# Remote Simultaneous Interpreting: Exploring Experiences and Opinions of Conference Interpreters in Taiwan

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Due to the COVID-19 pandemic, remote simultaneous interpreting (RSI) has become the "new normal" in the global conference interpreting market. These internet-based RSI platforms offer conference organizers a safe and convenient solution during the COVID-19 pandemic when traveling is difficult and physical gatherings are banned. Many conference interpreters, including those in Taiwan, were forced to adapt to this new mode of work to ensure their continual operation. In this report, the RSI experiences and opinions of Taiwan's conference interpreters were explored using a questionnaire and follow-up written interviews. Interpreters were asked about their remote interpreting experiences prior to and after the pandemic, how much they agreed to RSI providers' claims about the advantages of RSI, how much they agreed to claims about the shortcomings of RSI, and how they compared RSI with traditional (i.e., physical) simultaneous interpreting (SI). The results from 41 respondents revealed that conference interpreters in Taiwan were generally dissatisfied with their RSI experiences, and if given the choice regarding the mode of work (RSI vs. traditional SI), those interviewed would choose the traditional mode over RSI. Despite the potential negative effects of RSI on the interpreting market, respondents believed in its enduring presence. This exploratory study suggested that respondents resisted RSI affectively, but behaviorally (and perhaps cognitively) accepted it. Therefore, future research on the relationship between interpreters and technology should incorporate the affective constructs of personality traits, such as technological readiness, to better understand interpreters' attitudes toward new interpreting technology.

*Keywords*: COVID-19, remote simultaneous interpreting, conference interpreter, Taiwan, technology readiness

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# 臺灣會議口譯員遠距同步口譯使用意見調查

#### 范家銘

新型冠狀病毒疾病(COVID-19)肆虐全球,使「遠距同步口譯」(remote simultaneous interpreting, RSI)成為全球會議口譯市場的新常態。各種旅行與群聚禁令導致會議主辦單位必須使用這些以網路技術開發的 RSI 平臺,而會議口譯員被迫適應這個新的工作模式以維持生計,臺灣的會議口譯員也不例外。本研究透過網路問卷及書面訪談探索臺灣會議口譯員的 RSI 使用經驗與意見。問卷詢問填答者疫情爆發前後的遠距口譯經驗、是否同意業者用來行銷 RSI 所提出的諸多優點、是否同意許多同行提出的諸多缺點,以及他們如何比較 RSI 及傳統的實體同步口譯工作模式。共 41 位填答者的回覆顯示,臺灣會議口譯員一般而言不滿意現階段的 RSI 工作經驗,且若有兩個口譯案件,所有工作條件相同,僅有 RSI 或傳統實體之區別,受訪者均表示會選擇傳統的實體同步口譯工作模式。雖然 RSI 可能對口譯市場有負面影響,填答者一般認為這種工作模式不會隨疫情結束而消失。本探索性研究顯示,受訪者雖然在情感上可能抗拒 RSI,但認知上與行為上則可能接受,因此未來有關口譯員與科技使用的研究,宜納入如科技準備度這種人格特質的情感構念,以更細膩地了解口譯員對新的口譯科技抱持什麼樣的態度。

關鍵詞:新型冠狀病毒疾病、遠距同步口譯、會議口譯員、臺灣、科技準備度

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## Introduction

The impact of the coronavirus disease (COVID-19) started being felt around the world after the World Health Organization (WHO) declared it a public health emergency of international concern (PHEIC) on January 30, 2020. As the pandemic worsened in spring and summer, governments implemented lockdowns, travel restrictions, and border measures that severely dampened economic activities around the world. The repercussions shook the foundation of the language interpreting industry, namely, cross-cultural in-person communication. Due to shortage of work, many freelance interpreters who depended on income from the private market saw their income dwindle to a trickle, and even those who worked for international organizations, such as the European Union, suffered financial blows (Koutsokosta, 2020).

In contrast to the rest of the world, Taiwan was relatively unscathed and has been commended worldwide for its successful response to COVID-19. There was never a lockdown before May 2021, so businesses operated normally after the lunar new year holidays ended in early February 2020. However, the pandemic worsened in other countries in spring, forcing Taiwan's Central Epidemic Command Center (CECC) to announce on March 19, 2020 that foreign nationals would be denied entry, effectively preventing any foreigners from entering Taiwan. Conference organizers consequently either canceled or postponed their events, severely affecting the interpreting industry during the first two quarters of 2020. Although regulations have been relaxed on June 29, 2020 to allow foreign nationals to apply for entry to conduct business, a 14-day quarantine and an English-language certificate of a negative COVID-19 RT-PCR test taken within three days of boarding a flight to Taiwan were still required (Ministry of Health and Welfare, 2020a, 2020b). This made it difficult for foreigners to physically participate in local events.

Despite the challenges posed by border closures and travel restrictions,

conference organizers began devising innovative ways of holding events. Some adopted a "hybrid" mode, where local participants attended in person as speakers or audience members while foreign attendees joined virtually via videoconferencing platforms. Other events were held exclusively online. Regardless of the format, almost all virtual events that involved overseas participants utilized video conferencing software such as Cisco WebEx, Google Meet, Microsoft Team, Skype, Zoom, etc. Since most of these events involved more than one language, simultaneous interpreting (SI) services were sometimes required. Freelance interpreters began receiving more job inquiries as organizers adopted software platforms that allowed SI to be performed remotely, meaning that interpreters did not have to be physically at the same place as speakers. Remote simultaneous interpreting (RSI) thus became a major mode of work during the pandemic.

## **Overview of Remote Simultaneous Interpreting**

Traditional SI is operationally defined as a mode of work in which interpreters provide live from physical booths positioned in the venue where the event is being held so that they could have a direct view of speakers and screens. Sometimes the space is too small to place the interpretation booths and therefore moved to adjacent spaces, but as long as video and audio feed is provided through fixed lines and not over the internet, this mode of work would still be considered traditional SI. Therefore, the equipment needed in traditional SI usually includes soundproof interpretation booths (if no permanent and fixed interpretation rooms are on-site), interpreter consoles, control unit (e.g., audio mixer), infrared or radio receiver and headset, infrared radiant panels or radio transmitters, etc.

