Charting Thai university students’ group translation on Google Docs through DocuViz

Nakhon Kitjaroonchai, Faculty of Arts and Humanities, Asia-Pacific International University

Daron Benjamin Loo, Centre for the Promotion of Knowledge and Language Learning, Universiti Malaysia Sabah

Tantip Kitjaroonchai, Faculty of Arts and Humanities, Asia-Pacific International University

Abstract

This study sets out to investigate Thai university students’ group translation of Thai texts into English in a synchronous setting. Four groups, consisting of three or four members, were involved in this study. This study examined two Thai texts translated into English, one containing tourism information and the other a crime news report. Students were given 40 minutes to translate on Google Docs, and their group translation styles were charted out through DocuViz, a visualization tool that uses color coding and number of contributions to illustrate group work. Average contributions, along with the color-coded texts, were analyzed to determine the group work styles. The study found that most groups were cooperative in their real-time translation work, in that group members worked on particular segments, with one dominant writer either editing others’ contributions or translating the most. This study suggests that translation instructors consider expanding and redefining the implementation of translation tasks done in groups.

Keywords: Collaborative Translation, Collaborative Writing, Google Docs, DocuViz

Language(s) Learned in This Study: English


Introduction

The prevalence of computer-mediated communication (CMC) technological tools, along with the Internet, have supported group work for language teaching and learning. One such tool is Google Docs, software which allows students to work with peers either synchronously or asynchronously (Godwin-Jones, 2018; Kessler et al., 2012). With the continued growth of technological tools and social networking sites, research interest in tools supportive of group writing has also persisted (Li & Storch, 2017; Yim et al., 2017). In this area, research has considered students’ development of English writing skills in a group environment (e.g., Storch, 2011; Zhang, 2010; Zhang, 2019), including language learning through translation (e.g., Pintado-Gutiérrez, 2018). While research on group writing—especially in English—has grown, research on group translation remains minimal. It has been observed that group translation can foster plurilingual practices where skills for conceptualizing knowledge or managing information may be employed or transferred between languages (see González-Davies, 2017). Recognizing the possibility of exploring plurilingual practices in group translation and to address the limited research on group translation, our study aims to examine the translation of Thai to English done in groups using DocuViz.
Online Tools to Support Group Translation

The development of CMC tools has supported group translation. In a group effort, various work processes are enacted, such as negotiations, discussions, and the accommodation of different perspectives (Thelen, 2016). The use of CMC tools such as Google Docs to support group translation offers an optimal setting in terms of location and time flexibility (synchronous and asynchronous) while ensuring members' accountability by maintaining a revision history (see Birnholtz & Ibara, 2012; Li & Storch, 2017; Wang et al., 2015; Yim et al., 2017). This feature sets Google Docs apart from other platforms typically associated with collaborative learning, such as Wikis. For educators, this feature has become a crucial tool for the deployment of a blended learning approach, where face-to-face teaching and learning are enhanced by the creative use of technology (see Steinberger, 2017). It also supports peer learning, such as that seen in Kessler et al. (2012), where group members' joint effort was facilitated through peer scaffolding.

Studies have also examined the patterns and extent of contribution of those involved in group writing tasks (e.g., Kessler et al., 2012), as well as scaffolding behaviors between group members in the co-construction of texts (e.g., Li, 2013), and working styles (e.g., Sun et al., 2014). While these studies provide observation of joint efforts, they do not offer any insights into the quality of the work. In group writing, quality may be determined by the extent of a contribution or engagement with the task, as well as the type of revision provided (see Wang et al., 2015). To be able to do this, Wang and Zhang from the University of California, Irvine, developed a data visualization application called DocuViz—software that can display the contribution and revision history of work done in Google Docs (Wang et al., 2015). DocuViz can also create a visual history chart across different timelines, identifying authors and the amount of work they contributed (e.g., Yim et al., 2017).

Translation in Language Teaching and Learning

While the current view of group translation in the business arena takes on an interactional perspective, the view of translation to teach and learn a language has been shifting. In the formative years of language education, translation was considered an integral tool for foreign language pedagogy up until the paradigmatic shift towards oral proficiency and communicative competence in the 1940s. During this period, there was strong opposition towards the use of any language that was not the target language being learned. In recent times, acceptance of translation has been growing. Nevertheless, its use is still frowned upon, especially as it is viewed as an interference in the development of a target language (see discussion by González-Davies, 2020; Pintado-Gutiérrez, 2018), despite being covertly appreciated by both teachers and students (González-Davies, 2017). On the one hand, students' first language (L1) or mother tongue may be useful for cognitive problem-solving. On the other hand, the L1 poses an interference to the development of the second language (L2), especially if students are expected to generate ideas and cultivate abstract notions directly in the L2. Göpferich (2019), however, suggested that high proficiency in translation may mitigate the negative interference from students' L1, and the use of L1 and translation may be advantageous in terms of offering cognitive relief from macro-level writing processes and noticing gaps in students' L2, as well as structural differences between languages. Göpferich’s (2019) claims align with recent views that deem translation a viable skill to support communicative and intercultural competence. Regardless of these potentials, there are challenges that may impede the quality of translation, primarily the differences between source and target languages. For instance, in the case of the setting of this study where we examine the translation of Thai into English, idiomatic expressions in English may be challenging to translate (Bunchuttrakun, 2014). Aside from meaning, differences in grammar between the source and target language may also lead to challenges, such as that reported by Wongranu (2017), where student translators made many errors in form, such as the countability of nouns, the use of determiners, and tenses.

