

Methodological Issues in Phonetic Research of Polish as a Foreign Language

The present paper is concerned with the methodology of phonetic research of Polish as a second/foreign language. Polish phonetics is approached here from the perspective of methodological problems that may be encountered during the study conduction. There exists a number of methodological approaches to this kind of studies, not so many comprehensive ones though (apart from e.g. Zaško-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020). The aim of the article was to signal issues that may be met by the researchers attempting to design their studies: selecting a study group meeting specific criteria, determining their language proficiency level, proposing adequate source materials, and planning the recording phase. The analysis was inspired by the study conducted during the preparation of a PhD dissertation on realisation of Polish consonants by native speakers of German. Material examples presented come from the recordings made for this purpose at the University of Leipzig in 2023. Due to a relatively less number of methodological guidelines dedicated to phonetic research of Polish as a second/foreign language, the author, having encountered some challenges during both assemblance of the study group and data collection, shared her reflections exemplified in the doctoral study along with some others which may emerge in similar research. The paper shows that phonetic studies concerned with Polish as a foreign/second language trigger methodological issues which relate to, apart from problems of equipment and data processing, the assessment of proficiency of the respondents, linguistic proficiency itself (especially related to orthography and vocabulary) and requirements in source material design, as well as study design (its temporal aspects), personal, extralinguistic factors, communicative situation and the role of the researcher in it, and the question of spontaneity closely linked to the textual type of the samples collected. The analysis may serve as a starting point both at the stage of planning one's research, and evaluation of specific problems that were already encountered.

Keywords: phonetic research, methodology, Polish as a foreign language, Polish as a second language, Polish phonetics

Methodologische Probleme in der phonetischen Forschung des Polnischen als Fremdsprache

Die vorliegende Arbeit befasst sich mit der Methodologie der phonetischen Forschung des Polnischen als Zweit-/Fremdsprache. Die polnische Phonetik wird hier aus der Perspektive der methodischen Probleme betrachtet, die bei der Durchführung der Studie auftreten können. Es gibt eine Reihe von methodischen Ansätzen für diese Art von Studien, allerdings sind sie nicht immer umfassend genug (abgesehen z. B. von Zaško-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020). Ziel des Artikels war es, Probleme aufzuzeigen, mit denen Forscher bei der Konzeption ihrer Analysen konfrontiert werden können: die Auswahl einer Studiengruppe, die bestimmte Kriterien erfüllt, die Bestimmung ihres Sprachniveaus, das Vorschlagen geeigneter Quellenmaterialien und die Planung der Aufnahmephase. Die Analyse wurde durch Forschungen inspiriert, die im Rahmen der Vorbereitung einer Dissertation über die Realisierung polnischer Konsonanten durch deutsche Muttersprachler durchgeführt wurden. Die vorgestellten Materialbeispiele stammen aus den zu diesem Zweck an der Leipziger Universität 2023 gesammelten Aufnahmen. Da es relativ wenige methodologische Richtlinien gibt, die sich mit der phonetischen Forschung im Bereich Polnisch als Zweit-/Fremdsprache befassen, hat die Autorin, die sowohl bei der Zusammenstellung der Studiengruppe als auch bei der Datenerhebung auf einige Herausforderungen gestoßen ist, ihre Überlegungen, die sie in der

Doktorandenstudie angestellt hat, mit anderen geteilt, die in ähnlichen Forschungen auftauchen könnten. Der Beitrag zeigt, dass phonetische Studien, die sich mit Polnisch als Fremd-/Zweitsprache befassen, methodische Fragen aufwerfen, die neben Problemen der Ausstattung und der Datenverarbeitung auch die Einschätzung der Sprachkenntnisse der Befragten, die Sprachkenntnisse selbst (insbesondere in Bezug auf Orthographie und Wortschatz) und die Anforderungen an die Gestaltung des Quellenmaterials sowie das Studiendesign (seine zeitlichen Aspekte), persönliche, außersprachliche Faktoren, die kommunikative Situation und die Rolle des Forschers darin sowie die Frage des Spontaneitätsgrads betreffen, die eng mit der Textsorte der erhobenen Proben verbunden ist. Die Analyse kann als Ausgangspunkt sowohl für die Planung der eigenen Forschung als auch für die Bewertung spezifischer Probleme, die bereits aufgetreten sind, dienen.

Schlüsselwörter: phonetische Forschung, Methodologie, Polnisch als Fremdsprache, Polnisch als Zweitsprache, polnische Phonetik

Author: Alicja Derych, University of Wrocław, Pl. Nankiera 15b, 50-140 Wrocław, Poland, e-mail: alicja.derych@uw.edu.pl

Received: 3.11.2024

Accepted: 21.11.2024

1. Introduction

Even a well-designed phonetic study conducted accordingly to the established guidelines may encounter some obstacles. What is more, for some less researched languages, those guidelines may be less numerous or still non-existent. A comprehensive discussion on the methodological difficulties in conducting research of Polish as a foreign¹ pronunciation should cover its key aspects: including the selection, preparation and setting of equipment – a voice recorder – and an appropriate space in which speech recordings are made, sound system (if sound perception test is also conducted), assemblance of the study group – initial selection of speakers accordingly to priorly established criteria, the language(s) of the study – including the prepared questionnaire, source material design, data storage and the processing of results – automatic and/or manual transcription.

