A Collaborative Translation Effort Producing Subtitles for a HAS Center Video

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Abstract

The current study explores a collaboration between translators and the use of technology in the production of subtitles for a HAS Center video. It elaborates on the interrelationship between the roles of the translators and of the technology within a subtitling process. This type of partnership has not been fully analysed in the literature, especially within a Thai context. To achieve its goal, this study takes a sociological approach to explore how translators work together to translate subtitles from English into Thai in a digitally-mediated environment. The ethnographic data were analysed based on a framework combining the Actor-Network Theory (ANT) as proposed by Latour in 1987 and 2005 with the concept of habitus proposed by Bourdieu in 1977 and 1990. The findings suggest that translators form equal partnerships and reach mutual agreement based on their close interactions and past experience while collectively producing the subtitles. They also make the best use of technology, including networked platforms and facilitating tools, while performing the task. These interrelationships lead to effective teamwork in the production of subtitles, giving rise to a collaborative translation practice.

Introduction

The advent of current technology allows individuals to collectively produce translations within digital spaces, giving rise to collaborative translation practices and blurring the boundaries of the translators' physical locations. The term 'collaborative translation' has been broadly defined as an act of translation which is jointly performed by at least two or more agents taking part in creating translated works (O'Brien, 2011). However, such collaborations have not just been undertaken in the digital era, but have clear historical roots. In Asian contexts, for example, groups of translators have used a combination of oral and written processes. Bilingual translators orally translated texts into Chinese while others wrote down the translations (Hung, 2006). This type of practice has been used in the translation of religious texts, e.g., Buddhist sutra translations (Cheung, 2006), and works related to western knowledge have been translated into the Chinese language (Wakabayashi, 2005). In the past, these practices had the goal of presenting new knowledge (Cheung, 2006; Hung, 2005).

By comparison, in the digital era, where technology has played a crucial role in translation, collaborative translations involve interactions between translators and technological resources, showing a human-machine relation (O'Brien, 2011). Pym (2011) discussed the term as a practice performed by volunteer translators in digital spaces. Based on these aspects of the practice, "collaborative translation" can be used as an umbrella term for "community translations" done by online communities or for specific communities (Cordingley & Manning, 2017, p. 16). Examples of such types of translation productions can be found in Wikipedia, Facebook, TED[1] and fan translations. These examples highlight that online platforms have enabled translators to communicate with one another, work together and build their own communities to freely work on translation tasks (O'Hagan, 2011).

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[1] https://www.ted.com/

A growing number of practices in the digital era have demonstrated the practical importance of collaborative translations, defined as interactions among agents producing work collectively. These collaborations are often influenced by social forces and cultural backgrounds (Cordingley & Manning, 2017). Translation studies programs have become increasingly focused on collaborative translation practices within online environments (e.g., Jiménez-Crespo, 2017; Zielinska-Elliott & Kaminka, 2017). However, to date, research on collaborative translations, especially in a Thai context, remains underreported in the literature and few translation studies in Thailand have focused on the impact of technology (e.g., Wongseree, 2018, 2020). To fill this gap in the literature, the present research uses a sociological perspective to gain an in-depth understanding of how Thai translators collaborate in their production of subtitles using available technological tools and platforms. Further information about the purposes and goals of this project is provided in the following section.

Purpose of the Study and Research Questions

As previously discussed, this study is mostly concerned with eliciting the collaborative aspects of translation practice that have been facilitated by technology, focusing on a Thai context. The present research adopts the definition of collaboration proposed by Kenny (2008), a shared production of a single artefact where agents have worked synchronously and have collectively engaged in a task. In order to illuminate some of the issues in such a collaboration, the current study explores a key question: How does a collaborative translation practice develop in a digital environment?

In collaborations, translators are a key part of shaping the subtitling activity and recognising their contributions is critical to being able to answer the main research question. Therefore, the study aims to gain insight into the interrelationships of translators within a group producing subtitles. This includes how they share responsibilities, the ways they use their translation experience and

knowledge to produce subtitles, as well as the development of their engagement in the activity. To explore such interrelationships, the first sub-question is: How do translators produce subtitles within their groups?

By focusing on the translators, the current study hopes to evaluate their interrelationships based on their roles as social agents. Currently, technological resources are important elements in subtitle production. Therefore, the research also evaluates how translators interact with technology and how that technology may help translators complete their task. This leads to the second sub-question: How do translators use technology in their collective practice of producing subtitles?

Finally, by answering these research questions, this project seeks to describe collaborative subtitle production and translation practices from a sociological perspective, a viewpoint which seems to have been overlooked in studies of translation issues within a Thai context. The study also focuses not only on translators as key agents but also on technology in translation practices in the digital era. In order to accomplish these goals, the study chose to evaluate a representative example of collaborative translation, the production of English-Thai subtitles for a five-minute video promoting the Humanities Academic Service (HAS) Center, Faculty of Humanities, Chiang Mai University.

To provide a contextual background for this research, the following is a discussion of literature in the translation research field related to collaborative translation in the digital era.

Collaborative Translation in the Digital Era

Much translation research has addressed how translators work in a group or a community on a digital platform, and these studies are relevant to the present research which focuses on translation collaboration in a technological environment.

Literature in translation studies has examined collaborative translations from various sociological perspectives. Some studies have investigated the motivations of translators working within online communities. For example, Fernández Costales (2012) found that volunteer translators were motivated by enjoyment, humanitarianism, and enabling the preservation of cultural heritage. On the other hand, Olohan (2014) explored TED translations on online platforms, arguing that translators are driven by their support of the TED organisation, positive encouragement, and their goal of accumulating practical translation experience.

Furthermore, the collaborative aspects of translation have been explored in many studies of fan translation practices, defined as translations done by audience members who voluntarily produce translations of texts they have viewed in digital spaces (O'Hagan, 2009). For instance, O'Hagan (2009) highlighted how technological advancements have enabled users to contribute their translation efforts in a collective group. Li (2015) also discussed this issue in her study of the collaboration of Chinese fans producing online translations. She found that fans' contributions and their commitment to the translation process have developed a collective identity in this online community. In a project similar to Li (2015), Wongseree (2018) discussed fan collaborations in a Thai context and found that trust in fan communities, forged by their engagement in the practice, enabled close relationships among fan community members which could sustain fan collaboration efforts.

