺凌行为]', 20 November. Available at: http://www.zaobao.com.sg/forum/editorial/story20131120-278659 (Accessed: 29 October 2014).

Macao Daily News [澳門日報] (2014) 'Zhengshi wangluo qiling lixing yonggang ezhi [正視網絡欺凌理性勇敢遏止]', 2 June. Available at: http://www.macaodaily.com/html/2014-06/02/content_907404.htm (Accessed: 29 October 2014).

Xia, G. (2013). 'Chongjian Shejiaoquan Fang Wangluo Qiling (重建社交圈 防網絡欺凌)', *Macau Daily News* [澳門日報], 10 November. Available at: http://mpaper.org/Story.aspx?ID=485900 (Accessed: 31 October 2014).

Wenpo Daily [文匯報] (2013) 'Yulun moli: Wangluo gongshen chengfeng renshen gongji VS zhangxian gongyi [輿論魔力：網絡公審成風 人身攻擊 VS 彰顯公義]', 2 July. Available at: http://paper.wenweipo.com/2013/07/02/ED1307020013.htm (Accessed: 29 October 2014).

The following Chinese-English translation is NOT provided to any of the participants, but simply attached in this Appendix as a reference for non-Chinese language readers.

The underlined expressions are hidden agenda for the researcher. It is speculated that these expressions may pose a challenge to participants and some of them can be found, perhaps in different grammatical forms, in the parallel texts provided to the participants.

Translation assignment (Source text)

隨著社交網站日漸普及，網絡欺凌亦日益嚴重。人們能輕易地利用互聯網<u>**散播謠言**</u>、<u>**羞辱**</u>、<u>**騷擾**</u>、或<u>**恐嚇**</u>他人。 由於在網路上可<u>**匿名發言**</u>，大家往往無須為自己的言行負責，可刻意在網上分享令他人尷尬<u>**的**</u>影像，加以<u>**嘲笑**</u>。當發生具爭議性事件時，很多人在未了解內情前便對他人的私事妄下定論，有些則發表<u>**惡意評論**</u>、以<u>**辱罵性言詞**</u>攻擊他人，甚至將受害者的個人資料在網上<u>**公開**</u>。事實上，網絡欺凌可能比起傳統的<u>**面對面欺凌**</u>更具<u>**殺傷力**</u> 。由於網上訊息傳播得很快且不易移除，被欺凌者往往會<u>**承受**</u>巨大壓力及<u>**情緒困擾**</u>，直接影響其日常生活。<u>**心靈較脆弱**</u>的人，更可能會患上<u>**抑鬱症**</u>，最後因持續的<u>**精神折磨**</u>而<u>**自殺**</u>。為了打擊此類網上暴力，政府有必要透過<u>**立法**</u>來保護遭受網絡欺凌的<u>**受害者**</u>，可慮將在網上<u>**侵犯他人私隱**</u>，<u>**誹謗**</u>或恐嚇等行為<u>**刑事化**</u> 。(331characters)

Reference Translation (Target text)

With the growing popularity of social networking sites, cyber bullying has become increasingly serious. People can easily use the Internet **spread rumours**, **humiliate**, **harass** or **intimidate** others. As people can say anything on the Internet under the veil of **anonymity**, they often do not have to bear the responsibility for their own acts or words. Some Internet users may deliberately share embarrassing photos or videos of others online and **ridicule** them. When something controversial happens, many people simply jump to conclusions on others' private matters before having a full picture of the story. Some may post **malicious comments**, attack others with **abusive language**, or even expose the victims' personal information to the public. In fact, cyberbullying can be more **devastating** than traditional face-to-face bullying. As online messages spread quickly and cannot be easily removed, people being bullied often suffer from tremendous stress and emotional disturbance that directly affect their daily lives. Those who are more vulnerable may even suffer from **depression** and eventually **commit suicide** under relentless **mental torment.** To combat such online violence, the government should **enact** new laws to protect **victims** of cyberbullying. For example, the government may consider **criminalizing** acts such as **invasion of privacy**, **defamation** or intimidation. (201 words)

Translation Assignment I (Draft)

Instructions: The following text briefly describes some consequences of the phenomenon where the rich get richer and the poor get poorer, followed by discussion on the positive and negative impacts of collecting more tax from the rich. Translate the text into English. The paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

貧富懸殊幾乎是所有發達國家與地區的通病。社會資源分配不公，財富過度集中於少數超級富豪手上，容易引起民怨，帶來社會動亂。 有人提出透過開徵或增加富人稅來收窄貧富差距。無疑，這政策有助增加稅收總額，新增收入可用來紓緩中產及基層的負擔，長遠來說或許能減輕財富分配不均的問題，讓社會更穩定地成長。然而，加稅有可能會促使超級富人或企業家將資產或業務轉移到稅率較低的地方，甚至以移民的方式避稅，最終造成資金外流。與此同時，這政策可能會讓嚇怕潛在海外投資者，影響就業市場。另外，如果無法堵住稅收漏洞，不管稅率有多高，不少富人仍然有辦法避稅。此外，稅率太高會阻礙資本累積，打擊企業創新，最終影響經濟繁榮[101]。

Translation assignment II (Revision)

Instructions: Please revise your translation with the help of the three given texts.
Pay special attention to your language usage. (Duration: 40 minutes)

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[101] The above text is adapted from the following sources:

Apple Daily [蘋果日報] (2015) 'Buxi guwen pipan Pikaiti: Furenshui xingbutong (布希顧問批判皮凱提 : 富人稅行不通)', 6 January. Available at:
http://www.appledaily.com.tw/appledaily/article/finance/20150106/36310110/ (Accessed: 9 February).

Hong Kong Economic Journal [信報財經新聞] (2015) 'Aobama yu jiefu jipin Xianggang ye gai wending renxing [奧巴馬欲劫富濟貧 香港也該穩定人心]', , 22 January. Available at:
http://www1.hkej.com/dailynews/commentary/article/975943 (Accessed: 8 February 2015).

Li, W.Q. (2014) 'Gaishan pinfu chaju tigao suode cai zhiben [改善貧富差距 提高所得才治本]', *United Daily News [聯合報]*, 5 May. Available at:
http://www.ccw.org.tw/p/19903 (Accessed: 9 February).

Singpao [成報] (2013) 'Pinfu chaju yinqi minyuan [貧富差距引起民怨]', 5 May. Available at:
http://www.singpao.com/xw/gat/201305/t20130507_433605.html (Accessed: 8 February 2015)

The following Chinese-English translation was not provided to any of the participants, but simply attached in this Appendix as a reference for non-Chinese language readers.

The underlined expressions were hidden agenda for the researcher. It was speculated that these expressions might pose a challenge to participants and some of them could be found, perhaps in different grammatical forms, in the parallel texts provided to the participants.

Translation assignment (Source text)

<u>貧富懸殊</u>幾乎是所有發達國家與地區的通病。社會<u>資源分配不公</u>，財富過度集中於少數超級富豪手上，容易引起<u>民怨</u>，帶來<u>社會動亂</u>。 有人提出透過開徵或增加富人稅來<u>收窄貧富差距</u>。無疑，這政策有助增加稅收總額，新增收入可用來<u>紓緩</u>中產及基層的<u>負擔</u>，長遠來說或許能<u>減輕</u>財富分配不均的問題，讓社會更穩定地成長。然而，加稅有可能會促使超級富人或企業家將資產或業務<u>轉移</u>到稅率較低的地方，甚至以移民的方式<u>避稅</u>，最終造成<u>資金外流</u>。與此同時，這政策可能會讓嚇怕潛在海外投資者，影響就業市場。另外，如果無法堵住<u>稅收漏洞</u>，不管<u>稅率</u>有多高，不少富人仍然有辦法避稅。此外，稅率太高會阻礙<u>資本累積</u>，打擊企業創新，最終影響經濟繁榮。(294 characters)

Reference (Target text)

<u>The disparity between the poor and rich</u> is almost a common problem in all developed countries and regions. **<u>Unfair distribution</u>** of social resources and excessive concentration of wealth in a few hands of the super-rich can easily lead to social **<u>discontent</u>** and result in **<u>social unrest.</u>** Some propose to introduce new or higher taxes on the rich to **<u>narrow the wealth gap.</u>** Doubtless, this can help to increase a nation's total tax revenue and the additional income generated can be used to **<u>ease</u>** the **<u>burden</u>** on the middle class and grassroots. In the long term, this may help to **<u>alleviate</u>** wealth inequality and enable a more stable growth. However, increasing taxes may prompt the super-rich or entrepreneurs to **<u>transfer</u>** their assets or business to places where taxes are lower or even avoid tax through immigrating to other places, resulting in **<u>capital</u> <u>flight/ outflow</u>**. At the same time, this policy may scare off overseas investors and affect employment market. In fact, if **<u>tax loopholes</u>** are not eliminated, many rich people can still find a way to avoid tax no matter how high the rates are. Moreover, excessively high tax rate will hinder **<u>capital</u> <u>accumulation</u>** and deter business innovation. Eventually, this may affect economic prosperity. (202 words)

Appendix 1B: Writing Assignments[102]

Experiment I (Task 4 of 5)

Writing Assignment I (Draft)

Instructions: In your opinion, what is cyberbullying? Why is it so common? What could happen to those who are bullied? What should the government do? Your paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

Writing Assignment II (Revision)

Instructions: Please revise your writing with the help of the three given texts. Do not change your content or paragraph organization. Pay special attention to your language usage. (Duration: 40 minutes)

Experiment II (Task 4 of 5)

Writing Assignment I (Draft)

Instructions: Briefly describe some consequences of the phenomenon where the rich get richer and the poor get poorer. Some believe that this problem can be addressed by collecting more tax from the rich. What are the positive and negative impacts of such approach? Your paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

Writing Assignment II (Revision)

Instructions: Please revise your writing with the help of the three given texts. Do not change your content or paragraph organization. Pay special attention to your language usage. (Duration: 40 minutes)

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[102] An example of writing assignment from each Experiment is included in this Appendix. The remaining eight writing assignments can be presented upon request.

Appendix 1C: Parallel Texts

Experiment I (Task 4 of 5)

Text 1
Article removed due to copyright restrictions. Content available to view here:
Lambert, S. (2013) 'Harper says society must do whatever it can to stop cyberbullying', *The Canadian Press*, 10 May. Available at: http://www.macleans.ca/news/harper-says-society-must-do-whatever-it-can-to-stop-cyberbullying/ (Accessed: 30 October 2014).

Text 2
Article removed due to copyright restrictions. Content available to view here:
Lee, S. (2010) 'Cyber-bullying a growing problem in city', *China Daily,* 6 February. Available at: http://www.chinadaily.com.cn/hkedition/2010-02/06/content_9437534.htm (Accessed: 30 October 2014)

Text 3
Article removed due to copyright restrictions. Content available to view here:
McNamara, M. (2007) 'Cyber-Bullying Is A Growing Menace to Kids', *CBS News*, 15 February. Available at: http://www.cbsnews.com/news/cyber-bullying-is-a-growing-menace-to-kids (Accessed: 30 October 2014).

Experiment II (Task 4 of 5)

Text 1
Article removed due to copyright restrictions. Content available to view here:

Gollom, M. (2012) "Will the 'tax the rich' plan scare them away?", *CBC News*, 25 April. Available at: http://www.cbc.ca/news/canada/will-the-tax-the-rich-plan-scare-them-away-1.1164620 (Accessed: 21 Jan 2015).

Text 2
Article removed due to copyright restrictions. Content available to view here:
Williams, A. (2012) 'A wealth tax would hurt the economy', *Newsmax*, 31 December. Available at: http://www.newsmax.com/ArmstrongWilliams/Wealth-Tax-Economy-assets/2012/12/31/id/469570/ (Accessed: 20 January 2015).

Text 3
Article removed due to copyright restrictions. Content available to view here:
Lui, D. (2014) 'Hong Kong should reform its tax structure to redistribute wealth', *South China Morning Post*, 27 August. Available at:
http://www.scmp.com/comment/article/1581091/hong-kong-should-reform-its-tax-structure-redistribute-wealth (Accessed: 21 January 2015).

