Levelling the Playing Field with (In)accessible Technologies?
How Technological Revolution has Changed the Working Conditions of Blind Translators

Introduction

According to recent research, there are about 255 million persons with visual impairments around the world. Of those, about 36 million are completely blind [Bourne, Flaxman et al. 2017]. In Poland, the estimates of the population of people who are visually impaired vary. The Main Statistical Office of Poland calculated that in 2014 there were about 2.5 million people who suffered from some sort of sight-related problem that lasted for more than 6 months. Paplińska [2008], in turn, estimates that there are about 500,000 people with visual impairments

---

1 This project was financed by the research grant no. DEC-2013/09/N/HS2/02096 of the Polish National Centre of Science.
in Poland. The discrepancies are due to the fact that there are different, widely-adopted criteria for inclusion in this population. These, in turn, reflect the fact that the definition of the concept of disability, according to Barnes and Mercer [2002], is dynamic. No matter which data source one takes, it is evident that the population of visually impaired persons (VIPs) is sizeable and unlikely to suddenly decrease in the foreseeable future.

The fast evolving world has an impact on living and working conditions of persons with disabilities. ‘Traditional’ forms of employment and professions performed by persons with disabilities are rapidly disappearing. This means that if they want to work, they have to compete on an open market. There is a push for social inclusion, supported by the UN Convention on the Rights of Persons With Disabilities (UNCPRD)\(^3\) that has been ratified by the European Union and also, in 2012, by Poland. Last but not least, every year brings the development of new, life-changing technologies for persons with disabilities.

If one adds to all the above-mentioned the growth of knowledge-based economy, translation professions seem to be an attractive career pathway for blind and low sighted people. Yet the accessibility of translation professions has, as pointed out not long ago by Kellett Bidoli [2003], received virtually no attention from the academic community. Only recently has there been a growing interest in this area, on the one hand pushed by teachers of translation and other interested academics [Palazzi 2003; Figiel 2013; Figiel 2015; Hagemann 2016; Rodriguez Vázquez and Miletto 2016; Figiel 2017], and on the other hand propelled by blind translators themselves [Figiel 2009; Dold 2015; Barkhordar and Yousefi 2015].

The aim of this paper is to present some of the results of a qualitative study conducted among visually impaired translators and interpreters in Poland, which may shed light on some of the challenges related to the accessibility of the profession in the past few decades.

**Theoretical framework**

The present study can be placed within the emerging branch of sociology of translation, as described by Wolf and Fukari [2007]. The researchers that adhere to the so-called sociological or social turn in translation

\(^3\) [https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html> Visited on Jul 10, 2018.}
studies, such as Wolf [2006] or Sela-Sheffy and Schlesinger [2011], go beyond the analysis of texts and cultures and are exploring the role of translators, the social aspects of translating and the position of translations in the wider social space. Chesterman [2009] calls those three strands of study sociology of translators, sociology of translating, and sociology of translations respectively. If one adopts this trichotomy, this study falls within the scope of sociology of translators. In this perspective, researchers are mainly using the concepts of habitus, field and capitals, as developed by Pierre Bourdieu [1986].

Bourdieu, in addition to economic capital, distinguishes cultural and social capitals. The cultural form of capital can present itself in embodied, objectivized or institutionalized states. The embodied state is understood in Bourdieusian terms as those dispositions that agents acquire over their lifetime. Thus, the acquisition of cultural capital in its embodied state requires time and effort and cannot be delegated [Bourdieu 1986]. The ability to read the Braille code or use screen readers are some of the examples of this state of cultural capital. The objectivized state of cultural capital is represented by objects possessed by agents. These may include, in the context of the discussed study, Braille devices, specialised software for the blind, scanners etc. It is important to stress that without the stocks of embodied cultural capital, the volume of its objectivized state will not be effective. In other words, it is not enough to own a Braille note taker. One has to know how to write and read the Braille code in order to be able to effectively use the note taker. Finally, the institutionalized forms of cultural capital are those recognized titles or degrees that flow from possessing stocks of embodied and objectivized cultural capital. Bourdieu explains that cultural capital, under certain conditions, can be converted into economic form of capital. The social form of capital, in turn, is “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” [Bourdieu 1986]. In other words, it is the potential to mobilise a network of contacts for the benefit of the agent. This process acts as a leverage on the agent’s volumes of cultural and economic capitals, multiplying their efficacy.
Thus, in this paper the volumes of embodied and objectivized forms of cultural capital possessed by the visually impaired translators will be analysed. In addition, the required volumes of social capital will be explored.

