Communication via Translation Applications

Introduction

Communication across a linguistic rift is difficult. Perhaps it is no wonder that '[i]t is simply a fact of life that most people rarely interact through an interpreter.' (Roy, 2000, p.63) Pidgins may develop over time in such situations to fulfil 'short-lived' and 'specific' needs (Myers-Scotton, 2006, p.278); but each short-term tourist in a foreign country does not invent their own pidgin. Instead, they 'get by' with what words they know, gestures, and facial expressions, at great risk of miscommunication (Panayiotou et al., 2019). Traditionally, there are two solutions: relying on a bilingual interpreter, or having key phrases translated beforehand, as in a phrasebook. Translation apps, the medium to be analysed in this essay, are a new third option. This essay will first outline the processes of human interpreting and translating, and then explore where translation apps sit between these two processes. For specificity, the following distinction is made: translation turns writing into writing in another language, while interpreting turns speech into speech (or gestures) in another language.

Overview of Translating and Interpreting

Translating and interpreting are imagined as processes involving two primary participants – one conversant in language A, and another conversant in language B. In an interpreted setting, 'primary interlocutors…are often encouraged to think of themselves as speaking directly to each other.' (Roy, 2000, p.70) Meanwhile, in a translated setting, the translator can be obscured – even in a translated form, the ideas expressed in a text still belong to the author (Figure 1). But the fact is that there IS an intermediary, who analyses input in order to create a new text (Hale & Liddicoat, 2015, p.22), and bears some responsibility for the success of the interaction (Roy, 2000, p.100). They must mediate discourse faithfully, not only to the content, but also to the culture, politeness, and pragmatics in the target language (Hale & Liddicoat, 2015, p.15-16). Therefore, it is better to view intermediaries as participants in the communication they mediate (Roy, 2000, pp.70-1), albeit constrained ones (p.33). This is true
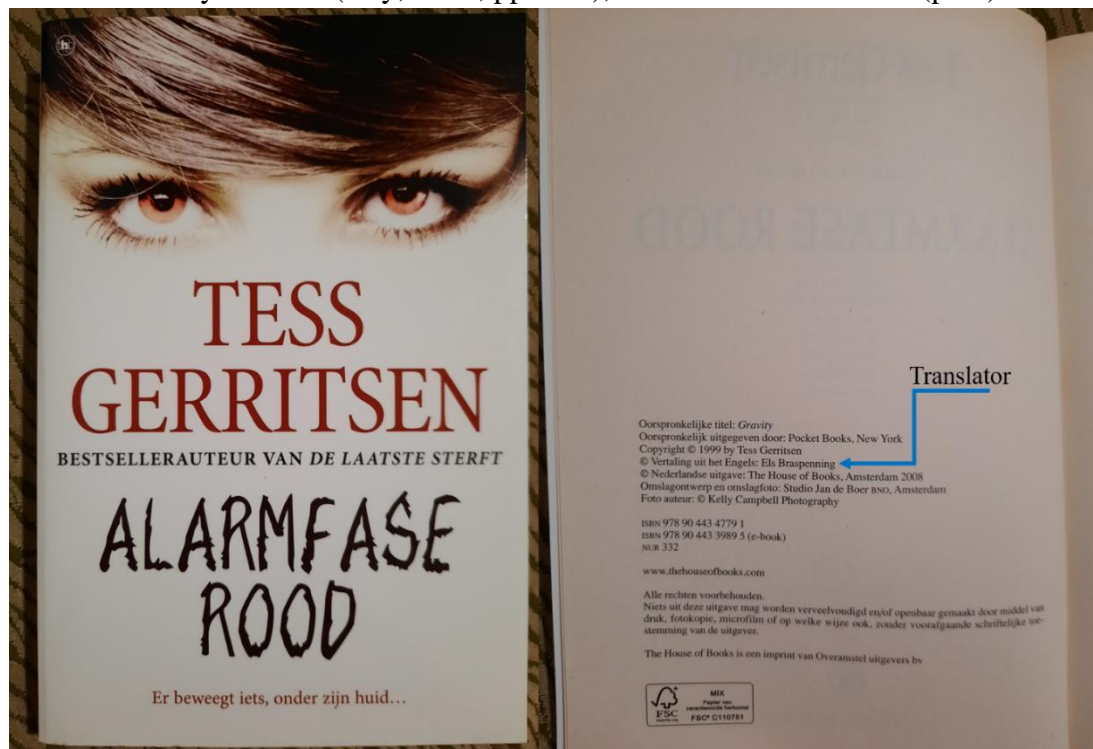

Figure 1. The author's name is prominently displayed above the translated name of this book. In contrast, the translator's name and the original title are in small print. [Author's photograph]

in translation – as mentioned, translators interpret the meaning of their source texts, which influences how they will reproduce it, allowing a single text to have multiple translations.[1] Meanwhile, in interpretation, interpreters take their own turns, and can offer turns to others (p.98) or shut them down (p.84). Primary participants, too, subconsciously acknowledge the participant-ness of interpreters by providing feedback only when the interpreter is interpreting, rather than when the other primary participant is taking a turn (p.72).