Appendix 2A: T-questionnaire

Questionnaire for Translation Group

In this questionnaire, you will find several questions about the translation activities you have worked on over the past five sessions. Please read each question carefully and take your time to respond.

There is no right or wrong reaction to the statements in the questionnaire. We are simply interested in your opinions. This questionnaire is for research purpose only. All your personal information will remain confidential and your responses will be kept anonymous at all times.

Part I - Drafting process.
The following items concern the drafting process as a whole.

1. During the drafting process, did you experience difficulty with any of the following aspects of language? Mark all that apply.
   - □ Grammar
   - □ Vocabulary
   - □ Sentence structure
   - □ None of the above

2. During the drafting process, did you think about any of the following aspects of language? Mark all that apply.
   - □ Grammar
   - □ Vocabulary
   - □ Sentence structure
   - □ None of the above

3. Did you find the drafting process a helpful activity to improve your English writing proficiency?
   - □ Very helpful
   - □ Fairly helpful
   - □ Moderately helpful
   - □ Not very helpful
   - □ Not at all helpful

4. During the drafting process, were you confident about your writing proficiency?
   - □ Very confident
   - □ Fairly confident
   - □ Moderately confident
   - □ Not very confident
   - □ Not at all confident

5. At this stage, did you enjoy the translation assignments?
    □ Very much
    □ Quite a lot
    □ Moderately
    □ Not very much
    □ Not at all

Part II - Class discussion.
The following items concern the class discussion sessions.

6. Did you have any language-related concerns – such as vocabulary, grammar and sentence structure – that you would like to discuss with your classmates during the discussion sessions?
    □ Many
    □ Quite a few
    □ A moderate number
    □ Not many
    □ None at all

7. When your classmates raised language-related concerns in the discussions, were you eager to share your opinions?
    □ Very eager
    □ Eager
    □ Somewhat eager
    □ Not very eager
    □ Not eager

8a. If you have indicated that you were eager to share your opinions, which of the following   was true?
    □ I was eager to share my opinions because I had similar problems when working on the translation tasks.

    □ I was eager to share my opinions even though I did not have similar problems when working on the translation tasks.

8b. If you have indicated that you were not eager to share your opinions, which of the following was true?

    □ I was not eager to share my opinions because I did not have similar problems in working on the translation tasks.

    □ I was not eager to share my opinions even though I had similar problems in working on the translation tasks.

9. Did you gain more confidence in speaking in English through discussing problems you faced in the translation tasks with your classmates?
   □ Very much more
   □ Much more
   □ Moderately more
   □ Not much more
   □ Not at all

10. Did the discussions with your classmates raise your awareness of certain aspects of language use?
    □ Very much
    □ Quite a lot
    □ Moderately
    □ Not much
    □ Not at all

11. Did the discussions help to enhance your class participation in any of the following ways? Mark all that apply.
    □ Yes, they attracted my attention.
    □ Yes, they kept me focused.
    □ Yes, they encouraged me to play a more active role in class.
    □ Yes, they made me feel less nervous in expressing my opinions.
    □ No, they were not helpful at all.

12. Did you enjoy the discussions as class activity?
    □ Very much
    □ Quite a lot
    □ Moderately
    □ Not much
    □ Not at all

Part III - *Revising process*.
The following items concern your revising process.

13. During the revising process, did you think about any of the following aspects of language use? Mark all that apply.
    □ Grammar
    □ Vocabulary
    □ Sentence structure
    □ None of the above

14. In revising your work with the help of the texts you were given, were you able to improve the vocabulary you had used in your writing in any of the following ways? Mark all that apply.
    □ I learnt new vocabulary that I could use in the text I had written.
    □ I recalled words I had already learnt.
    □ I was able to correct spelling mistakes.
    □ I gained collocational knowledge for new words.
    □ I learned new collocational knowledge for words I already knew.
    □ Others, please specify_____
    _____
    □ I did not make any improvement at all.

15. In revising your work with the help of the texts you were given, were you able to improve any of the following grammatical aspects of your writing? Mark all that apply.
    □ Subject-verb agreement   □ Verb tenses
    □ Parts of speech   □ Passive/active voice
    □ Fragments   □ Gerunds
    □ Punctuation   □ Articles
    □ Relative clauses   □ Prepositions
    □ Others, please specify _____
    □ I did not make any improvement at all.

16. In revising your work with the help of the texts you were given, were you able to improve your writing on the sentence level in any of the following ways? Mark all that apply.
    □ I learnt a new type of sentence structure.
    □ I was able to correct a wrong sentence structure.
    □ I was able to use a variety of sentence structure.
    □ I developed better fluency in writing English sentences.
    □ Others, please specify_____
    _____
    □ I did not make any improvement at all.

17. Did you find the revising process helpful in improving your English writing proficiency?
    □ Very helpful
    □ Quite helpful
    □ Moderately helpful
    □ Not very helpful
    □ Not at all helpful

18. After the revising process, did you feel more confident about your English writing proficiency?
   □ Very much more
   □ Much more
   □ Moderately more
   □ Not much more
   □ Not at all

19. After the revising process, did you consider the translation assignments to be enjoyable English writing activities?
   □ Very enjoyable
   □ Quite enjoyable
   □ Moderately enjoyable
   □ Not very enjoyable
   □ Not at all enjoyable

20. Did the revising process motivate you to improve your English writing?
   □ Very much
   □ Quite a lot
   □ Moderately
   □ Not much
   □ Not at all

Part IV- Translation activities in L2 classrooms.
The following items ask you to share your opinion about the helpfulness of the translation activities.

21. Overall, how would you rate the helpfulness of the translation activities in improving your English writing proficiency?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

22. Overall, how would you rate the helpfulness of the translation activities in encouraging you to participate in class discussions?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

23. Overall, how would you rate the helpfulness of the translation activities in building your confidence in English writing?
    □ Very helpful
    □ Helpful
    □ Somewhat helpful
    □ Not very helpful
    □ Not helpful at all

24. Overall, how would you rate the helpfulness of the translation activities in building your confidence in taking part in English class discussions?
    □ Very helpful
    □ Helpful
    □ Somewhat helpful
    □ Not very helpful
    □ Not helpful at all

25. Overall, how would you describe the series of translation activities assigned in class? Mark all that apply.
    □ Interesting   □ Too demanding
    □ Motivating   □ Uninteresting
    □ Thought-provoking   □ Boring
    □ Attention-grabbing   □ Tedious
    □ Challenging   □ Nerve-racking
    □ Others, please specify_____

26. After taking part in the series of translation activities over the past 5 weeks, do you think that translating from Chinese into English helps you to learn English?
    □ Very helpful
    □ Helpful
    □ Somewhat helpful
    □ Not very helpful
    □ Not helpful at all

Appendix 2B: NT-questionnaire

Questionnaire for Writing Group

In this questionnaire, you will find several questions about the writing activities you have worked on over the past five sessions. Please read each question carefully and take your time to respond.

There is no right or wrong reaction to the statements in the questionnaire. We are simply interested in your opinions. This questionnaire is for research purpose only. All your personal information will remain confidential and your responses will be kept anonymous at all times.

Part I - Drafting process.
The following items concern the drafting process as a whole.

1. During the drafting process, did you experience difficulty with any of the following aspects of language? Mark all that apply.
   - □ Grammar
   - □ Vocabulary
   - □ Sentence structure
   - □ None of the above

2. During the drafting process, did you think about any of the following aspects of language? Mark all that apply.
   - □ Grammar
   - □ Vocabulary
   - □ Sentence structure
   - □ None of the above

3. Did you find the drafting process a helpful activity to improve your English writing proficiency?
   - □ Very helpful
   - □ Fairly helpful
   - □ Moderately helpful
   - □ Not very helpful
   - □ Not at all helpful

4. During the drafting process, were you confident about your writing proficiency?
   - □ Very confident
   - □ Fairly confident
   - □ Moderately confident
   - □ Not very confident
   - □ Not at all confident

5. At this stage, did you enjoy the writing assignments?
   □ Very much
   □ Quite a lot
   □ Moderately
   □ Not very much
   □ Not at all

Part II - Class discussion.
The following items concern the class discussion sessions.

6. Did you have any language-related concerns – such as vocabulary, grammar and sentence structure - that you would like to discuss with your classmates during the discussion sessions?
   □ Many
   □ Quite a few
   □ A moderate number
   □ Not many
   □ None at all

7. When your classmates raised language-related concerns in the discussions, were you eager to share your opinions?
   □ Very eager
   □ Eager
   □ Somewhat eager
   □ Not very eager
   □ Not eager

8a. If you have indicated that you were eager to share your opinions, which of the following was true?

   □ I was eager to share my opinions because I had similar problems when working on the writing tasks.

   □ I was eager to share my opinions even though I did not have similar problems when working on the writing tasks.

8b. If you have indicated that you were not eager to share your opinions, which of the   following was true?

   □ I was not eager to share my opinions because I did not have similar problems in working on the writing tasks.

   □ I was not eager to share my opinions even though I had similar problems in working on the writing tasks.

9. Did you gain more confidence in speaking in English through discussing problems your faced in the writing tasks with your classmates?
   □ Very much more
   □ Much more
   □ Moderately more
   □ Not much more
   □ Not at all

10. Did the discussions with your classmates raise your awareness of certain aspects of language use?
    □ Very much
    □ Quite a lot
    □ Moderately
    □ Not much
    □ Not at all

11. Did the discussions help to enhance your class participation in any of the following ways? Mark all that apply.
    □ Yes, they attracted my attention.
    □ Yes, they kept me focused.
    □ Yes, they encouraged me to play a more active role in class.
    □ Yes, they made me feel less nervous in expressing my opinions.
    □ No, they were not helpful at all.

12. Did you enjoy the discussions as class activity?
    □ Very much
    □ Quite a lot
    □ Moderately
    □ Not much
    □ Not at all

Part III - Revising process.
The following items concern your revising process.

13. During the revising process, did you think about any of the following aspects of language use? Mark all that apply.
    □ Grammar
    □ Vocabulary
    □ Sentence structure
    □ None of the above

14. In revising your work with the help of the texts you were given as aid, were you able to improve the vocabulary you had used in your writing in any of the following ways? Mark all that apply.

☐ I learnt new vocabulary that I could use in the text I had written.
☐ I recalled words I had already learnt.
☐ I was able to correct spelling mistakes.
☐ I gained collocational knowledge for new words.
☐ I learned new collocational knowledge for words I already knew.
☐ Others, please specify_____
_____
☐ I did not make any improvement at all.

15. In revising your work with the help of the texts you were given, were you able to improve any of the following grammatical aspects of your writing? Mark all that apply.

☐ Subject-verb agreement   ☐ Verb tenses
☐ Parts of speech   ☐ Passive/active voice
☐ Fragments   ☐ Gerunds
☐ Punctuation   ☐ Articles
☐ Relative clauses   ☐ Prepositions
☐ Others, please specify_____
☐ I did not make any improvement at all.

16. In revising your work with the help of the texts you were given, were you able to improve your writing on the sentence level in any of the following ways? Mark all that apply.

☐ I learnt a new type of sentence structure.
☐ I was able to correct a wrong sentence structure.
☐ I was able to use a variety of sentence structure.
☐ I developed better fluency in writing English sentences.
☐ Others, please specify_____
_____
☐ I did not make any improvement at all.

17. Did you find the revising process helpful in improving your English writing proficiency?

☐ Very helpful
☐ Quite helpful
☐ Moderately helpful
☐ Not very helpful
☐ Not at all helpful

18. After the revising process, did you feel more confident about your English writing proficiency?
   □ Very much more
   □ Much more
   □ Moderately more
   □ Not much more
   □ Not at all

19. After the revising process, did you consider the writing assignments to be enjoyable English writing activities?
   □ Very enjoyable
   □ Quite enjoyable
   □ Moderately enjoyable
   □ Not very enjoyable
   □ Not at all enjoyable

20. Did the revising process motivate you to improve your English writing?
   □ Very much
   □ Quite a lot
   □ Moderately
   □ Not much
   □ Not at all

Part IV- Writing activities in L2 classrooms.
The following items ask you to share your opinion about the helpfulness of the writing activities.