The following article aims to serve as a contribution to the methodological discussion concerned with studying spoken variety of Polish as a second language. Reflections presented below were inspired by the research conducted for the purposes of the doctoral dissertation concerned with foreign pronunciation of Polish consonants: part of the study has been conducted among a group of speakers of German at the University of Leipzig and material examples – voice samples enclosed to this article – were recorded during this research². The paper emphasises issues related to the design of the survey materials – their suitability (regarding, in general, the level of proficiency in Polish), the selection of respondents, type of material obtained and the role of the

¹ For stylistic reasons the term “second language” is used interchangeably with “foreign language”, and “first language” interchangeably with “native language”.

² This topic was first discussed during a presentation delivered at the conference “Problemy i zadania współczesnego językoznawstwa XX” which took place in Karpacz, March 21st–24th, 2024.

researcher. Considerations focus mainly on the selection of source materials used and the adaptation of the ways of obtaining spoken data, taking into account factors related both to the level of proficiency in Polish, possible bilingualism, as well as extralinguistic factors such as creativity of the speaker and/or the stress related to the specific communicative situation during the study, and type of texts into which the speech samples obtained can be classified. Technical, technology-related, aspects such as the choice of appropriate devices (voice recorder, sound system: speakers and/or headphones, etc.) as well as their parameters will not be discussed in the article as they could easily form the grounds of a separate publication. For the same reason, also a vast topic of phonetic transcription³ and interpretation of data was omitted. The text aims to signal methodological issues surfacing while conducting phonetic research among native speakers of foreign languages learning Polish in general, not only the ones specific to the doctoral research that inspired it. It leaves certain questions open rather than provides definite answers.

2. Polish insights into phonetic research – selected publications

Because of the specific topic, in this paper I decided to concentrate on the presentation of some Polish contributions concerned with methodology of studies on spoken variety of language. There are not so many accounts dedicated to the methodology of researching Polish pronunciation itself. There can be though found a number of tests and their descriptions of tests design to check phonetic/phonological hearing of the subjects (e.g. Polish children, cf. Gruba 2012, but also foreigners learning Polish as their second language), and explanations of the methods implied in specific studies that were previously carried out.

The main point of focus of the following discussion are contributions providing guidelines / describing collecting spoken data, however, as they are as they are rather few in number⁴, the author decided to mention also some publications dedicated to researching sound perception which is often a part of phonetic studies design,

³ As this type of research of non-standard pronunciation requires detailed phonetic transcription using IPA (cf. Porayski-Pomsta et al. 2013, Rybka 2015, Lorenc 2016), it is time consuming and cannot be sped up using automatic tools as there exist no such applications suitable for Polish. Also, choosing most suitable program to align sound and transcription turns out quite challenging as EXMARaLDA (Schmidt/Wörner 2014) or ELAN (2024) are more suited to orthographic transcription than application of phonetic symbols accompanied with a number of diacritics. What is more, employing Praat (Boersma/Weenink 2024) can improve the quality of description but the tool only allows to properly analyse short fragments of recordings at once.

⁴ For the history of phonetic research (articulatory phonetics) in Poland, methods applied, mainly in native pronunciation studies, technical description of e.g. electromagnetic articulography and descriptions of tools utilised cf. Lorenc/Święciński (2014–2015). On phonodactics of Polish see also Kaproń-Charzyńska (2022).

especially within the scope of Polish as a second language. Sound differentiation tests may though serve as an additional tools aimed at helping to explain certain pronunciation patterns, they should be therefore designed accordingly to their purpose. What is also important in the present discussion, the authors of such tests often address the same or fairly comparable methodological issues that are encountered by phoneticians during preparation of source materials and spoken data collection.

Teaching and researching pronunciation often serves as a meeting ground of speech therapy, phonetics and second language teaching, this is why some of the contributions mentioned in the following section are not strictly phonetic publications. Previous research in the field presented below touch such methodological problems as: the language in which the study should be conducted (Szeląg/Szymaszek 2006), source material: e.g. the scope of sounds taken into consideration, sources of vocabulary included, text types etc. (Szeląg/Szymaszek 2006, Gruba 2012, Kwiatkowska 2015, Biernacka 2019, Binkuńska 2019, Cychnerska/Kubicka 2020, Majewska 2020, Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020, Gralińska-Brawata 2022), target group and its proficiency level in Polish (Kwiatkowska 2015, Biernacka 2020, Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020), language of the study (Szeląg/Szymaszek 2006), some technology-related conditions (Szeląg/Szymaszek 2006, Biernacka 2019, Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020, Gralińska-Brawata 2022) and other extralinguistic factors (Szeląg/Szymaszek 2006, Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020).