RSI, or "distance interpreting" as preferred by the Association Internationale des Interprètes de Conférence (International Association of Conference Interpreters, AIIC), refers to the mode of work in which interpreters receive the video and audio

feed of the speakers over the internet, usually through a cloud-based software platform, and transmit the interpretation to the audience over the internet. The equipment needed in RSI usually includes computers (and external microphones and headsets) and an internet connection; sometimes the audience can use their smartphones to listen to the interpretation. In this sense, the various brand names being advertised (e.g., Interprefy, KUDO, Interactio, Voiceboxer, etc.) usually refer to the cloud-based software platform that RSI service providers have developed. It is important to point out that despite the efforts of RSI solution providers to differentiate themselves from non-dedicated video-conferencing platforms (e.g., Zoom, Cisco Webex, Microsoft Team, etc.), interpreters do not necessarily distinguish between the two, because many would perceive anything different from on-site live SI as RSI.

RSI systems are usually set up in one of three ways: hybrid mode, hub mode, and virtual mode. In the hybrid setup, the interpreting teams are co-located on-site with some of the speakers and audience, while other speakers and audience members are off-site. However, all interpreting is still performed via cloud-based RSI platforms. In the COVID-19 era, the hybrid mode is only possible where national or local regulations allow public gatherings. Many conferences involving local audience in Taiwan have chosen the hybrid mode. In the hub setup, the interpreting teams are co-located at the same site so that they can work together and receive on-site technical support. All speakers and audiences are located elsewhere, and interpreting is performed via cloud-based RSI platforms. The hub setup has been strongly recommended by professional organizations such as AIIC (Canada Regional Bureau of the International Association of Conference Interpreters [CRBIACI], 2020) and the American Translators Association (Chaves, 2020). In the virtual setup, all interpreters, speakers, and audiences are located in different places, so interpreting can only be performed via cloud-based RSI platforms. Professional organizations strongly advise against using the virtual mode.

RSI platforms have been able to ride the wave of restrictions on public gatherings and travel. Their promotional and marketing efforts, coupled with unprecedented circumstances, have significantly increased the profile and usage of RSI among event organizers. The main stakeholder RSI solution providers had to convince was event organizers, so the webpage content of some of the more popular RSI solution providers (e.g., Interprefy, KUDO, Interactio, etc.) focused on three aspects of organizing a multi-lingual event: time efficiency, financial cost, and peace of mind. They proposed that organizers would be able to minimize the time needed to contact interpreting equipment vendors, set up and take down equipment, hire interpreters, plan their itinerary, etc. They also advertised that using online platforms and existing hardware (e.g., participants' smartphones as devices to receive interpretation) minimized the footprint of equipment, which meant saving cost. Negating interpreters' travel expenses was another cost-cutting advantage that has been emphasized. RSI solution providers also claimed that the scalability and flexibility of the technology and the technical support provided by their teams would allow event organizers to have peace of mind.

Interpreters' acceptance seemed less critical to the advent or success of RSI, because they were usually the more passive side of an interpreting service contract, especially during the time of the pandemic. However, health and safety have become strong arguments that RSI solution providers have put forward, convincing interpreters that RSI is the only feasible mode of work in these uncertain times. RSI companies also advertised that without geographical barriers and time zone differences, interpreters would be exposed to more job opportunities, which in turn meant more income. RSI companies also claimed that interpreters would receive optimal audio and video quality on their platforms with minimal latency.

## Past Research on Remote Simultaneous Interpreting

Little systematic research on RSI has yet been done since the outbreak of COVID-19. However, just months into interpreting remotely, interpreters began sharing accounts of fatigue, anxiety, alienation, hearing injury, price reductions, etc. These complaints corroborated with earlier empirical research showing that when interpreting remotely, interpreters became exhausted earlier (Moser-Mercer, 2003) and their performance deteriorated faster (Braun, 2013). They also felt more stressed out (Roziner & Shlesinger, 2010), alienated (Moser-Mercer, 2005; Seeber et al., 2019), and their health has been impacted (CRBIACI, 2021). Professional organizations such as AIIC and institutional employers of interpreters such as the Translation Bureau of the Canadian federal government have responded by issuing statements (Public Services and Procurement Canada, 2021) and guidelines (CRBIACI, 2020) regarding practices of remote interpreting with the goal of ensuring best practices and protecting the health and safety of interpreters.

Still, proponents of RSI tout its convenient and cost-saving advantages. Naturally, there are pros and cons to this new technology and mode of work, but the ascendence of RSI due to COVID-19 has not given stakeholders, especially interpreters, a chance to refute or endorse such claims in a collective and systematic way. A survey of 27 conference interpreters in Turkey (Kincal & Ekici, 2020) found that all respondents preferred traditional on-site SI over remote interpreting. A more recent survey (Collard & Buján, 2021) was conducted by the École Supérieure d'Interprètes et de Traducteurs (ESIT), a post-graduate level interpreting training institute under the New Sorbonne University in Paris. They polled 946 interpreters from seven regions and nine countries, and preliminary results showed that compared to on-site interpreting, 50% of the respondents thought they performed worse, while 67% thought working conditions were worse.

Importantly, 83% thought RSI was more difficult, but 77% stated that fees for RSI were similar or lower than for on-site interpreting. In contrast, a survey conducted by the Australian interpreting service provider Congress Rental Network (2021) revealed that 73% of the 191 respondents now have a positive view about RSI, compared to 31% in 2019, and 74% of respondents were able to maintain or increase their fees. The company has a large clientele in Southeast and East Asia, so it is highly likely that the respondents' profile differed from those who participated in ESIT's survey. The contrast suggests that individual circumstances and context might shape interpreters' opinions about RSI.

The current report wishes to contribute more data to this nascent but important field by exploring how professional conference interpreters based in Taiwan view RSI.

# **Research Methodology**

RSI has become a dominant and inevitable mode of work since COVID-19 broke out in February 2020. The purpose of this study is to collect and analyze Taiwan's conference interpreters' opinions about RSI by asking them to reflect on their own experiences between February and October 2020. The main objective is to explore how their opinions compare against the benefits and advantages claimed and marketed by RSI platform providers, and against the drawbacks and deficiencies expressed on the internet by interpreters worldwide. Therefore, this study differed from past literature such as Seeber et al. (2019) and Roziner and Shlesinger (2010) in the sense that other sets of claims and opinions were provided as baseline for comparison when respondents reflected upon their own views.

#### Instrument

The study adopted a mixed-method design consisting of an online questionnaire and follow-up interviews conducted through e-mail correspondence. RSI was operationally defined in the questionnaire as a mode of simultaneous interpreting where the audio and video of the speakers' source speech and the interpreters' rendition are transmitted via the internet through a cloud platform since interpreters could not be co-located with the users of interpreting (including speakers and audience). Respondents were also reminded that if the interpretation was transmitted to listeners using traditional radio frequency or infra-red SI equipment, it would not be deemed as RSI in the strictest sense.