21. Overall, how would you rate the helpfulness of the writing activities in improving your English writing proficiency?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

22. Overall, how would you rate the helpfulness of the writing activities in encouraging you to participate in class discussions?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

23. Overall, how would you rate the helpfulness of the writing activities in building your confidence in English writing?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

24. Overall, how would you rate the helpfulness of the writing activities in building your confidence in taking part in English class discussions?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

25. Overall, how would you describe the series of writing activities assigned in class? Mark all that apply.
   □ Interesting   □ Too demanding
   □ Motivating   □ Uninteresting
   □ Thought-provoking   □ Boring
   □ Attention-grabbing   □ Tedious
   □ Challenging   □ Nerve-racking
   □ Others, please specify_____

26. After taking part in the series of writing activities over the past 5 weeks, do you think that writing directly in English helps you to learn English?
   □ Very helpful
   □ Helpful
   □ Somewhat helpful
   □ Not very helpful
   □ Not helpful at all

Appendix 3: Participant Information and Informed Consent Sheet

You are invited to participate in a study on second/foreign language learning. The primary aim of this study is to investigate the outcomes of using different activities in L2 classrooms. You are being asked to participate in the study because you are a non-language major student who is learning English as a second/foreign language.

This study will involve completing 5 translation assignments and 5 writing assignments throughout Academic Year 2014/2015, taking part in corresponding class discussions, and filling in two questionnaires. Your participation is voluntary. You may decide whether or not to participate in this study and will not be treated with prejudice or suffer from any negative consequences. You are also free to withdraw from the study at any time, without giving an explanation.

All of your information will be held in strict confidentiality and kept in locked files. In order to help with the organization of information, you are asked to write down your name on the assignments and questionnaires. Your responses in the class discussions will also be audio-recorded and transcribed for analysis. However, all of these data will be used only for research purposes and in ways that will not reveal who you are. Any information that could identify you will be concealed before data files are shared with other researchers or results are made public.

There are no known risks associated with this study. Your participation is helpful to provide more pedagogical insights into the effectiveness of different writing activities for second/foreign language learners. The study may also help you to recognize your strengths or weaknesses in English writing and be more aware of your learning preference.

If you have any further questions about the study, please contact me at (853) 8599 3264 or through swlo@ipm.edu.mo. You may also contact my supervisors Professor Kirsten Malmkjær through km240@le.ac.uk or Dr. Adelina Hild through avh5@le.ac.uk.

Thank you very much for you time.

Yours sincerely,
Lo Sio Wai, Janice

	Please tick
1. I confirm that I have read and understand the information sheet for the study described in the participant information sheet, and that I have had the opportunity to ask questions.	☐
2. I understand that my participation is voluntary and that I am free to withdraw from the study at any time, and I do not have to give a reason for this.	☐
3. I agree to take part in the study described in the participant information sheet.	☐

	Please tick	
	Yes	*No*
4. I agree to the class discussion being audio recorded.	☐	☐
5. I agree to the use of anonymised quotes in written work or reports based upon this project.	☐	☐

_____   _____   _____

Name of Participant   Date   Signature

_____   _____   _____

Name of Researcher   Date   Signature

Appendix 4: Transcripts[103] of Class Discussions

Turn	Student	Transcript	Teacher	C/R	L/G
Experiment I (Task 4 of 5) T-Group (Students 1-13)				Identified themes[104]	
				C/R	L/G
			Ok, ready?		
237	S11	I think it's quite different to translate 散播謠言、羞辱、騷擾、恐嚇他人 [use the Internet spread rumours, humiliate, harass or intimidate others], so I wrote 'people can easily spread the rumours or threaten other people through the internet'.	{Pronunciation: spread} {Repetition: threaten other people through the internet}	C	L
238	S12	I also have the same problem. I translate it as 'spreading rumours, insult, annoying messages'.	Hmm um.	RS	L
239	S9	How about 'it's easily (easy) to insult or fight others through the internet'?		RS	L
240	S10	I translated into 'spreading rumors and insulting people and annoying messages…and threatening'.		RS	L
241	S2	For 可匿名發言 [can leave messages anonymously], I am not sure if it's okay to say 'hide their real name to leave a message'.	<Sorry? Hide their? >	C	L
242	S5	I think it may be…it can translate (can be translated) as 'since they don't need (to) use their real name to leave comment on the internet'.		RS	L

243	S1	I think that maybe 'don't use their real name'…<they don't use their real name>.	<Don't use their real name?>	RS	L
244	S12	What about 'hidden name'? 'we can leave a comment hidden name at the internet'…	{Pronunciation: hidden name}	RS	L
245	S10	*Interruption: Do you mean 'hidden name'? *NOTE: Students whispering the pronunciation for 'hidden'.*		RF	L
246	S10	I've written as 'they can hide their identities'. It's the same as 'hidden name', because I think 'identity' is higher level than 'hidden name'; just a name you can name any name, but identity is what is important…		RCS	L
247	S1	'Hidden name'…maybe is ….right choice, because it's more suitable in this passage. <Yes, hidden name>	{Pronunciation: hidden} <so you prefer hidden name rather than hide their identity>	RC	L
		(Silence)	Ok yes, anyone share the same problem or a different problem?		
248	S4	Ah… I got a new problem. I have problem in translating the expression 分享令他人尷尬的影像，加以嘲笑 - I don't know if I should translate it as 'sharing some video will make someone feel embarrassing and laugh them'. That's my translation. Any other opinion?		C	L
249	S10	*Interruption: Good job, you make it!...I am not the same with you.		RA	L
250	S3	Should it be 'they can painstakingly to share video which can make others embracing (embarrassing) in website and laugh at the others'? <yes embarrassing>	<Can you repeating again…the whole thing? Painstakingly? How to spell? {Pronunciation: painstakingly} <Do you mean embarrassing?)	RS	L

251	S10	*Interruption: I disagree. I said 'make fun of them'. <Laugh is hahaha…make fun of them (is) not just laugh…but make fun (of people)…[105]>	<So you disagree with laugh at them?>	RS	L
			What did you just say?		
252	S1	*Interruption: No, she just now mention 'embarrassing' . Maybe 'shame' is better. That's my opinion.		RS	L
253	S10	I also think of this word, but it's too serious because you…first you ….only it's embarrassing…you mean ..the 朗誦是什麼 [How to say 'recite'?]. <Recite> is something that is normal, but people make fun of them, but it's not a shame; it's not a shame to give out a speech …with a very…<yes>	<recite> <So you think 'embarrassing' is ok?> {Repetition: 'shame is a bit too serious'}	RC	L
254	S3	Shame is informal? Not informal?		RE	L
255	S2	More serious?		RF	L
256	S1	*Interruption: (she said) too serious.		RE	L
257	S1	But I think that video should be …use a serious word may be better.		RC	L
258	S4	Some video is very bad, such as some famous people…their video can cause very serious problem, so I think 'shame' is also okay.		RC	L
259	S11	I agree with S3: I also want to use 'embarrassing', but I forgot how to spell…<um>	<Ok, so there is a spelling problem here?>	RS	L
260	S2	I agree with S3 and I am the same with her, because I used 'embarrassing' too!		RS	L

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[105] This is a comment in nature, but this is clarification to the teacher and therefore not taken into consideration when evaluating the function of the LRE.

261	S8	I don't know how to express 發表惡意評論、以辱罵性言詞攻擊他人. Do you think it's 'some of them comment something bad…they use insulting words to blame the others'?		C	L
262	S9	I think (it's) 'many people will post some comments or use some words to bully others'. {Repetition}	{Repetition}	RS	L
263	S10	'Unfriendly comment or insulting words to attack others'? <yes>	<Your suggestion?>	RS	L
264	S3	I agree with S10. I use …'use insult terms to attack others'.		RS	L
265	S8	In my opinion, 'attack' is a verb that means you fight with others, so it's a good…appropriate word to this sentence.		RC	L
266	S4	I use 'some of them may judge the others, use their own words and opinions and that may make the victim upset'.	{Repetition: May judge the others with their own words and opinions…}	RS	L
267	S6	Maybe we can use 'some people post bad comments and use…insulting words to attack another one'…		RS	L
268	S12	I use 'leave a bad comment or use insult words to attack others'.	Ok	RS	L
269	S11	I use 'some people could post negative… comments with negative words to insult other people'.		RS	L
270	S1	Yes, I agree, this is a good choice. *NOTE: Students laughed and S1 said thank you.*		RC	L
			Yes?		
271	S2	Umm…I don't know how to express 侵犯他人私隱 [violate others' privacy]. The verb is 'vio…..' (violate).		C	L

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272	S7	*Interruption: 'violate' … 'violate other people's'. I don't know I just guess.	Ok, that's a guess.	RS	L
273	S5	Maybe can translate as 'disturb people's privacy'.		RS	L
274	S13	Well, I think in such translation we'd better not be empty or skip the first step we don't know. We should try make some words that can replace it. I think 侵犯他人私隱[violate other's privacy]…We'd better use 'destroy' <disturb> …it mean make it open. In my opinion, I think we can write on the way that…post others' personal information on the internet.	<She said disturb>	RS	L
275	S8	Another difficult part of this assignment is the translation of 刑事化[criminalize]. My answer is 'I think the government can consider to charge the people are guilty' to replace 刑事化 [criminalize].		C	L
276	S12	Make the punishment is …serious <more serious>.	<Make the punishment is serious?>	RS	L
277	S2	I translate 刑事化[criminalize] as 'to make the criminal law'.		RS	L
278	S1	I translate it as 'the government can consider to include those cyberbullying as criminal behavior'.		RS	L
279	S7	'The government can consider this move is guilt (guilty)'…it's my version.		RS	L
280	S9	But I don't think so. I think 刑事化[criminalize]…my explanation is 'criminal law'.	{Pronunciation: criminal}	RS	L
281	S7	…I think 刑事化 [criminalize]…. 化 [-ize] is blablabla –ize. If you think 'criminal'…I think you can try 'criminalize'….it's better I think…**continued after being interrupted: So until he say and then I think 'criminalize' is…<of course criminalize!>	<Then now which one will you choose? Criminalize or guilty?>	RS	G

282	S9	*Interruption: That sounds good!		RA	G
283	S13	*Interruption: That sounds professional.		RA	G
284	S13	I am willing to share my solution to you all. Actually, which is similar to S7, I also (agree to) use 'criminalize', but in the other hand, I think (we can translate this to) 'the government should alarm that such action is a criminal action or criminal activities'.	{Pronunciation: criminal}	RS	L
285	S5	I agree with you, you say 'criminalize' is it? Here I use 'making some illegal actions to be a crime'.	{Pronunciation: crime} ok?	RS	L
286	S2	How (do) all of you translate the term 誹謗 [defamation]?		C	L
287	S7	At first I also don't know how to translate the term 誹謗 [defamation], and then I say 'the bad words' and then…	Uh uh?	RS	L
288	S12	'Insulting'?		RS	L
289	S13	But in my point of view…we'd better write …in the (this) way: 'say something bad but not true about some people'.		RS	L
			Any similar problems or other problems and opinions? Ok, that's all for this discussion…Ok, nice, very good, So thank you very much.		