<u>Translation and Interpreting vs. Writing and Speaking.</u>
In terms of form, intermediaries' output is not too different from their source texts. But translating and interpreting are not just elaborated versions of writing and speaking. The presence of the 'medium' of the human interpreter already changes communication dynamics. Interpreters are supposed to be neutral, not taking sides (Roy, 2000, p.66) – thus, it is difficult to imagine an interpreter shouting on behalf of either party. Indeed, an Arabic interpreter for Trump at the U.N. headquarters in 2017 drew controversy for interpreting him 'performative[ly]', 'mimicking the way he spoke' (Abudayeh & Dubbati, 2020, p.424). The need to display neutrality means intermediaries often soften offensive expressions in intense circumstances, even when legally bound to accurately interpret them in face-to-face scenarios (Hunt-Gómez, 2018). Even when the intermediary is invisible and therefore less accountable, this is so: for example, the Spanish subtitler for the movie *Reservoir Dogs* avoided translating 30.1% offensive or taboo English expressions in the movie, and maintained (or augmented) the offensive force of only 55% of those expressions (Ávila-Cabrera, 2016, p.38).

Returning to interpreting, other aspects of typical speech do not hold true in an interpreted setting. For example, lag occurs, and primary participants can grow uncomfortable with the length of time between the turns they take (Roy, 2000, p.77). This lag occurs because the interpreter is taking a turn, but is not addressing the primary participant whose turn was just finished. In effect, that participant is being ignored by the others, which is likely to be considered rude in other circumstances, and may explain the discomfort. Furthermore, while Crystal (2006) writes that speech often fulfils a phatic function (p.29), interpreters concern themselves with accuracy in transmitting primary participants' intentions (Hale & Liddicoat, 2015, p.14). Thus, in untranslatable situations, such as of a joke, the interpreter may opt to explain the joke. The information of the joke is retained, but the solidarity aspect of the joke is easily lost in translation (Rudvin & Tomassini, 2011, p.108).

To summarise, Crystal's (2006) features distinguishing speech and text will be applied to interpreting and translation. Three points stand out to differentiate interpreting from regular speech: 1) the lag between primary participant turns; 2) the generally more informative function of an interpreted exchange; and 3) the potential mismatch between the prosody of the primary participants and that of the interpreter. Translated texts are featurally the same as regular texts, because 'inadequacies [and inappropriateness] in our writing can be eliminated

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[1] As an example, Haukur (n.d.) provides an overview of various translations of the Old Norse *Rúnatal*, all of which vary in word choice and in loyalty to the Old Norse alliterative metre.

in later drafts without the reader ever knowing they were there.' (p.29) It would take an already bilingual person to discover discrepancies between translations and their sources.

Speech	Interpreting	Text	Translation
Time-bound		Space-bound	
No time lag; spontaneous	No lag BETWEEN INTERPRETER AND PRIMARY PARTICIPANTS	Time lag; contrived	
Face-to-face		Visually decontextualised	
Loose structure		Complex structure	
Phatic function	INFORMATIVE FUNCTION	Informative function	
Immediately revisable		Repeatedly revisable	
Prosodically rich	Prosodically rich BETWEEN PRIMARY PARTICIPANTS	Graphically rich	

Communication via Translation Applications (Apps)
Machine translation is now a far more convenient option than finding a human, due to the ubiquity of smartphones – perhaps 5 billion people have one (Silver, 2019). There are two types of translation programmes: those which limit possible inputs, preferred by the emergency response (Turner et al., 2019) and medical sectors (Panayiotou et al., 2019); and those which allow any input, such as Google Translate. This paper will focus on the latter; and on their use in the context of spontaneous conversations, rather than in translating written texts. This paper opines that the main featural difference (following Crystal, 2006) between a machine-translated text and a human-translated text is that the translation does not require a time lag to be produced; however, for all the other features, there is little difference.

Communication over Google Translate begins either by typing in one of at least 103 languages, or speaking in one of at least 32 (Turovsky, 2016). The programme then outputs a translation of the text for the other primary participant to read, or can use speech synthesis to dictate the text. To respond, the other primary participant goes through the steps again.