This literature about collaborative translation has generally focused on the collective efforts and engagement of translators in online communities, marking the current impact of digitally mediated environments. The significance of technology and its impact on translation practices have been highlighted in many translation studies. For example, O'Hagan (2013) provides insights into one crucial role of technology, to serve as a platform for translators to collaborate on translations despite geographical distance. The significance of translators' reliance on technological tools has been highlighted by

Díaz-Cintas (2015). He argues that the importance of technological translation skills is increasing among both professional and non-professional translators in the digital era. The role of technology is also discussed by Kenny (2017), who stated that translation technologies are shaped by translators and have influenced their activities. She suggested that translation studies investigate the ways in which the human agents are associated with technology (Kenny, 2017).

The aforementioned literature in the translation studies field demonstrates a growing interest in collaborations. These research projects have concentrated on the collaborative aspects of the work, focusing on translators and emphasising the impact of technology on the practice. However, as mentioned earlier, there is still lack of such research conducted within a Thai context. To help fill this gap in the existing literature, the current study focuses on the production of subtitles by a group of participants in a Thai context. It extends current knowledge by providing an in-depth exploration of the collaborative aspects of producing translations that have been facilitated by technology. To highlight the role played by technology, this study considers technology a key non-human actor and explores its interactions with human actors in the practice of collaborative subtitle production.

Habitus as a Key Theoretical Concept

To gain insight into translation as a social practice, previous research in translation studies has used a sociological perspective, focusing on translators embedded in a particular socio-cultural background (e.g., Gouanvic, 2005; Inghilleri, 2005; Meylaerts, 2008; Simeoni, 1998). These studies explored translators' behaviours and decision-making practices by employing Bourdieu's concept of habitus within his theory of practice.

The concept of habitus highlights interactions between agents and their social structure (Bourdieu, 1977, 1990). It refers to "systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures" (Bourdieu, 1977, p. 72). The

concept considers the dispositions that individuals accumulate from their experiences interacting with other agents and/or social surroundings. Such experiences can be in the form of "schemes of perception, thought and action" (Bourdieu, 1990, p. 54), and are further applied when individuals or agents perform an action. The habitus is, therefore, viewed as a product of history as it contributes to individual and collective practices (Bourdieu, 1977).

The habitus of translators is internalised by experiences they gain from their interactions with other agents within a social setting (Meylaerts, 2008). This habitus influences the decision-making of translators and can be identified through their normative translating behaviours (Gouanvic, 2005; Simeoni, 1998). The impact of habitus on translators can help identify their product as embedded in social structures, highlighting translation as a social practice.

To achieve its main purpose of gaining insight into collaborative translation as a social practice, this research study adopts the concept of habitus introduced by Bourdieu (1977, 1990) as it pays close attention to the dispositions that translators have internalised from their social surroundings. The concept, therefore, can shed light on the ways in which the translators make decisions, emphasising how an online environment has affected their collective practices.

Actor-Network-Theory as a Framework of Analysis

The previous section discusses the key theoretical concepts used in the current research, highlighting how society affects translators working on projects facilitated by technology. With such a focus, the current study treats technology as a key actor which is closely associated with humans and plays a part in a social activity (Matthewman, 2011). This analytical framework, aligned with Actor-Network-Theory (ANT), is used in the current study since it foregrounds the role technology plays in the formation of a network of human and non-human actors (ibid).

Applying ANT to the data helps explain some of the new innovations, especially ones involved with technology and scientific

advances in dynamic environments (Chesterman, 2006; Latour, 2005). In investigations of interrelationships between human and non-human actors in a network, ANT focuses on actors' movements as they actively and collectively undertake, negotiate, interpret and transform their roles in order to achieve their goals (Callon & Latour, 1981; Latour, 1987).

In Callon's study (1986), movements include four overlapping moments: actors gathering to achieve a goal (*problematization*); a group forming to complete the task (*interessement*); actors taking action while negotiating their roles (*enrolment*); and, actors' roles transforming to mobilise the practice (*mobilisation*). In its analysis of these moments, ANT pays particular attention to how the actors' roles are transformed and negotiated to overcome any obstacles to the fulfilment of their goals, and how they lead to group formation, known in ANT as an 'association in social practices' (Latour, 2005). ANT's emphasis on association shows that social practices are not solely dependent upon individual actors but require interrelationships of heterogeneous elements which motivate each other to take actions in mobilising a practice (Latour, 2005).
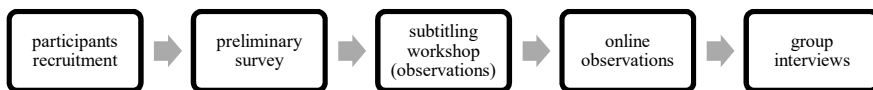
ANT has been the subject of some criticism, with researchers claiming that it may ignore the subjectivity of human actors due to its equal treatment of human and non-human actors (Hekkanen, 2009) and the impact of pre-existing social structures (Buzelin, 2007). Despite such criticisms, the framework has been adopted by many studies of both professional and non-professional translation practices. Studies of professional translation have drawn on ANT to focus on production networks between translation agents in changing technologised environments (e.g., Abdallah, 2012; Buzelin, 2007; Risku & Windhager, 2013). In addition, the framework has been used to analyse the interactions of non-professional translators in online communities, underlining the role of digital platforms in Facebook translations (O'Hagan, 2017) and of technological resources in fan translations (Wongseree, 2018, 2020).

The present research has found ANT to be a useful analytical framework for in-depth investigations of the impact of technology on translators in subtitle production. Moreover, ANT allows researchers to analyse the interrelationships of translators with other actors when they collectively create subtitles. Within an ANT framework, an ethnographic study is able to provide both micro and macro level descriptions of networks, including defining each actor, describing their associations, and shaping the whole practice (Law, 2007). Drawing on ANT, this research employs an ethnographic approach to data collection, further described in the following section.

Data Collection Approach

As previously mentioned, the current study took an ethnographic approach to collecting data as it is considered the most effective way to investigate interactions between networks of actors in social practices (Latour, 1999). This approach permits an in-depth analysis concentrating on the behaviours and roles of participants as they take part in the practice (Boellstorff et al., 2012; Wolcott, 2008). Ethnography is not only related to the ANT framework employed in the present study but also to the main goal of the study, exploring the interrelationships of the actors who create subtitles. The data was collected from an insider perspective as the researcher developed relationships with the participants and received in-depth information from them (O'Reilly, 2009). In addition, to obtain in-depth data from the participants, a mixture of data collection approaches, including interviews and observation, is suggested (Boellstorff et al., 2012). This empirical study, therefore, collected qualitative data using several methods, including surveys, observations and interviews. The triangulation of these research methods provides alternative explanations for the data results (Salmons, 2016), supporting the validity of the data interpretation.