An online questionnaire using Google Forms was designed in Chinese to collect responses from conference interpreters based in Taiwan. The first part consisted of four questions about background (i.e., years of professional experience and language combination) and workload changes (i.e., workload during the period of February to October 2020 as compared to the same period in previous years, and how much the change could be attributed to COVID-19). The second part consisted of two questions about respondents' experience in remote consecutive interpreting. The first one asked about the frequency of working in such mode, and the second asked respondents to express their degree of agreement on seven dimensions, for example whether they agree with the clients' choice of using the remote mode, and whether the audio and video quality allowed them to perform their job well. The third part consisted of six questions about respondents' experience in RSI, of which the first four asked about the software platforms they have used, the frequency of RSI assignments prior to and after the outbreak of the pandemic, and the mode of work (i.e., hybrid, hub, or virtual). The fifth question asked respondents to express their degree of agreement on 12 benefits or advantages that have been put forward by RSI vendors. These claims were collected and compiled from the websites of 18 RSI vendors as researched by the language industry market research and international consulting firm Nimdzi (Akhulkova, 2020). The sixth question asked respondents to express their degree of agreement on 18 deficiencies and drawbacks of RSI that have been collected and compiled from internet postings of the researcher's colleagues, social media accounts of AIIC members, and other publicly accessible websites such as The Professional Interpreter (https://rpstranslations.wordpress.com/). Respondents were encouraged to type in additional advantages and drawbacks of RSI. The fourth part asked respondents to weigh RSI against traditional on-site simultaneous interpreting across 14 dimensions, including working conditions, prospective development, feelings, and preferences. For questions in the second and third parts, answer items were designed with a five-point Likert-type scale, but the five options were "do not know/non-applicable," "strongly disagree," "slightly disagree," "slightly agree," and "strongly agree"; no neutral position was provided to avoid ambiguity.

The follow-up interview consisted of five open-ended written questions. These questions were based on the additional advantages and drawbacks of RSI that questionnaire respondents provided. Interviewees were asked to elaborate on why they preferred RSI or traditional SI, their views about the major differences between the two modes, what RSI deficiencies should be addressed as priorities, whether interpreters can make any difference in improving RSI, and how RSI could impact the interpreting industry. They were encouraged to provide additional comments.

# Sample

A list of interpreters who are based in Taiwan were drawn up. It comprised members of AIIC (N = 10), members of a closed interpreters' group page on Facebook (N = 64), and members of a private interpreters' group chat on a social

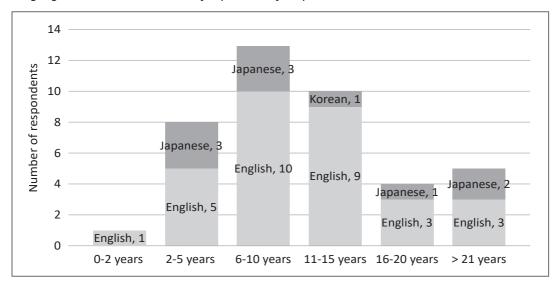
media messaging application (N = 20). Interpreter trainers who taught in postgraduate interpreting programs in Taiwan were also included in the list. Since there were overlapping members among the different groups, the link to the questionnaire was eventually sent via email to a total of 45 active interpreters. To expand the pool of potential respondents, all email recipients were encouraged to forward the questionnaire to other colleagues, and three email recipients wrote back to inform that they did. The link was also posted on a closed alumni Facebook group page of a post-graduate interpreting program in Taiwan. In the end, a total of 41 responses was collected between November 6 and December 15 of 2020.

The follow-up interview was conducted through email correspondence one week after the survey period ended. The email was sent to the 17 respondents who expressed their willingness to be interviewed. In the end, seven respondents shared their thoughts, of which four replied by email, and three respondents provided oral replies when the researcher had the opportunity to work with them in interpreting assignments between January and June of 2021.

## **Results and Discussion**

A total of 41 respondents filled out the questionnaire. Among them, 31 were Mandarin/English interpreters, nine were Mandarin/Japanese interpreters, and one was a Mandarin/Korean interpreter. Most respondents have worked as an interpreter for more than six years, so they have had several years of experience before COVID-19 hit and were able to compare the differences (see Figure 1).

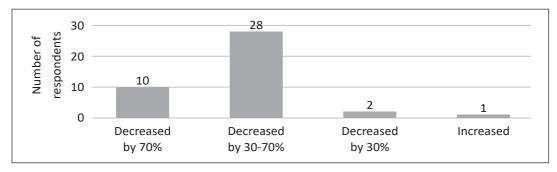
Figure 1
Language Combination and Years of Experience of Respondents



When asked to compare the amount of work in 2020 vs. 2019, 68.3% (N = 28) replied that it reduced by 30-70%, 24.4% (N = 10) by 70%, 4.9% (N = 2) by 30%. Only one interpreter did more work in 2020 (see Figure 2), but that was because the respondent only started working in 2019. More than 90% of the respondents (N = 37) attributed the reduction to COVID-19.

Figure 2

Amount of Work in 2020 vs. 2019

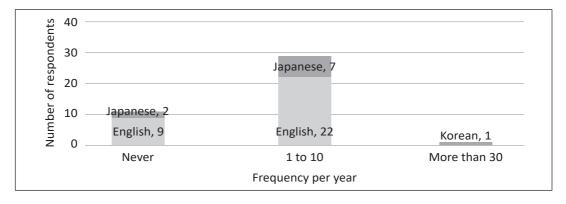


## **Experience and Opinion of Remote Consecutive Interpreting**

The second part of the questionnaire asked respondents about their prior experience in remote consecutive interpreting (RCI). Such mode of interpreting uses communication technologies such as telephone and videoconferencing to link interpreters to meeting participants, and is often practiced in business, legal, and healthcare settings (Braun, 2013).

There were 30 interpreters who had prior experience in RCI, with the majority working in such mode between one to ten times each year. In contrast, the Mandarin/Korean interpreter worked in this mode for more than 30 times annually. There were 11 interpreters who had never engaged in RCI (see Figure 3).

Figure 3 Frequency of RCI

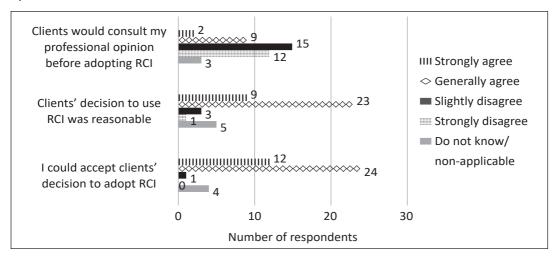


It was revealed that clients usually did not seek interpreters' professional opinion before deciding to use RCI, but most respondents felt that adopting such mode of work for the task was reasonable, and they could accept working in such mode (see Figure 4). Despite their general acceptance, the majority expressed that the audio, video, and working environment did not allow them to interpret at their

usual caliber of performance (see Figure 5). In general, more respondents were dissatisfied than satisfied with their RCI experiences (see Figure 6).

