

ACADEMIA Linguistics

CAPTURING THE LANGUAGE OF THE DEAF

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Imagine we were born in a society in which everyone around us communicates in a language we don't understand. What's more, it's a language we are not even able to experience with our senses. Now imagine that in spite of this, everyone expects us to master that language in order to help us live "easier," so that we can function "normally" in society. So that we do not have to be *different*. This is how, in very simple terms, we can describe the situation faced by the Deaf in various countries, including in Poland.

Note the preference for the term *Deaf* (or Polish: *Głusi*), rather than *hearing-impaired* (Polish: *niesłyszący*). While the hearing community may see the term *hearing-impaired* (or *niesłyszący*) as neutral, the Deaf want to be seen through the prism of what they are, rather than what they are NOT or in terms of how they are perceived to be defective. Writing the word *Deaf* (or *Głusi*) with a capital letter is intended to define deafness as a major indicator of a certain cultural and linguistic identity (similar to other minority groups in Poland, such as *Silesians* or *Kashubians*), and not to stigmatize their disabilities.

Deafness is rarely passed on genetically, and so over 90% of deaf children have hearing parents. Deaf children therefore usually spend their childhood tediously learning the language of the hearing. For them, it's like learning a foreign language. The Deaf in Poland attempt to master the intricacies of the Polish language in the same way that hearing Poles attempt to learn English, German, or Chinese. With one difference: the Deaf understand this kind of communication mainly from lip reading. Through incessant attempts and repetitions they try to control their own speech organs

