# Translation and Interpreting Needs in the Great East Japan Earthquake of 2011

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## 1. Introduction

This paper discusses the need for translation and interpreting during the Great East Japan Earthquake of 2011 (hereafter the 2011 Disaster). It bases its discussion on empirical data gathered as part of a broader case study on the experience of foreign nationals of the 2011 Disaster. The paper begins by situating the topic for discussion within the translation studies literature (Section 2). It goes on to show how the three themes discussed in this paper were developed by giving an overview of the broader case study, its design, and how the data for this research were coded (Section 3). The paper argues that the case data provide evidence for translation and interpreting being needed in the 2011 Disaster (Section 4). It then asserts that these translation and interpreting activities were overwhelmingly human-mediated phenomena that were carried out by volunteers (Section 5). Finally, it claims that there is evidence that some of these efforts at mediation may have been misplaced and gone unused by those who needed the information (Section 6). The paper ends with a brief conclusion and an outline of future work in this research.

## 2. Literature review

This paper aims to explore the proposition that translation and interpreting are required in a disaster setting to enable those affected and those responding to gather information and communicate (Lewis, Munro and Vogel 2011). Is this really so, and can it be shown empirically? Much valuable research has been carried out on the communication that took place in the 2011 Disaster (Ministry of Internal Affairs and Communication 2013, Appleby 2013, Japanese Red Cross Society 2012). However, all these studies focus on the supply side of disaster information, and the consumers of such information, in particular, those not of Japanese origin, are largely absent from these studies. In addition, questions of linguistic and cultural mediation are treated only tangentially in these works and do not comprise a significant focus.

The major journals in the field of translation studies (*Translation & Interpreting, Target, Meta, Lingua, The Translator* and *Language in Society*) contain no articles about the 2011 Disaster at the time of writing, and the major evidence for scholarship on translation and interpreting in the disaster comes from Japanese authors writing about collaborative volunteer translation and community interpreting published in the journals of other academic disciplines (Kageura et al 2011, Naito 2012, Mizuno 2012, Tsuruta 2011). To find other works on translation and disaster in the translation studies literature, it is necessary to look outside of the Japanese context: for example, the Beslan hostage disaster (Harding 2012); the 2010 earthquake in Haiti (Morrow et al 2011); or disasters in general (Bulut and Kurultay 2001).

This paper is based on the findings of only a small case study of the 2011 Disaster. Nonetheless, it adds to the literature the under-represented voices of those foreign nationals who lived the experience of the disaster, voices which could help us to better understand whether and how translation and interpreting were needed and what contribution translators and interpreters may have made. The next section will describe how the three themes in this paper were developed from these case study data by giving an overview of the case, the study design, and the coding used.

## 3. Case study overview and research design

On March 11, 2011 a powerful earthquake, created a massive tsunami that set off a serious nuclear accident. The worst of the damage affected the fishing villages and rural areas of Japan's north-eastern Tohoku region, in particular Iwate, Miyagi and Fukushima. More than 18,000 people lost their lives, and over 6,000 were injured. The deadliest of the three threats was the tsunami, and most deaths were by drowning, but the nuclear accident caused concern far beyond the official disaster zone and remains volatile at the time of writing. The response to the disaster was the largest in Japanese history and involved the deployment of personnel from both national and international bodies. Recovery operations are predicted to be ongoing for years to come.

### 3.1 The case

In the above context, about one million foreign nationals can be said to have had their lives materially disrupted, including official residents in the disaster zone, short-term visitors, international emergency responders, and undocumented economic migrants (E-Stat 2012, Earthquake Information 2011). Due to the difficulty of making contact with the short-term visitors and emergency responders who experienced the disaster and of gaining access to the community of undocumented migrants in Japan, it was decided to focus on the case of foreign nationals who were officially resident in East Japan at the time of the disaster.

Specifically, it was decided that a participant could be included in the case data if they:

- identified as a foreign national in a Japanese context;
- were resident in East Japan at the outbreak of the disaster;
- self-reported to be confident in speaking, listening to, reading, and writing English;
- were not a minor at the time of interview.