In the earliest of the contributions discussed, the authors proposed a test based on distinguishing consonants⁵, that can be used in diagnosing deficits in phonematic hearing. A crucial aspect relevant to preparation of such language-specific tool, namely distributional constraints of Polish consonants present in existing vocabulary, was also underlined, followed by a decision to incorporate words based on a frequency lists (Szeląg/Szymaszek 2006: 22–24). The test requires certain level of proficiency though, regarding especially lexical subcompetence in Polish, consequently, it will not certainly be useful in diagnosing beginner learners of Polish. The authors also described technical conditions required to conduct the test which should take place with the use of headphones and in a quiet room. What is also crucial, the participants should be well rested, concentrated, motivated and have good contact with the person conducting the test (clearly stating the instructions in Polish), conditions favouring the conduction of the test were also discussed, such as appropriate temperature in the room (Szeląg/Szymaszek 2006: 14, 27–28). One may also wonder if those conditions are entirely predictable during the course of study.

In the article describing and presenting her universal sound differentiation test, Kwiatkowska characterised its target group and described the conduct of the study:

⁵ Cf. also another speech therapy tool designed to test sound perception, aimed at age group of preschool children, which was based on pairs of nouns differing in terms of one / more than one features (Gruba 2012: 55–56).

the way of presenting the pairs of words to the respondents, the author also specified that her test is dedicated to the speakers of various first languages. While discussing the procedure, she also mentioned that the examining person needs to explain the process to the group (Kwiatkowska 2015: 308–311), there is no remark of the language used in providing instructions though, probably due to the fact that seems irrelevant in this type of test. Moreover, the author marked a vital issue which should be incorporated in this kind of study design as one of the grounding assumptions, such tests should not be based on lexical competence of the students examined due to the time they are designed to be performed, which is the initial phase of language learning process (2015: 307). Biernacka, while researching nasal vowels in foreign Polish pronunciation also took into consideration beginner learners, she investigated a group of 23 speakers representing A1 proficiency level (2019: 13–14, cf. also Biernacka 2020: 246). As for technical equipment and tools utilised in recordings, a portable computer and Praat software were incorporated. What seems important in further stages of phonetic studies, a crucial obstacle was mentioned, namely the quality of some recordings not suitable for acoustic, still allowing, however, for auditive analysis (Biernacka 2019: 24).

Another study (cf. Binkuńska 2019), this time focusing on the presentation of diagnosis of the consonant clusters' pronunciation (from the perspective of stylistic assessment) of Polish speakers with no speech therapy deficiencies, discussed, among others, source material preparation. In her materials, the author decided to use vocabulary derived from dictionaries and test each consonant cluster at least twice, through the reading of words, repetition of the words heard and spontaneous speech. This contribution presented valid conclusions regarding correctness in realisation of the clusters in different text types, it turned out though that repetition triggered hypercorrect pronunciation (Binkuńska 2019: 24, 26–30). Also Gralińska-Brawata (2022) and Cychnerska/Kubicka (2020) decided to test pronunciation based on reading (reproduced speech, cf. Skoczek 2010). Gralińska-Brawata's pilot study concentrated on self-assessment of pronunciation (on the other hand, of native speakers of Polish pronouncing English sounds), the recordings were based on reading of a list of phrases, and, as for procedural aspects – without previous preparation time given to the respondents, using a microphone and Audacity software (2022: 235–236) while Cychnerska and Kubicka researched intonation within the field of teaching Polish as a second language: they compared initial readings of a text (no previous preparation of respondents) with second recordings made after some training (2020: 215, 218).

Hearing testing proposed by Majewska was based on pairs of words, and, what is important in this kind of extensive research, not on vocabulary knowledge. The author aimed to study, apart from orthographic, orthoepic, also phonological competence in linguistically diverse group of students representing different levels of proficiency in Polish (A1–C2) (2020: 230). Reading of dialogues containing lexical material from a dictionary aimed at A1 and A2 CEFR levels (cf. Zgólkowa 2013) was utilised to test orthoepic competence. Speech samples were collected based on the images (designed

in a way they triggered using desired words and sounds analysed), which on the other hand required a certain proficiency level and development of lexical competence; questions and images (Majewska 2020: 231–233).

The last position in the state of the art regarding methodology taken into consideration in the present paper is the monograph “Od rozmowy do korpusu, czyli jak zbierać i archiwizować dane mówione” (Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020) which addresses issues such as sound recording for the purposes of spoken data research, record storage, and focusses on both technical and personal factors. A significant part of the study was devoted to data collection through the biographical interview method. As for the personal, “human factor” aspect of research, the publication discusses the topic of the relationship between the respondent and the person collecting spoken data, as well as situational arrangements. The authors postulated that speech representing official register is less difficult to record than unofficial, conversational material, and that the location of the study plays an important role, as the surroundings of a studio may trigger lesser naturalness of speech. What is more, the publication focuses on collecting data from native speakers of Polish, this is the reason why the authors mentioned that generally there is no language barrier between the speakers (which becomes an issue in studying speech of foreigners learning Polish, especially when their proficiency level is still relatively low). What is also crucial is the duration of speech and its influence on obtaining more natural statements, it seems that longer speech favours naturalness of expression (Zaśko-Zielińska/Majewska-Tworek/Śleziak/Tworek 2020: 9). Out of the publication written to date, this monograph definitely serves as one of the most comprehensive methodological contributions containing also practical guidelines regarding not only phonetic, but extensive research of the spoken variety of Polish.