Figure 4

Opinions About Clients' Decision to Use RCI



**Figure 5** *Impact of Audio, Video, and Work Environment on Interpreting Performance* 

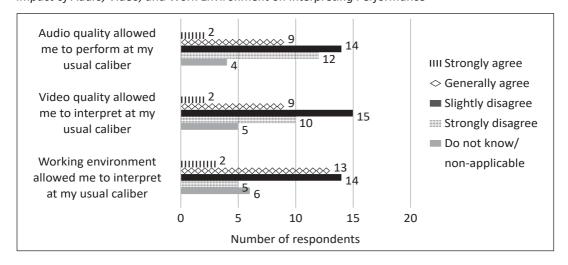
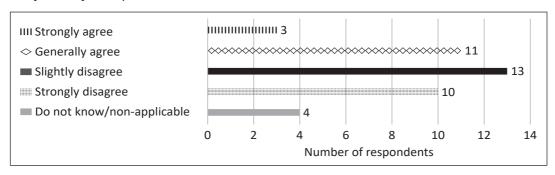


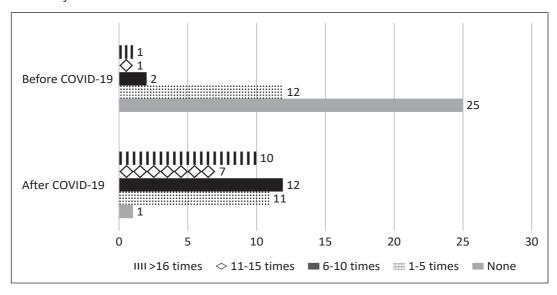
Figure 6 Satisfaction of RCI Experiences



# **Experience and Opinion of Remote Simultaneous Interpreting**

The next part of the questionnaire asked interpreters about their experiences with RSI. Before the pandemic (i.e., January 2020 and earlier), more than half of the respondents have never done any RSI, but since February 2020, all but one respondent have worked in the RSI mode (see Figure 7).

Figure 7 Number of RSI Jobs



Among the many RSI software platforms currently on the market, Zoom was the most used (N = 38), followed by Interprefy (N = 14) and InterpretNet (N = 6). Respondents had experience using six other RSI solutions: Cadence, Olyusei, Lango, Voiceboxer, KUDO, and Interactio. Although Zoom is not a dedicated RSI platform, by 2021, it has become the largest RSI platform (Akhulkova et al., 2021). It provided a simultaneous interpreting function, allowing many meeting organizers to leverage it, thus increasing the chance of interpreters using Zoom. Zoom lacked a relay interpreting function, but such deficiency was relatively insignificant for the conference interpreting market in Taiwan. Most events where interpreting service was needed only covered Mandarin Chinese and one foreign language (usually English, Japanese, or Korean), so the use of relay was minimal, thus lowering the need for dedicated RSI platforms that allowed for more complex relay functions.

Importantly, as mentioned in the section on the overview of RSI, some interpreters considered anything off-site as remote interpreting, irrespective of the platform or solution used. A possible reason was that some interpreters had experiences setting up ad hoc RSI systems consisting of a mashup of messaging applications and audio or video conferencing software. This could be because their clients did not prioritize interpreting services due to cost-benefit reasons (e.g., only a small number of audience members required interpreting service). Eight respondents mentioned that some of their RSI experiences involved logging on to videoconferencing platforms (e.g., Skype, Microsoft Team, Cisco Webex, Google Meet) as meeting participants to listen to the original speech, then opening a messaging app (e.g., Facetime, LINE, WhatsApp) on their smartphone and establishing an audio link, then interpreting simultaneously into it so that those who needed interpretation could listen to it via the messaging apps on their own smartphones. Respondents commented that this ad hoc setup sometimes resulted in problematic audio feedback due to audience members forgetting to turn off the microphones on their smartphones. Sometimes interpreters themselves forgot to turn on

the microphones on their smartphones as they juggled between multiple devices.

It should be pointed out that all respondents except one have used RSI platforms (with Zoom inevitably being counted as one), therefore it can be assumed that their answers for subsequent question items in the questionnaire were based on their experience with RSI platforms in general and not specifically ad hoc setups, which were additional systems that some of the respondents have experienced. In addition, RSI might seem diverse and complex in terms of the number of solution providers, but all of them essentially used the internet (or more specifically, VoIP technology) as a means of transmitting audio and video signals. Therefore, bandwidth, connectivity, and the algorithms of the platforms probably determined interpreters' experiences more than the setup did. One interviewee even commented that sometimes 4G cellular networks worked better than congested ethernet connections.

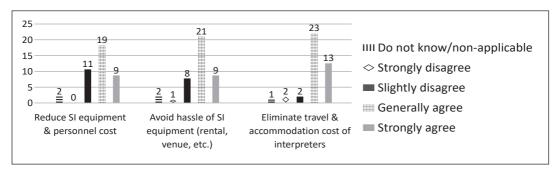
In terms of the mode of RSI, 34 respondents have worked in the hybrid mode, 23 at RSI hubs, and 19 virtually. Before the spring of 2021, daily life in Taiwan was normal and physical events were held, so it was not surprising that many respondents have worked in the hybrid mode.

### Opinions on Advantages of Remote Simultaneous Interpreting

RSI service providers would capitalize on event organizers' need to reduce cost and advertise that using RSI could cut cost on SI equipment and personnel (e.g., technicians, staff to distribute and collect interpretation receivers and headsets, chef d'équipe for oversea assignments, etc.), avoid the hassle of SI equipment rental, and eliminate travel and accommodation expenses of interpreters. Although respondents generally agreed with such claims (see Figure 8), interpreters might not necessarily know the exact budget event organizers have allocated to interpreting services, nor did they necessarily know how much could be saved by using RSI solutions. Respondents merely perceived such claims to be probably true.

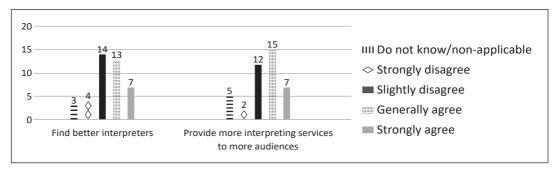
Figure 8

Can RSI Save Cost?