Experiment I (Task 4 of 5)					
NT-Group (Students 14-26)					
Turn	**Student**	**Transcript**	**Teacher**		
				C/R	**L/G**
			Ok, so we may get started…anyone?		
97	S15	I'll go first. I want to describe people…for example…for example ….maybe some people have positive things, but they always attack those positive things….always say something negative to those things. I want to… <No, I want to say 反社會人[anti-social people]…I only know anti-….I don't know anti- what.>	Yes, can be a bit louder. <You want to express this situation? Ok…反社會人 [anti-social people]…, so you want the term in English? >	C	L
98	S20	I think my problem is just like S2's problem. Let's take the example of this topic: Even cyberbullying is a new word, it is hard to present professional vocabulary in English, such as in Chinese we have (the expressions) 恥笑[ridicule]… 起底 [broadcasting personal information] or something like that…二次創作[second creation]…but I don't know how to use English to present it…<no, I just write another thing…>	Sorry….can you be a bit louder? <You wanted to write words like 恥笑, 起底 so did you write it here? Oh? you just write something else because you can't find a way to express it?>	C	L
99	S26	I also have this problem…I don't know how to express some proper nouns like 輿論 [public opinion]…受害者[victim], so I used something like 'people who are bullied'…. (For the term) 輿論[public opinion] I used 'public voice'…	<Uh huh … 輿論 [public opinion]… 受害者 [victim]> {Repetition: people who are bullied…public voice}	C	L

				Okay, speak up abit…louder…		
100	S19	I have the same problem with you….then I change …all sentence…the meanings…(change the meaning of all sentences, i.e. write something else).			C	L
101	S15	I just talk about the 反社會人 [anti-social people]…I just describe them (as) 'people who always say some bad things even though the things is positive for people to know'…	Ok		C	L
		(Silence)	Hmm um. Anyone else? Yes? Ok?			
102	S17	…I think I have the same problem as well because I want to use…write something …but I don't how to write…use other sentence to write it, but I think it 不能表達我的意思 [it can express what I try to say]….the sentence…yes…hmm…hmm…because I want to say someone say something which is unkind to other people on the internet…but this is …I think…attack people….攻擊[attack] but I don't know how to…如何分 [how to differentiate it] <What I mean is someone 在網上攻擊他人, 但我只懂表達成 '做不到的事' [What I mean is someone bully other people online, but I was only able to express it as 'something that can't be done'> **continued after being interrupted: <Yes….long sentence …>	<Wait wait…I don't understand...what does that have to do with… **continued after being interruption: <So in other words, you wanted to say 中傷 or 誹謗 and you don't know the English? Ok>	C	L
103	S20	*Interruption: Do you mean 中傷 [cast aspersions on somebody] or 誹謗 [defamation]?			RF	L
104	S16	I always have a grammar problem. When I was writing, sometimes I don't know when should I use 'can' or 'could', 'will' or 'would'…Most of the time I just follow my feeling…			C	G

105	S14	I agree with her because I also had the same problem…the word 'might' or 'may'…. Although I know 'might' is used the past tense….sometimes I think it's very confusing…how to…		C	G
106	S15	I also think sometimes our sentence will confuse the readers…such as …maybe I want to say 'to change the original video and to entertain some people', but I don't know how to say….so I said 'they also made some extra medias to entertain people…', but some readers may be confused…. 'changed the video' (edit the original versions)…<change the original and have some extra media…原本 video 有 extra 作品[extra elements added to the original video]…I just say they make some extra media….>	<So you wanted to say change the videos….change the original version? And have some what?.....Oh okay…> hmm um.	C	L
		(Silence)	Anyone has anydifficulties or same problem…?		
107	S14	Sometimes I feel confusing about the word 'cyberbullying'. It's a noun form…but I always think of some other ways to replace this word because I don't want the whole passage …is 'cyberbullying' and…it's mentioned many times in the passage, so I want to find a word to replace the word 'cyberbullying'.		C	L
108	S18	Can we use pronoun?…<maybe … 'it'…like this…>	<Can we use what?> {Repetition: using pronoun 'it'}	RS	L
		(Silence)	Hmm um. Yes? Anything else?....Hello…		
		(Silence)	Anyone any opinion…? Anyone else?		
		(Silence)	Any similar problems or		

			other difficulties?		
		(Silence)	Anything else?		
		NOTE: (Non-LRE discussion) – S14: Sometimes I want to think…write some uncommon ideas in my topic, but I think…so many topic is very usual…very common…I can't write some very special things in this.	*Ok?*		
109	S22	Some terms like 'psychology' …抑鬱[depression] …I think the people who are bullied (may experience)... <Yes, but I don't know how to spell or what terms I need to use…>	<Psychology?...so people who are bullied may experience this problem? You don't know the term 抑鬱[depression]?>	C	L
		(Silence)	Ok, anyone else? We are close to finish…any problems		
110	S19	I don't know how to say 自殺 [commit suicide], so I say 'the people kill themselves'…	Hmm um.	C	L
111	S21	I don't know how to say 二次創作[second creation], so I only said 'some people use their creative (creativity) to make new pictures or videos', so this is my problem.		C	L
		(Silence)	Ok, so any other…?		
112	S23	I have a problem. I think the biggest problem of me is still vocabulary, such as 報復[take revenge], I use 'wrong idea' to express it….報復性的思維 [Revengeful thoughts] <just use 'wrong idea'>	<sorry? Wrong idea? 報復性的 [revengeful]? Wrong idea to what?>	C	L

				Hmm um. Yes?		
113	S21	Too many vocab (vocabulary) problems, so I have a grammar problem. For example, I want to express 'have become a big problem everywhere', but I don't know I should use 'have become' or 'become'…I don't know…yes… yes grammar problem… 'become' is okay? Or..?			C	G
114	S24	I think we should use 'has become' because this phenomenon is continue….從前到現在 [from the past till present], from the past to now, so we should use present perfect tense		{Pronunciation: from the past till now}{Repetition: Okay, present perfect tense because it's from the past till now}	RS	G
115	S17	But I think it depends on what do you want to mean in your essay, because I think simple present tense and present perfect tense is (are) okay; it just depends on what do you want to express in your article, because you want to say…it's a situation, so 'become' is okay…just depend on what you want to say.			RC	G
116	S14	errr…. I don't know how to say 失業青年[unemployed youth], so I translate to 'unemployed young'. <yes>		<Unemployed? Ok>	C	L
		(Silence)		Anyone else? Any problems? Ok? Done?		
				Anything else? Ok, anyone else?		
				One more? No?		
				Alright…nice…good..any other difficulties to share?		
				Alright...if not…we will stop…Alright? so anyone else has any …		

Experiment II: Task 4 of 5 T-group (Students 14-26)					
Turn	**Student**	**Transcript**	**Teacher**	**Identified themes**	
				C/R	**L/G**
			Ok? Let's get started		
174	S21	…I'm not sure if I should translate 貧富懸殊 [The disparity between the poor and rich] (as) 'the rich get richer, the poor get poorer'.		C	L
175	S22	I think it is only (can only) represent as 貧者愈貧, 富者愈富 [the rich get richer and the poor get poorer], but it is not 貧富懸殊 [The disparity between the poor and rich], and I think 'the gap between rich and poor' is more appropriate.		RCS	L
176	S23	I write 'the gap between the rich and poor'.		RS	L
177	S14	I agree with S21: 'the rich get richer and the poor get poorer'.	Hmm um.	RS	L
178	S19	I use 'income disparity' to translate 貧富懸殊 [The disparity between the poor and rich].		RS	L
179	S25	I think … 'the rich get richer the poor get poorer' is too long, so I translated it (as) 'the distance between poor and rich'.		RCS	L
180	S17	I agree with S23. I used 'the gap between the rich and poor' because I think 'the rich get richer the poor get poorer' cannot mean 貧富懸殊 [The disparity between the poor and rich], because this sentence has another meaning, so I prefer to use 'the gap between the rich and poor'…	Louder please Hmm um.	RCS	L

181	S15	I have a problem (in translating) 社會資源分配不公 [Unfair distribution of social resources]…and so I just write…um….I don't know 分配[distribution]…	Hmm um.	C	L
182	S24	I have an idea. I expressed it as 'social resources distribute (distribution) is unfair'.		RS	L
183	S23	I write almost the same meaning with S15, I write 'social resources was given not fairly' to translate this sentence.		RS	L
184	S17	I have another opinion, because I think 分配 [distribution] can mean 處理 [deal with], so I use 'deal with' to express 分配 [distribution]…		RS	L
185	S24	I don't agree with you (S17). 'deal with' is mean (means) deal with some problems or deal with something, but we cannot say 'deal with the social resources'.		RC	L
186	S16	I don't agree with you. I think social resource is a problem so we can use 'deal with'. And I have another idea, I translate (it into) 'social resources share are not average'.	Hmm um.	RCS	L
187	S24	I don't agree with you (S16)…(being interrupted)... **continued after being interrupted: 我都還未說完 [I haven't finished mine yet]. If we use 'deal with', we can use 'we deal with the distribution of social resources', but we don't use 'deal with the social resources'. This is (what) I don't agree.		RC	L
188	S14	*Interruption: Yes I agree with her (S16), I also… **Continue after interruption: I think social resources is public thing so we can share the source (resources), so I used (the word) 'share'.	One by one, let him finish first…	RCS	L

189	S16	And I have another problem in line 2 容易引起民怨,帶來社會動亂 [can easily lead to social discontent and result in social unrest]… I think it's very difficult translate. I translate 民怨[social discontent] to 'people complain'.	Hmm um.	C	L
190	S24	I translate 民怨 [social discontent] as 'it make citizens dislike'.		RS	L
191	S15	I agree with you …but I used 'unsatisfied'.		RS	L
192	S25	I don't agree with him (S24)…the citizens 'dislike' what?		RC	L
193	S20	I translated 民怨 [social discontent] as 'the anger of citizens'.	Hmm um.	RS	L
194	S23	I think 民怨 [social discontent] is similar to 民憤 [citizen's anger], so I translated it to 'make citizens be angry'.		RS	L
195	S14	I think 民怨 [social discontent] is the citizens unhappy, so I used 'unhappy'.		RS	L
196	S17	I Agree with him (S20), so I used 'citizens are angry'.		RS	L
197	S24	hmm… I have a problem in line 2: 開徵 [introduce]. I don't know how to express it. I used 'implement the tax policy'.	Hmm um.	C	L
198	S17	I used 'collect' to express 開徵 [introduce], but I agree with S24 (with the usage) implement…can (be) used to express 開徵[introduce] …	Louder …louder… {Pronunciation: implement}	RCS	L

199	S16	I have other suggestions. I translated it to 'introduce'.	Louder please…	RS	L
200	S19	…開徵[introduce] I think it's 開始徵收稅 [start to collect tax], so I use the verb 'collect' …I translated I that (as) 'collecting tax'.	Hmm um. ok?	RS	L
201	S14	I don't agree with you…開徵[introduce] is a new tax, but not start to tax…so I used 'the new taxation'.		RCS	L
202	S23	I don't agree with you, because I think 開徵 [introduce] means 開始徵收 [start to collect tax], so I used 'being to collect' <begin to collect>.	{Pronunciation: begin}	RCS	L
203	S21	But in here I used 'levy' because I remember (in the) last assignment 擁堵費… (the one about [congestion charge]) …我們曾用過[we have used this term]…簡單易記啊 [quite easy to recall].		RS	L
		NOTE: laughter	Yes, good?		
204	S15	And I have a new problem. I don't know how to express 打擊企業創新[deter business innovation], so I said 'hit the company to create new things', but I think it's …I have a little bit problem…		C	L
205	S17	'Destroy the creative (creativity) of company'.		RS	L
206	S24	'Company' is not the same meaning as 企業[enterprises].		RC	L
207	S15	No, I disagree with you, company means 企業[enterprises], but I think 'destroy' has a little abit problem. I think 'distract' may be better. 'Destroy' is too serious …it means 'it's totally don't have the creativity.	Ok, yes?	RCS	L

208	S17	But I think 打擊企業創新 [deter business innovation] is a very serious thing. It will cause the economy become worse, so I think it's a serious problem, so I use 'destroy'…it's better…	Hmm um. Yes?	RC	L
209	S20	But I think 'destroy' in Chinese means 毀滅 [destroy]. It's different with (from) 打擊 [deter]…I can't agree with you.	One by one, yes	RC	L
210	S23	I don't agree with him (S17) too. I think 'destroy' is not suitable in this sentence.		RC	L
211	S24	I don't agree with him (S17). I agree with both of them (S23 and S15): 'destroy' means something disappear, so I used 'punch'.		RCS	L
212	S17	I totally disagree all with you! 'Destroy' maybe can mean 毀滅[destroy], but it also can mean 打擊 [*literally combat, but in this context this verb refers to something like 'deter']		RC	L
213	S16	'Destroy' is more serious…I use 'fight the creation (creativity) of business'.		RCS	L
214	S15	I disagree with you. I think 'fight' means 'challenge', but I don't think this is a challenge, this is an attack.		RC	L
215	S17	Yeah, and I think 'fight' is for person, I don't know can it mean for things (if it can be used when associated with things), so this is my question…yes…		RC	L
216	S25	'Destroy' rather emphasizes the word… 'hit down or break down' is better than 'destroy'.		RCS	L