**Methodology and sample**

Due to the relatively understudied nature of the problem, research into the conditions of VIPs working as translators had to have an exploratory nature. In such circumstances, it was justified to employ qualitative methods and, in particular, the technique of in-depth interviews [Wengraf 2001]. The interviews were conducted between August 2014 and September 2016. All were recorded on digital audio recorder. All the respondents expressed informed consent to participate in the study. The interviews were then transcribed and anonymized. Each respondent was assigned a fictitious name. For the sake of clarity, in this paper every quote is marked by the code name, gender, main working language of the respondent, and their age at the time of interview.

Fifteen interviews were analysed. Their total duration exceeded 23 hours. The transcript is more than 360 pages long. All the interviews were conducted in Polish, on the basis of a detailed questionnaire. The latter was divided into several parts, such as demographics, the translator’s education, working conditions, professional development and recommendations. In this paper all the quotations will be provided in English translation by the author of the paper.

The respondents were aged from 30 to 71. Out of a total of 15 respondents, there were 8 men and 7 women. Most of the respondents, 13 out of 15, worked with English (all those whose code name starts with the letter “a”). The same number (13), had studied translation, 9 of them at the Institute of Applied Linguistics (University of Warsaw), but also at postgraduate courses for literary translators or interpreters. Their experience in translation professions ranged considerably. Most of them had been working as translators, to a larger or smaller extent, for more than a decade, with three respondents working for 40 years or more.

---

4 Although the institutional state of cultural capital has been studied within the framework of presented project, its discussion falls outside the scope the present paper.

5 For lack of space, the questionnaire is not included in this paper. Its Polish version can be found in Figiel [2017].
of their visual impairment, the respondents constituted a homogenous group. All of them had a congenital condition. Most of them reported that they were blind. Only 2 respondents said they were low sighted. Thus, the sample is not a representative one for the population of VIPs in general. Nonetheless, it offers an interesting insight into the world of experienced multilingual professionals with visual impairments. As for translators with visual impairments in Poland, the author probably interviewed the majority of them.

**Results**

As has been pointed out in the previous section, the respondents represent a variety of age cohorts. Thus, it is possible to trace the evolution of assistive technologies and their influence over the working conditions of the visually impaired (VI) translators. The data corpus will be presented chronologically from the oldest to the most recent experiences of the respondents.

Up until the early 1990s, the main tools used by the respondents were voice recorder and regular, black-print typewriter. The following extract illustrates the working practice of that time:

> First [my wife] recorded the text that I was supposed to translate on a cassette recorder. Then, I would sit with my cassette player and typewriter and write, that is to say, translate (Antoni, male, English, 69).

Thus, the translators working in that period not only had to know how to touch type and had to have a cassette recorder, but also depended on sighted assistance. They had to ask somebody to read out the source text. Then they were working from the recording of that text. Using a regular typewriter, they prepared the translation. This procedure was reported by all the respondents who worked at that time.

At the beginning of 1990s, personal computers started to change the working conditions of many translators in Poland. The visually impaired translators were participating in that revolution. However, switching from analogue into digital proved to be a difficult process for some of the respondents:

> A huge change. Since there was no need for a cassette player or a voice recorder. And that meant a lot. I was so happy that I knew how to touch type.
Although it was not the same. While abandoning the typewriter, one had to get used [to computers] and that transition took some effort (Anna, female, English, 65).