3. Investigations into selected methodological problems of studying Polish as foreign pronunciation

The study⁶ that became an inspiration of methodological reflections presented in this article was conducted in a group of 25⁷ native speakers of German, learners of Polish, at the University of Leipzig in 2023 7 respondents represented proficiency levels lower (A0*⁸ and A1) than had been assumed during the design stage (one of the initial criteria stated that students should represent at least A2 in CEFR scale, see: Council of Europe, 2003) as beginner students may experience difficulties in producing longer speech samples. What is important, 8 of the speakers were bilingual (with Polish and

⁶ Detailed characteristics of the study are presented in: Derych (2023: 40–41).

⁷ 1 respondent participated only in the first major part of the study (did not undergo second sound differentiation test which is not discussed in this paper in detail).

⁸ Proficiency level of the speakers who were absolute beginners, which means they had just started their Polish course, for the purposes of the following discussion, were labelled as A0*.

German), namely: had at least one Polish-speaking parent. Respondents were pre-selected⁹ and further selection was based on a linguistic biography questionnaire (the author intentionally decided to gather samples also from beginners). 25 respondents were recorded based on three types of source material during 1:1 sessions during the stage of the study that consisted on three subparts, while three separate recordings were produced (based on a list of words, iconographic material and topics), 4 speakers, due to their lower proficiency level, only took part in recordings of a list of words. Approximate length of raw audio material (25 respondents) sums up to c. 3.5 hour (it is worth noticing that if only 9 students meeting initial criteria were taken into account, the amount of data would be significantly lesser, summing up to c. 1.5 hour). Detailed instructions to each of them were given to the respondents before each part in English and/or in Polish (according to speakers' preference) and presented on paper (printed out in Polish, German and English). Time for preparation before each of the recordings was not limited, the device was turned on after each of the respondents decided they were ready to begin.

In this section, at first, selected issues are discussed, starting from the point of focus on source material used in the doctoral study that inspired the paper during speech recordings with specific examples from the data collected, then other related problems are analysed in order to operationally categorise them in the latter part of the article.

Source material prepared by the author for the purposes of the first stage of recordings consisted of a list of 122 words aimed at testing previously selected sounds (consonants) at the beginning, in the middle and word-finally (if it was distributionally possible, taking into account phonetic constraints of Polish). The words were arranged alphabetically and printed out in a table and read from left to the right, most of them were derived from "Słownik minimum języka polskiego" (Zgółkowska 2013) and represented lexis from A1 and A2 proficiency levels, though their grammatical forms varied. As it was mentioned, the participants had a chance to read the list before the recorder was turned on. Methodological issues which were noticeable while conducting the first part of recordings were linked to the notions of lexical competence, orthography and reading of words, and to the general notion of so-called reproduced speech (Skoczek 2010) in contrast to spontaneous, "free" speech. The study was concerned with pronunciation of consonants, and the main point of focus was segmental phonetics, so intonation patterns did not influence the features studied. However, while analysing recordings of reading of the wordlist, in some cases certain suprasegmental patterns could be detected. Some of the speakers (this phenomenon has been illustrated with audio files 1 and 2 on linguistische-treffen.pl/en/issues/26) read final elements of verses (last words) similarly to the final words typical in indicative statements, i.e. employing

⁹ What is more, a kind of pre-selection was conducted with the help of the lecturer from the University of Leipzig. Special gratitude to mgr Agnieszka Zawadzka (Institut für Slavistik, Universität Leipzig), without whom it would have been much more difficult, if not impossible, to assemble a study group that met the initial criteria of the study.

cadence at the end of the verse. Strong pauses between each words still occurred so the intonation was not identical to sentential. Nonetheless, this issue should be taken into consideration while analysing e.g. realisations of vowels as it may trigger different pronunciation patterns. One of the potential reasons for the employment of falling intonation may be graphical spatial arrangement of words – it is reproduced, not spontaneous speech. Another example of potentially problematic issue in analysing suprasegmental features can be illustrated by the sample from the speaker who employed rising intonation on particular words (illustrated with audio file 3 on linguistische-treffen.pl/en/issues/26) This is not a concern in the analysis of the articulation of consonants. Another issue that can be encountered in this type of phonetic research is related to the proficiency level of the speaker, both in terms of their lexical competence and reading skills which are developed during the language course – at the very beginning of learning a new language (here operationally referred to as A0*) reading may pose difficulties and trigger non-standard realisations of both individual sounds and clusters. In case of the respondent (who did not specify their level in the questionnaire) whose sample serves as an example here (illustrated with audio file 4 on linguistische-treffen.pl/en/issues/26) syllabification was observed.