Figure 1
Data Collection Process

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┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│ participants │ ▸ │ preliminary  │ ▸ │  subtitling  │ ▸ │   online     │ ▸ │    group     │
│  recruitment │   │    survey    │   │  workshop    │   │ observations │   │  interviews  │
│              │   │              │   │(observations)│   │              │   │              │
└──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘
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To collect the data, the researcher started by recruiting participants (see Figure 1). Then, a preliminary survey was distributed to get information about the subtitling experience of the participants. A workshop, providing subtitling guidelines and information about tools are used to make subtitles was organised by the researcher. Observation data were collected online using the Line application while the participants did the subtitling. After the subtitle production was completed, group interviews were conducted to encourage discussions related to the work. Further details of the research methods are discussed in the following section.

Research Methods

Participants

To serve these research purposes, target participants were English major students in a large university in the northern part of Thailand who had taken the required translation courses included in the English major curriculum. The criteria used to select these specific subjects was intended to guarantee that they are experienced in the field and have practical translation knowledge.

To recruit acceptable participants, the researcher publicised this study project through the students' online communication platform. To ensure that in-depth data could be collected, the target number of the subjects was limited to ten interested students. The first ten qualified students who contacted the researcher were chosen and then the subjects were divided into two groups of five individuals each.

To guarantee research integrity, the researcher explained the objectives of the research and all data collection processes at the time of recruitment. The participants were informed that the project would begin with the subtitling workshop, continue through subtitle production and reflection, and end with an interview after completion of the production process. In addition, approval from the Ethics Committee of the researcher's home institution was obtained before data collection began. All participants completed a consent form, agreeing to provide research data. Data from the participants were collected in Thai, the first language of the participants and the researcher, to avoid any misunderstandings that might be caused by faulty translations, using methods explained below.

Survey

Before the subtitling workshop began, a preliminary survey was distributed to the participants using the *Google Forms* online platform. The survey was intended to gain insights into the participants' views of translation as a profession and of the use of technology in translation practice. It also provided background information the researcher could use to prepare a subtitling workshop.

Observation

In addition to the survey, observations were employed as part of the ethnographic approach to this study. This method is useful because the researcher is able to obtain detailed information about how an activity proceeds (Hine, 2015). Moreover, it provides opportunities for the researcher to actively take part in the project and have direct interaction with the participants (Hine, 2015). In the current study, the observation method was expected to provide the researcher with an understanding of how the participants worked together and arrived at their decisions while performing their subtitling tasks. After obtaining subject consent, the researcher observed the behaviour and the communication of all participants during the workshop and recorded observations in the form of written notes. In addition, observation of the online interactions throughout the subtitling process were made

after the researcher joined the Line groups that participants had formed.

Interview

After the participants finished the subtitling process, the face-to-face interviews were conducted in the groups established for the production of subtitles. This created an environment where the participants could share their views about making subtitles, enabling the researcher to examine collaborations in translation. Furthermore, the interviews were semi-structured. This gave the researcher the flexibility to receive in-depth responses on topics of interest that came up during the interview (Boellstorff et al., 2012). The questions addressed how participants worked together when making subtitles, including: what they took into consideration; any problems encountered/solutions arrived at; the technology used; advantages and expectations about translation learning tools and their advantages/ disadvantages; and, the participants' suggestions regarding the project.

After the data were collected using the aforementioned methods, they were analysed based on ANT and the concept of habitus. The detail of the analysis is provided in the following section.

Data Analysis

In data analysis, the researcher was careful to avoid serving their own interests through manipulation of the data (Hammersley & Atkinson, 1995). The evidence gathered from the data, along with references to the literature, were employed to maintain the generalisability and validity of the findings (Gibbs, 2007). The observations enabled the researcher to gain insight into the subtitling process as performed by the participants in their roles as translators. Moreover, the interview data provided useful explanations of the decision-making process, including the thoughts of subjects during subtitle production. The survey results partially explained how the participants' past experiences, especially their previous use of technology in translation, could influence their decision-making when creating subtitles.

The data from the three sources were analysed by the habitus concept to explain the impact of the translators' experiences on the

way they collectively performed the subtitling activity. ANT was applied mainly to the interview and observation data to shed light on how a subtitle production network was formed through the interrelationships of translators and the use of technology, achieving the purposes of this research.

Based on ANT, the collected data showed that the key actors in the production of subtitles were the translators, the lecturer, the HAS Center Director, technology, and the source text. The main human actors in the network were the *translators,* the ten participants in the study. These ten actors are referred to as Participants 1-10 based on the order in which they introduced themselves during the interviews. Group 1 includes Participants 1-5 while those in Group 2 are Participants 6-10. The term *lecturer* refers to the researcher herself who also took part in the subtitle production and the *HAS Center Director* was the client who received the completed subtitled video. The non-human actors include *technology*. This term refers to both the technological resources used for production such as subtitling tools and online platforms, and the *source text,* the video clip about the HAS Center. Each actor was part of the network used to complete the task of subtitle production. In order to achieve the main goal, their roles were negotiated and subsequently transformed, leading to the formation of the *Subtitle Production Actor Network* (see Figure 5).

Using the analysis of these data, the following section explains how translators work together and what role technology plays in subtitle production, answering the two sub-research questions. It is then followed by an explanation of how the subtitle production network of the key actors was formed, answering the main research question.
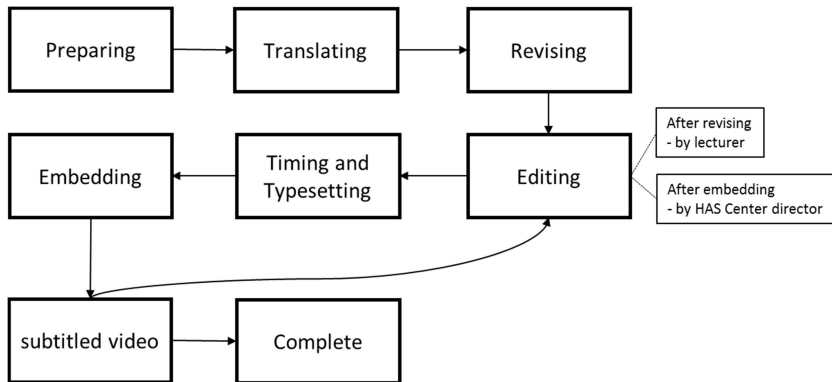
Results
Translators' Interrelationships in Subtitling Task

This section addresses the interactions of the actors, focusing on ways in which the translators negotiated and interacted with one another while producing subtitles. The interview and observation

data has been summarised in Figure 2, the subtitle production process. By addressing the first sub-research question of this study, it tries to explain how the translators worked together within their groups to produce subtitles for the HAS Center video.