The VI translators could do away with recording texts on cassette players with sighted assistance. But digital technologies were not accessible ‘out of the box’. Thus, one had to buy additional hardware and software that made it possible for the blind to use the computer. And those products were (and still are) very expensive. The acquisition of those additional devices and software imposed an additional financial burden, thus reducing the competitiveness of VI translators as compared with their sighted colleagues. Although some of these technologies were subsidised by the state, such subsidies were not always available and did not cover the full cost of additional equipment. Moreover, the access to up-to-date operating systems and computers was limited by the availability of specialised software, which lagged behind the latest technologies and standards:

Windows 3.11 was spreading at that time, but it was not accessible. So everybody switched to Windows and we were left with DOS. We were stuck there and we couldn’t get out. We sent documents in RTF. And that was a problem, because they would not accept them. They would say: ‘What? We don’t need it this way. We need it in Word or TXT [format]’ (Aneta, female, English, 43).

Also, it took some time until the specialised software could handle different working languages of some of the respondents. Here is how one of them describes inaccessibility of Cyrillic alphabet:

At that time it was difficult [to cope] with Russian. The computers were as they were, there were some synthesizers, but they wouldn’t read the Cyrillic alphabet (Robert, male, Russian, 42).

Digital technologies brought a promise of solving many problems that blind translators faced. The main hope was that they would now become much more independent. However, the realisation of that initial promise was questioned by some of the respondents:

One thing has remained the same. We were promised: you will now be able to scan things. I would never use scanned documents when translating. That’s because there are typos. And in those texts that I am translating, technical stuff, you cannot have a situation where, for example, ‘AB’ is recognised
as ‘4C’ by the scanner. You cannot do it that way. So, eventually somebody [sighted] has to proof read it [the scanned text] (Franciszek, male, French, 71).

In fact, as reported by all of the participants of the study, digital technologies created new problems which are impossible to solve for blind translators. For example, the question of layout and formatting emerged as an almost insoluble issue:

The control over it [formatting] is possible, but only to a certain extent. […] because if you want a blind person to go through it, you have to analyse every character and then turn on proofreading mode in the screen reader. It describes everything: whether the font colour is OK, whether everything is OK, because it has to be the same. So it is possible, but it’s very painful (Artur, male, English, 49).

Thus, it would seem that all the investments in expensive hardware and software cannot balance the negative consequences of the introduction of digital technologies and new problems that this brought for VI translators.

Additionally, CAT tools that are regularly used by sighted translators are not accessible for the blind:

I tried experimenting a bit with TRADOS, but somehow I failed to master it. And after all it was a demo version of an old release. At that time there was a new version which was completely inaccessible, so I stopped trying with this TRADOS. […] There was another one, MemoQ, that I tried, but that was […] also inaccessible. (Aleksandra, female, English, 39).

Most of the respondents had the same experience with CAT tools. They would try using them and fail because of their inaccessibility. Some have not even tried installing them, as they knew that they were not accessible. Only one respondent has neither tried nor knew anything about CAT tools, but that was because he translated philosophical, academic publications. In contrast, low sighted interviewees experienced other challenges with accessibility of CAT tools:

I don’t know about accessibility of CAT tools [with screen readers]. The transition from top-down to left-right reading was difficult for me, since one of my eyes sees less and I preferred working in the top-down system. At present, all CAT [tools] are right-left, so you know, I have to turn my head. Tough luck
since you have to do it. So I learnt to use “Copy Source to Target” and I don’t look at the other side [of the screen]. (Agata, female, English, 41)

The inaccessibility of CAT tools was particularly frustrating for those respondents who had some experience with them, because they knew that CAT tools could have solved some of the above-mentioned issues with layout and formatting:

The software tries to preserve the document layout. So if there is, for example, a table and I have to translate, let’s say, length of a device provided in centimetres, then I do not have to even know that there is a table. I simply see the phrase and place it in the translation. And then, in the target document, it will appear in the right table. […] I just go from segment to segment and I don’t have to care about the rest. […] An important aspect that is usually forgotten is that it [i.e. a CAT tool] helps to preserve the document layout, the visual layout. […] I just realised how many times this feature has saved my life. Had it not been for it, I wouldn’t be able to handle the text. (Arkadiusz, male, English, 32).