“Picture description”, or more specifically, oral production inspired by / based on graphical material (12 photos) served as the second stage of speech recordings. Each respondent was to choose one picture and say a few words about it (not necessarily syntactically complete and correct as this was not a point of focus in this kind of study) and/or describe them. While providing instructions, the researcher underlined that respondents did not have to provide descriptions of the photos, they were encouraged to say a few words about a selected picture, they were also given time to prepare before voice recorder was turned on. The photos were linked to the topics proposed for A1 and A2 levels in “Programy nauczania języka polskiego jako obcego. Poziomy A1–C1” (Janowska/Lipińska/Rabiej/Seretny/Turek 2016). Additional supporting questions were also presented to the respondents, they could use them for the whole time during their performance, the researcher also posed some questions if such need emerged. Oral production based on iconographic material gave rise to methodological problems connected to the proficiency level, lexical competence, creativity of the speaker and some other extralinguistic factors such as e.g.: stress, concentration on written instructions and those which lead to obtaining elements of dialogue (as a result of the researcher asking supporting questions). In cases of prolonged silence and/or struggle to speak, the researcher attempted to ask some additional questions. In some cases they were helpful, not at all times though. In attempts to collect spoken data, also extralinguistic aspects of the situation and disposition of respondents play a vital role. Creativity is important in order to produce a longer utterance, and some of the students prefer developing e.g. more concise statements while some of them lack or may not remember suitable vocabulary at the time. One does also have to account for stress accompanying being recorded on a device visible in front of them (cf. Zaśko-Zielińska/Majewska-Tworek/

Śleziak/Tworek 2020: 53). Gathering speech samples based on iconographic material does not always trigger entirely spontaneous or partially controlled speech, elements of dialogue and/or imitation may appear especially when a respondent asks the researcher for specific word in Polish (once again the role of lexical competence emerges) in order to talk about issues related to the picture.

The last part of the recording phase consisted of oral production based on a selected topic. Similarly to the previous part, respondents were asked to choose a topic from the list and say a few words about it. Time for preparation was not restricted in any way, and the instructions, along with the supporting questions were given to the speakers before the recorder was switched on. This method of data collection can be linked to the issues similar to the ones appearing in case of oral production based on iconographic material, such as proficiency level, lexical competence, speakers' creativity and other extralinguistic factors: e.g. stress, concentration on written instructions, reproduction as a result of reading out loud fragments of supporting questions (reproduced speech) and the emergence of dialogical elements (when the researcher needs to ask supporting questions). As A1 proficiency level is often too low to enable respondents to produce longer speeches or sometimes even to answer the questions, the role of lexical competence is once more surfaced here, and element of reading of supporting questions (speech more reproduced than spontaneous) can be spotted (illustrated with audio file 5 on linguistische-treffen.pl/en/issues/26).

The problem of, operationally called, "hidden bilingualism" may be (and was) encountered in the studies of Polish as a foreign language (as illustrated with audio file 6 on linguistische-treffen.pl/en/issues/26). In the questionnaire, one of the respondents stated that their first language was German while languages used at home were marked as German and Polish, the speaker also assessed their knowledge of Polish as B1. It should also be stated that information about the proficiency level was obtained based on self-assessment of each participant in a survey containing sections dedicated to native and foreign language(s) of the respondent as well as nationalities and language(s) of their closest family members, parents included, which is relatively subjective form of data collection. Such problems related to bilingualism are though possible to be detected at the stage of language biography gathering (in writing or during oral interview) and if one aims to test only non-bilingual learners of Polish, such speakers should be excluded from the study (which reduces the number of respondents and in some cases makes it necessary to once again supplement the study group) as bilingual speakers acquire language (and pronunciation patterns) differently than students learning Polish as their second language during courses.

On the other hand, as the questionnaire utilised in the doctoral study was based on subjective assessment of one's linguistic skills, some respondents seemed to declare higher proficiency level than they seemed to represent based on their oral performance during the recording phase. Such inconsistencies can be detected during the study especially if the researcher has some teaching background, no objective conclusions

regarding the level of proficiency can be though derived¹⁰ without utilising a standardised tool on all of the participants.

Moving on, the examples illustrated with the material gathered during speech recording and derived during the analysis exceeding the scope of that particular study enable me to make an attempt to categorise methodological issues related to:

- a. proficiency level of participants and its assessment,
- b. lexical subcompetence and design of source materials,
- c. time-related organisational aspects and study design,
- d. individual extralinguistic factors,
- e. general role of the researcher in specific communicative situation,
- f. type of material expected, type of material obtained and the question of spontaneity.

Discussion about bilingualism and multilingualism is being vastly covered with literature and definitions vary among researchers. Since this paper does not deal with this issue in detail, for the purposes of the current discussion, the author decided to treat every respondent who declared at least one parent being a native speaker of another language as bilingual (in this case other than German, using the other language, here: Polish, also at home). Problems with subjectivity related to assessing one's own level of proficiency in Polish lead to situations in which some of the students did not identify Polish (spoken by at least one of the parents at home) as their native language. The language biography questionnaire was designed in such a way it enabled the researcher to identify such cases of "hidden" bilingualism. However, in sections dedicated to foreign (not first) languages some bilingual (Polish- and German-speaking) students assessed their level of Polish anyway.