Translation Apps vs. Human Interpreting
In the above described process, one aspect similar to human-interpreted communication would be the difficulty in having overlapping turns. In human-interpreted communication, overlapping turns may be stopped if the interpreter often cannot deal with multiple inputs effectively (Roy, 2000, p.85). However, that does not totally prevent them from happening in human-interpreted events, and such overlapping turns can lead to unexpected moments of solidarity between primary participants (p.87). In contrast, over Google Translate, if two primary participants overlap in speech, the app has no way to decipher who has said what, and therefore participants must remain silent until the other has spoken (İkizoğlu, 2019, p.5). If participants opt to type, there will likewise be a period of silence as the current speaker prepares text. The medium forces periods of silence in what greatly resembles a face-to-face conversation, especially since there really would be only two parties involved.

Primary participants using translation apps also have poorer options to confirm the accuracy of the message transmitted to the other party. A human interpreter acting in good faith will clarify as much as necessary (Hale & Liddicoat, 2015, p.16), but not machines. Participants can back-translate their sentences using Google Translate to check if the output in the other

language translates back to what they first intended. However, as sentences become longer, translations and back-translations worsen (Shigenobu, 2007, p.262). Furthermore, Google Translate has no system suggesting to users which parts of their sentences are problematic for translation (as opposed to Shigenobu, 2007, p.263-264), and so users may have to backpedal significantly if their back-translations are horribly garbled or risk communication breakdown. Given the above limitations, participants would do well to keep their sentences short.

In addition, machine translation tends to analyse text at the level of the word or the sentence (Hale & Liddicoat, 2015, p.22), not at the level of paragraphs or even adjacency pairs. Thus, machines are not so adept at understanding anaphora and cataphora, and translators using machines resort to 'deliberate lexical repetition' to avoid mistranslations (Doherty, 2016, p.954). İkizoğlu (2019) offers a sample of such a mistranslation by Google Translate:

> Speaker A (English): 'Your [Speaker B's] son treat me so bad.' (p.11)
> Speaker B (Turkish): 'If you had told me before, I would have beaten (him) up.' (p.12)

Speaker B omits the pronoun 'him' in her utterance, which would normally be acceptable given the context of 'your son' in the previous utterance. However, the app could not process this omission and returned an unanalysable English translation (p.12). Speakers employing Google Translate therefore must spell out their sentences unambiguously, rather like how they might write for an unknown audience, making the language to be used for Google Translate more contrived than ordinary speech.

Additional Issues in the Machine as Interpreter
The greatest difference, however, between human-interpreted and machine-interpreted encounters is the lack of a responsible third agent in the interaction. In this case, primary participants can either accept more responsibility for the interaction, or offload responsibility onto the app. İkizoğlu (2019) found that when participants treated the app as a 'participant', they laughed at its strange translations, holding the app responsible for generating them (p.9). Notably, this only happened when the participant whose utterance was translated by the app understood the (poor) translation also (p.5, 7). In contrast, when participants treated the app as an 'object', their gaze stayed on their addressee rather than on the machine, expressing 'commitment to the interaction' (p.10). İkizoğlu's committed participants also sought confirmation from others about whether the translation provided by Google Translate was accurate (p.11, 12). Of course, this means that participants who took on more responsibility in the machine-interpreted exchange did not share a common language. In low stakes scenarios, it is easy to laugh at the app; but this is not so acceptable in the previously mentioned emergency and medical sectors. As an example, consider Figure 2:

Figure 2. English to Japanese translation, and back-translation. Taken 19 Feb 2021. [Author's screenshot]

The speaker of the initial English sentence might be satisfied with the back-translation, since it still conveys the urgency of the situation. However, the Japanese output sentence does not necessarily convey the same urgent, deadly meaning:

この	人は	すぐに	出血	します
kono	*hito-wa*	*sugu ni*	*shukketsu*	*shimasu*
this	person-TOPIC	immediately	bleed	do.NONPAST

'This person bleeds immediately!' / 'This person is soon to bleed!'

It will be difficult to determine if the speaker of the English sentence or emergency response is to blame for the miscommunication if emergency response decides to treat this as a prank call. But such a scenario would aptly demonstrate what Hale and Liddicoat (2015) call 'a fundamental misunderstanding of the nature of the act of translation…What is missing here is the idea of the translator as an interpreter and rewriter on meanings as opposed to a simple decoder.' (p.22) A machine can DECODE more or less the meaning of the words, that a person bleeds quickly. However, it is irrelevant to the machine how panicked the speaker or typist is when creating the input, and thus the true meaning of 'help, this is an emergency' is missed.