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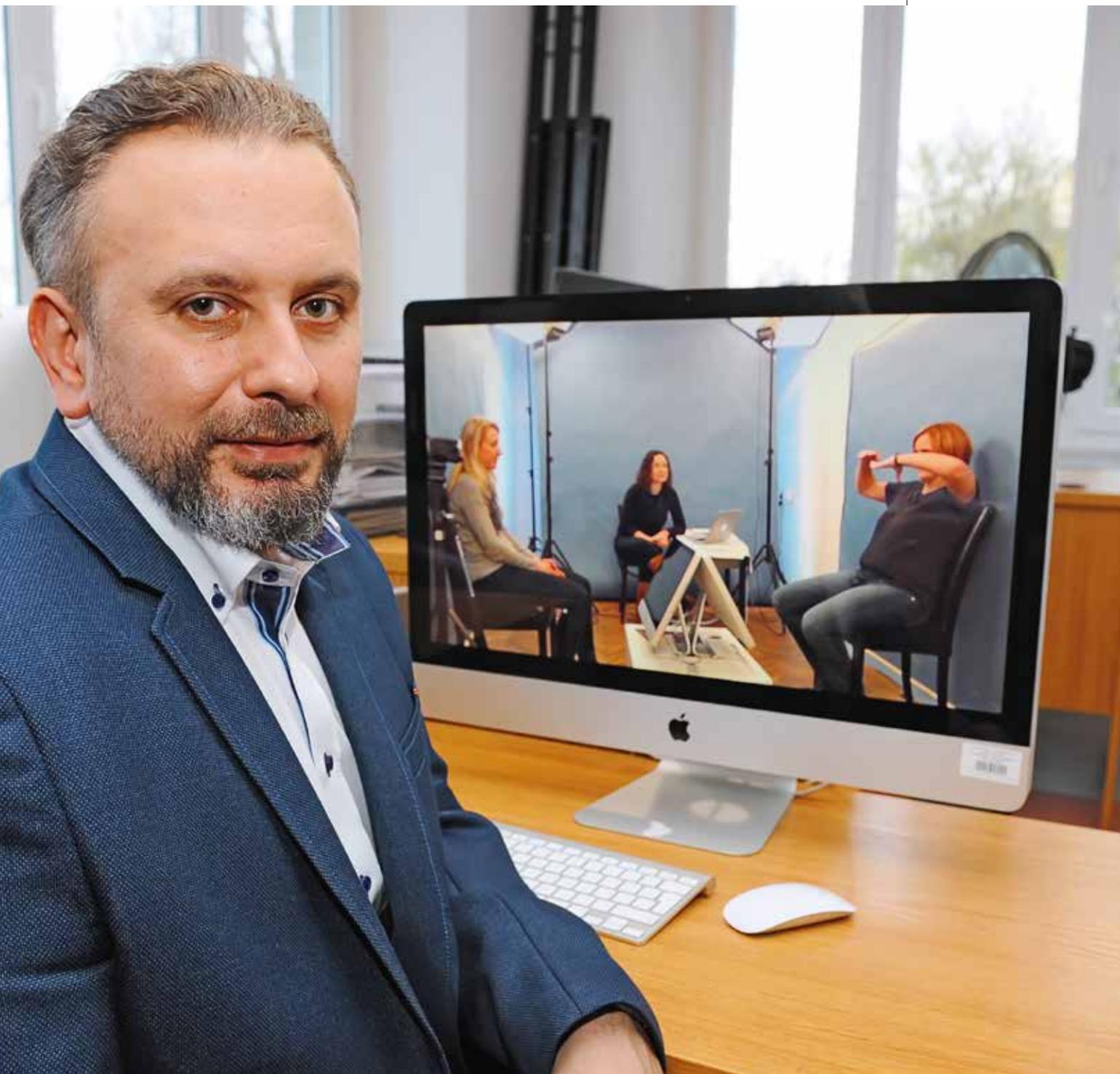
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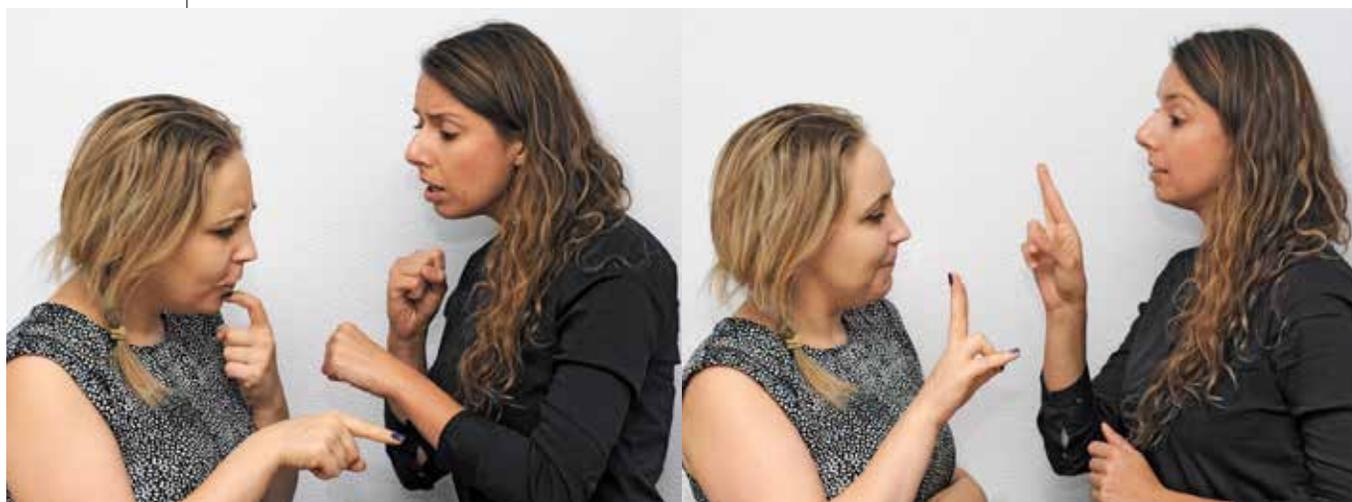
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THE FIRST-EVER CORPUS OF POLISH SIGN LANGUAGE (PJM)

Polish Sign Language (PJM) is a natural communication system that has been evolving for two centuries. It is at the heart of the identity and culture of the Deaf community in Poland, but it is often marginalized and neglected. It first came under serious linguistic scrutiny not long ago, and more systematic research on it has been initiated in recent years by a team of researchers at the Section for Sign Linguistics at the University of Warsaw.





Communication in sign language is not limited to just making signs with one's hands, but it also includes facial expressions, body movements, and pointing.

so as to produce sounds which will be understood by the hearing. Because it is the latter who dictate the standards for communication.

But even years of arduous practice will still not change the fact that the Deaf are most often perceived as *different*. Even if they are able to communicate through speech, it is a very difficult means of communication for them and it is very often one-sided, geared towards the needs of the hearing person. So it's no wonder that the Deaf often feel alienated. This feeling disappears, however, when they are surrounded by people who use sign language.