As mentioned above, lexical source material was chosen mainly from A1 and A2 CEFR proficiency levels, so as not to base phonetic assessment on the knowledge of vocabulary. However, not every speaker, even having achieved a targeted degree of linguistic competence, knows all the words required for a given level, their language subcompetences are still being developed and lack of knowledge of certain lexical (or also grammatical) structures may influence the output of speech production: both reproduced and spontaneous. As in case of most studies conducted in groups representing different proficiency levels, it is not practically possible to assess the specific level of language knowledge during the ongoing course (groups in language coursed tend to vary due to individual factors) without a specific test tool. Moreover, each subcompetence would possibly require individual assessment, specifically phonetic subcompetence, which would go beyond the scope of the study and significantly increase its duration time. As discussed above, subcompetences such as e.g. lexical, syntactic etc. may influence the outcome of the research in terms of pronunciation in a number

¹⁰ It has been decided that for the purposes of the doctoral study, proficiency level stated by each of the participants in the language biography questionnaire will be taken into consideration (possibly with a comment on bilingualism in specific cases).

of aspects. What is more, adhering to a universal set of topics and related vocabulary even from A1 and A2 levels (as the doctoral study was designed to fit participants from different groups, coming from different academic institutions) do not guarantee the researcher (if no, difficult to prepare for such purposes, assessment test is previously conducted) that the speakers, firstly, know, and secondly, would be able and will necessarily utilise the vocabulary during the study, especially if the recordings are gathered during the semester, for some of the participants, after they had finished their course. In qualitative phonetic studies those factors are difficult to standardise. However, on the other hand, they enable more detailed analysis of personal nuances of pronunciation patterns.

As for other organisational, time-related aspects, one needs to discuss also study design. Each research stage should be designed in a way that does not exhaust respondents too much (the author aimed not to exceed an hour / an hour and a half at once). The process could be broken up into several days, this may be problematic though if we concern surveys conducted e.g. abroad, requiring travel and other organisational considerations.

Apart from proficiency level and study duration, the factors that may influence the performance of participants are some extralinguistic issues, such as stress and/or creativity. Tasks that require spontaneous or semi-spontaneous speech base not only on the knowledge of at least some words (even if the participants are aware they do not need to produce coherent, grammatically acceptable constructions), but also on creativity and individual preferences regarding speaking, especially under pressure, in an artificially created communicative situation of being recorded at the university space (which may be associated with some kind of assessment). Even a proficient speaker who prefers to briefly discuss the topic and/or adhere to shortly answering a list of supplementary questions may not produce a lengthy speech. The issue of so-called creativity is particularly visible in the task in which a picture selected by the speaker serves as an inspiration to produce some utterances / a speech. Apart from creativity, a question of fatigue may play an important role in individual performance not necessarily in the diligence of pronunciation, but rather at the conceptual level of speech production. Surely, the participants need to be provided with safe space, and the researcher may (and does) ask additional questions in order to help in the production of some words and/or phrases, sentences etc., but the effects of such actions do not always significantly affect the amount of the linguistic material (data) acquired.

The researcher, apart from conducting the research in accordance with the developed methodology and the prepared scenario, should provide a comfortable atmosphere during the study. Gaining spoken data that can be labelled as spontaneous is extremely difficult in a communicative situation arranged artificially at the university building (or, in other cases, e.g. in speech lab, etc.) when the two parties do not know each other. The researcher guides the speaker during the recordings, and, what

is important, does not interfere when it is not necessary. They should provide space to speak and engage with relevant and helpful questions or hints when there is a need. This surely requires both proper methodological preparation, training and relatively subjective communication and interpersonal skills.

This research is not specifically considered with speech genres, but discussions of problems accompanying gathering spoken material, may give rise to some genealogical questions, such as: what type of text is obtained this way and what are further implications in the scope of pronunciation analysis. As the person leading the study has to engage (if such need emerges) in aiding the participants produce their speeches, not only asking additional questions, but sometimes suggesting answers if questions alone do not suffice, elements of imitation in participants' performances may appear. They definitely need to be noted and possibly analysed differently in terms of phonetic realisation patterns, as imitation may produce some types of pronunciation distinct from the utterances of certain word memorised.

During each part of the study which inspired this discussion, the participants were provided both with oral and written instructions of their tasks, they were also able to ask additional questions in case any part of them was unclear (in Polish and/or in English, whichever was preferred). Written instructions (in three languages: Polish, English and German) were available during relevant stages of the study, also during recording of utterances based on photos and topics. The questions were aimed at helping, not disturbing the participants, so they did not need to answer them if they wanted to take a different approach to the issues proposed in the source material. However, what was intended to serve as an aid, in some cases caused i.e. too much concentration on the questions, leading to reading the fragments out loud (which triggered more reproduced than spontaneous speech) and focusing on only providing answers. In other cases, a lack of consideration for those questions was visible when some of the speakers were experiencing difficulties in producing longer utterances. The problem of reproduction is especially surfaced while studying results of a text or a list of words that have been read out loud. In the second case, the research showed that some of the respondents tended to interpret some of the verses, in which the words were not syntactically linked, as complete intonational entities resembling sentences. What is more, reading and speaking tempo varied among the participants, which was also expected due to both individual differences between speakers and their proficiency levels, moreover, the number of self-corrections varied (which is particularly visible in the length of wordlist recordings).