Therefore, far from eliminating the need to use sighted assistance, digital technologies have actually increased the demand for it. The respondents reported many areas in which they would need sighted assistance. What follows are some of these areas, illustrated by the relevant quote from the respondent who expressed the need for support.

- Formatting and document layout:

  Let’s not delude ourselves: if we want to be sure that the formatting is done properly, it has to be done by a sighted person who will check the text (Artur, male, English, 49).

- Text recognition for non-searchable source text files (JPEG, graphic PDFs etc.):

  If somebody were to read those graphic files for me, that would obviously make the translation process longer, but it would have given me equal opportunities (Regina, female, Russian, 38).

- Tables:

  Or I would try to get somebody to read those tables with me so that I know that my screen reader reads them correctly and that I understand correctly the text layout. Or maybe I would try to convert them somehow to plain text and
then translate them and ask again somebody for help converting them back to tables. (Aleksandra, female, English, 39)

- Searching for information on the Web:

  Let’s say that I am searching for an abbreviation. I know that this is not a company name acronym. And I get 150 company names. And I have to go through them. So I prefer to phone my friend and tell her: ‘you know what? I am looking for such and such abbreviation. If you don’t know it, search for it. But it’s not a company name’. That way I will get it quicker. And I can help her with other things. (Franciszek, male, French, 71).

  A somewhat different perspective was offered by a blind sworn translator:

  If you deliver a regular translation, it is then edited, corrected and what not. They don’t want you to use boldface, they want you to use a regular typeface and then they would do it [format the text] themselves. But if you have to deliver a sworn translation, then you have to print it out and so forth. And then, unfortunately, a sighted person has to check if the tables are OK and so forth. (Robert, male, Russian, 42).

  As for who should provide such assistance, here is what one respondent had to say in the part of interview devoted to recommendations:

  Yes, but this [the assistance] had to be paid for. Just as a proof-reader is a paid job. So, for example, you are translating and then you have a proof-reader. […] But such an assistant should be paid for and it should not be the mother [of a blind translator]. (Agata, female, English, 41)

**Discussion**

On the basis of the material presented above, it is possible to discern three distinct periods with regard to assistive technologies and other forms of support that respondents were using:

- Analogue period – until the early 1990s;
- Transitional period – from early 1990s to mid-2000s;
- Digital period – from mid-2000s onwards.

It seems that there is a correlation between the growing complexity of digital technologies and the required additional volumes of cultural and social capital that blind translators must possess. In the analogue period
the blind translator had to have somebody who would read out the source text, record that on a cassette recorder and then know how to touch type the translation on a typewriter. In the digital period, the volumes of both cultural and social capital that blind translators have to possess have increased substantially. Instead of a cassette recorder and a typewriter, the translator has to have a computer equipped with a speech synthesiser and a screen reader, a scanner, a Braille device and other necessary hardware. The overall costs of special hardware and software can easily run into many thousands of euros. For example, a Braille display with at least 40 cells which is suitable for working with longer texts costs around three to four thousand euros. This objectivised state of cultural capital needs to be accompanied by its embodied state. The visually impaired translators, on top of all the competences required from their sighted colleagues, have to know how to read and write in the Braille code, how to use screen readers, how to work with a computer using only keyboard etc. Mastering all those skills takes time and implies, among other things, learning by heart of dozens or even hundreds of shortcut key combinations. It has to be stressed that this knowledge and skills need to be acquired even before one attempts to start out as a translator. They thus represent a high barrier of entry for young VIPs interested in translation professions.

Additionally, the competence of sighted assistants need to be higher than in the analogue period. Whereas in the latter epoch the assistant only had to be able to read aloud the text, nowadays he or she has to know how to use formatting and layout options in word processors or how to proof read scanned documents. Due to these constraints, some VI translators expressed their preference for cooperating with the same assistant on a long-term basis. For example, one of the participants has done just that and found such cooperation to be the key element for his success. However, the problem is that he has to share his remuneration with the sighted assistant, since no support from the state is provided.