Figure 2
Subtitle Production Process in the Actor-Network

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┌──────────┐     ┌──────────┐     ┌──────────┐
│Preparing │ ──▶ │Translating│ ──▶ │ Revising │
└──────────┘     └──────────┘     └──────────┘
                                         │
                                         ▼
                                                    ┌──────────────────┐
┌──────────┐   ┌──────────┐   ┌──────────┐          │ After revising   │
│Embedding │◀──│Timing and│◀──│ Editing  │          │ - by lecturer    │
└──────────┘   │Typesetting│   └──────────┘          └──────────────────┘
     │         └──────────┘                          ┌──────────────────────┐
     │                                               │ After embedding      │
     ▼                                               │ - by HAS Center      │
┌──────────────┐   ┌──────────┐                      │   director           │
│subtitled video│──▶│ Complete │                      └──────────────────────┘
└──────────────┘   └──────────┘
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Based on analysis of the interview and observation data, both groups of translators adopted the same process of subtitle production (see Figure 2). The interrelationships of the translators started when they gathered at the request of the lecturer, another human actor, to make subtitles for an HAS Center video. This led to the formation of two groups, including five translators each, in accordance with the workload expected in the creation of subtitles for a 5-minute HAS Center promotional video. After this *interessement*, the translators enrolled in the network through interacting with other actors and actively participating in the subtitle production process. During the preparation phase, the *enrolment* of the translators was demonstrated by their negotiations to set the times and dates for performing the task. Such negotiations were made through conversations in the *Line* application.

The interrelationships of the translators were evident during the translating process. In this step, the participants in both groups negotiated with each other and divided the script into five equal parts. This was described by the translators during the subsequent interviews as follows:

> We divided [the work] into an equal number of the sentences [from the script]. [Participant 2, Group 1]

> After we received the script, I checked the word count and then divided the script into equal parts for each person, around 100 words each. [Participant 8, Group 2]

Based on the extracts, the translators agreed to each be responsible for a fair share of the translation work. This decision was based on consideration of the amount of time required for translation, as Participant 9 clearly stated that the division of work "helps to speed up the translation process and it is fair for every member to be responsible for equal work." This attitude shows that the division of their work was based on consideration of submission deadlines. Moreover, as each translator took responsibility for translating their own parts, they gained an opportunity to discuss their translation decisions. As Participant 8 said,

> Sharing works enables us to understand each member's choices, such as our individual decisions about how to translate "HAS Center" [into Thai]. Group members treated this phrase differently.

The way the translators agreed to divide responsibilities demonstrates the level of respect shown for each member's skills, leading them to treat one another equally. Such equality in working conditions might have been based on previous personal relationships among the members. This is described by the members of both groups, especially Participants 2 and 5, who clearly stated that their close relationship made them feel at ease in expressing their opinions, and Participants 8 and 10 who stated that their relationship helped them

work smoothly on the collective project. Equal treatment was also apparent in the groups' decision not to select a leader. These choices of how translators decided to work together implies that their habitus was internalised by the interactions of translation agents (Meylaerts, 2008), which in this case had been formed in the past. The equality in responsibilities and treatment were based on their previously close relationships, suggesting a level of trust which could be considered key to forging interrelationships when creating subtitles (Wongseree, 2018).

In addition, the interrelationships of the translators were demonstrated in the revising process. Based on the interview data, both groups decided to revise their work before submission to the lecturer. According to the observation data, while the translators divided their translation work equally, they worked together to do the revisions. This process was deemed particularly important by the translators:

> [In the revision process, we checked] register, word choice and meaning against the source text as there might have been some parts, especially the final parts of each section, that were linked to another section. That is why we needed to reread it [the translation] and check if the meaning was accurately represented. [Participant 10]

The extracts show that the revision process was conducted to maintain consistency of register and word choices used in translation. These aspects had been stressed in the translation courses that the participants had taken, suggesting how the translators' decisions had been impacted by their habitus (Gouanvic, 2005; Simeoni, 1998). Negotiations among the group members during the revision process changed the role of participants from translators to proof-readers of the subtitled text. These interactions between the translators show how they collectively engaged in finishing the task by sharing their subtitling work on the HAS Center video.

Another process that demonstrated the interrelationships of the translators is involved with technical activities: timing and typesetting the subtitles. These steps required effective interactions among members. For example, they worked together on selecting the styles of subtitles, choosing fonts and colours and deciding when subtitles should be segmented.

> [When we time and typeset the subtitles,] we thought of which fonts we should use and how the subtitles should be arranged for easy reading. We also discussed which words could be omitted. [Participant 1]

> We checked the size of the subtitles and their position. We also considered if we could see it clearly and if the space between each character was easy to read. [Participant 9]

The extracts show that not only did the members pay close attention to the translations, but they also took the audience's point of view into consideration. That is why they reached a mutual agreement to use black and white subtitles, colours usually favoured by Thai media.

Participants' choices can reflect how their viewing experiences are internalised, leading to the decisions they make when typesetting subtitles. For example, during the typesetting process, they agreed to choose styles that appear distinctive on the screen to help audiences see the subtitles clearly. This demonstrates the ways in which habitus shaped the decisions of the translators (Gouanvic, 2005; Simeoni, 1998).

Not only did the translators form relationships among themselves in completing the subtitling work, but they also sought assistance and consulted other human actors. For example, to save time during the preparations they asked the lecturer to provide them with a script, eliminating the need to transcribe the source text dialogue. Moreover, after mutual agreement was reached in the revising step, the translators submitted their work to the lecturer for comments and suggestions. The Director of the HAS Center also gave comments to the translators,

resulting in an editing process in which the translators again negotiated with one another to edit their work. The way the translators interacted with the lecturer and the Director suggests that although the interrelationships of the translators are considered a key part of subtitle production, the process also requires interactions with other human actors or translation agents to be completed.