Phonetic research in foreign languages, Polish included, pose a number of methodological questions concerning issues ranging from technical aspects of recording equipment, time, location, involving source material design, assemblance of the study group, conduct of the study (specific communicative situation), role of the researcher (including individual characteristics of the speakers and the researcher), to data storage, its processing, analysis and interpretation. The methodological problems

discussed concern qualitative, not quantitative study, quantitative research would also require taking into account also aspects related to standardisation and statistical representativity.

4. Conclusions

The initial premise of the study that inspired this discussion was to collect both reproduced (reading) and spontaneous spoken data, or at least as spontaneous as possible under the specific conditions of this particular communicative situation. Methodology adapted in data collection resulted indeed in obtaining different types and genres of spoken data: list of words exemplified reproduced speech, elements of imitation and elements of dialogue appeared, monologue parts may also be distinguished, it is though difficult to call that free speech, rather (not in all cases though) partially guided speech. In order to ensure detailed and accurate analysis, an additional commentary line dedicated to marking of imitation and reading sequences (as for picture “description” and “free speech”) should be introduced in transcription. Regarding doctoral project purposes, the speech samples collected are still usable in qualitative analysis planned, possibly with certain modifications. Initially, beginner students and those with knowledge of Polish not higher than A1 level were to be excluded from the study due to challenges in acquiring material suitable for phonetical analysis. What is especially noticeable, duration of recordings obtained varies, samples collected from different speakers differ in length due to various reasons such as possible differences in the level of proficiency (within the scope of vocabulary and grammar), stress, individual differences in creativity and abilities/preferences regarding producing longer speeches.

In this article, I intended to signal a number of problems which may appear in the process of studying pronunciation in Polish as a second language. They fall (apart from those equipment-related, which were intentionally set aside in this discussion) into a number of categories which comprise: (a) proficiency level of participants and its assessment; (b) lexical subcompetence and design of source materials; (c) time-related organisational aspects and study design; (d) individual extralinguistic factors; (e) general role of the researcher in specific communicative situation, as well as (f) the type of material expected, type of material obtained and the question of spontaneity. One also needs to take into consideration not only problems discussed in this text, but also crucial issues related to technological aspect of this kind of research and preparation of material for further analysis, namely phonetic transcription.

Literature

BIERNACKA, Michalina. “Realizacje tzw. samogłosek nosowych – audytywno-akustyczna ocena wymówień uczących się języka polskiego jako obcego z poziomu A1”. *Prace Filologiczne* 73 (2019): 11–31. <https://doi.org/10.32798/pf.481>. 21.5.2024.

