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DISABILITY AND (DIS)EMPOWERING TECHNOLOGIES: THE CASE OF BLIND TRANSLATORS¹

Abstract: This paper is based on fifteen in-depth interviews with blind translators and interpreters from Poland. Due to the age-diverse sample of participants, three periods based on available assistive technologies have been isolated: the analogue period, the transitional period and the current, digital period. The paper discusses in detail challenges and opportunities faced by the interviewees working in each of these periods, with particular emphasis on accounts of analogue period and transition into digital technologies provided by three veteran translators.

The data is analysed within the theoretical framework provided by Pierre Bourdieu's theory of capitals. The results of the study suggest that there is a growing gap between the volumes of embodied and objectivised cultural capital 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 essential for translators are hardly accessible for the blind.

In conclusion, the author argues that modern technologies, far from eliminating the need for additional volumes of cultural and social capital, have actually aggravated it. Unless digital translation tools and settings are made accessible blind and low sighted translators and interpreters will continue facing exclusion from the labour market. Moreover, looking at the experiences of the older generation of successful translators and interpreters with visual impairment, we can draw conclusions on what factors support the inclusion of younger generations of blind translators and interpreters in the labour market.

Keywords: disability, technology, translation, Bourdieu, Braille, Optacon

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Introduction

Ever since translation and interpreting were taught in Poland, there have been many successful blind² translators and interpreters. Some of them have been working for public institutions (both in Poland and abroad), and some in the private sector. However, very little attention has been devoted to the way they work and the challenges they face. Particularly, how technologies, both in the past and at present, have been impacting the way in which those translators and interpreters have been working. In the popular imagination, and sometimes within the very community of the blind, it is often claimed that digital technologies have a universally positive impact on the lives of the blind people. This article challenges this view by presenting the real-life experiences of blind translators in Poland across five decades (1960s–2010s).

Up until recently, virtually no academic publications have dealt with the subject of blind people who are either studying or working as translators.³ Even if there were any publications, these were written by the members of the community themselves and concerned specific challenges faced by blind students and professionals, such as note-taking in consecutive interpretation.⁴ Moreover, some of these publications were of dubious quality and only contributed to the reproduction of stereotypes about the blind.⁵ Only within the last two decades this situation has gradually started to change.⁶ The growth in research is matched with the awareness that mixed teams (that include a person with visual impairment) are a decisive factor in the success of the research project covering these issues.⁷ It seems that nowadays, any discussion on translation and technology is incomplete without a reference to accessibility.⁸

² For the sake of simplicity, in this article the term “blind” is employed as the synonym of the term “visually impaired.” However, it has to be stressed that it is the term “visually impaired” (and not “blind”) that is an overarching term that includes all members of this community. The term “low sighted” is only used in this paper when specifically referring to people who have difficulties with seeing but are not totally blind.

³ C.J. Kelleth Bidoli, *The Training of Blind Students at the SSLMIT – Trieste*, “The Interpreter’s Newsletter” 2003, no. 12, p. 190.

⁴ D. Dold, *Die Notizentechnik blinder DolmetscherInnen beim Konsektivdolmetschen* (unpublished MA Thesis), Faculty of Translation Studies, University of Graz, Graz 2015.

⁵ Y. Barkhordar, K. Yousefi, *Major Skills and Abilities of Blind and Visually Impaired Translators*, “Translation Journal” 2015, <http://translationjournal.net/April-2015/major-skills-and-abilities-of-blind-and-visually-impaired-translators.html> (accessed: 15.06.2022).

⁶ See e.g. S. Rodríguez-Vázquez, F. Mileto, *On the Lookout for Accessible Translation Aids: Current Scenario and New Horizons for Blind Translation Students and Professionals*, “Journal of Translator Education and Translation Studies (TETS)” 2016, vol. 1 (2), pp. 115–135.

⁷ S. Rodríguez-Vázquez, D. Fitzpatrick, S. O’Brien, *Is Web-Based Computer-Aided Translation (CAT) Software Usable for Blind Translators?* [in:] K. Miesenberger, G. Kouroupetroglou (eds.), *Computers Helping People with Special Needs. ICCHP 2018*, Springer, Cham 2019.

⁸ S. O’Brien, S. Rodríguez-Vázquez, *Translation and Technology* [in:] S. Laviosa, M. González-Davies (eds.), *The Routledge Handbook of Translation and Education*, Routledge, New York 2020, p. 269.