Group Translation: Roles, Accountability, and Interaction

Recent studies in language classrooms have illustrated how the use of students’ first or other languages as sites for the negotiation of meaning and form may be useful, which is indicative of a plurilingual approach to language learning. In a plurilingual approach, students may engage in crosslinguistic comparisons to
notice similarities and differences between languages. This may include using knowledge about languages to examine and interpret texts, expressing opinions, or negotiating information through different linguistic expressions (Llanes & Cots, 2020; Muñoz-Basols, 2019). This process is relevant to translation work, where different linguistic codes—such as their L1—may be used to exchange viewpoints or co-construct knowledge. This, of course, might be mediated by students' translation ability and their knowledge of the target language (Yang et al., 2016). Translation instructors can also make use of a student's knowledge of the target language to deconstruct learning materials and even reconstruct (translate) these materials into the student's first language (Yang et al., 2016).

Besides the presence of multiple languages, group translation becomes complex due to variables affecting group work. While research on group translation remains limited, the complexity of such working processes may be inferred through findings from group writing research (e.g., Kessler et al., 2012; Tan et al., 2010). One variable contributing to the complexity of group translation may be members’ varying contributions, mediated by their language proficiency and the influence of internal (e.g., interest and motivation) and external factors (e.g., other work commitments that students may have). This affects the role that members might assume, which may be consensually agreed upon, or might even be assigned indirectly as a result of how a translation work might progress. A member may be the leading contributor who is considered the main translator. While translating, the leading contributor might also edit what they have translated. When there is a leading contributor, other group members may comment or, in some cases, even offer alternate translations. On the other hand, group members may also take turns being the leading contributor. In such a situation, group members are responsible for translating and editing what they and others have translated. This is akin to Yu's (2019) observation of a cyclical procedure, where translated materials are re-edited or re-revised as group members make progress with the translation work. Another role may be equal contributors, where group members are designated specific areas to work on. In such a situation, group members aim to shoulder equal responsibilities.

Along with roles, another trait in group translation worth considering is the accountability assumed or assigned to group members. In group translation, accountability may be achieved by self-checking one's own contribution, checking others' work, or ensuring that the translation work meets the expectations of the translation task. These various accountability checks are implemented differently based on the roles of the group members. If there is a single leading contributor, there might be self-checking while simultaneously translating. Other members may offer feedback, whose impact might be mediated by their ability to translate or their social identity within the group (see Yu, 2019). A group task with multiple leading contributors, on the other hand, might consistently check on each other's work, as well as their own contributions. However, when there are equal contributors, there may be a tendency to keep to their assigned area.

Inevitably, roles and accountability will shape group members' interactions. To understand interaction, it is useful to consider mutuality and equality. Mutuality refers to “the extent to which each member of the pair engaged with the other's contribution,” while equality refers to “the level of contribution of each participant to the task” (Wigglesworth & Storch, 2012, pp. 367–368). The extent of these measures may differ depending on the roles of the group members. For instance, if there is a single leading contributor, there may be a low level of equality and mutuality. On the other hand, for a group with multiple leading contributors, there may be high equality and mutuality, as everyone works not only on their part, but on others' contributions as well. Furthermore, if group members have specific parts to translate, this may signify high equality but low mutuality, especially if they only concentrate on their assigned parts.

Despite the lack of work in the area of group translation, there are several working styles that may become apparent when we take into account roles, accountability, and interaction. First, there may be the dominant translator style, where the leading contributor occupies most of the interaction. As a result, there may be minimal to no input from other group members. Thus, work by the dominant translator may not be validated by peers. Next is the cooperative translation style, where contributors’ work may or may not be validated by peers, and possibly with no in-text modification, as members will keep to their assigned tasks. Third, there may be the collaborative translation style where the contributors' work is validated by their peers with
potential in-text modification. While these working styles can be observed, it must be noted that these work arrangements will not be stable or constant, as they may shift according to processes for a task (e.g., Kessler et al., 2012) or even when embarking on a new task (Zhang, 2019). Furthermore, the extent of group work may be mediated by the difficulty of the task. For example, if the task involves correcting errors, some might have clear and definite answers and group members might not need to interact to discuss them (Wigglesworth & Storch, 2012).