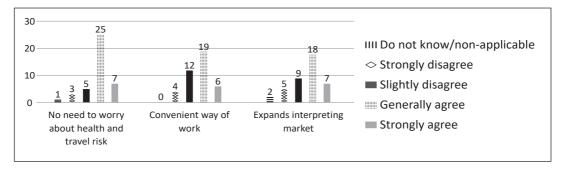
RSI service providers also purported that when events are held at places where the number of qualified interpreters or interpreters with specific language combinations are limited, RSI could allow event organizers to find better interpreters and offer interpreting services to more people because there would be no geographical barriers. When geographical barriers are broken down, the existing balance of supply and demand of interpreters in a particular market is bound to be tilted. However, the supply and demand of interpreters with more popular language combinations (e.g., Mandarin/English) was probably more balanced, so most respondents were not direct beneficiaries or victims of such a claim, resulting in a slightly mixed view (see Figure 9). However, when interviewed, one respondent mentioned that interpreters in Taiwan whose language combination included Southeast Asian languages such as Bahasa Indonesian, Tagalog, Vietnamese, and Thai, could potentially benefit. The respondent had learned from a Mandarin/ Bahasa Indonesian interpreter that he has received more work from Taiwanese businesses located in China that employed many workers from Southeast Asia. In the past, due to geographical barriers, they would hire local Chinese interpreters to help with communication. Now, with the help of platforms such as Zoom, these businesses have instead switched to requesting his services for his higher quality of interpretation. Therefore, for the Mandarin/Bahasa Indonesian interpreter, RSI helped increase demand for his service and his income as well.

Figure 9 Can RSI Provide Better and More Interpreting Services?



Since interpreters were also important stakeholders, RSI service providers would inevitably try to seek their support. The COVID-19 pandemic has provided an incontrovertible reason: reduce health and travel risk. Without the need to travel, RSI seemed to be a more convenient way of work. RSI service providers believed the interpreting market will expand as a result of these advantages. More respondents agreed than disagreed with such claims (see Figure 10).

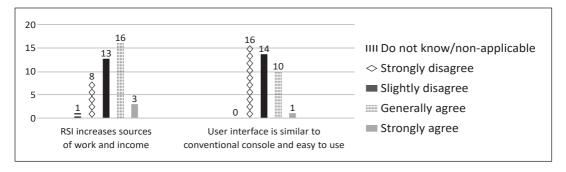
Figure 10 Other RSI Benefits



However, it is interesting to note that when asked about the claim that RSI could increase interpreters' source of work and income, there was a more mixed response. This seemed contradictory to the general belief that RSI could potentially enlarge the interpreting market, so it was likely that respondents answered according to their own situation. In addition, respondents did not buy into the claim that the user interface of these RSI platforms was similar to conventional interpreter consoles and easy to use (see Figure 11). This was probably why RSI providers such as KUDO has partnered up with Taiden, a conference equipment manufacturer, to develop a portable device that can be plugged into a computer via USB (KUDO, 2022). It mimicked a traditional interpreter console as used in an interpreting booth to help bring back the familiarity of a tactile console.

Figure 11

RSI Income and Ease of Use

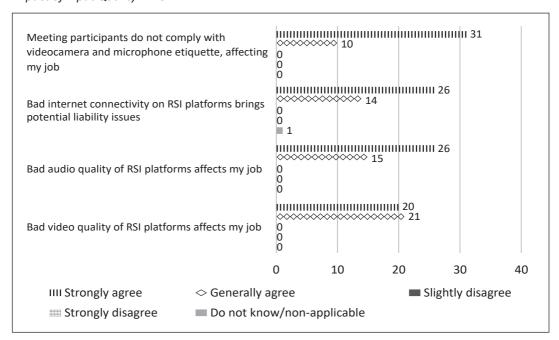


#### Opinions on Drawbacks of Remote Simultaneous Interpreting

There have been wide and open discussions on various internet forums about the drawbacks of RSI. Some of the disadvantages pertained to elements that immediately impacted the performance and delivery of interpreting services. Others were more related to the nature and future of the interpreting profession. Respondents were asked about some of the most commonly discussed issues.

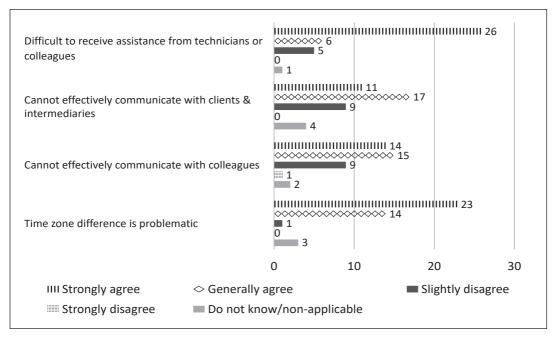
Hardware specifications, internet connectivity, and user behavior (e.g., distance from microphone, ambient noise) affected the quality of incoming audio and video signals. Interpreters' performance was highly susceptible to the quality of the audio and video input. When asked about this issue, respondents overwhelmingly expressed their dissatisfaction about bad audio quality, bad video quality, potential liability due to bad internet connectivity, and online participants' erratic compliance to housekeeping rules such as microphone or video camera etiquette (see Figure 12).

Figure 12 Impact of Input Quality in RSI



SI not only involves a team of interpreters, but also technicians, other intermediaries (e.g., interpreting agencies), and the end client as well. Respondents generally agreed that RSI made it very difficult and complex for interpreters to communicate with other stakeholders. Working in a different time zone was also problematic for respondents (see Figure 13).

**Figure 13**Contacting Others is Difficult in RSI

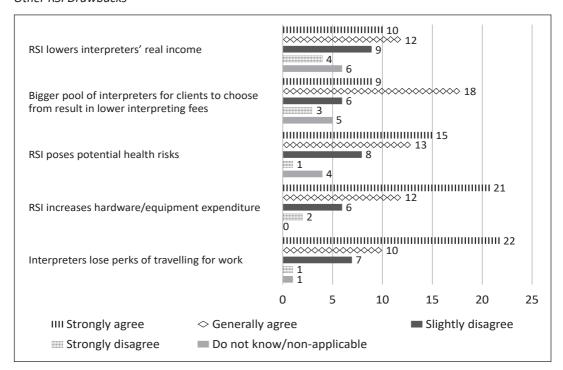


Respondents also generally agreed that RSI lowered their real income, probably due to additional expenses that could not be reimbursed. For example, some interpreters had to upgrade their internet subscription package to a more expensive one that provided faster connections or dedicated lines. Others would rent shared office spaces (i.e., co-working spaces in commercial office buildings) for dedicated and reliable internet connections or book a hotel room so that they could interpret during midnight without disturbing family members. Another reason might be that interpreting fees decreased due to more competition from a wider pool of interpreters. RSI also posed potential health risks such as hearing

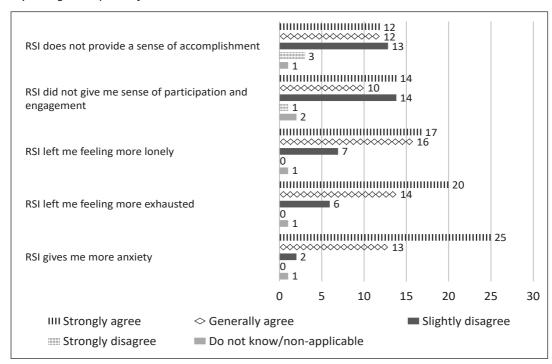
injuries, and naturally the perks of travelling around the world for interpreting assignments had all but vanished (see Figure 14).