With all these positive developments, there is still a need for more narratives by blind translators themselves. This paper builds on a project carried out by the author between 2014 and 2017, in which 15 blind translators and interpreters from Poland were interviewed about their experiences and challenges they face when studying translation and working as translators/interpreters.⁹ The aim of the project was to give voice to the blind translators/interpreters themselves and, hence, to study the accessibility of training and working in the profession from their perspective. Contrary to previous papers reporting the results of this project,¹⁰ this article focuses specifically on the changing assistive technologies and the relation between these technologies and humans using them. Thus, the objective of this paper is to give a thorough account of what have been the barriers and drivers for the success of the visually impaired translators. Since, as postulated by the social model of disability,¹¹ it is the barriers erected by the society that disable a person with an impairment.

The data from interviews are analysed using the theory of capitals developed by Pierre Bourdieu (1930–2002). He defined capital as “accumulated labor (in its materialized form or its ‘incorporated,’ embodied form) which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor.”¹² Thus, he distinguished economic, cultural, social and symbolic capitals. For the purpose of the present paper it suffices to say that cultural capital can appear in three forms: (1) embodied; (2) objectivised; (3) institutionalised. These forms can be represented, within the context of the discussed study, by touch typing, possessing a Braille note-taker and holding a degree in translation studies, respectively. Of paramount importance for the present study is the notion of social capital, defined by Bourdieu as “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.”¹³ In other words, it is the ability of blind translators to mobilise assistance. It has to be stressed that, under certain conditions, different kinds of capital can be converted into another, e.g. cultural into economic capital.¹⁴ In addition, there is the symbolic

⁹ This paper is exclusively devoted to written translation and does not cover oral translation, usually referred to as “interpretation.” For more details on this aspect, see W. Figiel, *New Technologies in Teaching Interpreting to Students with Visual Impairments* [in:] M.D. Rodriguez-Melchor, I. Horvath (eds.), *The Role of Technology in Conference Interpreter Training*, Peter Lang, Bern 2020, pp. 221–236.

¹⁰ See e.g. W. Figiel, *Levelling the Playing Field with (In)accessible Technologies? How Technological Revolution Has Changed the Working Conditions of Blind Translators*, “Między Oryginałem a Przekładem” 2018, vol. 24, no. 3 (41), pp. 75–88.

¹¹ C. Barnes, G. Mercer (eds.), *Implementing the Social Model of Disability: Theory and Research*, Disability Press, Leeds 2004.

¹² P. Bourdieu, *The Forms of Capital* [in:] J. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*, Greenwood, Westport 1986, p. 241.

¹³ *Ibidem*, p. 252.

¹⁴ *Ibidem*, p. 242.

capital, which can be understood as prestige.¹⁵ Thus, this paper aims to explore what are the capitals, and their forms, that a blind translator has needed to possess in order to be successful in overcoming barriers erected by the society and what has been the impact of the development of technologies on these processes. Moreover, Bourdieu argues that agents, equipped with capitals and dispositions, come into conflict with each other within a given field. Bourdieu defines field as “a set of objective power relations that impose themselves on all who enter the field and that are irreducible to the intentions of the individual agents or even to the direct interactions among the agents.”¹⁶ Thus, a blind translator, who is, using Bourdieusian terms, invested in the translatorial field, needs to possess high volumes of capitals.

Methodology

To research this relatively understudied problem, it was decided to employ qualitative social research methods, namely the technique of in-depth interviews.¹⁷ A detailed interview questionnaire was prepared for this purpose. It included questions concerning such areas as education, employment, professional development, assistance and support and recommendations.

The interviews were carried out between August 2014 and September 2016. All were recorded on digital audio recorder. Prior to the interview, all interviewees expressed informed consent to participate in the study. The interviews were then transcribed and anonymized. Each respondent was assigned a fictitious code name. All in all, fifteen interviews were analysed. Their total duration exceeded 23 hours. The transcript is more than 360 pages long.

Every quote provided in this paper is accompanied by the code name, gender, and the age of the interviewee at the time of interview. The first letter of the code name reflects the first foreign working language of the translator: A for English, F for French, R for Russian. All quotes have been translated into English by the author. Where necessary, additional explanation is provided in brackets (“[]”). Sometimes, details about the interviewees are anonymized by putting in brackets a more general description, such as in the case of “[my wife]” instead of providing the name of a person in question.

¹⁵ P. Bourdieu, *Language and Symbolic Power*, Polity Press, Cambridge 1991, p. 230.