The Study

With the help of DocuViz, this study aims to explore the group work styles of Thai university students in their translation of Thai to English. Beyond their group work styles, this study also hopes to illuminate the potential plurilingual practices of the participants. These are the research questions that this study seeks to address:

1. What is the group translation style(s) of Thai university students performing timed translation tasks?
2. What are the group members' perceptions of the experience of group translation?

Context and Participants

This study employed purposive sampling and recruited Thai students enrolled in a three-credit Thai to English translation course, which met for two and a half hours once a week over a 13-week semester. The primary researcher was the lecturer responsible for this course. After briefing students on the aims and the procedures of the study, consent was sought from students who were willing to participate.

Table 1

Demographic and English Proficiency Information of Participants

<table>
<thead>
<tr>
<th>Group</th>
<th>Pseudonym and Color Code</th>
<th>Gender</th>
<th>TOEIC Scores</th>
<th>English Proficiency (Self-evaluation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ann (Orange)</td>
<td>F</td>
<td>520</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>Mon (Green)</td>
<td>F</td>
<td>450</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>Bee (Red)</td>
<td>F</td>
<td>420</td>
<td>Pre-intermediate</td>
</tr>
<tr>
<td></td>
<td>Wit (Purple)</td>
<td>M</td>
<td>400</td>
<td>Pre-intermediate</td>
</tr>
<tr>
<td></td>
<td>Nid (Orange)</td>
<td>F</td>
<td>550</td>
<td>Intermediate</td>
</tr>
<tr>
<td>B</td>
<td>Tanya (Red)</td>
<td>F</td>
<td>470</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>Pim (Green)</td>
<td>F</td>
<td>450</td>
<td>Pre-intermediate</td>
</tr>
<tr>
<td></td>
<td>Nan (Orange)</td>
<td>F</td>
<td>500</td>
<td>Intermediate</td>
</tr>
<tr>
<td>C</td>
<td>Pui (Green)</td>
<td>F</td>
<td>430</td>
<td>Pre-intermediate</td>
</tr>
<tr>
<td></td>
<td>Lim (Red)</td>
<td>F</td>
<td>700</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>Kan (Orange)</td>
<td>F</td>
<td>580</td>
<td>Intermediate</td>
</tr>
<tr>
<td>D</td>
<td>Pat (Red)</td>
<td>F</td>
<td>450</td>
<td>Pre-intermediate</td>
</tr>
<tr>
<td></td>
<td>Tam (Green)</td>
<td>M</td>
<td>400</td>
<td>Pre-intermediate</td>
</tr>
</tbody>
</table>

Thirteen students took part in this study. These students' L1 is Thai, and they had learned English as a foreign language for at least eight years beginning from the secondary and high school levels. As shown in
Table 1, their TOEIC scores ranged from 400–700, and they evaluated their English proficiency level as pre-intermediate or intermediate. These students were assigned into groups of three to four members. Students with different proficiency and competency were grouped for the purpose of honing students' group work skills. The assignment of students to groups was done by the primary researcher based on impressionistic views formed from the experience of teaching these students in previous courses.

Translation Tasks
There were two texts that students had to translate in groups—tourism information and a crime news passage. These tasks were selected to fulfill the objectives of this course, where students had to practice translating different genres within a limited time frame in order to gauge students' translation skills. The two collaborative translation tasks were worth five percent of the total grade. Each team was given 40 minutes to complete each task synchronously during class in a computer laboratory using Google Docs. The tourism information text was administered in week five of the academic semester, while the second task on crime news translation was done in week seven.

Data Collection and Analysis
Primary data was collected from students' translation of Thai to English and students' reflections. Students' translation of Thai to English was collected through two tasks, which were (a) translation of a paragraph on tourism information (amounting to 160 words), followed by (b) translation of a paragraph from a crime news report (amounting to 180 words). As mentioned, groups had to complete the tasks on Google Docs. A secondary data source was a reflection on the group translation. Students were invited to respond to an anonymous open-ended survey to discuss their group work experience in translation, revision, and any other challenges they may have faced while working in a group. Suggested translations are provided in the Appendix.

Students' group translation—done on Google Docs—was visualized through DocuViz, which charted out color codes in a bar to represent group members' contribution. The color codes present an overview of group members' sequence of contribution (see Wang et al., 2015, for example). All the visualizations produced by DocuViz utilized the same colors and sequence (orange, green, red, and purple). Furthermore, DocuViz generates the number of contributions by each group member. Besides color coding, there may also be struck-through and inserted texts. This signifies revision work done either by the same group member (no change in color) or by a different group member (changes in color).