By focusing on the translators, this section discusses the different roles they played, and presents them as social actors whose decisions have been influenced by their past experiences and interrelationships. The discussion addresses how the association of key human actors, especially the translators, can help complete production of the subtitles. Such association can be formed due to their close relationships as demonstrated in the way they worked together. It is evident from the equal treatment during the translating process, the discussions during the revision and their negotiations to reach a mutual agreement in the timing and typesetting process. In addition to the interrelationships of the translators, technology, a key non-human actor, played a crucial role throughout the subtitling process. This leads to the second sub-question, discussed in the following section.

Technology: Networked Platforms and Tools for Subtitling

The previous section elaborated on the interrelationships the translators formed during the subtitling process. However, not only were the efforts of translators and other human actors crucial to subtitle production, it was evident that the non-human actors, especially technology, helped mobilise the subtitle production activity. The discussion below will answer the second sub-question about the ways in which the translators use technology in subtitling.

The data collected from the surveys, online observations and interviews demonstrate that technology is an important part of every aspect of subtitle production, and is required to achieve the main goal of creating subtitles, as illustrated in Figure 3.

Figure 3

Subtitle Production Process and Use of Technology
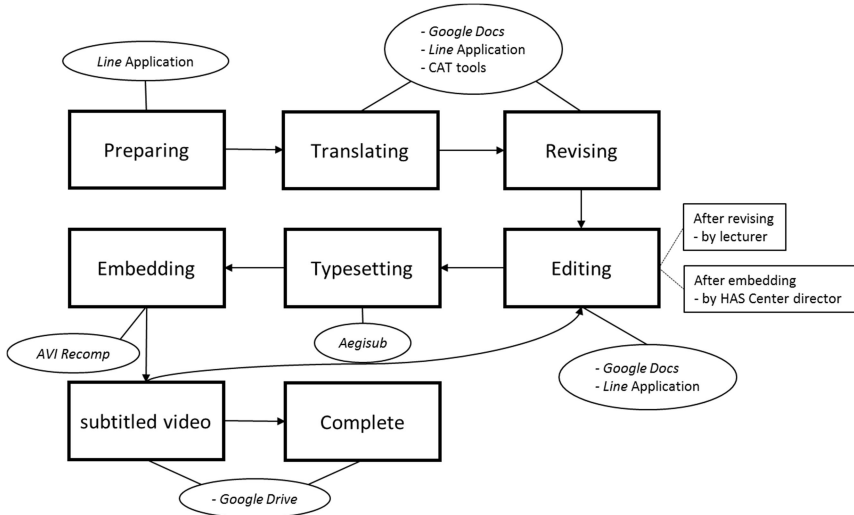
The active participation of technology as a key non-human actor and its interactions with human actors is discussed below, arranged by the types of programs used in subtitle production.

Common Technological Platforms.

Based on observations made during the subtitling workshop and the online conversations, the participants were more likely to use available technology that they were familiar with to facilitate the subtitle production. *Line,* a popular free messaging app in Thailand,[2] was an obvious technological platform for the subjects to use. It served as a shared communication platform for the translators in both groups. Basically, they used *Line* to interact with one another, including scheduling their work and sharing the locations of translation files so members could check translated work and give comments.

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[2] In 2019, Line was used by an estimated 44 million Thai users out of the total population of around 69 million people. (Boonnoon, 2019)

For the first group in particular, *Line* also served as a platform for members to discuss translation issues and reach a consensus. Moreover, *Line* was a platform for interactions between the translators and the lecturer. It allowed the lecturer to communicate with the translators about the working process, give advice regarding translation, and set appointment dates for future interviews. This selection by the translators implies their habitus as they made this decision based on their prior experience. They had used this application in their everyday lives and knew that it was a convenient platform for interaction.

In addition to *Line*, the online observations demonstrated that the translators used *Google* platforms when creating the subtitles. These included *Google Drive,* used to save or store their finished products and share them among the members and the lecturer. Moreover, *Google Docs*[3] was used by the translators in both groups as an interactive platform for sharing and editing their translated work. The Group 1 participants told their interviewer that even when they were working in different locations, *Google Docs* enabled them to share their translations in real-time.

One reason why the translators chose this program was because of its easy-to-access platform which allowed them to promptly interact with one another regarding the translations. This is demonstrated by the following extracts from the interview data:

> It [*Google Docs*] is a platform that we can use to edit works together. [Participant 5]

> We created it [translation] in Google Docs because we could simply use our computers to translate the parts we were responsible for. [Participant 10]

These extracts imply that the translators had had experience in using *Google Docs* as they knew its functions well. *Google Docs*

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[3] The program is an online word processor that allows users to create and edit documents, share files and work on documents simultaneously. (https://docs.google.com/)

enabled the translators to fulfil their goal of collectively and simultaneously producing translations. It served as a space for the interactions of the human actors, especially translators, to share and discuss translation tasks regardless of their physical locations.

Furthermore, *Google Docs* allowed the users to edit and comment on the work online. As illustrated in Figure 4, this function was also used by the lecturer, another human actor, after the translators completed their translation.

Figure 4
Screenshot of Google Docs being used by the lecturer to give comments (Group 2)
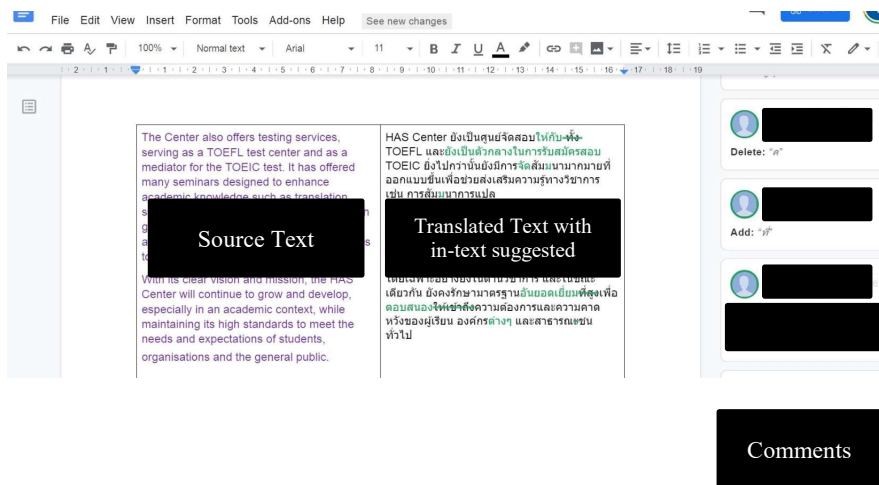
This shows how technology, e.g., *Google Docs*, served as an interactive platform for the translation task, facilitating the interactions between the translators and the lecturer. This capability allowed the lecturer to give prompt feedback to the translators and vice versa.