¹⁶ P. Bourdieu, *The Social Space and the Genesis of Groups*, “Theory and Society” 1985, vol. 14 (6), p. 724.

¹⁷ T. Wengraf, *Qualitative Research Interviewing: Biographic Narrative and Semi-Structured Methods*, SAGE Publications, Los Angeles 2001.

Sample

The interviewees were recruited through personal contacts of the author who himself is a blind translator. In addition, each interviewee was asked to name any other blind translators they knew. This method, referred to in social sciences as snowball sampling,¹⁸ was particularly useful due to the relatively small number of (isolated) members of the community of blind translators in Poland.

At the time of the interviews, the interviewees were aged from 30 to 71. Out of a total of 15 interviewees, there were 8 men and 7 women. Most of 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 oldest interviewees working for 40 years or more. In terms of their visual impairment, the interviewees constituted a homogeneous 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 far from being a representative one for the population of the visually impaired persons in general. Nevertheless, it offers an interesting insight into the world of experienced multilingual professionals with visual impairments. It has to be stressed that, due to a relatively small number of working blind translators in Poland, the author has probably carried out interviews with most of the members of this community.

Results

As pointed out in the previous section, the sample of interviewees was age-diverse, including three interviewees who were older than 65, belonging to the pioneering generation of blind translators and interpreters who had been working before 1989. Thus, the analysis of the collected empirical material allowed for the isolation of three distinct periods related to the availability of (modern) technologies:

- **Analogue epoch** (up until c.a. 1990), in which translators were using analogue technologies to support their education and work;
- **Transitional epoch** (c.a. 1990–2005), in which blind translators were transitioning from analogue to digital technologies and thus experiencing opportunities and challenges related to this process;
- **Digital epoch** (from c.a. 2005 until present), in which blind translators are faced with the consequences of both the use of digital technologies and the transformation of translation industry as such.

¹⁸ E. Babbie, *The Practice of Social Research*, 12th ed., Wadsworth Publishing, Belmont 2010, p. 193.

It has to be stressed that these periods are isolated somewhat arbitrarily and some of the narratives mix up elements of the two neighbouring epochs. Nevertheless, this division does provide a useful point of reference. What follows is a detailed description of these three epochs.

Analogue epoch

The three oldest interviewees attended university courses in the 1960s. All three studied at the Higher School of Foreign Languages, the forerunner of Institute of Applied Linguistics, at the University of Warsaw. Right from the beginning of their studies they had to use adaptive technologies. Here is how one of them describes his experiences with Braille slate and stylus:

[...] slate is very convenient. You can bring it in a folder. So I took notes in Braille. And I have to say that when the lecturer, for example, would rush, then it happened that during the break the rest would copy from me, I would dictate to them. [...] And I would use contractions, at that time, the old, Laski¹⁹ system. Plus I would add my own contractions. (Franciszek, male, 71)

Contractions were even more important for students of English:

And since English Braille has contractions that are popular, note-taking was quite effective. When I had to share my notes with somebody, I could dictate them or touch type and these [notes] were good. (Anna, female, 65)

In a similar vein, another interviewee boasted of his typist skills:

On average, they measured it then, I could type 250 characters per minute. It was like a professional secretary, typist. And I would always type [...] with all fingers. So I would write really quickly. [...] I would type down handouts that were really hard to get. I would type them really quickly on ten carbon copies, and somebody would dictate it to me. And they were very grateful for this. (Antoni, male, 69)

Thus, a blind student of translation (and translation professional) needed to be proficient in Braille and be able to touch type. They would also use reel-to-reel recorders. Following the spread of cassettes, they would switch to more portable cassette recorders. These served to record the text for translation, both during the university period and, later on, in professional life. The following extract illustrates how blind translators worked professionally with cassette recorders:

¹⁹ In Polish, there are two contraction systems in Braille. The historical Laski system was developed more than 100 years ago by Róża Czacka. The newer system was elaborated in the 1980s by a renowned Polish philologist, Prof. Zygmunt Saloni. Both are rarely used by the blind in Poland.