To summarise, another table is drawn up to compare the features of human interpreting, machine-translation interpreting, and human translation:

Human Interpreting	Interpreting	Human Translation
Time-bound	Time-bound	Space-bound
No lag between interpreter and primary participants	SHORT LAG; CONTRIVED	Time lag; contrived
Face-to-face	Face-to-face	Visually decontextualised
Loose structure	Loose, SIMPLE structure	Complex structure
Informative function	Informative function	Informative function
Immediately revisable	Immediately revisable; DIFFICULT TO REVISE	Repeatedly revisable
Prosodically rich between primary participants	NEITHER	Graphically rich

In addition, this paper has discussed a key feature of communication via translation apps: the lack of a responsible third party. Machine translation is 'better than nothing' (Doherty, 2016, p.962) for straightforward, short, 'low stakes' interactions (Hale & Liddicoat, 2015, p.22), but it is not yet ready for literature (Sproat, 2010, p.241) or emergencies (Turner et al., 2019).

Translation Apps in the Present
For all the problems machine translation may have, it works well enough in the low stakes environments in which it is used. Google (2015) released a video showing how a monolingual Spanish speaker was able to train with a monolingual English-speaking football team, which led to his discovery by English Premiership Clubs. While the video shows only two instances of Google Translate being used, it does indicate that connections between people who do not share a language can be made more conveniently than before. With Google Translate acquiring more languages, this may even become more widespread.

Even professional translators themselves are coming to rely on machine translation. They use computers to store and retrieve commonly translated phrases (Doherty, 2016, p.951), and some professionals even count on 'previously used human translation in TM [translation memory] data' to be of high quality (p.954). And it is not strange that some of these previously used human translations may come from non-professionals. Now that anyone on the Internet can contribute, non-professionals can also offer translations for things they are passionate about (p.960). It was possible until September 2020 for content creators on YouTube to allow strangers to subtitle their videos in other languages (Lyons, 2020); and Google allows any of its users to contribute to Google Translate (Google, n.d.). This can blur the line between human and machine translation (Doherty, 2016, p.953): are the translations examined in Figure 2 just the poor work of amateurs that have been picked up by statistical algorithms, or is something fundamentally broken about Google Translate?

On the other hand, the widespread-ness of translations by professionals or amateurs which serve well enough leads to an assumption that 'interlingual communication is unproblematic and independent of professional expertise' (Hale & Liddicoat, 2015, p.21). As a result, the price for professional translators' services has dropped by up to 50% (Doherty, 2016, p.949). Yet the truth is that translation or interpretation is not simple. As discussed previously, mediating between languages requires understanding of the cultures behind those languages. It is alarmist to suggest that people will simply stop learning other languages with the advance of translation apps. But it is possible that people will come to trust too much in the apps, and believe that different languages and ideas are similar enough to simply be parsed from one to the other, forgetting that quality translation comes from UNDERSTANDING the other (Hofstadter, 2018). It is not always enough to understand the gist, and that is precisely why translation apps which control inputs and outputs are favoured by emergency response and medical services, where the need to fully understand is vital.

Nevertheless, technological developments in other fields may have things to offer machine translation. Microsoft has developed an 'empathetic AI' chatbot named XiaoIce, who is able to demonstrate 'a sufficient emotional quotient (EQ) to meet users' emotional needs' (Zhou et al., 2020, p.55). Perhaps accurate assessments of participants' emotional states as they produce text will be useful to its translation. XiaoIce also seems to be able to understand deixis (p.63), which would be useful for translation apps, given İkizoğlu's (2019) observations of their mistranslations (p.12). Perhaps the future will bring machines that can UNDERSTAND in a way similar to humans, but for now, that future may be distant (Hofstadter, 2018). Nevertheless, a small shift to a new method in machine translation may prove a large step in bringing about these understanding machines.

Conclusion
Translation apps provides a 'quick and dirty' (Doherty, 2016, p.959) fix for the hassle of finding a bilingual for every interlingual interaction. Structurally, a translator- or interpreter-mediated interaction is different from normal writing and speech respectively; and translation apps are still more different. Their logistical issues force a stunted, contrived kind of face-to-face conversation; and they are best suited for low stakes interactions due to the difficulty in distributing responsibility in app-mediated interaction to participants and the apps themselves. Nevertheless, translation apps have allowed and will continue to allow people with no common language to connect far more conveniently than before. And, in expectation of technological advances, it is too soon to dismiss the future potential of translation apps.

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