In this study, we will consider the number of edits. Edits are defined as the number of characters contributed (the typing of translation or revisions made on translation), which are data generated by DocuViz. We calculated the mean contribution of each group member, as well as the standard deviation of the mean scores. It is assumed that the number of edits made by group members will be able to situate group work according to the styles discussed previously. If the averages are more or less the same, we may assume that the group work had high equality but low mutuality. On the other hand, if a group member has a higher average than the rest, group members may have agreed on allocating responsibilities to each group member, signifying low equality but potentially high mutuality (see Yim et al., 2017). An extreme scenario would be the total withdrawal or non-performance by some group members, leading to only one group member dominating most, if not all, of the translation or writing work, signifying low equality and mutuality (see Strobl, 2014).

This quantitative approach is different from the group writing studies reviewed earlier (e.g., Barros, 2011; Yang et al., 2015), which focused on students' perceptions of the translation process. Studies which had used DocuViz as a data collection and analytical tool, on the other hand (e.g., Wang et al., 2015; Yim et al., 2017), had only described data based on the color coding. Our study, on the other hand, will rely on the color-coded texts and the calculation of the average edits of group members (number of edits divided by total edits) to provide an overview of members' contributions. These are further elaborated by students' responses to the open-ended survey. The content of the responses will be analyzed thematically in accordance with the research aim (e.g., Lee, 2016). This is done by familiarizing ourselves with the data,
generating the initial themes, reviewing the themes, and finally complementing the themes and their elaboration with the quantitative findings (Maguire & Delahunt, 2017). The overall themes generated were group work, translating, revising, interacting, and working with technology.

Findings

In this section, which addresses the first research question, we illustrate the group translation styles of four groups. All four groups showcased dissimilar group translation styles despite working on the same translation tasks.

Translation of Tourism Information by Group C

Let us first consider the translation work of Group C, which consisted of three group members. The text translated is tourism information (Figure 1). The colored bar chart and colored English translation are provided in Figure 2. Table 2 presents the total number of edits, along with the number of edits on their own text and on peers' text. The sample translation for the tourism information and crime news report is in the Appendix.

Tourism Information in Thai

Table 2

<table>
<thead>
<tr>
<th>Color (Group Member)</th>
<th>Total Edits (Average)</th>
<th>Edits of Own Text (Average)</th>
<th>Edits of Peers' Text (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>1229 (0.3)</td>
<td>1228 (0.3)</td>
<td>1 (0.0)</td>
</tr>
<tr>
<td>Green</td>
<td>2508 (0.6)</td>
<td>1270 (0.3)</td>
<td>758 (0.8)</td>
</tr>
<tr>
<td>Red</td>
<td>745 (0.2)</td>
<td>601 (0.2)</td>
<td>144 (0.2)</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
</tr>
</tbody>
</table>
Figure 2

Translation from Thai to English by Group C

Koh Nang Yuan, the wonderful paradise of relaxation and it is listed as one of the top 10 most beautiful islands in the world. Koh Nang Yuan consists of three small islands connected to together with white sand dunes and clear sparkling blue sea that brings that forms three private bays.

Along the island, there are coral reefs and clown fish which are swimming around to entertain you. In addition, on at mountain top there is a breathtaking viewpoint with a comfortable walking path. If you walk up to the top, you can will be able to watch the sunrise and set sunset on the same beach.

This is considered a unique identity of Koh Nang Yuan, the only place in the world that you can spend time from morning until late evening on the island. You and your family will discover the charms of happiness on a relaxing day without boredom together with various activities for your choice.

In Figure 2, we can see that each of the three paragraphs was translated by a group member. There was an allocation of work which saw almost equal contribution by two members (Orange and Green), and an extent of mutuality seen through the edits to others' work made by Green and Red. This also illustrates members that may be considered leading contributors (e.g., Arnold et al., 2012). However, there were no revisions made by Orange ($M = 0.0$) and Green made the most edits to their peers' translation ($M = 0.8$). Furthermore, there were no edits made to Red's contribution, which may signify an extent of trust towards Red's ability to translate without the need for further revision. This may be illustrative of a cooperative translation style. Nevertheless, while revisions were observed, they were not necessarily correct, such as the replacement of the preposition in one case from “on mountain” to “at mountain.” There were also problematic expressions, such as “charms of happiness” or “relaxing day without boredom together.”

Translation of Tourism Information by Group B

Next, we show the group translation style of Group B, based on the translation of the tourism information found in Figure 1. Figure 3 presents the sequence of contributions and the English translation, marked by color codes signifying the three members of this group. Table 3 presents the total number of edits, along with the number of edits on each members’ own work and on that of others.
Figure 3

Translation into English by Group B

Nang Yuan Island, that it is the island is breathtaking and paradise of relaxation. It has been honored as one of the top 10 most beautiful islands in the world. Nang Yuan Island consists of 3 small islands. They connect with clean beach and sparkling blue sea and become three private bays.