The above discussion presented the ways in which *Google Docs* was used as an interactive platform for the human actors to access documents and make changes to achieve the main goal of

producing subtitles for the HAS Center promotional video. In turn, *Google Drive* played an important role as the subtitling project reached the final stages of production and the translators/lecturer used the app as a sharing platform for all human actors to have access to the subtitled product. The selection of these programs by the translators shows the habitus that the translators demonstrated through their normative behaviours in producing translations (Gouanvic, 2005; Simeoni, 1998). In this particular study, the translators chose these platforms to facilitate their translation tasks based on their previous experience and the online availability of the program. These interrelationships between the human actors and the *Google* platforms, i.e. *Google Drive* and *Google Docs,* played an important part in mobilising the subtitle production activities.

Tools for Facilitating Subtitling

Not only did the translators use technology to provide a shared communication platform and working space, but based on the collected data, technology also acted as a platform for translators to gain access to resources for subtitling and was a facilitating tool.

When asked in the preliminary survey what technology they had previously used for translation, all translators said that they had experience using Internet resources. The tools they had used for producing translations included dictionaries and search engines, available through open access on the Internet. The dictionaries they listed in the survey included English-Thai and Thai-English dictionaries, monolingual dictionaries, collocation resources and thesauruses. Examples of online resources they were familiar with include: *Google Translate, Thesaurus.com, Collocation, Longdo dictionary, Line Dictionary* and other online commercial monolingual dictionaries such as *Oxford, Cambridge* and *Collins*. Similarly, participants explained that online dictionaries significantly contributed to their creation of translations. In addition to online resources, some of the translators, e.g. Participant 10, downloaded a dictionary application onto their smartphones for everyday use. This is an example of the translators' habitus as their normative behaviours affected their use of

resources, particularly Computer-Assisted Translation tools (CAT), when producing translations.

Furthermore, the interview results show that the translators used *Aegisub*[4], a technological tool for subtitling, timing and typesetting. However, some of them, including Participants 7, 9 and 10, had some experience with other programs that were able to add subtitles to videos, such as Premiere Pro or Sony Vegas. The translators probably chose *Aegisub* because it was the program introduced by the researcher in the subtitling workshop. They probably chose to use *AVI Recomp* to embed subtitles into the source text for the same reason. Another possible explanation for their choices is the suitability of the programs to their particular tasks. Participant 6 said that *Aegisub* is, "easy-to-use and has less complicated functions" than the video making programs. Moreover, Participant 9 argued that video making programs are for "media making purposes rather than being specifically designed for making subtitles," while Participant 10 said that these programs require computers or laptops that meet high specifications.

The selections of these programs as facilitating tools for subtitling implies that the previous experiences of the translators have been internalised, resulting in normative behaviours during the subtitle decision-making process. This shows that the habitus of the translators influenced their methodology.

The active role of technology in the actor-network discussed in this section proves that technology provides indispensable resources, e.g., platforms and tools, in the process of subtitle production (see Figure 3). This is consistent with the viewpoint of the majority of survey participants, who believed that technological resources "are necessary as facilitating tools for translation." In particular, Participant 3 shared an opinion about available technological Internet resources:

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[4] a free downloadable software available on the Internet that fan translators usually use when subtitling (Wongseree, 2018)

> Technology allows translators to have quick access to a wide
> range of information on the Internet, and enables them to
> research examples of word usage in various contexts [in relation
> to translation] online. Translators can also use tools from many
> sources and in various forms.

In conclusion, technology helps shape the subtitling practice by providing tools and platforms for the translators and, in turn, the roles of these resources have been diversified to fit the purposes or the goals of the translators as they complete the task. Such associations reflect the close link between people and technology in translation (Kenny, 2017) and, as mentioned in many studies (e.g., O'Hagan, 2009; Wongseree, 2018), emphasise the importance of technology in collaborative translation practices in the digital era. These findings are also consistent with those of Díaz-Cintas (2015), suggesting that technical skills are essential for present-day translators.

Collaborative Translation Practice in Subtitling

The data analysis and discussion included in the two previous sections provide a micro view of the interactions of the actors with a particular focus on translators and technology, thereby responding to the two sub-research questions. These types of interactions have led to the formation of the *Subtitle Production Actor-Network* (see Figure 5). This system provides a macro insight into how a complete network of the actors in subtitle production is formed, tapping into the actors' main roles or actions that are negotiated and transformed when they interact with each another.

In Figure 5, the human actors (the translators, the lecturer and the HAS Center Director) are depicted in rectangles while the non-human actors (technology and the source text) are presented in an oval shape. *Translators* are placed in the middle since they are considered the most significant actors in mobilising subtitling activities. The associative links in this network indicate the interactions that result in the negotiated roles of the actors. Their interrelationships are briefly described along with these associative links.

Figure 5
Subtitle Production Actor-Network
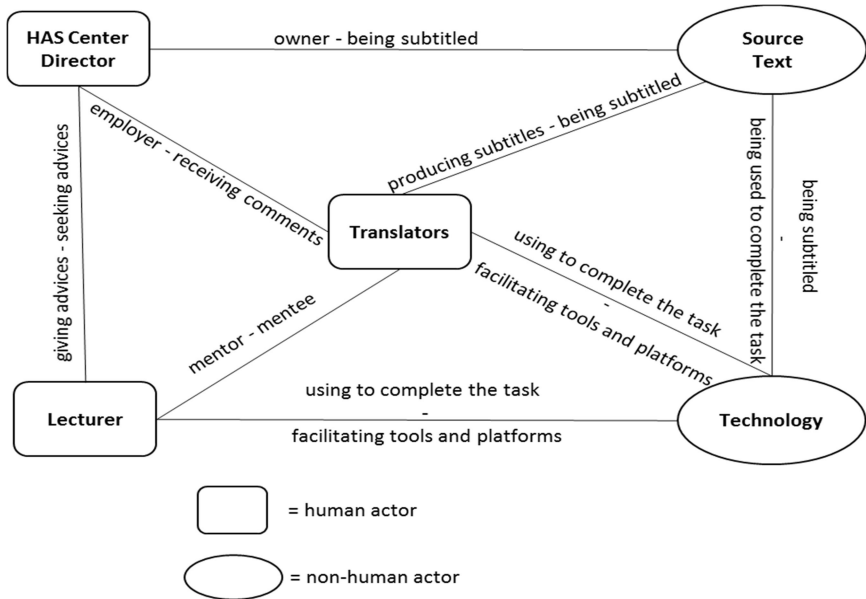
The *Subtitle Production Actor-Network* was formed after a lecturer interested the translators in establishing a group to achieve the goal of making subtitles for a promotional video of the HAS Center, the source text. This process showed the problematization, a starting point of network formation. The translators then formed a group and sought alliances from other actors, including a lecturer and technology, to accomplish the task (*interessement*). To carry out the subtitling task, in the enrolment process the translators negotiated and transformed the roles of technology, stating that it would be a platform for sharing translation and communication and provide the tools necessary for translating and creating subtitles. Technology also provided a platform for translators and the lecturer to discuss work with each other. In turn, facilitated by technology, translators sought advice from the lecturer who provided comments regarding translation. While forming