For practical reasons relating to the time and resources available to the researcher, only foreigners who could speak English were interviewed. However, it must be stressed that native English speakers do not make up the biggest community of foreigners in Japan, and foreign nationals in Japan do not constitute a cohesive community or culture. Therefore, great efforts were made to ensure that a diverse profile of nationalities, language communities, ages, and occupations could give their perspectives. In the end, 28 participants were interviewed and they:

- represent 12 nationalities (Irish, Dutch, French, German, Tunisian, Sudanese, Chinese, Bangladeshi, American, Canadian, Australian, and New Zealander);
- were resident in 5 different cities in East Japan (10 participants were located in the official disaster zone in Sendai, Furukawa, Tokai and Hitachinaka, and 18 participants were located beside the official disaster zone in Tokyo);
- are aged in their 20s, 30s, 40s and 50s;
- represent a variety of occupations, including language teacher, student, engineer, executive, diplomat, employee of the Japanese local government, interpreter, and restaurant owner.

While some participants had only arrived in Japan a few months when the disaster hit and spoke little Japanese, others had been living in Japan many years and spoke the language to near native level.

### 3.2 The design

Face-to-face, individual interviews were held with the 28 participants, and the interviews took place in Ireland and Japan from September 18 to October 13, 2013. Interviews lasted 60 minutes on average, and the method of questioning was semi-structured, covering a list of topics rather than consisting of an ordered set of questions. Ethical approval was granted by the relevant university research ethics committee and all participants read a plain language statement and signed an informed consent form.

### 3.3 The coding

The interview data were transcribed and manually coded using a variety of *a priori* and *in vivo* codes over three coding stages as follows:

- Stage 1; 4 *a priori* (translation, interpreting, human, machine);
- Stage 2; 4 *a priori* + 17 *in vivo* (voluntary, assume non-voluntary, intercultural mediation, communicating, gathering information, type of foreigner, japanese speaker in network, trustworthiness, Japanese ability, facilitating response, TV, radio, Internet/social media, PA, embassy, suggestions, pictures/graphs/diagrams);
- Stage 3; 4 *a priori* + 17 *in vivo* + 4 family codes (translation and interpreting needs, voluntary human mediation, misplaced efforts, future work).

The *a priori* and *in vivo* codes were then grouped under the four family codes to become the three themes and conclusions that will now be discussed.

## 4. Theme 1: translation and interpreting needs existed

From the interview data, it can be seen that translation and interpreting were needed by foreign nationals in the 2011 Disaster. In particular, the needs arose when participants were gathering information to gain awareness of the disaster more than when they were trying to communicate information about the disaster to other people. When the participants recounted instances of communication, it seemed that they were mostly interacting in a common language with people that were already known to them. Communication, therefore, required little to no mediation. However, when trying to gather information about the disaster to improve their awareness of the situation, participants were checking multiple sources and seeking information from people usually not already known to them. It is in these information-gathering activities that evidence for linguistic and cultural mediation could be found. Moreover, certain topics requiring linguistic and/or cultural mediation came up repeatedly in the participants' accounts. A non-exhaustive list of the main topics in the case data includes:

- Information about what was destroyed, where was badly affected, and who was missing (most commonly delivered through mass media channels);
- Public address announcements explaining initial response procedures (run to higher ground, stay indoors, etc.), explaining evacuation procedures (especially in large public places like stations, theme parks, shopping centres, etc.), and explaining where to find more information;
- Directions about where to go for water, petrol, and supplies, especially what stores were open;
- Requests for direction and basic reporting on activities (for mediators liaising between local response coordinators and emergency responders);
- Advice from embassies in the area to their citizens in or near the disaster zone;

- Transport routes and timetables for evacuation;
- Application forms and the processes involved in becoming a volunteer;
- The administration required to make claims for insurance, rebuilding, moving back in to your home, getting government assistance, etc.;
- Nuclear-related information, especially reporting rates of radioactivity in particular geographic areas;
- Food safety information, especially labeling the places of origin for food and drink items.