Around the islands also have coral reefs and both small and big clown fish swimming near the island for pleasure viewing. Moreover, there is also has viewpoint on top of mountain with convenient walkway. If you go up on top you can see the sunrise and sunset on the same beach.

It is a unique identity of Nang Yuan Island which is the only place can be found in the world.

Morning until night at Nang Yuan Island, you and your family will discover the fascination of happiness on a relaxing time without bored with many activities that offer you to choose.

Table 3

<table>
<thead>
<tr>
<th>Color (Group Member)</th>
<th>Total Edits (Average)</th>
<th>Edits to Own Text (Average)</th>
<th>Edits to Peers' Text (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>2747 (0.6)</td>
<td>2549 (0.6)</td>
<td>198 (0.7)</td>
</tr>
<tr>
<td>Green</td>
<td>691 (0.2)</td>
<td>687 (0.2)</td>
<td>4 (0.0)</td>
</tr>
<tr>
<td>Red</td>
<td>981 (0.2)</td>
<td>879 (0.2)</td>
<td>102 (0.3)</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

From the color-coded English translation (Figure 3), we could see that Orange had initially translated the whole source text ($M$ total edit = 0.6), and it was later expanded by Red and Green. Besides both contributing the same average edits on their own work (0.2), neither Red nor Green revised Orange’s contributions, with Green making no edits at all ($M = 0.0$). What this signifies is the presence of a dominant translator, where the leading contributor did most of the translation and revised the translation of their peers. Even though there was a dominant translator, there were still errors. For example, the first sentence translated by Orange could have been revised to “Nang Yuan Island is a breathtaking island and a paradise for relaxation.” Furthermore, “that is” was used as a relative clause to modify the subject “Nang Yuan Island,” which is inaccurate and can be omitted. Likewise, the second sentence from the passage contained some errors in word choice—“has been honored” could have been corrected as “is listed.” This was also observed in Group C’s translation work, where the contributions of Red were not revised. However, Orange in Group B asserted more dominance, seen through the translation of the whole source text. What is
observed in Group B is the lack of mutual effort and, inevitably, the absence of cooperation or collaboration.

**Translation of Crime News Report by Group A**

**Figure 4**

**Crime News Report in Thai**

นายบดมาน และนายทีแรงงานประมง 2 ผู้ต้องหาที่ต่าร่าวจับได้พิเติม ขณะพยายามหลบหนีเข้าทางบ้านหาดเล็ก

หลังก่อนหน้านี้ เจ้าหน้าที่ฝ่ายปกครอง และชาวต่างชาติ สามารถจับผู้ต้องหา 3 คน จากทั้งหมด 5 คน ประกอบด้วย นายยิ้ม นายภัย และนายเจ็นซ์ที่รวมกันก่อเหตุข่มขืน และทำร้ายนักท่องเที่ยวต่างชาติได้ โดยเหตุเกิดเมื่อวันเสาร์ที่ผ่านมา

นายประกอบ มีเจริญ ช่างเครื่องประจุเรือ ส.ประเสริฐพร, เรือหาปลากะตัก บอกว่า ผู้ก่อเหตุไม่ได้มีนิสัยก้าวร้าวหรือพฤติกรรมรุนแรง ขณะอยู่บนเรือก็ออกเงียบๆ บางคนก็ร่าเริงตามปกติ

เมื่อทั้งหมดขึ้นฝั่งเกิดได้ ก็ไปพบครอบครัวชาวฝรั่งเศส 4 คน ชาย 2 คน หญิง 2 คน ที่กำลังเดินบนถนนต่อเข้าแป้งปี้ เฟื่องฟู ม่านอาหาร ซึ่งช่วยกันคุ้มครองผู้หญิงทั้งสอง คน และรุมใช้มีดทำร้ายผู้ชาย จนต้องวิ่งหนีไปขอความช่วยเหลือ

Similar to the group translation of Group C, there appeared to be an allocation of tasks to the four members in Group A in their translation of a crime news report (Figure 4). This is seen when examining the colored bar and the color-coded text in Figure 5, with the original text (Thai) in orange, which was copied by the Orange member. Table 4 presents the total number of edits, along with the number of edits on each member's own text and on that of others.

**Figure 5**

**Thai Source Text and English Translation by Group A**

Mr. Bot Man and Mr. Thi, two suspects were arrested by police at the Hat Lek border pass while attempting to escape.

Previously, the public authorities and the Koh Kood people in Trad province were able to arrest the three suspects of five people. It includes Mr. Yim, Mr. Phai, Mr. Jae who raped and harmed the foreign tourists. The incident occurred last Saturday.

Mr. Prakop Meejae, a mechanic of the S. Prasertporn, anchovy fishing cruiser said that the arrested didn't have aggressive or violent behavior. They stayed quietly and some of them were cheerful.