217	S20	In English, you won't use 'destroy the ISIS', you will just say 'strike the ISIS or hit the ISIS'…you know…as she (S15) said, if you use 'destroy', it means totally disappear. It's different, okay…		RC	L
218	S24	I have an idea…the answer to this question is so clear, so we should have another topic. I have some problem in line 4, I don't know how to express 分配不均 [*uneven distribution (of wealth)]. I used 'unaverage'. 'Average' means 平均 [average]…if opposite is it 'unaverage', 'disaverage' or something like that…?	<Do you mean 分配不均? 財富分配不均的, line 4>	C	L
219	S15	I think don't have this word…or maybe you can change it to a verb.		RC	L
220	S20	I used 'unbalanced'	Unbalanced?	RS	L
221	S25	'Unbalanced'…is it incorrect? Is it 'imbalanced[106]'?		RC	G
222	S24	Or 'disbalance'…?		RS	G
223	S17	I agree with her (S25) …'imbalance', and I think the others is (are) wrong, because I know 'imbalance' is the opposite form for 'balance'.		RC	G
224	S14	Imbalance…I agree with you.	Hmm um.	RS	G
225	S24	I agree with you too. *NOTE: Laughter*		RA	G
226	S15	I have problem to 最終造成資金外流[resulting in capital flight/ outflow] and I just said 'the funds go to other places'.		C	L

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[106] The concern in Turn 221-225 shifted from word choice to whether affixes un-, im- and dis- should be used and hence this was categorized as a grammatical LRE.

227	S24	I have an idea: I expressed it as 'it will cause money go outside'.		RS	L
228	S23	I translated it to 'finally result in money outflow'.	Hmm um.	RS	L
229	S14	I think 外流 [outflow] mean some …it's moving, so I used 'move to another place'.	{repetition: move to another place}	RS	L
230	S17	Because I think 外流[outflow] can mean 離開[leave], so I expressed it as 'leave to another place'.	Hmm um.	RS	L
231	S14	I don't agree with you. Money cannot 'leave'…		RC	L
232	S17	How can you know….so ensure that 'leave' cannot (be used) with things?		RE	L
233	S14	Maybe….Because the 'leave' is for people …not for things.		RE	L
234	S15	**Interruption: I don't agree with you. Love can leave. I don't agree with S17 too…because the money cannot leave by itself.		RC	L
235	S17	*Interruption: Why?		RE	L
236	S14	Money and love …is not all called things… Love is 很抽象的[something very abstract]; and money is 很具體的 [something very concrete]; they are not the same thing…		RC	L
237	S24	*interruption: I don't agree with you (S14)….. **continued after interruption: I don't agree with three of you. I can 'leave' can be used (collocated) with 死物及人[both things and people], so that's my idea.		RC	L

				Ok, good, but I think we are running out of time. Last one.		
238	S14	In Line 6 不管稅率有多高，不少富人仍然有辦法避稅 [many rich people can still find a way to avoid tax no matter how high the rates are]: This sentence is a bit complicated. I used 'even the tax (is) very high', but I'm not sure.	{Pronunciation: complicated} hmm um.	C	L
239	S24	I expressed it as 'despite the tax rate is high, many rich people also have ways to hide the tax'.		RS	L
240	S15	And I have another solution, I used 'it doesn't how high the tax are, many rich can still have ways to avoid paying tax'.	{Pronunciation: avoid}	RS	L
241	S23	I translated it as 'no matter how high is the tax rate, a lot of the rich still have method to avoid tax'.		RS	L
242	S20	no matter 'how high the tax rate is'…		RC	G
243	S24	no matter 'how high the tax rate is'…because it's not a question sentence…		RC	G
244	S23	It's a noun clause.		RC	G
245	S17	So there's a grammatical mistake…yes…		RC	G
246	S15	*Interruption: yes		RA	G
			Ok, we're running out of time, so…		

Experiment II: Task 4 of 5 NT-group (Students 1-13)						

Turn	Student	Transcript	Teacher	Identified themes	
				C/R	**L/G**
112	S3	I want to describe the Chinese 減少貧富差距 [narrow the gap between the rich and poor], I want to know what is the best describe (description), so I write: 'collecting more tax from the rich may reduce the range between the wealthy and poor'.		C	L
113	S7	'It can reduce the range of the poor get poorer'?	Hmm um.	RS	L
114	S2	I have a question. I don't know how to express 貧富懸殊[the disparity between the rich and poor], so I copied the title 'the rich get richer and the poor get poorer'.	Hmm um.	C	L
115	S12	I know the topic have 'the rich get richer and the poor get poorer', but I used 'the imbalance (between) the rich and poor'.		RS	L
116	S1	*Interruption: Yes, the title has 'the rich get richer and the poor get poorer'…easy problem…the title give you 'the rich get richer and the poor get poorer'…it's better.		RS	L
117	S10	*Interruption: No I think 'the imbalance of rich and poor' is okay. Another suggestion is 'the imbalance of property share in the society'.		RS	L
118	S2	I have a question: I don't know how to express 資源分配不公[unfair distribution of resources], and…no…just a blank <yeah, I don't know how to use>	Yes? Sorry again? Slightly louder <資源公配不公? And you used? You just keep it blank?>	C	L
119	S7	My suggestion is the 'social source <resource> (is) unfair to share'.	{Pronunciation: resource}	RS	L

120	S13	For your case, 'the phenomenon of resource separation'?		RS	L
121	S7	I don't know how to express 社會失衡 [imbalance (of power/wealth) in society], so my solution is 'the social being imbalance'.		C	L
122	S3	I used 'social unrest' …No I have worked on this so I remember.	Hmm um.	RS	L
123	S6	*Interruption: I'll use 'social lost the balance'….	Hmm um.	RS	L
124	S6	I have a problem. I don't know how to explain 累進稅 [progressive taxation]. Yes, I use…**continued after being interrupted: …Let me say first please? I used…. 'such as buying house, if buy more house to pay more tax', so… *NOTE: another student noted that respect is needed.*	Hmm um. Yes?	C	L
125	S7	My solution is 'collecting more tax from the rich'. Is this okay to replace 累進稅 [progressive taxation] (with) 'by collecting more tax from them'?		RS	L
126	S13	*interruption: I have the same problem, but mine is 累退制 [regressive taxation]… **continued after interruption: Progressive system 累進稅 [progressive taxation]…it means to collect tax range depending on the rich's property…so that (so)…for my 累退制 [regressive taxation] it's 'regressive'. I don't know how… I just write in a long sentence: 'the government could collect the tax ….depend(ing) on their range …if they're rich…specific amount…then can reduce their tax' Yes… I use a long sentence to describe this…		C	L
		(Silence)	Anyone wants to share their opinion or concern they have?		
127	S2	I have problem …how to translate (express) 罪行 [crime]…I translate (express) to 'social problem'.		C	L

128	S7	'Crime'…		RS	L
129	S11	(Should it be) 'will be happen' or 'will happen'? The problem 'will be happen' or the problem 'will happen'?		C	G
130	S3	*Interruption: I think 'will happen' is the best choice.	One by one <Will happen?>	RC	G
131	S2	*Interruption: me too, I think 'will happen'.		RC	G
			Ok, anything else?		
132	S3	I have a question. I want to say if collecting more tax from the rich, the rich will immigrant (immigrate) to other country. I don't know if (the word) 'immigrant' to other countries….Is it… have a problem (Is it problematic)?		C	L
133	S7	'Immigrant (immigrate) to other countries' …my suggestion is same as you.		RS	L
134	S2	'go to another country'?	Hmm um.	RS	L
		(Silence)	Anyone else?		
135	S7	I don't know how to express 自由財產權 [freedom of property rights]. It's because I think that if the government want to collect more tax from them, it will violate the right of property…Ok, any problem? **Continued after being interrupted: so my solution is 'the right of freedom of property'. *NOTE: students whispering about the meaning of the Chinese 財產[property].*		C	L
136	S3	*Interruption: 'freedom of property'!		RS	L
137	S2	'Property right'?		RS	L
138	S6	I think 'property right' is okay…		RC	L

139	S13	*Interruption: 'Property right freedom' is okay…		RS	L
140	S5	I am quite uncertain about the expression: I wanted to say 社會資源重新分配 [redistribution of social resources].**Continued after being interrupted: In my way, I translated it as 'social resources'.		C	L
141	S10	*Interruption: 'The re-division of source in the society'.	Ok?	RS	L
142	S12	I think 'imbalance' …'division the resource'…. Can I use this one?		RS	L
143	S1	What 'division'...?		RF	L
144	S12	And I don't know how to express 遊行[demonstration]. Is it 'demonstration'?	Is that another question? Ah ok…	C	L
145	S11	Can I use 'movement'? 'Event'? *NOTE: Laughter*		RS	L
146	S5	Can I ask another question? I don't know how to express 經濟衰退[economic depression]…		C	L
147	S9	'Economic move slowly'…	<How to you spell..? economic or economy?>	RS	L
148	S1	'Economy decline'… 'decrease'…		RS	L
149	S5	I want to ask how to express 經濟危急的狀況 [economic crisis]. I expressed this sentence as 'economic problem in urgent period'?		C	L
150	S8	'Terrible economic condition'?	<Terrible what?>	RS	L
151	S12	'Urgent economic situation'?		RS	L

152	S11	I have one question…(How to express the term) 福利[welfare]?	Hmm um.	C	L
		(Silence)	…Anyone else?		
153	S5	(I don't know how to express) 基礎建設[infrastructure]…		C	L
154	S10	'Foundation'…		RS	L
155	S12	'Basic facility'?	Uh huh?	RS	L
156	S8	Can I…? I don't know how to 組織運動[organize a movement], so I express it into 'plan a movement'. Can (do) you have a better example for me?		C	L
157	S5	I will translate <express> it as 'the activity of organization'.		RS	L
158	S12	'Organization function'?	Ok?	RS	L
159	S11	And I don't know how to express 民怨 [social discontent]. My solution is 'complain'.		C	L
160	S5	*Interruption: How about 'dispute'?	{Pronunciation: dispute}	RS	L
161	S1	*Interruption: 'Dissatisfied'	{Repetition: Dissatisfied}	RS	L
162	S5	'Civil unrest'. I learn it from your…you gave me some paper about the Chinese… 我有看過那報紙 [I have read the news article (you gave us)].	Ok, yes?	RS	L
163	S1	One sentence: 政府的角色就像一個中間人[the government's role is like a mediator]…..'the role of government is such as (like) a middleman'.		C	L
164	S10	'The character of government act as a bridge'…橋樑[bridge] is 'bridge'…		RS	L

165	S11	I don't know how to translate (write) '社會向上流動' [the society's upward mobility]. I use 'level up'. *NOTE: Laughter*		C	L
166	S10	(What about the expression for) 撤銷工廠 [withdraw plant]? I used 'move out'…		C	L
167	S5	'Move out their company'? <I used moved out their company>	<What did you say?>	RS	L
		(Silence)	Anyone wants to share their opinion or concern they have?		
			Anything else? Last two minutes?		
168	S6	I don't know how to explain 資產階級革命 [Bourgeois revolution]…		C	L
169	S3	*Interruption: 資產階級[Bourgeois] …. 'middle level' …?		RS	L
170	S7	資產 [assets]… 'money level of'…		RS	L
		NOTE: Laughter	Yes? What did you say?		
171	S2	'Property' is 資產[assets]…階級[class] is 'level'….so….		RS	L
172	S13	*Interruption: 'Property pass' (party)… 'the revolution of property level'….pass (party)…黨[party]	<pass? What pass? {Pronunciation: Party}	RS	L
173	S2	(Do you mean) 'Party'?		RF	L
		(Silence)	Anyone else? Any difficulty experienced in writing this?		
			Anything else? Anyone wants to share their opinion or concern they have?		
		Thank you!	Any other? If not then that's all!		