The implications from this finding are two-fold. First, if one is interested in examining translation and interpreting in a disaster, it might make more sense to focus on acts related to information gathering rather than more broadly on communication. Second, some of these needs, especially those in the second half of the list, would lend themselves to standardization, meaning that some linguistic and cultural preparation might be possible in advance of future disasters. Some prepared resources might have been useful in the 2011 Disaster because the second theme revealed in this research is that it was mostly volunteers who seemed to carry the burden of linguistic and cultural mediation, in particular foreigners mediating for other foreigners.

## 5. Theme 2: mediation was largely human and voluntary

The participants' experiences of translation and interpreting in the 2011 Disaster were experiences of human mediation. None of the participants mentioned any interactions with translation technologies such as TMs or MT systems, and it would seem that the extent of a 'machine' element to translation and interpreting activities was the use of electronic dictionaries and some word lists. One participant talked of problems of consistency, storage, repetition, and accuracy in the translation work he was asked to do. These issues could likely have been mitigated by the use of some readily-available, free translation software, but his lack of translator training made him unaware of such computer-assisted translation tools. Overall, the lack of any 'machine' element to the linguistic and cultural mediation mentioned in the accounts of participants in this study likely arose from the fact that such mediation seemed to be voluntary, ad-hoc and carried out by people with no formal training. Only one participant, a professional interpreter, had prior experience and qualifications, but even he worked in a voluntary capacity in the disaster and was asked to volunteer by his embassy at short notice, with only vague instructions and little outline of what the role would require:

> *Eh, all of sudden there came an email from the French embassy. French embassy was recruiting interpreters to go, and this was unclear, to go to Sendai, to go North… I think it was "If you want to participate, you email back us, and you come this evening at the Embassy because we move at night." So the decision was not like, "Okay, let's sleep on that." No. No, no. It was, "Okay!" So I, I, I emailed back that, eh, I volun-*

*teer. (Interpreter, age: 50-60, from France, lived in Tokyo, in Japan 27 years at onset of disaster)*

Thus, it would appear that translation and interpreting may not have been greatly taken into account in disaster planning prior to the onset of the 2011 Disaster. This is significant only because the data have shown that linguistic and cultural mediation were needed by some foreign nationals in the disaster. Where no volunteer mediators were available, friends or acquaintances who could speak Japanese had to fill the gap. One participant highlighted his dependency on fellow evacuees in a refuge centre:

*The language is always [laughter] a big problem in Japan. Thus, eh, about this thing, otherwise their policies or their handling is very good. That's I believe. But, eh, the information gap is still to language sometimes, as like I said you, in the camp, there is my friends that translate me but when I am outside now, every day I cannot request my friend, what is the situation and what is the situation? (Student, age: 30-40, from Bangladesh, lived near Sendai, in Japan 1.5 years at onset of disaster)*

Volunteer translators and interpreters and ad-hoc mediators of the kind described above experienced a lot of stress. Some talked of encountering harrowing examples of human suffering, some were exposed to significant radiation, and some underlined that, while mediating the disaster for others, they were also being directly affected themselves. One participant described the stress of his job as a volunteer translating and passing on official information in a local government office as follows:

*I was, sort of, in the position of giving people information to make them feel more comfortable, but the fact is, that was quite stressful at the time. At the time, hearing people ask questions about things that you are concerned about yourself is, eh, that's stressful info, information, you know, like people would ask, eh, "We just saw an explosion on the TV. Is it safe to live here?" And I'm just like, em, eh, [laughter] "That's a really good question." And, sort of, having to go by the information you have and stand by that, you know, and when you are somewhat dubious of the, the content or the veracity of that information, then it's a little bit stressful, you know. (Language teacher, age: 30-40, from USA, lived in Sendai, in Japan 7 years at onset of disaster)*

What will be explored in the final theme is the idea that some voluntary translation and interpreting efforts may not have had the desired impact.

## 6. Theme 3: were some mediation efforts misplaced?

There is evidence in the literature for the important role played by radio (e.g., Appleby 2013), Internet (e.g., Google Crisis Reponse 2012), and social media (e.g. Kaigo 2012) in the response to the 2011 Disaster. However, the data gathered in this case suggest that the translation of information over these three channels may have had little impact on the lived experience of the foreign nationals participating in the study. This seems to have been because this translated information was not seen as useful, or was simply not known about.