When they got to Koh Kood, they met a french family, the 2 males and 2 females who were walking on the isolated road to the restaurant. They abducted the two ladies and harmed the men by knife till they ran to ask for help.
Based on the color codes in Figure 5, the translation was initiated by Red, followed by Purple, and then by Green. Orange, who uploaded the source text for the group, translated only the last part of the report. It appeared that since the original Thai text had four paragraphs, each member conveniently took one, signifying equality. The average total edits of all members were approximate to each other, except for Orange, with an average of 0.4 total edits, given that she had copied the source text. The members' average edits of others' work were low, with Orange making an edit in Green's translation and Red in Orange's. This signifies low mutuality. Table 4 indicates that Purple's average edit of others was 0.4. However, this was due to Purple's longer translation, as well as writing over the original Thai text copied by Orange, which DocuViz detects as a form of revision. Hence, there were only two members who contributed edits. Orange changed “prakop” to “Prakop” and “they” to “They” as subjects to begin new sentences. Red changed the phrasal verb “got to” to “got on” in the last paragraph. While the attempts to revise the text by these two members were successful, there were other errors that were not addressed, such as the missing capitalization for the word french. The working style that is observed in Group A is cooperative, where there is equality through the focus on one's own work but limited mutuality, seen through the minimal interference (revision) in others' work.

Translation of Crime News Report by Group D

Group D presented a different group translation scenario, with one member not contributing at all. In the color-coded bar and text found in Figure 6, we can only see work done by Orange and Red. Similar to Group A, Orange had copied the original Thai text to be worked on. Table 5 presents the total number of edits, along with the number of edits on self and on others.
Mr. Bod Man and Mr. Tee, two suspects were arrested by police at the Hat Lek border pass while attempting to escape.

Administration officer and Kood islander, Trat province. 3 of 5 alleged offenders of Mr. Yim, Mr. Pai and Mr. Jern were arrested for raping and attacking to the foreign tourists last Saturday.

Mr. Prakop Meejae is as a boat's technician of S.Praserpotorn fishing boat said that the habits did not appear aggressive or violent. While they were on the boat, some were quiet and other looks cheerful as normal. When they arrived at Koh Kood, they encountered a french family. There were 4 people, two men and two women walked on the solitery road to find the restaurant. They continually abducted the women and attacked the men with a knife until they run away for helping.

In the translation work of Group D, Orange seemed to be the dominant translator, as seen in Figure 6 and in the average total edit (0.6). Red's contribution averaged 0.3, and their edit of Orange's work came to an average of 0.2. Green had participated initially, as seen in the number of edits in Table 5. Nonetheless, their contribution was overwritten by Orange. We could deduce that there was no mutual effort here, with minimal equality. The dominance observed in Group D could have been established by the knowledge that a group member brings in skills that are perceived as better (see Tan et al., 2010). Nonetheless, while Orange acted as the dominant translator, it did not account for an accurate translation. This is seen in the color-coded text in Figure 6, which shows syntactic and semantic errors. For example, the run-on and incorrect sentence structure in the middle of the passage: “The Administration officer and Kood islander, Trat province. 3 of 5 alleged offenders of Mr. Yim, Mr. Pai and Mr. Jern were arrested for raping and attacking to the foreign tourists last Saturday.” The cause of such errors may come from intralingual interference (see Sermsook et al., 2017).

Responses from Open-ended Survey

Students’ responses from the anonymous open-ended survey addressed the second research question (Table 6). The open-ended survey was not compulsory; hence, not all group members shared their opinions regarding the group translation activities, with most of the responses being short. The themes (in bold) gleaned from the open-ended survey are group work, translating, revising, interacting, and working with technology. There were also sub-themes (in italics). Some responses are provided (verbatim) to illustrate the themes and sub-themes.
### Table 6