mentor-mentee interrelationships with the translators, the lecturer also interacted with the HAS Center Director and communicated his suggestions to the translators. These interactions were part of mobilising the subtitle production network. At the same time, the translators negotiated among themselves within their groups, establishing their roles as translators, proof-readers and typesetters in the process of making the subtitled video. These roles showed the ways in which the translators took part in mobilization of the subtitling activity, giving rise to the *Subtitle Production Actor-Network*. This Actor-Network is an example of the interrelationship of heterogeneous elements mobilising a practice in ANT (Latour, 2005).

The current study illustrates the collaboration of translators involved in subtitle production for an HAS Center video. This type of collaborative translation practice is formed by the interaction of agents influenced by social and cultural factors (Cordingley & Manning, 2017). The study's first goal was to gain an understanding of the ways in which translators work together to complete such a task. Based on the collected data, analysed in an ANT framework, the current research defined the interrelationships of the translators and their interactions with other actors in the subtitling process, demonstrating that the translators worked synchronously. That is, they all took part in translating the script of the source video. They shared their views and consulted with each other to resolve issues and overcome any obstacles occurring during the translation process, including word choice, register and consistency of translation. Furthermore, this collective engagement was also applied to technical tasks, including typesetting and embedding subtitles. The translators employed technological resources that facilitated the subtitling. By interacting with human actors, the roles of technology included providing a networked platform (e.g., *Line, Google* platforms) and facilitating tools (e.g., CAT tools, *Aegisub, AVI Recomp*) in the *Subtitle Production Actor-Network*, giving rise to the subtitling practice. The interrelationships formed among the human and non-human actors demonstrate that practices cannot be performed by an individual actor (Latour, 2005).

Through these interrelationships, the translators made their decisions based on the habitus, shaping a collective practice (Bourdieu, 1977). The shared subtitle production evidently elicited the collaboration described by Kenny (2008), as the translators collectively engaged in achieving a goal of creating a single artefact - Thai subtitles of a HAS Center video.

Conclusion

The present study analyses a subtitle production project in which ten subjects participated. This research focuses on a collaborative translation practice within a Thai context, a perspective which seems to have been overlooked within the translation studies field. By exploring the interrelationships of the human and non-human actors in subtitling (as illustrated in a *Subtitle Production Actor-Network)*, the research addressed collaboration not only in the translating process, but also in the practice as a whole. The results showed that decisions made by the translators and main translation agents were likely to be derived from their habitus, and their shared discussions and interactions during subtitling were an important part of completing the task. Furthermore, the translators and other translation agents sought ways to adapt everyday life technological platforms for use in translation, and available subtitling tools on the Internet were also helpful in performing the necessary tasks. These findings showed that at present, technology has a crucial role in producing translations such as subtitles.

Research Implications

Future research projects may focus on improvement of the video quality itself. This is a shortcoming acknowledged by the researcher and the participants offered suggestions to strengthen this area. The note taking method may be applied so that researchers can receive in-depth participant insight in a timelier fashion. Despite the small number of the participants in the research, the ethnographic approach enabled the researcher to collect in-depth data. Although

some researcher subjectivity is inevitable when interpreting ethnographic data, this approach is a way to produce knowledge through interactions and experiences (Hine, 2008). The survey data provided useful background information on the translators, especially in regard to their use of technology in translation. Observations and interview data enabled the researcher to explain how the interrelationships of the translators and their use of technology in a subtitling practice were affected by collaboration. This ensured the validity of the data findings in the present research. Moreover ANT, introduced by Latour (1987, 2005), allowed the current study to clarify the interrelationships between actors in a subtitle production network and provide a detailed description of the impact of technology in a collaborative translation practice.

References

Abdallah, K. (2012). *Translators in production networks: Reflections on agency, quality and ethics* [Doctoral dissertation, University of Eastern Finland]. UEF ERepository. http://urn.fi/URN:ISBN:978-952-61-0609-0

Boellstorff, T., Nardi, B., Pearce, C., & Taylor, T. L. (2012). *Ethnography and virtual worlds: A handbook of method.* Princeton University Press.

Boonnoon, J. (2019, July 25). Line aims to unite digital and real world in outreach to Thai users. *The Nation Thailand*. https://www.nationthailand.com/business/30373677

Bourdieu, P. (1990). *The logic of practice*. Polity Press.

Bourdieu, P. (1977). *Outline of a theory of practice.* Cambridge University Press.

Buzelin, H. (2007). Translations "in the making" In M. Wolf & A. Fukari (Eds.), *Constructing a sociology of translation* (pp. 135-169). John Benjamins.

Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (Ed.), *Power, action and belief: a new sociology of knowledge?* (pp. 196-223). Routledge.

Callon, M., & Latour, B. (1981). Unscrewing the big Leviathan: How actors macro-structure reality and how sociologists help them to do so. In K. Knorr-Cetina & A.V. Cicourel (Eds.), *Advances in social theory and methodology: Toward an integration of micro- and macro-sociologies* (pp. 277-303). Routledge and Kegan Paul.

Chesterman, A. (2006). Questions in the sociology of translation. In J. F. Duarte, A. A. Rosa, & T. Seruya (Eds.), *Translation studies at the interface of disciplines* (pp. 9-27). John Benjamins.

Cheung, M. (Ed.). (2006). *An anthology of Chinese discourse on translation: Vol. 1: From earliest times to the Buddhist project.* St Jerome Publishing.