Answering some frequent questions

When it comes to the Deaf, the vast majority of the hearing population express their sympathy, compassion and a desire to help. Good intentions, however, cannot take the place of accurate knowledge. All sorts of misconceptions and stereotypes influence the way the hearing perceive the Deaf and their language. Below are some of the typical questions asked of sign language researchers by laymen:

Is sign language just about showing letters by hand, one after another?

No. Sign-language signs are not like the words of a spoken language. They are not made up of letters, which after all represent sounds. Rather, each sign corresponds to a single concept (such as HOME, WORK, NICE), and thus one sign resembles one word of spoken language, not individual sounds or letters.

Do all Deaf people around the world speak the same language?

No. There are about two hundred sign languages in the world. Some are used by hundreds of thousands of people (as in the case of American Sign Language or



ASL, used in the US and Canada), others are limited to small rural communities (like many local sign languages in Africa or Asia). Usually the Deaf from one country speak the same sign language, but that does not mean that it derives from the spoken language used in that country. In fact, British Sign Language and American Sign Language have nothing in common, even though the hearing people in the UK and the US share the same spoken language. The language spoken by the Deaf in Poland is Polish Sign Language (commonly referred to by the Polish abbreviation PJM, for *polski język migowy*).

So do the Deaf in Poland sign "in Polish"?

No. The Language of the Deaf community in Poland, called Polish Sign Language (PJM), is not just spoken Polish language translated into signs. Rather, it is a language all of its own, unrelated to spoken Polish, with its own grammar. The question *How old are you?* is in Polish *Ile masz lat?* (literally: *how-many you-have years*). In PJM, the same sentence is asked with this series of signs: *YOU LIFE HOW-MANY*. This one small example serves to illustrate how the word order and the word/sign choices are very different in the two languages. For at least two hundred years (since the establishment of Poland's first school for deaf children), PJM has been de-

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language may also show different signs with each hand simultaneously. In spoken language, sentences are one-dimensional strings of words composed of sounds. A human being is not able to simultaneously utter two different sounds and therefore can't say two words at the same time. This means that spoken languages are easy to write down as sequences of letters. In sign languages it is much more difficult. Nowadays, video recording is the simplest solution.

Can everything that can be expressed in spoken language be expressed in sign language?

Yes. Deaf people can refer not only to the immediate present ("here and now"), but also to abstract concepts, feelings, unrealistic and hypothetical situations. What's more, sign language has its own stylistic variations (precise, official, or slang sign language). You can compose poetry and jokes in sign language, and it even has profanity. Just like spoken languages, PJM has regional and community-based versions. The sign language of Poles from the north is different from those in the south. Young people use slang, while various professional groups use industry jargon. It can therefore be said that PJM, like any other language, lives and evolves along with its users.

Many more examples could be given of basic questions, the answers to which the general public in Poland remains totally unaware of. Although the Deaf are a minority group living amidst us, they and their language are a completely foreign subject to most hearing Poles (unlike in the case of other minority groups and languages in the country, such as German, Lithuanian, etc.) But does it have to be so? In countries such as the US, UK, and Sweden there is much more public awareness when it comes to this topic. Many hearing people without any family connection to the Deaf community, such as Lady Gaga, are learning American Sign Language. It appears frequently in popular culture. Sign language

veloping and evolving spontaneously. Today it is a fully formed natural language, which, due to its uniqueness and being completely different from the Polish language, was ignored by the hearing population for long decades.

Is signing a sort of pantomime, understandable to everyone?

No. Sign languages use conventionalized signs, which means that each one must be learned individually in order to understand it (just like individual words in spoken languages). The meaning of a sign in sign language is not obvious just from its shape. For instance, one sign in PJM, resembling a military salute, actually refers to the toilet, which is a meaning a hearing person would certainly never have guessed. Moreover, similar signs may have completely different meanings in various sign languages; for instance the sign meaning HARD OF HEARING in PJM in fact means HORSE in Czech Sign Language, and the sign for TO KNOW in PJM will mean BOY in German Sign Language.

Can sign language be written down?