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, 69)

However, this method was rigid and did not allow for any changes:

I would ask him what he planned [for the next class], recorded and transcribed it. [...] But [...] he would sometimes tell me he would do this, and then would do something else that I didn't transcribe. (Franciszek, male, 71)

Nevertheless, cassette recorders represented a breakthrough in that a blind person could listen to the text without the presence of a sighted reader:

At that time, cassette recorders became available [...]. They were quite big, but they were portable. My earlier device was called *Tonetka* and it weighted ten kilos. [...] So when one of my sighted friends was reading something, he could record it. And I didn't have to be present there. (Anna, female, 65)

In addition to all the assistive technologies, one of the interviewees emphasized the role of memory:

The cassette recorder, slate and stylus, and a typewriter, and a head, because you needed to remember a lot at that time, it seems to me. When I see how nowadays people work, we needed to rely more on our memory, it had to be always at hand, that would always be a base. (Anna, female, 65)

As shown by the above-cited materials, all these technical solutions required cooperating sighted teachers and assistants. Thus, the quality of this cooperation became one of the most important issues:

at that time you needed a desk, a dictionary and you needed to teach the readers. In general, every new reader had to learn how to use a dictionary because, horror of horrors, grown-up people didn't know the alphabet, I swear! (Anna, female, 65)

This is confirmed by another interviewee:

But, I'll be honest with you, hardly anyone looked for work under socialism. When [...], for example, I called around, looking for students... They... They agreed, but they wanted unknownst money. Or she would say: "yes, okay, I'll come." And I'm waiting, and she doesn't arrive, because on the way she went to her friend's, she gave up. And these were the kind of stories that made it very difficult sometimes. Sometimes it put me in a very difficult situation. (Franciszek, male, 71)

Yet another interviewee, from a younger generation, had the same qualms about the work of some assistants who helped him transcribe handwritten documents:

There has to be the right sighted person for this, well, because if he's scatterbrained, well, he'll say part of it, and then it turns out he won't say something that's there or he'll mess something up, you know; and that's the problem. (Robert, male, 42)

Hence, those interviewees who could, as was the case with Antoni, opted for asking family members to help them out. An alternative option was to offer a good pay for the reader:

I simply paid a person I employed for reading aloud to me. [...] At that time I earned a lot. People spent a lot of money and were chasing after furniture at that time [late 1970s and early 1980s]. And I would sometimes spend four thousand on a reader. [...] The one who came to me was supposed to read what I told him and as many times as I told him to do. (Franciszek, male, 71)

Many interviewees mentioned having access to Optacon, a device that converted black print into embossed representation that could be read using the sense of touch. It is worth quoting in full how one of them described his experiences with Optacon

With Optacon you would move the camera around the text with one hand and with the other hand you would have the shape of the letter in a tray. But the problem was that not everyone knew how to do it. You had to be very precise. [...] I remember I'm in the middle of the page, I'm reading smoothly, and then I sneezed and I moved it. And now, go look for the text. [...] But I could look up any dictionary, just open it and find [the word]. I knew how to use it best. It wasn't worthwhile to read this way, because it was pretty slow. Although I must say that I translated the regulations of the Paris-Dakar Rally on my own in one night. It was about twelve pages, and I managed it. (Franciszek, male, 71)

Thus, Optacon gave more independence to blind translators working in the analogue epoch, as confirmed by the following statement:

after 1980 I had for a while the so-called Optacon. [...] A device for the blind that allowed me to use dictionaries on my own. So I learnt how to use Optacon and I could read black print text. (Antoni, male, 69)

Optacon could also raise the translator's prestige among the clients:

Optacon helped, because I would take it and it would buzz. And I'd turn on Optacon, and I'd take this text, and I'd move the camera a little bit here and there. And I was like, "aha, are we translating all this or what?" And they treated me like a wizard, that it's like: I moved something here, this thing buzzed and I knew everything. And that was a good thing. (Franciszek, male, 71)

As can be seen from the quotes above, Optacon required considerable skills to operate it. Additionally, the device was manufactured in the United States and hence was very expensive and difficult to come by. Optacon, thus, was a harbinger of what was to come with digital technologies.

These pioneers also had to face prevailing stereotypes:

The dean came to me and congratulated me on my score [at the entrance exam to the university] and said I would definitely be accepted, but he worried a lot how would I step on those stairs, and there are plenty of them there. Fortunately, it didn't block me anything. (Antoni, male, 69)

These stereotypes became so engrained in the older generation that one of its members concluded the conversation, asking the sighted not to believe that “stairs are the biggest and the most important problem faced by the blind” (Anna, female, 65).