- BIERNACKA, Michalina. "Wymowa a zapis – badania jakościowo-ilościowe błędów z prac uczących się języka polskiego jako obcego w grupach wielonarodowościowych". *Kierunki badań w glottodydaktyce polonistycznej*. Ed. Iwona Janowska and Michalina Biernacka. Kraków: Wydawnictwo Księgarnia Akademicka, 2020, 243–260. <https://doi.org/10.12797/9788381384117.12>. 8.9.2024.
- BIKUŃSKA, Ewa. "Wymowa grup spółgłoskowych w wybranych logopedycznych technikach diagnostycznych". *Poradnik Językowy* 761/2 (2019): 24–37. Print.
- BOERSMA, Paul and David WEENINK. "Praat: doing phonetics by computer" [Computer program]. Version 6.4.07. 2024. <http://www.praat.org/>. 21.5.2024.
- Council of Europe: COSTE, Daniel, Brian NORTH, Joseph SHEILS and John TRIM. *Europejski system opisu kształcenia językowego: uczenie się, nauczanie, ocenianie*. Martyniuk Waldemar (transl.). Warszawa: Wydawnictwo Centralnego Ośrodka Doskonalenia Nauczycieli, 2003. Print.
- CYCHNERSKA, Anna and Emilia KUBICKA. "Sposoby badania intonacji w glottodydaktyce polonistycznej na przykładzie nagrań mowy odtwarzanej studentów rosyjskojęzycznych". *Kierunki badań w glottodydaktyce polonistycznej*. Ed. Iwona Janowska and Michalina Biernacka. Kraków: Wydawnictwo Księgarnia Akademicka, 2020, 211–228. <https://doi.org/10.12797/9788381384117.10>. 8.9.2024.
- DERYCH, Alicja. "Wybrane trudności w artykulacji polskich spółgłosek przez osoby niemieckojęzyczne (na przykładzie wymowy studentów Uniwersytetu w Lipsku)". *Wielojęzyczność. Wyzwanie współczesnej logopedii vol. 4*. Ed. Sofia Kamińska. Siedlce: Uniwersytet Przyrodniczo-Humanistyczny w Siedlcach, 2023, 24–63. Print.
- "ELAN (Version 6.8)" [Computer software]. Nijmegen: Max Planck Institute for Psycholinguistics, The Language Archive. 2024. <https://archive.mpi.nl/fla/elan>. 21.5.2024.
- GRALIŃSKA-BRAWATA, Anna. "Polish Learners' Self-Assessment and Reflections on Their Pronunciation Progress". *Językoznawstwo* 2/17 (2022): 229–252. https://doi.org/10.25312/2391-5137.17/2022_17agb. 3.12.2024.
- GRUBA, Joanna. *Ocena słuchu fonemowego u dzieci w wieku przedszkolnym*. Katowice: Wydawnictwo Uniwersytetu Śląskiego, 2012. Print.
- JANOWSKA, Iwona, Ewa LIPIŃSKA, Agnieszka RABIEJ, Anna SERETNY and Przemysław TUREK (Ed.). *Programy nauczania języka polskiego jako obcego. Poziomy A1–C2*. Kraków: Księgarnia Akademicka, 2016. Print.
- KAPROŃ-CHARZYŃSKA, Iwona. "Wyzwania w nauczaniu języka 'egzotycznego' – na przykładzie fonodydaktyki języka polskiego". *Roczniki Humanistyczne* 70/10 (2022): 143–157. <https://doi.org/10.18290/rh227010.9>. 8.9.2024.
- KWIATKOWSKA, Kamila. "Testowanie słuchowego różnicowania polskich dźwięków mowy w nauczaniu języka polskiego jako obcego". *Nowe perspektywy w nauczaniu języka polskiego jako obcego III*. Ed. Emilia Kubicka and Aleksandra Walkiewicz. Toruń: Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, 2015, 305–316. Print.
- LORENC, Anita and Radosław ŚWIĘCIŃSKI. "Badania artykulacyjne głosek języka polskiego". *Logopedia* 43–44 (2014–2015): 63–86. Print.
- LORENC, Anita. „Transkrypcja wymowy w normie i w przypadku jej zaburzeń. Próba ujednoczenia i obiektywizacji”. *Logopedia artystyczna*. Ed. Stanisław Milewski and Barbara Kamińska. Gdańsk: Harmonia, 2016, 107–143. Print.

- MAJEWSKA, Agnieszka. "Badania nad kompetencją fonologiczną, ortoepiczną i ortograficzną w zakresie dźwięków odpowiadających literom *q* oraz *ę* w grupie cudzoziemców uczących się języka polskiego". *Kierunki badań w glottodydaktyce polonistycznej*. Ed. Iwona Janowska and Michalina Biernacka. Kraków: Wydawnictwo Księgarnia Akademicka, 2020, 229–242. <https://doi.org/10.12797/9788381384117.11>. 8.9.2024.
- PORAYSKI-POMSTA, Józef, Joanna KWASIBORSKA-DUDEK, Olga JAUER-NIWOROWSKA, Dorota LIPIEC, Izabela WIĘCEK-POBORCZYK, Małgorzata GOLANOWSKA and Alicja MALINOWSKA. *Znaki fonetyczne do zapisu poprawnych i zdeformowanych realizacji fonemów języka polskiego w alfabetych międzynarodowym i slawistycznym*. Gdańsk: Glottispol, 2013. Print.
- RYBKA, Piotr. *Międzynarodowy alfabet fonetyczny w slawistyce*. Katowice: Wydawnictwo Uniwersytetu Śląskiego, 2015. Print.
- SCHMIDT, Thomas and Kai WÖRNER. "EXMARaLDA". *The Oxford Handbook of Corpus Phonology*. Ed. Jacques Durand, Ulrike Gut and Gjert Kristoffersen. Oxford: Oxford University Press, 2014, 402–419. Print.
- SKOCZEK, Robert. "Cechy fonostylistyczne mowy spontanicznej w tekstach czytanych: analiza akustyczna oraz implikacje dydaktyczne". *Lingwistyka Stosowana* 3 (2010): 265–278. Print.
- SZELAĞ, Elżbieta and Aneta SZYMASZEK. *Test do badania słuchu fonematycznego dzieci i dorosłych*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne, 2006. Print.
- ZAŚKO-ZIELIŃSKA, Monika, Anna MAJEWSKA-TWOREK, Marta ŚLEZIAK and Artur TWOREK. *Od rozmowy do korpusu, czyli jak zbierać i archiwizować dane mówione*. Wrocław: Quaestio, 2020. Print.
- ZGÓŁKOWA, Halina. *Słownik minimum języka polskiego*. Kraków: Universitas, 2013. Print.

ZITIERNACHWEIS:

- DERYCH, Alicja. „Methodological Issues in Phonetic Research of Polish as a Foreign Language“, *Linguistische Treffen in Wrocław* 26, 2024 (II): 353–367. DOI: 10.23817/lingtreff.26-21.