AI Translators and the International K-Pop Fandom on Twitter

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Abstract

This paper was originally written for Sun-Ha Hong's CMNS 253W course *Introduction to Information Technology: The New Media.* The assignment asked students to write a short paper that critically analyzes a chosen technology and its existing/potential impact on different kinds of people and social relations. The paper uses APA citation style.

Artificial Intelligence Translators on Twitter opened many doors for International K-Pop fans. It allowed them to connect with their favourite artists without needing a middleperson of a translator. However, through this, the fear of "robots taking over" started to blossom. Can AI translators truly replace "real person" translators and therefore will "real person" translators, who receive celebrity treatment in the fandom, "lose their jobs"? This paper explores how AI is not able to recreate the culture that "real-person" translators have created on the K-Pop fandom Twitter. Therefore, AI and humans must work together to provide the fullest translations for the International K-Pop fandom. This essay uses content analysis of tweets created by the International K-Pop fandom and K-Pop artists, as well as taking from various pieces of literature on AI.

When Twitter first implemented Artificial Intelligence Translators on their platform, it opened many doors. Particularly, it impacted the International K-Pop fandom greatly, who no longer had to rely on other fans for translations of tweets by their favourite artists. With the tap of a screen or the click of a button, they were able to translate what their favourite artist is saying into their own language. However, even with the implementation of AI Translators on the Twitter app, many people still prefer and turn to "real people" translators (Aisyah, 2017, p. 76). After all, it is assumed that the AI Translator –the "machine" translator misses many cultural nuances, which is crucial in any translations. However, since AI

works by taking data from a dataset and identifying patterns to come up with an answer (Broussard, 2018, p. 34), if enough cultural nuances are fed into the data, AI may be able to translate the cultural nuances as well. This raises the age-old fear of "robots taking over." However, in the raising of this fear, the question of who is programming those robots are not explored. It ignores the idea of ghost work. Furthermore, AI Translators do not replace the culture of the K-Pop fandom on Twitter – Translators receiving celebrity treatments and the cultural niches of the fandom cannot be created by AI. Not only that, but AI also has an implicit bias based on who has programmed it (Bernagozzi et al., 2021, p. 53). These are a few things one must consider before jumping into the conclusion that "robots are taking over," for humans and AI must work together. Artificial Intelligence is not a replacement for human work.

Ghost work is one of the aspects that is ignored when there is a fear of "AI robots taking over." For AI to exist, there needs to be the presence of ghost work. Ghost work is the intentionally hidden human labour that powers technology (Gray and Suri, 2019, para 1). Ghost work is what fills the gaps that AI cannot (Gray and Suri, 2019, para 2). In the case of the AI Translators on Twitter, someone is feeding those datasets into the translation machine. By claiming that "robots are taking over" due to the presence of AI, it ignores how real humans work to make the AI possible, and therefore becomes unrecognized labour. It can also be argued that AI works to help humans to be better at their work rather than "taking over" (Downie, 2020, p. 145). With the implementation of AI, there are decreased "translate please" requests under tweets of K-Pop artists, which Aisyah (2017) found there seemed to be a lot of before the implementation of AI Translators (p. 78). This allows for the artist to see more "genuine" responses to their tweets, rather than a clogged-up timeline of translation requests. Furthermore, there is less pressure for translators to translate as fast as possible to "serve" the fandom, who are providing this service for free even with their busy schedules (Zur, 2018, p. 150).

Postman (1998) has said that the benefits and disadvantages of new technologies are never distributed evenly around the population (p. 2). The fear is that if AI Translators are able to translate the cultural nuances that a "real person" translator may be able to do, the popular translators would "lose their jobs." Aisyah and Jin (2017) found that translation is not just about translating the text, but the cultural nuances and meanings as well (p. 114). It is assumed that AI Translators miss the mark of cultural nuances in their translations, however, because AI works by identifying patterns in pre-existing data (Broussard, 2018, p.