Transitional epoch

The turn to digital technologies came in tandem with the socio-economic transformation in Poland. This has upended the lives of many people and forced them to look for new ways of getting by. One of the interviewees from the older generation decided to apply to become a sworn translator and faced some hurdles:

And then immediately there was a problem: whether I can vouch that the translation will be done properly. Because I cannot see. So I wrote them that there is the typewriter, the tape recorder, that computers are developing. That was already in the 1990s. [...] Besides, I have my Optacon [...] Then the judge wrote to the Association of the Blind, asking what is Optacon and can you read handwriting with this Optacon. And they wrote back that you could. That wasn't entirely true. It would have to be someone very capable. And it depends what kind of handwriting it is. Well, but they wrote and they accepted it. (Franciszek, male, 71)

This account not only tells a lot about the ingenuity and resourcefulness of the translator in question, but also about the respect the Polish Association of the Blind enjoyed at that time within the society at large.

Yet, the most consequential transformation came with the spread of personal computers. Many interviewees reported that across the decade of 1990s the ways they studied and worked were completely transformed:

First I had a Braille typewriter. Well, a lot of noise and it disturbed a lot. I gave it up very quickly. Then there was a tape recorder, Grundig or something, big. I was recording, recording, but then it all discouraged me, because I had so many tapes. Then, of course, there were portable recorders, also for regular cassettes. So, for some exams I learned from these tapes. 30, 40 of these tapes, let's say. But later I started to take notes, that is to whisper and record what I needed. [...] And then computers came along in the nineties. So I was actually writing my MA thesis in WordPerfect, which ran under DOS. So it was going quite well. I think I got computer dictionaries from somewhere. [...] but it wasn't much. It was just a modicum of what we have now. (Robert, male, 42)

However, the transition was not always smooth and required some time and effort.

Well, yes, a very big change, because first of all you no longer needed a tape recorder or a portable recorder of any sort, and that's a big deal. I was very happy that I knew how to touch type, although it's not quite the same, because the strike is different, when someone moved from typing on a typewriter, they had to adapt to it and this transition cost some effort. Besides, the computer cost me a lot of nerves in the beginning, I mean, it sucked the energy out of me somehow. I was more of a self-taught person. I learned a lot of things on my own by trial and error, that's how it all worked out, but after a few hours, after some time working with the computer, I was simply exhausted mentally. (Anna, female, 65)

Personal computers were, in fact, a breakthrough for blind language learners. However, because they were not portable at that time, they still could not change some of the practices of blind students of translation. Here is how one of the interviewees described how she studied at the university:

Oh gosh. It was a tragedy! The situation is as follows: there is no computer at home yet – at the very beginning, for the first 2 years or so there is no computer, there is only a Braille machine, a battery operated cassette recorder and lots of tapes, dozens, bags, boxes of tapes repeatedly recorded during classes; ninety-minute tapes only, of course. These were later transcribed into Braille at home, to free up the cassette so there would be something to record on. This is 5 years out of my life. I mean, when the computer came, it was a bit easier, because it was easier for me to write on the computer, but nothing changed, because somehow scanning didn't appeal to me. (Aneta, female, 43)

One of the reasons for Aneta not being convinced about using scanners in the 1990s might have been lack of accuracy of OCR software. Here is how a more experienced translator commented on this aspect:

One thing hasn't changed. We were promised: "you'll be able to scan for yourself." No way, I can't translate text that has been scanned. Because there are mistakes. And with the texts that I translate, technical documents, it can't be that it's written, let's say, "AB," and the scanner reads "4C." Well, you can't do it that way. And now. And so someone has to look through it. (Franciszek, male, 71)

Thus, the transition into digital technologies did not mean that sighted assistance is not necessary. On the contrary, as will be shown in the next section of this paper, there is a growing need for such services. The same interviewee puts it this way:

But I would always need a reader. Already for those translations or sworn translations. I always needed a reader. There is no other way. Then things changed a bit when I started to use a computer. There was DOS for a short time, unfortunately... But then Windows somehow started to work. (Franciszek, male, 71)

Also, the adoption of the latest digital technologies by the community of the blind was hindered by the inavailability of assistive technologies, as explained by this interviewee:

Windows 3.11 came out at that time and it wasn't accessible. But everybody switched to Windows, and we stayed with DOS, we were stuck with it and we couldn't get out of it. We sent documents in RTF. It was a problem, because they didn't accept it, they would say: we need it in Word or TXT. (Aneta, female, 43)

A separate issue, as reported by another interviewee, was a complete lack of support for Russian language:

I continuously faced problems with Cyrillic alphabet and speech synthesizers that would work with it. (Robert, male, 42)