Yes, although it's not easy. One of the most distinctive traits of sign language is its three-dimensionality. This means that the signs are variously positioned in space and can move within it. A person using sign

has been featured in cartoons like the Simpsons and Smurfs. It is sometimes taught as a foreign language in high schools, and at the world's only university for the Deaf (Gallaudet University in Washington, DC) classes are taught in sign language. A huge role in the rising popularity of ASL has been played by linguists, who showed that sign language is a legitimate, full-fledged language. Thanks to their hard work, the hearing public has finally come to realize that sign language is in fact in no way inferior to, less communicative, or more primitive than spoken language.

Conducting research

In the world of linguistics, extensive works have been published not only on those languages with a long history of research, such as American or British Sign Language, but also on Nicaraguan, Indo-Pakistani, and Jordanian Sign Languages, and even the sign language used in the village of Adamorobe in Ghana. Increasingly, research is striving to look at sign language communication through the prism of linguistic theories previously reserved for spoken language communication. There are serious international linguistics journals devoted entirely to the subject of sign language (including *Sign Language Studies* published in the US, and *Sign Language & Linguistics* in Europe). The importance of this avenue of research is also evidenced by the numerous academic bodies that have been emerging worldwide, involved in the study of sign languages.

In Poland, however, scholarly work on the subject is still limited to a certain number of articles and only a handful of books.

Seeking to address this situation, in 2010, the Section for Sign Linguistics was formed at the University of Warsaw, with its attention focused on PJM. Its aim is to develop a comprehensive grammatical description of PJM, and to conduct research on sign language communication from a contrastive perspective (comparing different sign languages, as well as drawing comparisons between sign and spoken languages). The flagship project of the Section is the creation and linguistic analysis of a visual "corpus" of PJM, which is a large collection of video recordings registering and documenting the various types of expression in this language.

Ensuring a future

The plan to create the PJM Corpus was inspired by similar projects implemented in other countries (including the UK, Australia, and Germany). Drawing upon this international experience allowed our Section for Sign Linguistics team to choose the best available methodological solutions and develop a detailed long-term action plan. The PJM corpus is a huge set

of data collected in the form of videos meant to serve as a basis for in-depth linguistic research, learning about Deaf culture, and the creation of the first ever PJM dictionary based on empirical data. The corpus will serve scientists for long years, but it will also be valuable to the Deaf community itself, as a source of knowledge about PJM and its documentation for future generations. Because of the difficulty in writing sign language down, we have very little information about how sign language looked 100 or 200 years ago. Thanks to the corpus, a hundred years from now those interested in this issue will be able to travel back in time and see today's PJM in action.

The signers appearing in the PJM corpus videos are exclusively Deaf individuals who learned to sign in childhood. They come from different parts of Poland, so that we can better understand and describe the differences in the dialects of the language. They are recorded in a special studio, equipped with digital cameras, computers, data storage, lighting equipment, etc. Collecting the data for the corpus is an extremely complex and time-consuming process. The recorded signing must be spontaneous and natural, but it needs to be skillfully elicited. This is done by means of an extensive set of tasks, involving summarizing a film or describing an image. Each recording session takes several hours, during which only sign language is used: aside from the participants, the moderators and even the cameramen are Deaf.

Gathering such video data, however, is only the first step to the thorough study of PJM. Equally important is the organization of the collected material, which involves separating the recorded statements into individual signs and their analysis using special software (made available to us at the Section for Sign Linguistics at the University of Warsaw by our partner team from the Institute of German Sign Language in Hamburg, which is one of the world's most important centers researching Deaf communication). This process, referred to by linguists as the annotation of the corpus, will take several years, as it requires long hours of work. For example, it takes an expert researcher at least an hour to annotate one minute of video.

The hard work of researchers has already brought the first measurable effects. In 2016, based on the corpus data, the first-ever PJM dictionary was created, registering the actual usage of this language. It is available to all at www.slownikpjm.uw.edu.pl.

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PHOTOGRAPHY BY JAKUB OSTAŁOWSKI

The expansion of the PJM corpus is currently being funded by the National Programme for the Development of Humanities (NPRH) of the Polish Ministry of Science and Higher Education: project 0111/NPRH3/H12/82/2014, *Multi-layered linguistic annotation of the corpus of Polish Sign Language (PJM)*.

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