34) if enough "cultural data" is fed, they are able to translate such nuances. For example, in a tweet by ATEEZ, a K-Pop boygroup, as seen in Figure 1, it said "[#성화] 에이티니 꽃길만 걷자" which translates to "[#SEONGHWA] ATINY, let's only walk on a flowery road," which is shown in Figure 1 and Figure 2. The translation on Figure 1 was done by an AI Translator, while the translation on Figure 2 was done by a "real human." The AI was able to detect the "cultural nuance" of the term "ATINY," which is the fandom name for the group ATEEZ, and translate it. Although, it is true that sometimes AI Translators miss the mark. Broussard (2018) found that "Narrow AI," which is what translation apps are based on, works best with datasets already given to them (p. 34). Since language is constantly evolving at a very fast rate, colloquial terms changing rapidly each time, it would be impossible to create datasets to "train" AI machines on every colloquial term out there. This is shown in Figure 3, where there is a "translation fail" by AI. Figure 3 is a tweet that says "요즘 인싸라면 불금에 '이것' 한다?," which translates to "These days, if you're an insider you do 'this' on a Fiery Friday night?." However, as seen in Figure 3, the AI was able to translate the colloquial term "인싸" ("inssa" which translates to "insider") but not "불금" ("boolgeum"), which translates to "Fiery Friday," which is similar to TGIF in English (Fritz, 2015). Therefore, the AI missed a crucial colloquial term and just translated "Fiery Friday" into "Fire" which does not make much sense. This is when fans will turn to "real person" translators – when AI misses the mark. However, this is not to say that fans rely on AI Translators most of the time. AI Translators are like fast food – it satisfies the hunger for a short moment, as in, one may be able to get a gist of what the tweet is saying, without understanding the full cultural context. It is the real person translators that can offer cultural contexts – either in the replies after the tweet or in a screencap (Figure 4). Therefore, even if AI Translators become so advanced that they get translations perfectly right each time, they are unable to give cultural contexts like a real person translator would be able to.