The image of radio coming out of the case data is negative; it is variously described as repetitious, irrelevant or forgotten. An illustration of how alienated some foreigners felt from the information being broadcast over radio can be seen from the following quote:

> *When you talk about radio, radio, I think for Japanese people, it means hope. Right? They listen to it, though it got nothing to do with him. I mean, Sendai, there are, there are some, the news information about Tokyo. But, em, listening what the government is doing, "Is the government going to save us? Is the government taking some acts, taking actions?" They very care about that. And they have the hope their government will save them and they know some day they'll comes to them…But as for foreigners, we care more about ourselves. "Can we just come back home country tomorrow? What can I eat? I can't, don't have anything to eat." It's more, I mean, realistic for us. So it's totally different, eh, directions. (Student, age: 20-30, from China, lived in Sendai, in Japan 5 months at onset of disaster)*

This is a surprising finding, as the translation of radio information is an important pillar of the emergency communication directed specifically at foreigners in Japan. The resources committed to translating radio communication can be seen in the account of one foreigner employed by the local government who began working on multilingual radio broadcasts just a few hours after the onset of the disaster:

> *My job was to support foreigners in Sendai so we were taken straight to the radio station because we had to start, em, translating into English. So, eh, every month they would do, how to prepare for a big earthquake or what to do if such a disaster happened, so we did it in Japanese, Chinese, Korean, English, and I think they did do it in Easy Japanese or the Easy Japanese ended up happening a lot later once they realised that it should have been done in Easy Japanese. Well, the Japanese that they did use, they tried to make it easy but I think they really made it a lot easier for, em, those who had just come to Japan. So, yeah, we spent the, like, a good three or four hours at the radio station, just constantly giving out the information. (Japanese government employee, age: 20-30, from New Zealand, lived in Sendai, in Japan 5 years at onset of disaster)*

The image of multilingual Internet and social media content was less negative in the data. For instance, the bilingual (English-Japanese) Twitter accounts of well-known commentators on Japan, such as Hiroko Tabuchi or Jake Adelstein, were singled out as examples of very useful translation. Nonetheless, a problem arose with the translation of Internet content in that many participants were completely unaware that such multilingual resources had been made available. Only one participant in this study thought to check a Japanese ministry website for disaster information, even though all the major ministries translated their sites into at least English, Chinese, and Korean in the weeks following the onset of the disaster.

## 7. Conclusions and future work

In conclusion, this paper used newly-gathered empirical data to show that translation and interpreting were needed in the 2011 Disaster. It found that translating and interpreting activities were more likely when a person was gathering information than when they were communicating with another person. It also suggested that some of the information that needed to be linguistically and culturally mediated might easily lend itself to standardization and machine manipulation in preparation for future disasters. The paper highlighted that linguistic and cultural mediation were carried out by foreigners for foreigners in a voluntary and ad-hoc capacity without machine assistance, and that these volunteer translators and interpreters and ad-hoc mediators experienced a lot of stress. Finally, the paper discussed the fact that some efforts in the 2011 Disaster, in particular relating to the mediation of information delivered through radio and Internet, may not have had the desired impact because audiences for such multilingual information either did not see it as useful or did not know where to find it.

These conclusions suggest possible avenues for future research. First, the researcher intends to clarify the conceptual map for some of the phenomena observed in these data. What was the difference between professional translating and interpreting, volunteer translating and interpreting, and ad-hoc linguistic and intercultural mediation in the 2011 Disaster, if indeed there were differences? Second, the researcher plans to explore ways suggested by the data for how translators and interpreters, as well as translation scholars, could contribute to preparedness for future disasters in Japan. Initial ideas include improving the multilingual information broadcast through the Japanese emergency public address system, using scholarship in the areas of audio and visual translation and localization to make information communicated with graphs, diagrams and pictures more cross-culturally appropriate, and examining how embassies, which played a key role in the experiences of the disaster of participants in this research, could be better provided with translated or interpreted information. Finally, the researcher intends to examine theoretical frameworks that could begin to explain why translation and interpreting were needed in the 2011 Disaster, why these phenomena manifested in the way they did, and why any of this may be important.

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