Appendix 5A: Discussion Patterns of T-group versus NT-group in Experiment I

T-Group (Participants 1-13)																		
Discussion 1 (D1)																		
1-5	C	RS	RS	RS	RA													
6-7	C	RS																
8-16	C	RS	RS	RS	RS	RS	RS	RS	RS									
17-20	C	RS	RS	RS														
21	C																	
22-24	C	RS	RS															
25-29	C	RS	RS	RS	RS													
30-34	C	RS	RS	RS	RS													
35-40	C	RS	RS	RS	RS	RS												
41-49	C	RS	RA	RS	RS	RA	RS	RS	RS									
50-67	C	RA	RS	RS	RS	RS	RS	RS	RS	RS	RS	RS	RE	RS	RS	RS	RS	RS
68-75	C	RS	RS	RS	RS	RS	RS	RS										
76-79	C	RS	RS	RS														
80	C																	
81	C																	
82-83	C	RS																
Discussion 2 (D2)																		
84-92	C	RCS	RS	RS	RS	RS	RS	RS	RS									
93-105	C	RS	RS	RS	RS	RS	RS	RA	RA	RC	RS	RS	RS					
106-109	C	RS	RS	RS														
110-116	C	RS	RS	RS	RS	RCS	RA											
117-125	C	RS	RS	RS	RS	RCS	RS	RC	RC									
126-127	C	RS																
128-134	C	RS	RS	RS	RS	RS	RS											

135-140	C	RS	RS	RS	RS	RS							
141-147	C	RS	RS	RS	RS	RS	RS						
148-150	C	RS	RS										
151-156	C	RS	RS	RS	RS	RS							
157-162	C	RS	RS	RS	RS	RS							
Discussion 3 (D3)													
163-171	C	RS	RS	RA	RS	RS	RS	RS	RS				
172-176	C	RS	RA	RS	RA								
177-181	C	RS	RS	RS	RS								
182-194	C	RS	RS	RS	RS	RS	RE	RE	RC	RC	RS	RC	RS
195-199	C	RS	RS	RS	RC								
200-203	C	RS	RS	RS									
204-208	C	RS	RS	RS	RS								
209-214	C	RS	RS	RS	RS	RS							
215-220	C	RS	RS	RS	RS	RS							
221-228	C	RS	RS	RS	RC	RF	RF	RS					
229-236	C	RS	RS	RS	RS	RS	RS	RS					
Discussion 4 (D4)													
237-240	C	RS	RS	RS									
241-247	C	RS	RS	RS	RF	RCS	RC						
248-260	C	RA	RS	RS	RS	RC	RE	RF	RE	RC	RC	RS	RS
261-265	C	RS	RS	RS	RC	RS	RS	RS	RS	RC			
271-274	C	RS	RS	RS									
275-285	C	RS	RS	RS	RS	RS	RS	RA	RA	RS	RS		
286-289	C	RS	RS	RS									
Discussion 5 (D5)													
290-297	C	RS	RS	RS	RC	RS	RC	RS					
298-299	C	RS											

300-304	C	RS	RS	RS	RS					
305-314	C	RS	RS	RC	RS	RS	RS	RC	RCS	RS
315-320	C	RS	RS	RC	RS	RC				
321-326	C	RS	RS	RS	RS	RS				
327-335	C	RS	RS	RS	RA	RS	RS	RS	RS	
336-341	C	RS	RS	RS	RS	RS				
342-348	C	RS	RS	RS	RS	RS	RS			
349-352	C	RS	RS	RS						
353-358	C	RS	RF	RS	RS	RC				
359-360	C	RS								

NT-Group (Participants 14-26)						
Discussion 1 (D1)						
1	C					
2-4	C	RS	RC			
5-6	C	RS				
7-9	C	RS	RS			
10-13	C	RS	RE	RC		
14-15	C	RS				
16-19	C	RS	RS	RC		
20-23	C	RS	RS	RC		
24-29	C	RS	RC	RS	RC	RC
30-33	C	RE	RE	RS		
34	C					
Discussion 2 (D2)						
35	C					
36	C					
37	C					
38	C					

39	C				
40-41	C	RS			
42	C				
43-44	C	RS			
45	C				
46-49	C	RS	RS	RS	
50	C				
51-55	C	RS	RS	RS	RS
56	C				
57-59	C	RS	RS		
60-61	C	RS			
62-64	C	RS	RS		
Discussion 3 (D3)					
65-69	C	RS	RS	RS	RS
70-71	C	RS			
72	C				
73-74	C	RS			
75	C				
76	C				
77	C				
78-80	C	RS	RE		
81	C				
82-85	C	RS	RS	RC	
86	C				
87	C				
88	C				
89	C				
90	C				
91	C				
92	C				
93-95	C	RS	RS		
96	C				

Discussion 4 (D4)						
97	C					
98	C					
99	C					
100	C					
101	C					
102-103	C	RF				
104	C					
105	C					
106	C					
107-108	C	RS				
109	C					
110	C					
111	C					
112	C					
113-115	C	RS	RC			
116	C					
Discussion 5 (D5)						
117-118	C	RS				
119-120	C	RS				
121	C					
122	C					
123-125	C	RS	RS			
126	C					
127-128	C	RS				
129-131	C	RS	RS			
132-137	C	RS	RS	RC	RC	RCS
138-139	C	RS				
140-146	C	RS	RS	RS	RS	RS	RC
147	C					
148-150	C	RS	RS			
151	C					

Appendix 5B: Discussion Patterns of T-group versus NT-group in Experiment II

T-Group (Participants 14-26)																	
Discussion 1 (D1)																	
1-12	C	RS	RS	RS	RS	RA	RS	RS	RS	RS	RS	RS						
13-23	C	RS	RS	RS	RE	RE	RS	RS	RC	RC	RC							
24-30	C	RS	RS	RS	RS	RS	RS											
31-39	C	RS	RS	RS	RS	RS	RS	RS	RC									
40-56	C	RS	RS	RE	RE	RC	RC	RS	RCS	RC	RC	RC	RC	RC	RCS	RC	RA	
57-60	C	RS	RS	RS														
61-65	C	RS	RS	RS	RS													
Discussion 2 (D2)																		
66-74	C	RC	RC	RC	RC	RC	RC	RC	RC									
75-78	C	RS	RS	RS														
79-83	C	RS	RS	RS	RS													
84-91	C	RCS	RC	RC	RC	RC	RC	RC										
92-101	C	RCS	RS	RS	RCS	RS	RCS	RCS	RC	RC								
102-111	C	RS	RCS	RF	RS	RS	RC	RS	RS	RC								
Discussion 3 (D3)																		
112-116	C	RCS	RCS	RCS	RS													
117-119	C	RS	RS															
120-125	C	RS	RS	RS	RS	RS												
126-127	C	RS																
128-136	C	RS	RS	RS	RC	RC	RC	RC	RS									

Lines																		
137-141	C	RS	RF	RS	RS													
142-153	C	RCS	RS	RC	RC	RC	RC	RCS	RS	RE	RE	RS						
154-157	C	RS	RS	RC														
158-163	C	RS	RS	RS	RS	RA												
164-173	C	RS	RE	RE	RE	RC	RC	RS	RS	RC								
Discussion 4 (D4)																		
174-180	C	RCS	RS	RS	RS	RCS	RCS											
181-188	C	RS	RS	RS	RC	RCS	RC	RCS										
189-196	C	RS	RS	RC	RS	RS	RS	RS										
197-203	C	RCS	RS	RS	RCS	RCS	RS											
204-217	C	RS	RC	RCS	RC	RC	RC	RCS	RC	RCS	RC	RC	RCS	RC				
218-225	C	RC	RS	RC	RS	RC	RS	RA										
226-237	C	RS	RS	RS	RS	RC	RE	RE	RC	RE	RC	RC						
238-246	C	RS	RS	RS	RC	RC	RC	RC	RA									
Discussion 5 (D5)																		
247-252	C	RS	RS	RS	RS	RC												
253-254	C	RS																
255-265	C	RS	RS	RC	RS	RS	RA	RA	RC	RC	RS							
266-271	C	RS	RE	RE	RC	RS												
272-276	C	RS	RS	RS	RS													
277-298	C	RS	RS	RS	RS	RF	RC	RC	RC	RC	RC	RC	RC	RC	RA	RC	RC	RC
	RA	RC	RC	RC														
299-311	C	RS	RS	RS	RS	RC	RC	RC	RC	RCS	RC	RC	RC					
312-323	C	RS	RS	RA	RCS	RC	RC	RC	RC	RC	RC	RC						

NT-Group (Participants 1-13)				
Discussion 1 (D1)				
1	C			
2	C			
3	C			
4	C			
5-6	C	RS		
7	C			
8-9	C	RS		
10	C			
11	C			
12	C			
13	C			
14	C			
15-19	C	RF	RF	RC	RF
20-21	C	RS		
22	C			
23	C			
24-25	C	RS		
26	C			
27	C	RC		
Discussion 2 (D2)				
29-32	C	RS	RE	RE
33-36	C	RS	RE	RCS
37-39	C	RE	RE	
40	C			
41-44	C	RF	RF	RS
45-46	C	RF		
47	C			
48	C			
49-50	C	RS		
51-52	C	RS		

53	C							
54-57	C	RS	RS	RS				
58-62	C	RS	RS	RS	RS			
63-64	C	RS						
65-66	C	RS						
Discussion 3 (D3)								
67	C							
68-69	C	RS						
70-73	C	RF	RS	RE				
74-77	C	RS	RS	RS				
78-79	C	RS						
80	C							
81	C							
82-83	C	RS						
84	C							
85-86	C	RS						
87-91	C	RS	RC	RS	RS			
92-95	C	RS	RS	RS				
96	C							
97-105	C	RS	RS	RS	RS	RS	RC	RF	RS
106-109	C	RS	RS	RS				
110-111	C	RS						
Discussion 4 (D4)								
112-113	C	RS						
114-117	C	RS	RS	RS				
118-120	C	RS	RS					
121-123	C	RS	RS					
124-125	C	RS						
126	C							
127-128	C	RS						
129-131	C	RC	RC					
132-134	C	RS	RS					

135-139	C	RS	RS	RC	RS
140-143	C	RS	RS	RF	
144-145	C	RS			
146-148	C	RS	RS		
149-151	C	RS	RS		
152	C				
153-155	C	RS	RS		
156-158	C	RS	RS		
159-162	C	RS	RS	RS	
163-164	C	RS			
165	C				
166-167	C	RS			
168-173	C	RS	RS	RS	RS	RF
Discussion 5 (D5)					
174-175	C	RS			
176-177	C	RS			
178-179	C	RS			
180-182	C	RS	RS		
183-185	C	RS	RS		
186	C				
187-188	C	RS			
189-190	C	RS			
191	C				
192	C				
193-194	C	RS			
195	C				
196-200	C	RS	RS	RS	RS
201-202	C	RS			
203-206	C	RS	RS	RS	
207-209	C	RS	RC		
210	C				
211-212	C	RS			

213-214	C	RS		
215-216	C	RS		
217-220	C	RF	RS	RS
221-222	C	RS		
223-225	C	RS	RS	
226-227	C	RS		
228	C			
229	C			
230	C			
231	C			
232	C			
233	C			
234	C			

Appendix 6A: Lexical Improvements across Five Tasks in Experiment I

Task	Improved terms	Replaced terms	T-group (Students 1-13)	NT-group (Students 14-26)
1	detain*	arrest, suspect, jail, put into jail;[107] caught, caught	S7, S10, S11, S13	S14, S22
	tolerant*[108]	accepted attitude, attitude of acceptable, silent attitude, cannot stand, be silent, keep silence;	S3, S4, S6, S8, S9, S10	
	obligation *	responsibility, duty, need, have to, should	S3, S5, S7, S9, S12, S13	
	exempt*	excused, don't have to be guilty, avoid any penalty, cannot run away, crime excuse, should have no punishment, be free from, a privilege to escape, amnesty, not given punishment	S1, S3, S4, S5, S7, S8, S9, S10, S12, S13	
	celebrity*[109]	stars, stars, stars, idols, famous people, artists, star, artists, famous stars; famous person, famous people, stars	S2, S3, S4, S5, S6, S7, S8, S9, S11	S16, S17, S25
	marijuana*	*durg*, drugs, weed, drugs, drugs, poisonous drugs, drugs, drugs, weed, drug; poison-drug	S2, S3, S4, S6, S7, S8, S9, S11, S12, S13	S22
	distort	Twist, change, mislead, twist	S2, S8, S9, S12	
	ruin	destroy, broken, got no more future, over; broken	S3, S8, S10, S11	S20
2	afford*	take, take, pay, withstand	S1, S11, S12, S13	
	compensate*	pay, benefit and repay, comfort, avoid the coming loss	S2, S3, S9, S13	
	incentive*	motive, good reason, motivation, be willing to, reason, reason; motive	S1, S3, S4 S7, S9, S12	S22
	landlord*	owner, owner, owner, owner, owner, building owner; owner,	S1, S2, S7, S11, S12, S13	S15, S18, S21, S22, S26

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[107] Expressions listed after this semicolon are from the NT-group.