Figure 1. A screencap of the tweet by K-Pop group ATEEZ. There is text in the original language (Korean) and the AI Translation of that text in English.
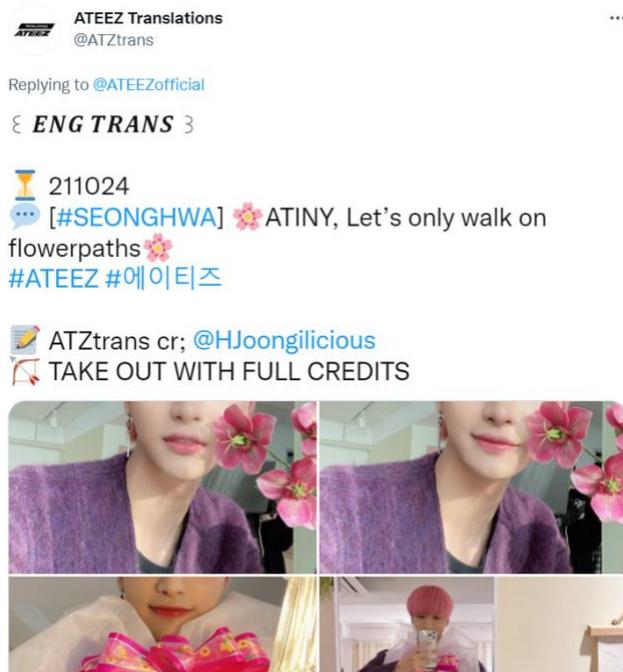
Figure 2. A screencap of a tweet by ATEEZ Translations, which is a translation of the tweet in Figure 1. ATEEZ Translations is considered a "real person" Twitter translation account for the K-Pop group ATEEZ.
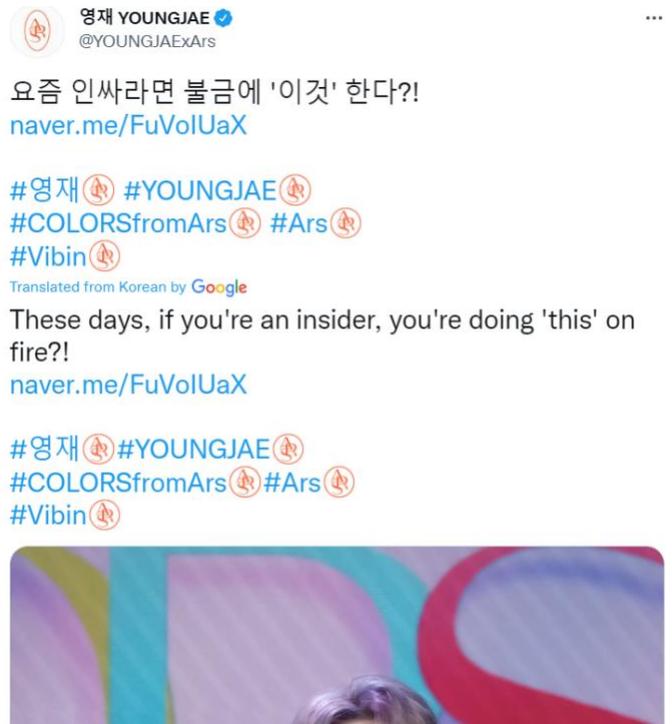
Figure 3. Screencap of a tweet by K-Pop artist Youngjae. The screencap shows the original tweet in Korean as well as the translation by AI.
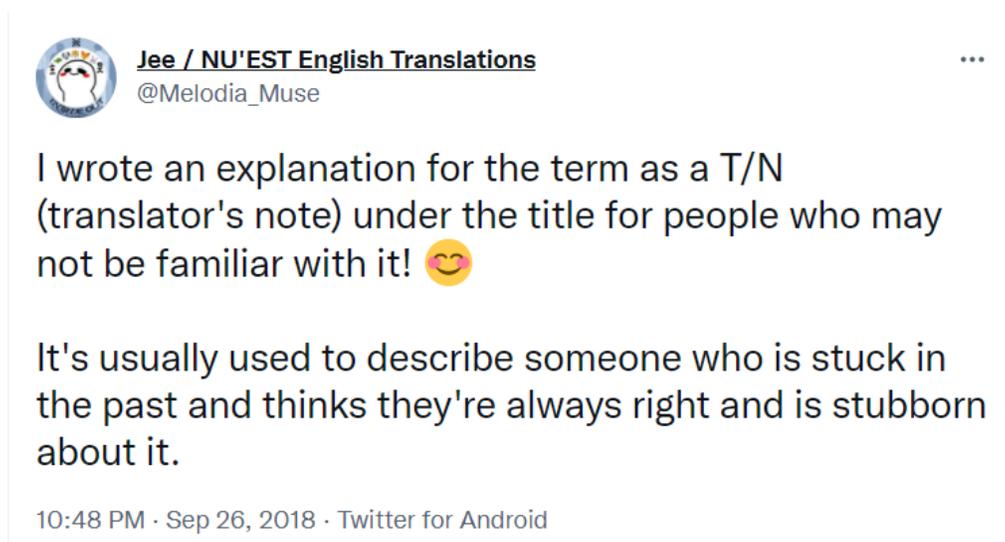

Figure 4. A screencap of a tweet by @Melodia_Muse which shows that they have written "translation notes" to explain a previous tweet in the thread.