These problems had a negative impact on professional development of the interviewee. A separate issue is that there was, for many reasons, lack of awareness of certain state-of-the-art technologies and devices:

And we started talking about computers. [...] And I said: “no, well, for now there’s only DOS, because there’s no [way to work with] Windows.” Well, because those were the beginnings. “Windows isn’t talking yet.” And she says: “What do you mean there isn’t? There is.” (Franciszek, male, 71)

Digital epoch

With the spread of digital technologies and growing emphasis on accessibility from the main software providers, the initial hurdles described in the section above have gradually been overcome. Nowadays, Windows and macOS have a built-in screen reader (respectively, Narrator and VoiceOver). There has been an improvement (though, admittedly, not sufficient) in access to subsidies covering most of the costs of the more expensive Braille devices (whose prices may be up to 4,00–6,000 euros). Nevertheless, this does not mean that there are no barriers for blind translators.

First, a blind translator needs to know how to operate all modern devices. Switching to ever more complicated technologies and mastering their use may be quite challenging, especially for members of the older generation:

I haven’t quite learned [how to use] it yet. It [Braille display] turned off somehow. I don’t know how to turn it on. I need to read more. [...] A month, two months ago I got a new device. And there’s no time to sit and learn how to use it. [...] It turns out that I have to read at least the beginning of the manual, because otherwise I won’t be able to master it. [...] And that device started helping me. Because if I wasn’t sure, for example, I’d go there and see if the character was right. Because sometimes the synthesizer would also get it wrong. And here I see that, aha, it’s not like that, there’s one “t” and there should be two, right? (Franciszek, male, 71)

Thus, far from being the relic of the past, Braille code continues to be an essential support for blind translators:

At the moment I still need Braille – also for translating, I need it for text editing in general, I do not only use Braille when I work at the computer, but I like using my Braille display and it is completely different, I can notice many things. I mean, when I want to listen to something, then my speech synthesizer will read it faster, but when I’m reading and I want to check everything, I’ll use a Braille display. [...] I must say it’s really different when you read from a Braille print-out, it’s very interesting. It’s unbelievable, but even when I thought that everything was okay, I would proofread it, I would pick up something printed on paper in Braille and I would still find things that in some mysterious way were not visible to my eyes, or rather ears, or fingers on the computer. I don’t know why this is [...]. Maybe the sighted will say something like that too, that it’s different when they read from a display and when they read from paper. This must be similar. (Anna, female, 65)

Additionally, there is still a need for sighted assistants. What is more, this need is not being reduced, but rather increased, with the spread of digital technologies. There are new areas where previously assistance was not required. The following quotes illustrate challenges with document layout and formatting, respectively:

I mean a computer is not a very reliable thing. Even in some ways the typewriter was more reliable. For example, I once sent blank pages to someone. That's because all the text made it into a margin. Someone [sighted] should have taken a look at it. (Franciszek, male, 71)

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, 49)

Sighted assistance is even more important for sworn translators:

If you do a regular translation, [...] they generally want a normal font, and then they do it [the layout and formatting] themselves. But if you're handing in a certified translation, well, you have to print it out and so on, and then, well, unfortunately, a sighted person has to check if the table's didn't go somewhere. (Robert, male, 42)

In addition, a blind sworn translator would require assistance in going through the case files:

If the files have many volumes, it is impossible to go through them, and here lies the difficulty. I realize that a sighted person can take photos of files and then read it at home, but I can't do it. (Robert, male, 42)

Interestingly, this shows that some types of modern technologies (such as smartphones equipped with cameras), although accessible for the blind, cannot be a substitute for an assistant. Of course, with modern technologies there are many opportunities. One of these relates to the fact that it is not necessary, at least for translators, to disclose their disability:

The Internet makes it possible to look at a blind person objectively. I work with many people, many translation agencies who, for example, after six years found out that I am blind. And they are surprised [...]. Because they simply do not know. Even more nowadays, when my [assistant] has been making sure for a dozen or so years that it [the translation] has the same form, that it looks the same, that the colors haven't suddenly changed, well, they don't know. (Franciszek, male, 71)

However, some of these opportunities become transformed into challenges for blind translators:

because one more thing came with computers. [...] For example, someone brought five car registration certificates. So you translate one, and for the rest you just change the data, right? I have plenty of these assignments. And now someone brings me another certificate, so we just match

them. It's hard for a blind person to do it on your own. Because you have to read everything. (Franciszek, male, 71).