[108] Lexical expressions presented here were occasionally used in different grammatical form. Only the most commonly used form is presented.

[109] Lexical items that appeared in parallel texts are marked by the symbol '*'.

		renter, home owner, house owner, owner of the house		
	intervention*	influence, disturbing, control, factor that affect, take part, interruption, touch	S1, S2, S3, S5, S6, S8, S10, S11	
	maintenance*	*mantanence*, fix, checking and repairing, protect, maintain job, fix; *repairence*, repair	S2, S3, S4, S5, S9, S12,	S15, S23
	public consultation*	public survey, public discussion, public research, a survey on public, public conference with all citizens, public investigation, public opinion survey, ask the public	S2, S4, S5, S6, S7, S8, S9, S11, S12	
	Implement	take, use, use, use; run	S2, S6, S8, S12	S18
	feasible	working, can carry out, going to work, work	S2, S4, S6, S12	
3	altruistic/altruism*	beneficial to others, unselfish behavior, beneficial action, benefiting other people	S1, S2, S10, S11	
	nominate*	choose, chosen, tag, name, name, tag	S1, S2, S5, S6, S10, S13	
	campaign*	activity, (omission), event, activity, activity, activity; activity, activity	S1, S4, S5, S6, S11, S12	S16, S18
	narcissistic behavior/ narcissism*	(omission), selfishness, self-love manner, self-affection-based action, *nacisism*[110], self-love, showing-off act, satisfied themselves	S1, S2, S4, S5, S10, S11, S12, S13	
	rare (disease)*	unfamiliar, special, (omission), special, *rell*, weird, *inordinary*, special; uncommon	S1, S2, S5, S8, S10, S11, S12, S13	S23
	innovative	progressive change, brand-new, creativity, new way	S2, S3, S7, S8	
	environmentally-friendly	environmentally, environmental protection, eco-friendly, good for the environment	S2, S4, S11, S12	
4	harass*	shame, shame, disturb, trouble, bother, disturb	S1, S4, S6, S9, S11, S13	

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[110] Misspelled and words that do not exist are italicized.

	ridicule*	laugh at, laugh, laugh, laugh, make fun of, laugh at; laugh	S1, S4, S5, S6, S10, S11	S25
	legislate*	make law, make the law, make some law, law-making, make law, make the law; law-making, use law	S2, S3, S5, S6, S9, S11	S25, S26
	commit suicide*	suicide, kill themselves, kill themselves, suicide, kill themselves, kill themselves; carry out suicide, kill themselves	S1, S2, S4, S6, S8, S13	S14, S15
	abusive*	insult, (omission), blaming, bad, bullying, *insultive*, impolite; bad	S2, S3, S4, S6, S9, S10, S12	S25
	anonymous*	not require to provide any identity, don't need to provide their names, take a unknown name, unknown, don't need to write down the true name, (omission), secret, can hide their information; (omission), keep their position in secret	S1, S4, S6, S7, S8, S11, S12, S13	S20, S23
	intimidate*	threaten, threaten, threaten, threaten, threaten, threat, frighten	S2, S3, S4, S5, S10, S12, S13	
	criminalize*	Include…as criminal behavior, illegalize, make…illegal, crime, illegalize, illegalize, implement new law to go against	S1, S4, S7, S9, S11, S12, S13	
	Defamation*	Say things that are not true, faking things, faking news, faking news, wrong accusation, slander, say fake and wrong thing, serious lies that hurt people; say false things	S2, S4, S5, S6, S9, S11, S12, S13	S25
	spread rumors*	lie, spread something fake, sent something rumour, spread some unreal messages, say bad words, say something bad, spread *rummons*, spread rumis, use internet to spread lies	S2, S4, S5, S6, S7, S8, S9, S11, S12	
5	conducive*	better, good, benefit, good, good	S1, S2, S4, S5, S6	
	reproductive*	give-birth, production, birth, giving-birth, birthing	S2, S3, S8, S11, S13	
	decline*	become weaker, decrease, decrease, get lower, decrease, decrease, lower, decrease; decrease	S1, S3, S4, S8, S9, S10, S11, S12	S21

Matchmake/matchmaking*	pull closer, link, help, let …match, dating, men and women party; activities, activities	S1, S2, S4, S6, S8, S9	S15, S16
paternity leave*	birthing holiday, special holidays for father, holiday, holidays after and before give birth, holiday for fathers, the holiday of giving birth a baby for male, the holiday of fathers, after-birth holiday, serving giving birth holiday, father's birth holiday, serving holiday; leave	S1, S2, S3, S4, S6, S7, S8, S9, S10, S11, S12	S24
maternity leave*	birthing holiday, special holidays for mother, holiday, holidays after and before give birth, fertility leave for women, holiday for mothers, the holiday of giving birth a baby for female, the holiday of women who birth baby, after-birth holiday, giving birth holiday, pregnancy holiday, birth holiday; birth leave, baby-care holiday, enough holiday to look after their children	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12	S21, S22, S25
allowance	bonus, bonus, money, bonus, money	S3, S7, S8, S12, S13	
fertility	giving-birth ability, ability to have babies, production, female's birth ability, birthing, ability of giving birth a baby of women, give birth ability	S1, S2, S3, S5, S6, S7, S11	
flexible	free, free, free, freer, elastic, free, elastic, *flxisble,* free	S2, S3, S5, S6, S7, S8, S9, S10, S12	
aggravate	worsen, lead to, worsen, heavier	S6, S7, S9, S10	

Appendix 6B: Lexical Improvements across Five Tasks in Experiment II

Task	Improved terms	Replaced terms	T-group (Students 14-26)	NT-group (Students 1-13)
1	impose* (charges)	receive, collect, take, introduce	S15, S20, S22, S23, S25	S5, S6
	implement*	do, introduce, issue, process, provide, use	S14, S15, S16, S22, S23	S1, S2, S8, S12, S13
	ease*	improve, solve, reduce, will be better, relieve	S14, S15, S18, S20, S21, S25, S26	S7, S12
	emission*	pollution, pollution caused by cars, waste	S15, S16, S18, S20, S21, S22, S23	S4, S6
	capacity*	volume, loading, load, amount of bus, amount of loads, bus could take more and more people, capesity	S14, S15, S18, S19, S20, S22, S23, S24	S10, S11
	adjust	change, reset	S14, S15, S16, S22	
	exclusive	Unique, only, specific, special, privacy, special, particular	S14, S19, S20, S22, S23, S24, S25	
	deter	stop, discourage	S15, S16, S19, S20	
2	transparent/transparency*	Visibility, clear view, clean and clear, clearer, *transparention, clarity, clear, opened to public, invisibility, obvious, clear, clear; (omission)	S14, S15, S16, S17, S18, S19, S20, S21, S23, S24, S25, S26	S3
	bribery/bribe*	Through accept money from others who want something from them, money-related corruption, dirty money, corruption such as taking money from others, corruption, money, corruption, accept money, corruption; dirty money	S14, S16, S17, S18, S20, S21, S23, S24, S26	S10
	combat* (corruption)	Attack, attack, fight, reduce all of, anti-corruption; fight	S17, S19, S20, S21, S24	S12
	compensate/ compensation*	Help pay, repay, pay back, pay, treat, treat; pay back	S15, S18, S20, S21, S24, S26	S5
	controversial (problem)	Argue, which was discussed intensely, arguable, big,	S14, S15, S16, S18, S20, S21,	

		argumentative, very arguable, which full of argue, *agrued*, hit	S22, S23, S24	
	personal gain	Personal benefit, earn the self benefits, get own wealth by themselves, earn personal things	S14, S18, S19, S24	
	remuneration	salary, wealth, pay, salary	S16, S19, S24, S26	
3	condemn*	Blame, blame for, go against, complain, blame, disagree, blame, complain, against, complain	S14, S15, S16, S17, S18, S19, S20, S24, S25, S26	
	slaughter*	Massive killing, killed incident, incident that many people were killed, murder, butcher, murder, murder	S14, S15, S16, S17, S20, S21, S24	
	core (value)*	Main, main, own, inner, important, vital, main, main, central, central	S14, S15, S17, S18, S19, S20, S21, S22, S24, S25	
	provocative*	Bad, aggressive, penetrating, *provokking*, hateful, annoying, sensitive, bad, bad, annoying	S14, S15, S16, S17, S19, S20, S21, S22, S23, S24	
	ridiculed*	Made fun of, teased, laughed, laugh at, make fun, laugh at, made fun and laughed at, made fun of	S14, S15, S16, S17, S18, S19, S20, S22	
	revenge*	Hurt others, pay back, treat them, harm others, return, fight back, hit back, return others	S14, S15, S18, S19, S20, S21, S23, S24	
	defend*	Protect, keep, protect, prevent, protect; protect	S15, S18, S22, S24, S26	S2
	civilized	*civalised*, *curtural*, culture, educated, culture, *civalised*	S14, S15, S17, S18, S19, S20	
	trample	Step, defile, step on, step on, harm, destroy	S14, S17, S18, S20, S23, S25	
	demonstrate	Protest, go against, go to streets, fight, parade	S14, S16, S17, S24, S25	
	tragedy/tragic	*trajedy*, nightmare, disaster, sad, disaster, sad ending, conflict, sad ending, unhappy incident	S14, S15, S16, S17, S19, S20, S21, S23, S24	
	massacre	Culture, killing, kill incident, murder, violent behavior	S18, S19, S23, S25, S26	

	launch (attacks)	Occur, make, make, make, create, create	S15, S16, S17, S18, S21, S26	
4	social unrest*	Social problems and confusion, the confusion of society, social unstable, social problems, social instability, social mess, social disagreement, mess to society, the society wouldn't be safe; social problem, social mess	S14, S15, S16, S18, S20, S21, S22, S23, S25	S3, S5
	social discontent*	Dissatisfaction, get anger from the public, anger of citizens, the people's opposition, some citizens be angry, citizen dislike; dissatisfied	S15, S18, S20, S22, S23, S24	S13
	assets*	Money, property, property, money, money, properties, capital, money, property; money, funds, money	S14, S15, S16, S17, S18, S19, S20, S21, S22, S23	S3, S11, S12
	revenue*	Money of tax, money, incomes, income, income, tax, income; money, tax or fund, money, money, money	S14, S17, S18, S19, S21, S23, S25	S3, S7, S11, S12, S13
	entrepreneur*	Bosses, industrialists, corporate bosses, businessmen, *entrepers, company heads, big bosses, businessmen, businessmen, business, bosses, suppliers; financial group	S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S26	S6
	(tax) loopholes*	Law holes, bug, tax hole, bug, problems, avoidance, wound, problems, hole, bug, illegal gap, leak	S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S25, S26	
	(wealth) accumulation*	Saving, gather, gathering, saving, collection, storage, collection, reserve, saving, collecting, saving	S14, S15, S16, S17, S18, S20, S21, S22, S24, S25, S26	
	prosperity*	development, boom, future, development	S18, S20, S21, S25	
5	affordability*	Ability of burden, ability to pay, burden ability, burden ability, abilities to take burden, afford power, ability to afford, ability, purchase ability, ability to pay	S14, S16, S17, S18, S19, S20, S21, S22, S23, S24	

repay/repayment*	Pay back the money, refund, pay, give back money, pay, pay back, return, pay, pay, pay; pay back,	S14, S15, S16, S17, S18, S19, S20, S22, S23, S24, S26	S4
interest rate*	Interest, interest, tax, bank rates, money interest, interests, rate	S14, S15, S16, S17, S18, S20, S21, S22	
property*	House, house, housing, building, house, building; falt, apartment, house	S14, S20, S21, S22, S25, S26	S2, S9, S11
down payment*	First payment, first payment, mortgages, first pay, first payment, paying the priority, first payment, first payment, first payment, payment, first payment, first payment; prior payment, first payment, first payment, first payment, the money to pay first, first-time payment, first pay, first payment	S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26	S1, S2, S5, S6, S7, S8, S10, S13
assess*	check, estimate, consider, comment, consider, estimate	S14, S18, S19, S22, S23, S26	
soaring*	Increasing, rising, rising, rising; an explosion of, rising, rising	S14, S17, S19, S25	S2, S4, S13
burst	Blow up, break, broken, blow, bomb, bomb, blow up	S14, S15, S17, S19, S21, S22, S26	