RSI not only changed the landscape of conference interpreting, it seemed to have also affected interpreters' psychology. They felt more anxious because they worried about managing handover and technical issues such as connectivity and operating the software platforms. The sense of accomplishment diminished because of minimal interaction and feedback. They lacked a sense of participation or engagement since they have become merely a sound stream coming from the audience's computers or earphones. They also felt more exhausted, possibly due to phenomenon such as Zoom fatigue (Bailenson, 2021) and the need to decipher incoming information from bad audio and video input (see Figure 15).

Figure 14 Other RSI Drawbacks



**Figure 15**Psychological Impacts of RSI



Interpreters are usually more inconspicuous during SI than in consecutive interpreting, but at least they are still co-located with meeting participants and can leverage various visual and communicative cues to fine-tune their interpretation. One respondent mentioned that the sense of gratification was largely derived from the subtle feedback in the venue:

Although we were separated from the action in the meeting room by a booth, we were still part of the action, and we could actually see or feel our contribution by observing the atmosphere in the room. Simultaneous interpreting is already difficult; I think it is important for me to receive that kind of feedback, however indirect or subtle, in order to persist and not give up. (Participant 5)

Another reiterated the importance of being in the room, which echoed sentiments from respondents in Kincal and Ekici (2020):

On-site traditional simultaneous interpreting is like playing in a live concert where one feels the ambience and interaction and adjusts one's performance accordingly. RSI is like auditioning in front of a camera or singing in a recording studio where one can only imagine the target audience. When doing RSI, I often feel very isolated and indifferent. (Participant 17)

Respondents also provided additional comments about the drawbacks they have experienced. Three mentioned the difficulty of doing relay interpreting with RSI platforms, but this technical issue has been mostly resolved by the most popular platforms except Zoom (Fedorenkova, 2020). A respondent commented that it was almost impossible to perceive the nuanced reactions of speakers and audiences. Another respondent said that since clients cannot see the interpreters, they would be more likely to blame the interpreters for any negative feedback they receive from meeting participants.

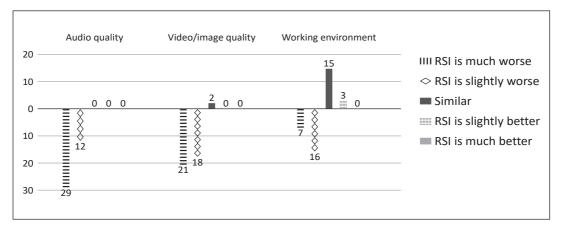
# Comparison Between Remote Simultaneous Interpreting and **Traditional Simultaneous Interpreting**

The last part of the questionnaire asked interpreters to compare RSI with traditional SI on various factors and indicate which mode of work was better. These factors included working conditions, communication with others, their emotions and feelings, prospect and development, and attitude.

In terms of working condition, respondents overwhelmingly felt that the audio and video quality of RSI was much worse than traditional SI, but more than one third of respondents felt that the working environment of both modes did not differ too much (see Figure 16). This was later explained by interviewees that RSI allowed them to work from the comfort and familiarity of their homes, while the setup in mobile or permanent booths for SI might not always be comfortable or suitable.

Figure 16

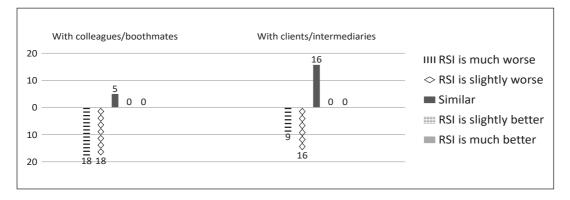
Comparing RSI With Conventional SI: Working Condition



No respondents thought that communication with colleagues, clients, or intermediaries was better in RSI than in traditional SI (see Figure 17).

Figure 17

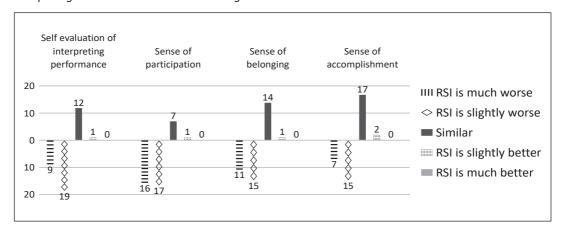
Comparing RSI With Traditional SI: Communication With Others



Compared with working in the traditional SI mode, more respondents felt less engaged and lacked a sense of belonging and accomplishment. Importantly, 68% of respondents (N = 28) thought they performed worse in RSI, and only one

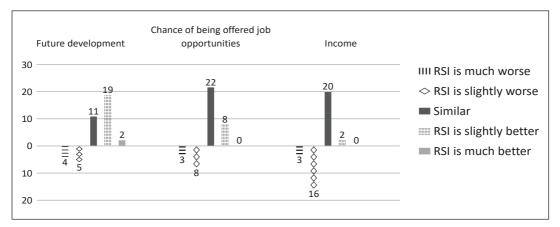
respondent thought she performed better (see Figure 18). Interestingly, the few respondents who rated RSI higher on these criteria varied greatly in their years of experience in the industry, so junior interpreters are not necessarily more receptive to RSI.

Figure 18 Comparing RSI With Traditional SI: Feelings



Although respondents indicated that they had almost identical chances of being offered RSI or traditional SI assignments, almost half of the respondents indicated that RSI contributed to a lower interpreting income due to lower fees. One reason was because some clients and agencies would demand lower rates from interpreters on the basis that online meetings were often shorter in duration. Yet, half of the respondents believed that the prospect of RSI is better than that of traditional SI (see Figure 19). Interestingly, only one of the most senior interpreters believed so.