A part of the culture that would be missing if "real person" translators were replaced is the presence of English in the International K-Pop fandom. Although K-Pop stands for "Korean Pop" it is undeniable the hybridity of English in the K-Pop fandom. A part of this is due to how the artists use English themselves in their stage names to their lyrics (Chun, 2017, p. 57), but also because English became "a must" for economic as well as cultural globalization (Jin, as cited in Jin and Ryoo, 2012, p. 119). Not only that, but many of the events also held by the various international K-Pop fans are in English (Malik and Haidar, 2021, p. 370). Therefore, the common language used to communicate between International K-Pop fans is English, and some fans use the K-Pop Fandom Twitter to learn English (Malik and Haidar, 2021, p. 363). Although AI can translate from and into any language, allowing the fans to tweet to their favourite artist using their native tongue, using only AI to translate and removing "real person" translators removes the possibility for language learning. Although it can be argued that this is a good thing – after all, expecting English from those from non-English speaking countries have been the forefront for linguistic imperialism (Hosni, 2015, p. 301), it is undeniable that an opportunity may be missed for some international fans and for some K-Pop artists themselves tweet in English (Figure 5).
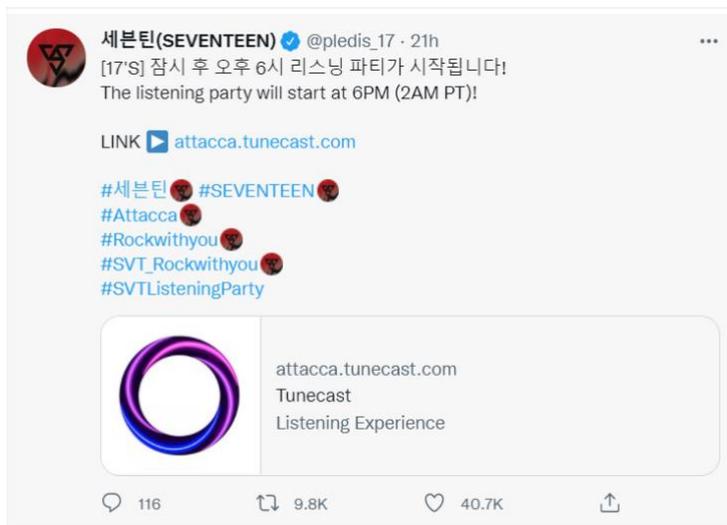

Figure 5. A screencap of a tweet by the K-Pop group Seventeen. Unlike other tweets that have relied on AI or fandom translations, this Twitter account "officially" tweets Korean AND English.

One of the things that AI cannot replace is the culture that is created with "real person" translators in the international K-Pop fandom. Many fans rely on "real person" translators and are immensely grateful to them (Aisyah, 2017, p. 76). Zur (2018), in their study of Hebrew Hallyu fans, also found that there have been a lot of gratitude towards translators, in this case, the subbing community of Korean Dramas (p. 150). This gratefulness allows translators to become like celebrities themselves – creating a public opinion of them. Not only that, in a study by Aisyah (2017), there have been some distrust in Google Translate, one fan saying, "I used google translate to translate [the tweet] not sure if it is correct" (p. 76). This distrust in AI Translators also allow translation accounts to flourish in their celebrity-like treatment. A popular translation account for K-Pop artist Jay B, has 96.5k Twitter followers, signifying the influence and popularity that some translation accounts can have (ForDef./JAY B, n.d).

As said by Downie (2020) in their book *Interpreters vs machines: can interpreters survive in an AI-dominated world?,* "All a tool can ever do is enhance the quality that an artist has" (p. 147). Therefore, all AI Translators do is assist in creating a "fast food culture" of translations – where fans are able to instantaneously understand what their favourite artist is saying at the surface and send messages to them in their native language. AI Translators are not the replacement for "real person" translators. AI Translators miss the cultural context of the international K-Pop fandom – whether it is through not being able to translate colloquial terms correctly, or by destroying the culture of English hybridization in the K-Pop fandom, or the celebrity treatment of translators. Furthermore, claiming that robots will take over ignores the idea of ghost work. In conclusion, the importance of working together with "real person" translators and AI translators, is reflected in the globalization of the International K-Pop fandom Twitter. Artificial Intelligence is not the replacement for human work.

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Note: Translations were done by me, Judy Yae Young Kim, unless otherwise stated.

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