**Students’ Responses to Open-ended Survey**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group Work</strong></td>
<td>1. My part is to translate a rough draft on the passage I assigned for, then each members will work on revising. In the end we work on editing the final work together.</td>
</tr>
<tr>
<td><strong>Demarcation of work</strong></td>
<td>2. The difficulties that I translated in my part was I did not really good at grammar structure.</td>
</tr>
<tr>
<td><strong>Translating</strong></td>
<td>3. I did not understand the Thai version well, so I translated wrong in English. I could not chose the suitable vocabulary to use when I translated my part. It is hard for me when I used the past or present perfect tense.</td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
<td>4. for me, idiom is difficulties for me to translated, but that is challenge to me.</td>
</tr>
<tr>
<td><strong>Revising</strong></td>
<td>5. We mostly revise one sentence structure and grammar first. Then we simultaneously revise. The reason is, each member will see a mistake better when we take turn revising.</td>
</tr>
<tr>
<td><strong>Simultaneous revision</strong></td>
<td>6. I did not revise to my friend part because i'm not sure that i did right to translate or not. And i know my limit to translate.</td>
</tr>
<tr>
<td><strong>Separate and individual revision</strong></td>
<td>7. My friends will chat to me or comment to me. when I solve it but if is not good enough my friends will solve it.</td>
</tr>
<tr>
<td><strong>Revising own and others’ translation (to the best of their ability)</strong></td>
<td>8. I did some of them but I know myself have some problem in grammar and I will ask them to help</td>
</tr>
<tr>
<td><strong>Interacting</strong></td>
<td>9. We divided the text into 4 parts (1 part per 1 person), so we knew our duty very well. Then, we would tell what time we would edit.</td>
</tr>
<tr>
<td><strong>Minimal interaction</strong></td>
<td>10. Our group is somewhat active but we are almost inactive as well. After we divided every part. No one translate, it almost close to the deadline then they will enter to work their part. After working on their part, they just leave. They don’t even check others part. When I comment or give suggestion to them they did not come and check.</td>
</tr>
<tr>
<td><strong>Interacting outside of translation task through other online medium</strong></td>
<td>11. we will chat and sent the (message) to members for asking them by copy the mistake sentence and asked them how to fix it</td>
</tr>
<tr>
<td><strong>Active participation by members, according to their ability</strong></td>
<td>12. In my group we had good interaction. Everyone in my group we did as we can do.</td>
</tr>
<tr>
<td><strong>Group Work with Technology</strong></td>
<td>13. In my group we are very active in my opinion that I see. Everyone try to make our path best and we help each other when they can not do it well. who is good at translate help who is not good at translate. Who is not good at it try to make them path have less wrong.</td>
</tr>
<tr>
<td><strong>Transparency</strong></td>
<td>14. sometimes we are together and work together on one computer, so it look like one person is working only (both GoogleDocs and DocuViz)</td>
</tr>
</tbody>
</table>
Facilitates group work

15. It can help me to work in the future because Google Docs is comfortable for me and can help me to work easily. I can work with the members in my group and I can comment or chat to them. I hope I will do my work and help each others in the future although my skills in English it not good enough.

16. It shows me that who is working more then another. It is good to remind another to work more. Also, it may help someone who doesn't work to help another members more.

One of the sub-themes that emerged from the students' responses was the demarcation of work (responses #1). In the sample responses, we can see that students had a specific part of the text to translate. This perhaps led to minimal interaction between group members, as seen in responses #9 and #10, where group members had a clear idea of their responsibilities. This was evident in response #10, where the student reported that other members kept to their parts. A factor for this might be students' general lack of translation ability, such as that seen in responses #2 to #4, where they indicated difficulty with grammar forms and idiomatic expressions. As a result, when it comes to revising translations, students may enact different strategies, such as revising together (#5), refraining from revising others' translation (#6), or giving feedback to group members. Others were helping with the revision or reaching out when they were unsure of how to revise the translations (#7 and #8) (see Abrams, 2016). In line with reaching out, it appeared that the group members were also interacting in other social media platforms (#11). When using the online platforms, there were also some challenges, such as the inability of either platform to distinguish contributions when students used one device to work together (#14), yet there was also a positive perception of the usefulness of Google Docs to consolidate the social aspects of group work (i.e., interacting with group members; #15) and to keep track of members' work contribution (#16; see Li & Zhu, 2013).

Discussion

This exploratory study examined group translation in a synchronous manner by Thai university students. Based on the color-coded bar and text, the group translation style that was common among the four was that of a dominant translator, where one member contributes most of the translation and evaluates what other group members might contribute. In such a working style, the group members rarely evaluate the dominant member's translation work. A potential reason for this might be that members keep to their assigned segments to clear the path for a group member assigned or perceived as the capable translator, who also edits and perhaps manages the group's work. In all groups, there was at least one group member who stood out in the group translation in terms of offering revision and not just translation. Group D showed a rather extreme case of this, where one member did the bulk of the translation work and others hardly contributed. This form of group work arrangement—dominant translator or cooperative—may lead to a linear work process, wherein group members who had completed their portion would not revisit their work again or that of others' (as reported in response #10). A reason for this, as Wang et al. (2017) posited, could be the reluctance of members to contribute, for they do not want to be judged or to judge others' work, or that the group members “do not have an inherited role structure” (p. 9) in group work. Nonetheless, as seen in our findings, having a dominant translator—even when others contributed—did not ensure a better translation, as the English translation still had errors. This supports the notion that students' awareness of their language knowledge or skills would have a bearing on their participation in group work, such as that seen in responses #2 to #4 and in the discussion by Li and Zhu (2013). Thus, when students perceive that they lack knowledge or skills, they are likely to minimize their presence in the group work (and inadvertently open up space for others). This brings about an affirmation of other group members as knowing more or being more capable, resulting in the natural delegation of a leading role. From a different perspective, this lack of equality may be perceived as a form of cooperation in that members who were not proficient in the target language would minimize interruptions that may affect the more capable group member (Arnold et al., 2012). This may be evidence of students' self-evaluation of their language skills.
(see Table 1) and recognition that their contributions may be less than their counterpart's, such as that seen in response #6.