Appendix 7: Samples of students' translation and writing

Part I - Translation assignment (Draft)

PART I: DRAFT
Instructions: The following text discusses some views on cyberbullying: What is cyberbullying?
Why is it so common? What could happen to those who are bullied? What should the government do?
Translate it into English. The paragraph should be approximately 200 words in length.
Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

隨著社交網站日漸普及，網絡欺凌亦日益嚴重。人們能輕易地利用互聯網散播謠言、羞辱、騷擾、或恐嚇他人。 由於在網絡上可匿名發言，大家往往無須為自己的言行負責，可刻意在網上分享令他人尷尬的影像，加以嘲笑。當發生具爭議性事件時，很多人在未了解內情前便對他人的私事妄下定論，有些則發表惡意評論、以辱罵性言詞攻擊他人，甚至將受害者的個人資料在網上公開。事實上，網絡欺凌可能比起傳統的面對面欺凌更具殺傷力 。由於網上訊息傳播得很快且不易移除，被欺凌者往往會承受受巨大壓力及情緒困擾，直接影響其日常生活。心靈較脆弱的人，更可能會患上抑鬱症，最後因持續的精神折磨而自殺。為了打擊此類網上暴力，政府有必要透過立法來保護遭受網絡欺凌的受害者，可考慮將在網上侵犯他人私隱、誹謗或恐嚇等行為刑事化。

Social webside has become common. Therefore, cyberbullying also has become more and more serious. People can easily use internet to say something bad, insult, disturb and threat others. People usually share some movies which makes other people embarase. And they don't need to take any responsibility with their saying because they don't need to write down the true name in the internet. Most people comment some bad things, use some bad words to attack others and even publish the personal information of the victims before they even know the fact of the argue things. In fact, Cyberbullying may more serious than the traditional bully. The messages of the internet can spread so fast and do not easy to delete. Thus, people who is bullied usually bear a large pressure and their mind always feel bad. It affect their lives (directly). People whose mind is weak may got ill and then they may kill themselves because they always unhappy. Government should make a law to fight cyberbully and protect the victims. In addition, Government can crime the behaviors which violate others' privacy, say something not true about others or threaten others.

Part II - Translation assignment (Revision)

PART II: REVISION

Instructions: Please revise your translation with the help of the three given texts. Pay special attention to your language usage. (Duration: 40 minutes)

Social network has become common. Therefore, cyberbullying also has become more and more serious. People can easily use the internet to spread rumours, insult, disturb and threaten others. People usually share some movies which make other people feel embarrassed. And they don't need to take any responsibility with their saying and behavior because they can stay anonymous in the internet. Most people comment some bad things, say something insulting to attack others and even publish the personal information of the victims in the internet before they even know the fact of the controversial issues. In fact, cyberbullying may be more harmful than the traditional bullying. The messages of the internet can spread so fast and do not easy to delete. This, people who is bullied usually hear a large pressure and have negative emotion. It (directly) affects their lives. People whose mind is weak may get depressed and commit suicide because of continuous mental suffering. Government should enact a law to fight cyberbullying and protect the victims. In addition, Government can criminalize behaviors which violate others' privacy, defame others or threaten others.

Part I - Writing assignment (Draft)

PART I: DRAFT

Instruction: In your opinion, what is cyberbullying? Why is it so common? What could happen to those who are bullied? What should the government do?

Your paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

Cyberbullying is a bad behavior in Internet. Nowadays, people can express all their thought, whatever that's positive or negative. They express what they think exactly, but most of the people wouldn't think cyberbullying can affect one's mind. Cyberbullying is very common in Internet, but why people always do such a bad thing to other people? I think one of the reasons is more and more young people nowadays do not respect other's personal issue, and they don't care about other's feeling, I think that's a big failure in education. Cyberbullying can cause a serious result. It may affect one's confidence or children's growing, when cyberbullying becomes more and more serious, it could become a society problem. Finally, I think government should give a good example to young people from education, school should tell them that's a really a bad behavior. Government should also establish a law to attack cyberbullying so that fewer and fewer people will be hurt by this bad behavior and people will not easily try this action. I think we should all support this no matter what because it is influencing too many people around the world nowadays.

Part II - Writing assignment (Revision)

PART II: REVISION

Instructions: Please revise your writing with the help of the three given texts. Do not change the content or paragraph organization. Pay special attention to your language usage.

(Duration: 40 minutes)

Cyberbullying is a bad behavior in Internet. Nowadays, people can express all their thought and feeling, whatever that is positive or negative. They express what they think directly but most of the people wouldn't think cyberbullying can affect one's mind. Cyberbullying is very common in Internet, but why people always do such a bad thing to other people? I think one of the reasons is more and more young people nowadays do not respect other's personal issue, and they don't care about other's feeling. I think that's a big failure in education. Cyberbullying can cause a serious result. It may affect one's confidence or children's growing. When cyberbullying become more and more serious, it could become a society problem. Finally, I think government should provide a good example to young people from education. school should tell them that's a really bad behavior. Government should also establish a law to attack cyberbullying so that fewer and fewer people will particular be hurt by this bad behavior and people will not easily try this action. I think we should all support this no matter what because it is influencing too many people around the world nowadays.

Part I - Translation assignment (Draft)

PART I: DRAFT

Instructions: The following text briefly describes some consequences of the phenomenon where the rich get richer and the poor get poorer, followed by discussion on the positive and negative impacts of collecting more tax from the rich. Translate the text into English. The paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

貧富懸殊幾乎是所有發達國家與地區的通病。社會資源分配不公，財富過度集中於少數超級富豪手上，容易引起民怨，帶來社會動亂。 有人提出透過開徵或增加富人稅來收窄貧富差距。無疑，這政策有助增加稅收總額，新增收入可用來紓緩中產及基層的負擔，長遠來說或許能減輕財富分配不均的問題，讓社會更穩定地成長。然而，加稅有可能會促使超級富人或企業家將資產或業務轉移到稅率較低的地方，甚至以移民的方式避稅，最終造成資金外流。與此同時，這政策可能會讓嚇怕潛在海外投資者，影響就業市場。另外，如果無法堵住稅收漏洞，不管稅率有多高，不少富人仍然有辦法避稅。此外，稅率太高會阻礙資本累積，打擊企業創新，最終影響經濟繁榮。

The difference between the poor and the rich is almost a *serious* problem to all developed countries and regions. The social resource share unfair, the wealth is over attended to a few super rich people. It contributed to the people's *opposition* easily and brought the social *discontent*. Some people mentioned that we can decrease the *difference* between the poor and rich by receiving or increasing the tax from the rich. No doubt, this policy is helpful to increase the total tax, the increased income can be used to help the burden of the middle industry and the basic industry. For the future it may help to reduce the problem about wealth share unfair. And let the society more stable grow up. However, increase tax may toward the super rich people or businessmen move property or business to some places which has low tax, and even immigrant to avoid the tax, finally cause the capital on to other place. At the same time, this policy is likely some the foreign investor, affect the employment market. Otherwise, if we can't block the tax hole, no matter how high the tax rate is, many rich people still have method to avoid the tax. On the other hand, the tax rate too high will turn the capital and against the *enterprise's innovation* finally affect the economic prosperity.

Part II - Translation assignment (Revision)

PART II: REVISION

Instructions: Please revise your translation with the help of the three given texts. Pay special attention to your language usage. (Duration: 40 minutes)

Income inequality is almost a common *problem* to all the developed countries and regions. The distribution of social resources is unfair, the wealth is over concentrated to a few super-rich people. It contributed to the social discontent easily and brought social unrest. Some people mentioned that we can decrease the gap between the rich and poor by imposing tax or increasing the tax from the rich. No doubt, this policy is helpful to increase the total tax, the new income can be used to ease the burden of the middle class and the grassroots. In the long term, it may help to reduce the wealth inequality, and let the society more stable grow up. However, the tax increase may promote the super rich people or entrepreneurs move their assets or business to the places which have lower tax, even immigrant to avoid the tax, finally cause the outflow of funds. At the same time, this policy is likely scare potential overseas investors affect the employment market. Otherwise, if we can't block the loopholes, no matter how high the tax is, many rich people still have methods to avoid the tax. On the other hand, the tax rate is too high will deter the wealth accumulation against the innovation of enterprises, finally affect the economic prosperity.

EX I: NT4

Part I - Writing assignment (Draft)

PART I: DRAFT

Briefly describe some consequences of the phenomenon where the rich get richer and the poor get poorer. Some believe that this problem can be addressed by collecting more tax from the rich. What are the positive and negative impacts of such approach? Your paragraph should be approximately 200 words in length. Please DO NOT use dictionary at this stage. (Duration: 30 minutes)

Nowdays, the rich get richer and the poor get poorer. This phenomenon has become more and more serirus. Therefore, the consequences of this phenomenon are people may get dissatisfied and poor people will get hard to live.

Some people think collect more tax from the rich can solve the problem. There are some positive impacts of collecting more tax from the rich. This way may make poor people get happier. Because the poor think the rich have a lot of money, they need to pay more tax to give back the society. In addition, collecting more tax from the rich can increase the income of government. After that, the government can use the money to help the poor. On the other hand, the rich may dissatisfied about this policy. They think it is unfair to them. Then, the rich and their company may move to other country because of the tax. There are both advantages and disadvantages of collecting more tax from the rich. If government really want to use this policy, they need to consider more.

A = 5
I - 4L/G

Part II - Writing assignment (Revision)

PART II: REVISION

Instructions: Please revise your writing with the help of the three given texts. Do not change the content or paragraph organization. Pay special attention to your language usage. (Duration: 40 minutes)

Nowadays, the rich get richer and the poor get poorer. This phenomenon has become more and more serious. Therefore, the consequences of this phenomenon are people may feel ① dissatisfied and the poor will get hard to live. Some people think collect more tax from the rich can solve the problem. There are some positive impacts of collecting more tax from the rich. This policy may make the poor feel ② happier. Because the poor think the rich have a lot of money, they need to pay more tax to contribute ③ to the society. In addition, collecting more tax from the rich can increase the income of government. After that, the government can use the money to help the poor. On the other hand, the rich may feel dissatisfied about this policy. They think it is unfair to them. Then, the rich and their companies ④ may move to othe country because of the tax. There are both advantages and disadvantages of collecting more tax from the rich. If government really want to implement ⑤ this policy, they need to consider more.

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