Taking into consideration all the factors discussed above, is translation an accessible profession? To that question all the participants of the study responded that it was. However, as many of them pointed out, a blind person needs more competences than sighted translators. The following extract illustrates this position:

I believe that it’s a good profession for the blind. Clearly not everybody can do it, but it’s a good profession. It’s a profession that offers hope for the future for the blind and allows them to participate in the open labour market
on similar terms to others. Maybe not on equal terms, but on similar terms, because there are some limitations. (Artur, male, English, 49).

**Practical implications**

By analysing the material presented in this article, it can be stated that a number of practical steps need to be undertaken if the visually impaired translators are not to be left behind in the digital age. It has to be stressed that this is not a question of charity or pushing all the people with vision impairments into translation professions. Rather, in accordance with the basic tenets of the social model of disability as presented by Barnes and Mercer [2002], the point is to offer the same opportunities for the blind in translation professions as to the sighted with no extra cost for the VIPs. In addition, in the social model of disability the main responsibility for breaking down social barriers falls not on persons with disabilities, but on the society in general. Since it is the latter that creates barriers, it has to play a fundamental role in abolishing them.

In general, the main emphasis should be laid on providing such support and tools that would at least decrease the volumes of additional cultural and social capital required of blind translators.

To that effect, there needs to be a system of free-of-charge sighted assistance for those who need it, in line with the principle of non-discrimination, as stipulated by the UN Convention on the Rights of Persons with Disabilities (UNCPRD), especially in Articles 5, 19, 26, and 27. The assistance would, at least partially, level the playing field for VI translators, by allowing them to delegate those technical actions that are not part of translation proper and cause problems to VI translators. They, in turn, would be able to concentrate solely on the effort of translation, using thus to the full the potential and skills they have. This assistance could be provided by MA students of translation, who, while being paid decently for their job by the state, would simultaneously learn the craft from their more experienced blind colleagues. Although the latter is just an idea that requires further elaboration, it seems that a project of such scope could be financed by the European Commission, e.g. from the Erasmus Plus programme. A coalition of willing universities, organisations active in the field of sight disability and, above all, blind translators would be required. Such enterprise would not only support blind translators but also help developing expertise in teaching translation to blind students.
Additionally, in order to make CAT tools more accessible, when procuring such software the states and international organisations should include a mandatory clause on accessibility, e.g. on the A+ level according to the Web Content Accessibility Guidelines. The fulfilment of that obligation by the software provider should be verified by independent experts, including persons with disabilities, hired by the procuring entity. That way, software developers would be incentivised to prioritise accessibility should they want to participate in tender competitions. This recommendation is particularly relevant with regard to EU institutions, since the EU is a signatory to the UNCPRD.

The adoption of just those two measures will help to lower the entry barrier for translators with visual impairments by, at least to some extent, reducing the need to hold additional volumes of cultural and social capital, thus allowing for a more efficient conversion of the latter into economic capital. It seems that in the foreseeable future the gap between the required volumes of capital held by sighted and the blind will persist. However, all the interested parties should take all appropriate measures to overcome this inequality of opportunities.

References


Abstract

With the development of new technologies, the number of assistive devices/technologies at the disposal of persons with visual impairments has steadily grown. It would thus seem that translation professions have become more accessible. However, it seems that there is a growing gap between the competences indispensable for sighted and blind translators. The more technologically advanced the world of translators becomes, the more surplus technologies have to be mastered by the blind. And some of the digital tools which have become a blessing for sighted translators, such as CAT tools, are hardly accessible for the blind. Yet these challenges are not discussed outside the community of blind translators, except for only a handful of papers from a few translation scholars. So, is translation accessible for persons with visual impairments? This question is addressed on the basis of 15 in-depth interviews with blind and low sighted translators from Poland, analysed within the theoretical framework of Pierre Bourdieu’s theory of capitals.

Key words: accessibility, sociology, disability, translation, Bourdieu