Thus, a blind translator needs someone to help them out with these technical (and very often repetitive) activities. The best option is to have a long-term partnership with a sighted assistant:

And then I thought it would be best to have a permanent collaborator. [...] she was learning French or Russian somewhere in high school. But she doesn't know enough to do anything. But simply because she's already worked with me for sixteen years. No, even already I think eighteen. So, I take care of the content. I send it to her. She takes the original text and sets it [the translation] up so that it looks exactly the same. And also, after so many years, she has this thing. She also has this ability. [...] She can, for example, say: "here I have this thing, as I remember, you always wrote like this for years, and here it's different. So where is the mistake?" And she can catch it, that I've got something wrong here. (Franciszek, male, 71)

Incidentally, many of these inaccessible activities could have been done by a specialized software that nowadays is commonly used by many translators. Yet, this software, known as Computer-Aided Translation (CAT) tools, is not accessible.²⁰

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 in centimetres of a device, 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 [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, 32)

Yet, only a relatively unknown product, called Fluency, have been made accessible for the blind, notably, thanks to the activism of blind translators.²¹ However, at the time of carrying out the interviews, there was very little awareness about accessible CAT tools:

I tried experimenting a bit with TRADOS [industry standard CAT tool], 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, 39)

Even when the information is available, it may be hard for a blind person to search it quickly and efficiently, with the blind more exposed to information overflow:

²⁰ See e.g. W. Figiel, *Levelling the Playing Field...*, op. cit., p. 81; I. Refaat, *Accessibility in the Computer-Aided Translation Tools for English-Arabic Language Pair*, "Transcultural Journal of Humanities and Social Sciences" 2021, vol. 1 (2), p. 36.

²¹ W. Figiel, *Niewidomi tłumacze, (nie)widzialni aktywiści?*, "Teksty Drugie" 2020, no. 2, p. 44.

There is TRADOS. And now it goes like this. You take a translation, you upload it into the software, and it says it has 750 of these variants [in translation memory]. So, go pick and choose. A sighted person may just put out all these options on a display, like on a huge sheet, and look through them. It's the same with the Internet. I know I am looking for an acronym. I know it's not the name of the company. I type it [into search engine] and it shows a hundred and fifty company names. And I need to go through these... I'd rather call a colleague and say, "You know what, I'm looking for this thing. Could you help me out? And it's not the company name." This way I get it faster. And I help her with something else, because I already have some experience, right? So here we are, working together. (Franciszek, male, 71)

The same issue was raised by another interviewee who, in addition, complained about inaccessibility of many electronic dictionaries:

It is definitely necessary to improve the accessibility of dictionaries, because there are already many electronic dictionaries. Searching on the Internet is a bit like... you can do it, but this should be quick and trouble-free. (Anna, female, 65)

Her opinion regarding electronic dictionaries was echoed by another interviewee:

There are dictionaries on CDs, yes, sometimes you can buy computer dictionaries, so it's all great, but they have a lot of graphics or other things and screen readers don't work with them. There is this fantastic Longman dictionary that came out some time ago and it doesn't work [with a screen reader]. (Aneta, female, 43)

Conclusions

As we have seen in the previous sections, blind translators have, at least over the past six decades, used assistive technologies. From slate and stylus to smartphone, they have been extremely knowledgeable about access technologies and could use them efficiently. Within the framework of Pierre Bourdieu's theory of capitals,²² they have had to possess large volumes of both embodied (e.g. touch typing, reading and writing in Braille) and objectivised (necessary hardware and software) volumes of cultural capital. It seems that over the past few decades, due to the spread of digital technologies, the necessary volumes of objectivised cultural capital have only grown. The required volumes of embodied cultural capital have grown in tandem. It is not enough to have an assistive technology, one needs to know how to use it. In addition, these specific forms of cultural capital are not necessary for sighted translators, which means that with the growth of digital technologies there seems to be a widening gap between what is required of sighted and blind translators.

There has always been a need for assistance. The translators who succeeded on the market were those who managed to mobilise such support. In terms of Pierre Bourdieu's theory, they had large volumes of social capital that served as a lever-

²² P. Bourdieu, *The Forms of Capital...*, op. cit., pp. 241–258.

age for their cultural capital. What is more, as has been demonstrated in this paper, sighted assistants have had to possess certain qualities and skills. In addition, they, too, need to be more competent with growth of digital technologies. Whereas in the analogue period, in the words of one interviewee, they only needed to know how to read and know the alphabet, nowadays, they need to be specialists in formatting and document layout. Because of the issues related to accessibility of digital technologies for blind translators, the need for assistance continues to grow. Hence, there is still a need for more social capital.