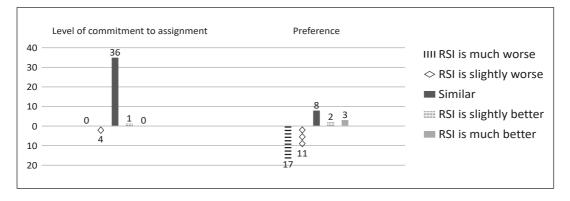
Figure 19
Comparing RSI With Traditional SI: Prospects



Lastly, despite giving the same level of commitment to RSI assignments, 68% of the respondents preferred traditional SI than RSI (see Figure 20). This percentage was lower than the results attained by Kincal and Ekici (2020), where 21 out of 27 respondents preferred on-site SI. However, all seven interviewees reiterated their preference for on-site traditional SI when all conditions except the mode were equal.

Figure 20

Comparing RSI With Traditional SI: Attitude



#### **General Discussion**

The results of the survey suggested that the 41 respondents were generally dissatisfied with their RSI experiences, and they could only accept the current conditions due to the need to make a living. These opinions were not dissimilar to the sentiments expressed by many interpreters around the world. RSI might have offered a source of income in these uncertain times, but when given the opportunity to choose between on-site traditional SI and RSI, most interpreters would choose the former. Respondents felt that traditional SI offered much better audio and video input quality, induced less anxiety, brought greater focus to the task of interpreting, and facilitated more substantial communication with speakers, audiences, and stakeholders. Even so, about half of the respondents believed that RSI would become more prevalent in the future due to its convenience and cost-saving advantages for event organizers. Therefore, some respondents agreed with the view that interpreters should actively provide user feedback to RSI service providers so that interpreters' needs and preferences could be incorporated into future design updates. However, such endeavors do not necessarily eliminate the drawback of RSI. On the one hand, despite continuous efforts in client education, respondents felt that they could only do so much to encourage meeting participants to adopt good online meeting etiquette such as using dedicated microphones or speaking in a quiet environment. Although the situation seemed to have improved with recurring clients, compliance is still erratic. Ironically, RSI service providers probably do not have the incentive to fundamentally improve the audio and video qualities being transmitted on their platforms (Guiducci, 2020). Their lowinvestment, self-service, centralized business model "replaces human resources (sound technicians and engineers with real ears and know-how, working on site) with digital correction algorithms" (Guiducci, 2020), which could not offer

comparable quality to that of the more human-intensive setup the conference industry has relied upon for so long despite its higher cost. On the other hand, issues such as the sense of alienation, increased fatigue, and heightened anxiety would persist. What once made the interpreting profession attractive and enjoyable, such as the pride and gratification of being the critical link to successful communication, or the excitement of meeting people and learning new cultures in an immersive environment, have greatly diminished. These sentiments were shared by interviewees regardless of their language combination, past experiences with remote consecutive interpreting, or years of experience in the industry. The only difference was that the more junior interpreters seemed to be more willing to adapt to the changing circumstances and not be eliminated by the market, while the more senior interpreters would consider retiring from the profession altogether.

The findings from this exploratory investigation are not dissimilar to those of recent studies (Collard & Buján, 2021; Kincal & Ekici, 2020), and not necessarily in discordance with those revealed by the survey from Congress Rental Network (2021). However, the paradoxical nature of the interpreters' responses is immediately apparent: How could interpreters excoriate RSI while embrace it at the same time? Apparently, they have depended on RSI to continue working as interpreters during the pandemic but have not resisted it despite their dissatisfaction as reported in the results. Mani and Chouk (2017) found that technological dependence on smart devices have no effect on technological resistance, nor does anxiety toward technology directly impact consumer resistance to smart devices (Mani & Chouk, 2018). RSI is not a smart device, so another possible explanation is that interpreters could rationally assess the advantages put forward by RSI vendors, since most of them could be quantified and measured objectively (e.g., reduced travel time and cost, increased job offers). Most respondents probably benefited from RSI personally, because without the technology they probably would not have had the opportunity

to work and earn income during COVID-19. The fact that all but one respondent had experience with RSI indicated that they have at least accepted RSI behaviorally, and some might have even accepted it cognitively. However, respondents might have also perceived RSI as a threat that disrupted their routines and practices, thus resisting it affectively. Campbell et al. (2020) proposed that "the extent of threat is influenced by severity, scope, and psychological distance" (p. 313). Severity refers to the degree of potential harm to well-being; scope refers to the duration and number of people, communities, and geographic areas the threat could impact or have impacted; and psychological distance refers to how close a person perceives the threat. The prevalence of RSI has demonstrably changed the landscape of conference interpreting worldwide, and when all but one respondent in this study had experienced RSI, the extent of the threat cannot be described as small, at least in terms of scope and psychological distance. The severity of the threat might differ from person to person, but as an exploratory study, the design of the current questionnaire and interview was unable to reveal the idiosyncrasies of individual respondents. Since individual dispositions (such as inertia and skepticism) have been shown to explain why consumers resist innovation (Mani & Chouk, 2018), future studies investigating the relationship between interpreters and their acceptance and usage of technology should incorporate the construct of personality traits. In fact, Mellinger and Hanson (2018) have also suggested that the personality traits of interpreters should be investigated when studying their relationship with technology.

An important personality trait that has been increasingly researched by marketing scholars is technology readiness (TR). It was defined by Parasuraman (2000) as "people's propensity to embrace and use new technologies for accomplishing goals in home life and at work" (p. 308). Blut and Wang's (2020) meta-analysis of 163 articles re-conceptualized TR as "a two-dimensional construct differentiating between motivators (innovativeness, optimism) and inhibitors (insecurity, discomfort)" (p. 649). Two findings were particularly relevant for interpreters. First, in mandatory settings where customers were coerced by the environment to use technology, inhibitors mattered more (Blut & Wang, 2020). The disruptions caused by COVID-19 created an environment that made it imperative for interpreters to accept RSI, so interpreters' perceived level of insecurity and discomfort would determine their TR for RSI. Second, inhibitors were found to be more relevant for "utilitarian" (i.e., productivity-oriented) technologies than for "hedonic," or pleasure-oriented, technology (Blut & Wang, 2020). Since RSI could be deemed as a utilitarian technology, interpreters' perceived level of insecurity and discomfort once again would determine their TR for RSI. This sense of insecurity and discomfort about their world, and their role within it, could be heightened when their norms, beliefs, routines, and practices are disrupted by a threat (Campbell et al., 2020), which, in the current context, is very likely to be RSI. Such perceptions are evident in a senior interpreter's comment about her feeling that the requisites of a "good interpreter" have changed under RSI:

In the past, clients liked you because your interpretation was accurate and your delivery was pleasant and easy to follow, and you were able to demonstrate your professionalism when the speech got difficult. Now, clients like you if you agree to using their videoconferencing platform of choice, if you are willing to slash your rates because the meeting is shorter, and if you can multitask between four screens. (Participant 8)

Another respondent lamented that her techniques and experiences no longer mattered:

With more and more pre-recorded speeches, one only has to spend time or money, or both, to have them transcribed from voice to text by automatic

<sup>&</sup>lt;sup>1</sup> "Insecurity" included question items such as "you do not feel confident doing business with a place that can only be reached online" (Parasuraman, 2000, p. 313). "Discomfort" included question items such as "there should be caution in replacing important people-tasks with technology because new technology can breakdown or get disconnected" (Parasuraman, 2000, p. 312).

speech recognition software, machine-translated, and post-edited, so that one could read the translated scripts aloud when the video is being played. The edge we have gained from experience has virtually disappeared. You are just another sound streaming from the laptops of meeting participants. What sense of achievement does one get out from that? Is there a need to learn interpreting or practice anymore? (Participants 32)

These comments add to the negative feelings toward RSI (see Figure 15), and could be perceived as insecurity and discomfort, inhibitors of TR. Such "ontological insecurity" probably stemmed from a "perceived lack of order, meaning, and continuity" (Campbell et al., 2020, p. 314), which could lead to fear, anxiety, and the breakdown of self-identity (Campbell et al., 2020; Laing, 2010).

To suggest that RSI, a technology that existed before COVID-19 but never really gained traction, threatens the ontological security of interpreters might seem far-fetched and exaggerated. After all, it has helped sustain many interpreters' livelihoods during the pandemic. RSI vendors seemed to have spared no effort in providing a sense of continuity and normalcy, coaxing clients and interpreters alike with their technological wizardry. Every stakeholder in the interpreting market knows that RSI is a disruptor, but unlike smartphones or AI-powered machine translation, RSI is also a lifesaver at the same time. As a result, when their ontological security was challenged, individual interpreters responded and adapted, at least in the short term, by admitting or ignoring their cognitive dissonance and accepting RSI as a viable form of work, however unsatisfactory they deemed it to be. Whether their TR is high or low remains to be investigated with a validated and more comprehensive instrument, and further triangulated with qualitative research.

<sup>&</sup>lt;sup>2</sup> "Ontological insecurity" is a term coined by Scottish psychiatrist R. D. Laing, which refers to a person's sense of diminished stability and wholeness in reality (Laing, 2010). An ontologically insecure person might experience an existential crisis.

At the very least, RSI will probably indirectly, by way of mandatory distant learning and virtual classrooms due to pandemic control measures, force interpreting programs to reconsider and re-imagine how training is delivered, and to some extent, contemplate and reflect on what is actually being taught. Even though COVID-19 has forced training institutions to switch to online teaching, instructors probably did not have access to the actual RSI platforms used on the market. Rather, they used a combination of online platforms (e.g., GoReact, Zoom, etc.), software (e.g., Audacity), and applications (e.g., WhatsApp) to make things work. Whether institutions have budgets to buy session plans on these RSI platforms, and whether RSI service providers would be willing to develop an educational version of their software, are unclear. Unless interpreting programs are positioned as vocational schools or financially sponsored by corporations that license their products for a fee, the answer to the first question is probably "no." The answer to the latter question is also very likely an unequivocal "no" because there would be little incentive for commercially successful for-profit enterprises to design an education version (i.e., less expensive version) of their software. Therefore, unlike in the past when there was almost a seamless transition from the classroom to the conference room, interpreting students will need to learn a new set of technical skills after they enter the market in the future. For example, there will be more multi-tasking and coordination required as interpreters juggle not only between two languages, but also among multiple screens: the RSI platform on one, meeting documents and glossaries on another, and maybe third and fourth ones to receive instructions from and communicate with intermediaries, clients, and colleagues. For younger generations of students, this probably would not be a problem at all, as they grew up with technology and are much more tech-savvy than many of their teachers. In addition, it is not practical to train students for all RSI platforms, as technology evolves faster than training programs can secure

funding and make procurement decisions. Furthermore, it would be ethically controversial to require students to pay top dollar for equipment when some of them might never become a practicing interpreter.

The impact of RSI on interpreting training is arguably much smaller than that of computer-aided interpreting (CAI) technologies. As interpreting is moved online, it will probably be more convenient and feasible to incorporate CAI tools such as automatic speech recognition, speech-to-text transcription, and glossary extraction into the RSI platforms. In fact, many video conferencing platforms have partnered with Otter.ai, an automatic voice transcription solutions provider, to generate real-time subtitles by leveraging artificial intelligence (Malik, 2021). RSI vendor KUDO has begun developing a software application that purports to use artificial intelligence to help interpreters build glossaries.3 It is not difficult to imagine that CAI tools will have a much larger impact on the interpreting profession as well. Many translations program have already incorporated computeraided translation (CAT) tools into their curricula. If interpreting programs start using or teaching CAI tools, new curricula need to be designed and new pedagogy developed. Information-processing or cognitive models that interpreting studies have popularized might need to be revised and new models that consider humanmachine interaction will need to be theorized and empirically tested. Furthermore, in an era of endless technical innovations that position machines at the center of discussion, anthropocentric models that consider the affective, cultural, and social aspects of interpreting should be theorized and emphasized. These pertinent issues cannot be answered in this report but need to be addressed sooner or later.

<sup>&</sup>lt;sup>3</sup> https://kudoway.com/solutions/kudo-interpreter-assist/

## **Conclusion**

A survey of 41 conference interpreters in Taiwan whose experience spanned more than 20 years suggested that the majority found RSI to be a dissatisfactory experience. Compared with on-site traditional SI, the quality of audio and video input severely impacted their work. In addition, they generally disliked the higher level of anxiety, the sense of alienation, and the increased fatigue. Respondents also mentioned how RSI is possibly redefining the role and competencies of an interpreter, which would inevitably affect how interpreting is taught and practiced.

RSI is fundamentally "democratizing" the profession of conference interpreting as it makes SI more accessible, a fact that was aptly and cleverly capitalized by RSI service providers as a marketing advantage. It is breaking down barriers of geography, time zone, and human resource availability; it is upending identities and power relations, undoing vested interest, creating new stakeholders, and blurring boundaries and roles. However, research on these developments is still far and few between. Not only do interpreting studies lag translation studies when it comes to a more sociological and philosophical perspective, it has also overlooked technological advancements in RSI and CAI, which existed before COVID-19. COVID-19 has revealed the gap and provided an opportunity to begin this important quest.

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