Cordingley, A., & Manning, C. F. (2017). What is collaborative translation? In A. Cordingley & C. F. Manning (Eds.), *Collaborative translation from the Renaissance to the digital age* (pp. 1-30). Bloomsbury.

Díaz-Cintas, J. (2015). Technological strides in subtitling. In S. Chan (Ed.), *The Routledge encyclopedia of translation technology* (pp. 632-643). Routledge.

Fernández Costales, A. (2012). Collaborative translation revisited: Exploring the rationale and the motivation for volunteer translation. *Forum - International Journal of Interpretation and Translation*, *10*(1), 115-142.

Gibbs, G. R. (2007). *Analyzing qualitative data.* SAGE Publications.

Gouanvic, J. (2005). A Bourdieusian theory of translation, or the coincidence of practical instances. *The Translator, 11*(2), 147-166.

Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.). Routledge.

Hekkanen, R. (2009). Fields, networks and Finnish prose: A comparison of Bourdieusian field theory and Actor-Network theory in translation sociology *Selected Papers of the CETRA Research Seminar in Translation Studies 2008.* https://www.arts.kuleuven.be/cetra/papers/files/hekkanen.pdf

Hine, C. (2008). Virtual ethnography: Modes, varieties, affordances. In N. Fielding, R. M. Lee, & G. Blank (Eds.), *The SAGE handbook of online research methods* (pp. 257-270). SAGE Publications.

Hine, C. (2015). *Ethnography for the Internet: Embedded, embodied, everyday.* Bloomsbury.

Hung, E. (2005). Translation in China - an analytical survey: First century B.C.E. to early twentieth century. In E. Hung & J. Wakabayashi (Eds.), *Asian translation traditions* (pp. 67-107). St. Jerome Publishing.

Hung, E. (2006). 'And the Translator Is -': Translators in Chinese history. In T. Hermans (Ed.), *Translating others: Vol. 1* (pp. 145-160). St. Jerome Publishing.

Inghilleri, M. (2005). The sociology of Bourdieu and the construction of the 'object' in translation and interpreting studies. *The Translator, 11*(2), 125-145.

Jiménez-Crespo, M. A. (2017). Translation crowdsourcing: Research trends and perspectives. In A. Cordingley & C. F. Manning (Eds.), *Collaborative translation from the Renaissance to the digital age* (pp. 192-211). Bloomsbury.

Kenny, D. (2017). Introduction. In D. Kenny (Ed.), *Human issues in translation technology* (pp. 1-7). Routledge.

Kenny, M. A. (2008). Discussion, cooperation, collaboration. *The Interpreter and Translator Trainer, 2*(2), 139-164.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Harvard University Press.

Latour, B. (1999). On recalling ANT. *The Sociological Review, 47(1)*, 15-25.

Latour, B. (2005). *Reassembling the social: An introduction to Actor-Network-Theory.* Oxford University Press.

Law, J. (2007). *Actor network theory and material semiotics*. http://www.heterogeneities.net/publications/Law2007ANT andMaterialSemiotics.pdf

Li, D. (2015). *Amateur translation and the development of a participatory culture in china - a netnographic study of the last fantasy fansubbing group* [Doctoral dissertation, The University of Manchester] Manchester eScholar. https://www.escholar.manchester.ac.uk/uk-ac-man-scw: 273854

Matthewman, S. (2011). *Technology and social theory*. Palgrave Macmillan.

Meylaerts, R. (2008). Translators and (their) norms: Towards a sociological construction of the individual. In A. Pym, M. Shlesinger, & D. Simeoni (Eds.), *Beyond descriptive*

translation studies: Investigations in homage to Gideon Toury (pp. 91-102)*.* John Benjamins.

O'Brien, S. (2011). Collaborative translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies: Vol. 2* (pp. 17-20)*.* John Benjamins.

O'Hagan, M. (2009). Evolution of user-generated translation: Fansubs, translation hacking and crowdsourcing. *The Journal of Internationalisation and Localisation, 1*, 94-121.

O'Hagan, M. (2011). Community translation: Translation as a social activity and its possible consequences in the advent of web 2.0 and beyond. *Linguistica Antverpiensia, New Series – Themes in Translation Studies, 10*, 11-23.

O'Hagan, M. (2013). Understanding fan-translation: Pop culture and geeks too cool for translation schools?. In S. Bayó Belenguer, C. Ó Cuilleanáin, & E. Ní Chuilleanáin (Eds.), *Translation right or wrong* (pp. 230-245)*.* Four Courts Press.

O'Hagan, M. (2017). Deconstructing translation crowdsourcing with the case of a Facebook initiative: A translation network of engineered autonomy and trust?. In D. Kenny (Ed.), *Human issues in translation technology* (pp. 25-44)*.* Routledge.

Olohan, M. (2014). Why do you translate? Motivation to volunteer and TED translation. *Translation Studies, 7*(1), 17-33.

O'Reilly, K. (2009). *Key concepts in ethnography.* SAGE Publications.

Pym, A. D. (2011). Translation research terms: A tentative glossary for moments of perplexity and dispute. In A. Pym (Ed.), *Translation research projects 3* (pp. 75-99). Intercultural Studies Group.

Risku, H., & Windhager, F. (2013). Extended translation: A sociocognitive research agenda. *Target, 25*(1), 33-45.

Salmons, J. (2016). *Doing qualitative research online.* SAGE Publications.

Simeoni, D. (1998). The pivotal status of the translator's habitus. *Target, 10*(1), 1-39.

Wakabayashi, J. (2005). Translation in the East Asian cultural sphere. In E. Hung & J. Wakabayashi (Eds.), *Asian translation traditions* (pp. 17-65)*.* St. Jerome Publishing.

Wolcott, H. F. (2008). *Ethnography: A way of seeing* (2nd ed.). Altamira Press.

Wongseree, T. (2018). *Understanding Thai fansubbing: Collaboration in fan communities translating a Korean TV show* [Doctoral dissertation, Dublin City University]. DCU Online Research Access Service. http://doras.dcu.ie/22113/

Wongseree, T. (2020). Understanding Thai fansubbing practices in the digital era: A network of fans and online technologies in fansubbing communities. *Perspectives*, *28*(4), 539-553.

Zielinska-Elliott, A., & Kaminka, I. (2017). Online multilingual collaboration: Haruki Murakami's European translators. In A. Cordingley & C. F. Manning (Eds.), *Collaborative translation from the Renaissance to the digital age* (pp. 167-191). Bloomsbury.