Interestingly, in some cases (as with Optacon) we have seen the conversion of objectivised cultural capital into symbolic capital, i.e. the prestige of the translator.²³ This example shows that modern technologies do have the potential to empower blind translators.

As pointed long ago by Cynthia Kellett Bidoli, with the growth in modern technologies, the number of blind people enrolling in university-level courses of translation is likely to grow.²⁴ However, if the translator's workflow continues to be only partially accessible for blind translators (and thus requirements for high volumes of cultural and social capital persist), many graduates of these courses will find it hard to establish themselves on the highly competitive market for translators and thus acquire dominating position in this field. On the other hand, if digital technologies are made available and accessible for the blind, they may yet contribute to their empowerment as professional translators and active participants within the translatorial field.

References

- Babbie E., *The Practice of Social Research*, 12th ed., Wadsworth Publishing, Belmont 2010.
- Barkhordar Y., Yousefi K., *Major Skills and Abilities of Blind and Visually Impaired Translators*, "Translation Journal" 2015, <http://translationjournal.net/April-2015/major-skills-and-abilities-of-blind-and-visually-impaired-translators.html> (accessed: 15.06.2022).
- Barnes C., Mercer G. (eds.), *Implementing the Social Model of Disability: Theory and Research*, Disability Press, Leeds 2004.
- Bourdieu P., *The Forms of Capital* [in:] J. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*, Greenwood, Westport 1986, pp. 241–258.
- Bourdieu P., *Language and Symbolic Power*, Polity Press, Cambridge 1991.
- Bourdieu P., *The Social Space and the Genesis of Groups*, "Theory and Society" 1985, vol. 14 (6), pp. 723–744.
- Dold D., *Die Notizentechnik blinder DolmetscherInnen beim Konsektivdolmetschen* (unpublished MA Thesis), Faculty of Translation Studies, University of Graz, Graz 2015.
- Figiel W., *Levelling the Playing Field with (In)accessible Technologies? How Technological Revolution Has Changed the Working Conditions of Blind Translators*, "Między Oryginałem a Przekładem" 2018, vol. 24, no. 3 (41), pp. 75–88.

²³ P. Bourdieu, *Language and Symbolic...*, op. cit., p. 230.

²⁴ C.J. Kellett Bidoli, op. cit., p. 190.

- Figiel W., *New Technologies in Teaching Interpreting to Students with Visual Impairments* [in:] M.D. Rodriguez-Melchor, I. Horvath (eds.), *The Role of Technology in Conference Interpreter Training*, Peter Lang, Bern 2020, pp. 221–236.
- Figiel W., *Niewidomi tłumacze, (nie)widzialni aktywiści?*, “Teksty Drugie” 2020, no. 2, pp. 40–57.
- Kellett Bidoli C.J., *The Training of Blind Students at the SSLMIT – Trieste*, “The Interpreter’s Newsletter” 2003, no. 12, pp. 189–199.
- O’Brien S., Rodriguez-Vázquez S., *Translation and Technology* [in:] S. Laviosa, M. González-Davies (eds.), *The Routledge Handbook of Translation and Education*, Routledge, New York 2020, pp. 264–277.
- Refaat I., *Accessibility in the Computer-Aided Translation Tools for English-Arabic Language Pair*, “Transcultural Journal of Humanities and Social Sciences” 2021, vol. 1 (2), pp. 36–52. DOI: 10.21608/tjhss.2021.57339.1028.
- Rodriguez-Vázquez S., Fitzpatrick D., O’Brien S., *Is Web-Based Computer-Aided Translation (CAT) Software Usable for Blind Translators?* [in:] K. Miesenberger, G. Kouroupetroglou (eds.), *Computers Helping People with Special Needs. ICCHP 2018*, Springer, Cham 2019, pp. 31–34.
- Rodriguez-Vázquez S., Mileto F., *On the Lookout for Accessible Translation Aids: Current Scenario and New Horizons for Blind Translation Students and Professionals*, “Journal of Translator Education and Translation Studies (TETS)” 2016, vol. 1 (2), pp. 115–135.
- Wengraf T., *Qualitative Research Interviewing: Biographic Narrative and Semi-Structured Methods*, SAGE Publications, Los Angeles 2001.