**Pedagogical and Research Implications**

Based on the findings, we may draw some pedagogical and research implications, primarily with regards to how group translation can be organized. First, given the imbalance of participation of group members, translation instructors should reconsider the setup of group translation tasks. As discussed by Shah and Lewis (2019), the nature of group work is fluid, and the expected interactions with high mutuality and equality might not be a constant recurrence (see also Abrams, 2016). Thus, in group translation, instructors should consider factors beyond language proficiency or translation ability. What should also be considered are the thinking or negotiation processes involved in group translation. This may help understand the motivation of students who might dominate the work process and even those who choose to remain quiet (and perhaps, in doing so, ensure that they do not jeopardize the quality of the work).

Second, translation or writing instructors should consider expanding the time and space for where group work is expected to take place. To achieve this, instructors could utilize other technological tools for a task completed over an extended period to have a richer view of collaboration, especially to better understand mutuality and equality. For instance, together with DocuViz, instructors could encourage students to communicate via chat or through annotations. These communication features are readily available in Google Docs. This may also help better define the scope of roles that are pertinent to a translation process, adding to the work of Yue et al. (2019). To support these efforts, the instructor will also need to play a more active role in the group translation process. There are other tools that can be employed as well, such as Google Translate, which can offer alternative translations. This might even present further learning opportunities, where students can be guided to evaluate translation alternatives to determine the most suitable translation. This can further contribute to the development of students' metalanguage awareness and provide insights into potential plurilingual practices, which were not captured in this study due possibly to the time constraint for task completion (see Li & Kim, 2016).

To summarize, our study sought to examine the translation of Thai to English done in groups through the use of DocuViz. The findings showcased the nature of group translation, namely the presence of a dominant translator (e.g., Kampittayakul, 2018). For future studies, it might be beneficial to look into small group dynamic interaction across prolonged engagement with group translation tasks using asynchronous mode in Google Docs or other cloud-based collaborative tools and observe if members' translation behaviors shift from one task to the next. Future research may also explore factors influencing learners' interactional changes while performing a group translation task. This would help researchers understand students' translation work processes in a natural setting. Furthermore, future studies can investigate if distinctive group translation styles or interaction patterns yield positive effects on the translation outcomes.

**References**


Appendix. Suggested Answers.

Model Answer for Translation of Tourism Information

Koh Nang Yuan, the wonder of beauty and heaven for relaxation, has been admired for one of the world’s top ten most beautiful islands.

Koh Nang Yuan consists of three small islands, joined by the white sand dunes, contrasted with the light blue sea. All of these magnificent components appear to be the three private swimming bays. Around the island are also coral reefs and you can get entertained by school of clownfish swimming around. Moreover, there is a viewpoint on top of the mountain with a convenient pathway. Here, you can observe sunrise and sunset at the same beach, which is the uniqueness of Koh Nang Yuan, the only place on the planet. From dawn till dusk, you and your family will discover the happy charm of exciting yet restful days with numerous fun activities.

Model Answer for Translation of Crime News Report

Mr. Bot Man and Mr. Thi, two Cambodian fishing crew, were arrested by police at the Hat Lek border pass while attempting to escape.

Previously, administrative officers and villagers of Koh Kut, Trat province were able to arrest 3 out of the 5 suspects, identified as Yim, Pai, and Jern, who conspiratorially raped tourists last Saturday.

Mr. Prakorb Michae, a trawler of Sor Prasertporn fishing boat, said the suspects showed no aggressive behavior while on duty. They were unassertive and cheerful.

After the suspects returned onshore, they met four French tourists: 2 males and 2 females, strolling on a secluded street looking for a restaurant. The accused grabbed the females and assaulted the male tourists with a knife. The victims managed to escape and called for help.
About the Authors

Nakhon Kitjaroonchai is currently a full-time lecturer in the Faculty of Arts and Humanities at Asia-Pacific International University, Thailand. His research interests include online collaborative writing, L2 writing, CALL, and translation studies.

E-mail: nakhon@apiu.edu

Daron Benjamin Loo teaches academic writing and communication at Universiti Malaysia Sabah. His research interests include feedback interaction between teachers and students, as well as language learning ecologies in a university setting.

E-mail: daronloo@ums.edu.my

Tanthip Kitjaroonchai currently teaches EFL (English-as-a-foreign-language) university students at Asia-Pacific International University, Thailand. Her research interests include teaching grammar to beginners, L2 writing, language skills, and translation studies.

E-mail: thanthip@apiu.edu