

## **Pronunciation Instruction in German Studies: A Persistent Challenge or a Learning Opportunity? \***

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### **Abstract**

The present paper deals with two questions. First, the acquisition of pronunciation in the first language is discussed about learning pronunciation in foreign language instruction. It examines which acquisition processes can be transferred to foreign language learning. Second, various aspects that significantly slow down the acquisition of a foreign language's pronunciation are addressed. Finally, a two-semester plan for a phonetics course within German Studies for learners with Polish as their first language is presented.

**Keywords:** Pronunciation, German language, Phonetics, Pronunciation Pedagogy, Language Acquisition

### **Introduction**

Every person is surrounded every day by a multitude of different sounds: birdsong, traffic noise, traffic-light signals, the sound of flowing water, mobile phone ringtones. Some of them, especially synthetically produced sounds, seem to be an indispensable part of our everyday lives. The sound of human speech accompanies us from birth and is impossible to imagine life without. It is only when we can no longer express our thoughts through language that we recognize its importance. The way phonological and phonetic competence is acquired differs considerably between a first language and a second language. This raises the question of which acquisition processes can be applied in foreign language instruction and in what sequence phonetic phenomena should be taught. The present article aims to provide some recommendations for a modern pronunciation course for learners of the German language.

### **Acquisition of Pronunciation in the First Language (L1)**

Already in the womb, the fetus perceives the high frequencies of the mother's voice along with all physiological sounds. Even at this developmental stage, prosodic structures of the mother tongue are formed. Shortly after birth, they serve as an acoustic guide for identifying the mother. The first breath is accompanied upon exhalation by the first cry. Alfred Tomatis and his followers, who worked with his APP method, state that auditory maturation is often underestimated. According to Tomatis (2004), auditory maturation is considered one of the most important components in the overall development of the human being. Jean Piaget emphasizes in his holistic approach that first language acquisition (L1) proceeds in parallel and harmoniously with other cognitive and motor processes that prepare the child for future life in society. Individual elements of these highly complex processes are interdependent and mutually supportive, thereby intensifying the acquisition of the first language(s) through various perceptual channels. Nevertheless, it takes several years for the phonological system of L1 to be fully internalized. The acquisition of difficult sounds and sound combinations is not even realized until around the end of the sixth year of life.

## **Challenges in Pronunciation Acquisition in Second Language (L2) Learning**

In foreign language teaching, it is easy to observe that internalizing the pronunciation of first language sounds has a different character than the automation of the articulation of a second language, especially in adulthood. The acquisition of the phonetic-phonological system of the first language begins already on the first day of life, provided there are no functional or organic dysfunctions, and extends throughout the early childhood years. In the case of a foreign language, the learning process usually begins at school age. Innate predispositions of learners to discriminate, identify, and imitate foreign sounds play a crucial role. The acquisition process is guided by foreign language teachers who possess phonetic-phonological knowledge, apply appropriate teaching methods, and, above all, are committed to fostering phonetic competence. Learners, however, often come into contact with systematic pronunciation instruction only during philological studies, where separate courses are devoted to pronunciation training. In adulthood, articulatory movement patterns are often already established. These are given primary attention in phonetics courses. Prosodic features of the foreign language, however, receive less attention, even though they constitute an essential basis for articulation in L1 acquisition and therefore play a central role (cf. Hirschfeld / Reinke 2018, 19).

### **Temporal Constraints for Phonetics in Study Programs**

It should be emphasized that despite innovative and engaging teaching methods in pronunciation instruction, only basic phonetic phenomena can often be addressed due to time constraints within German Studies programs.

At some Polish colleges and universities, one to two semesters are allocated for pronunciation exercises. A four-semester pronunciation course is very rarely offered to students. Therefore, even a four-semester course is not proportionate to the time span in which the acquisition of pronunciation in the first language takes place, aside from other obstacles in acquiring foreign language pronunciation. Sikorski (2002, 43-44) presents a logical comparison in which he contrasts the time required for the acquisition of first language pronunciation with the average number of class hours in a phonetics course within German study programs. Normally, the phonological system of the mother tongue reaches a certain stability by the sixth year of life. Sikorski arbitrarily assumes that this process, excluding the one-year infancy period, takes approximately five years. For daily phonetic activity, he assumes a minimum of two hours as a standard. When this value is multiplied by the number of days in a year and by the number of years, it results in 3560 individual instructional hours, monitored by parents, family, peers, and the entire social environment. This is by no means comparable to the 120 class hours, assuming the course lasts four semesters. If this result is divided by the number of students in a group, it becomes apparent that each individual student receives only a minimal percentage of individual attention from the instructors throughout the entire pronunciation course. This situation is to be expected in the foreseeable future as well. Pronunciation instructors face a difficult task regarding the timeframe within curricula.

### **Role of Pronunciation Instructors in L1 and L2 Acquisition**

In adulthood, few people succeed in learning a foreign pronunciation solely through imitation, as is the case in childhood. The acquisition of each new sound is supported through conscious awareness, the use of gestures, visualization, movement, and references to the mother tongue, in order to activate various perceptual channels and cognitive strategies and to help students automate phonetic phenomena.

In the case of the first language, however, the role of parents, family, and other language mediators is passive: they only need to provide a good model. They do not correct phonetic deviations; on the contrary, they often modify their own pronunciation and speak unnaturally to their children. Provided there are no dysfunctions, children are nonetheless able to internalize sound patterns that correspond to the general norms of their environment. It should also be noted that in first language acquisition, the ear and the vocal tract, along with all speech organs, are still highly malleable and only later specialize in one or more languages. With increasing age, this ability is lost. The ear perceives communicatively relevant features, which later allow it to quickly distinguish familiar sounds from communicatively irrelevant sounds, noises, and tones. When a hearing filter is formed, it filters out all sounds not present in the phonological system, compares them with familiar auditory patterns, and assigns them to the closest match. This auditory accommodation of speech sounds leads to phonetic interference in adult foreign language learners. According to Alfred Tomatis, missing frequencies in a person's perceptual spectrum also do not appear in their voice. By analogy, foreign language sounds that are not correctly perceived cannot be articulated. First language acquisition proceeds in parallel with psycho- and sensorimotor learning processes that are interdependent and mutually reinforcing, preparing the child for adult life.

## **Didactic Space and Tools in Pronunciation Instruction**

In foreign language learning, pronunciation instruction usually takes place outside the target country and with little contact with native speakers. As a result, the availability of authentic speech models is severely limited. In seminar rooms, classrooms, and so on, learners primarily have access to a teacher and recorded speech as the sole input. In the age of AI, it is now possible to conduct interactive pronunciation exercises with avatars. Pronunciation instruction is further constrained by seminar rooms that are not designed for this type of course. The number of participants often makes individualized teaching impossible. Consequently, pronunciation instruction in German as a Foreign Language (DaF) at many Polish universities is largely limited to choral speaking. The typical task consists of: listening and repeating or speaking along. It is generally acknowledged that this type of exercise does not allow teachers to identify or diagnose individual deviations in students, monitor the correct execution of an exercise or play, or implement timely corrective measures. It is inconceivable and outdated to conduct 90-minute speaking lessons in a seminar room or language lab using only headphones. Although learners are not distracted by external stimuli and can concentrate on speech signals, the experience becomes monotonous, uncomfortable, and tedious after a certain point, causing students' performance to decline rapidly. In some cases, the technical equipment does not meet the requirements of modern pronunciation instruction. High-quality speakers, headphones, and computers are therefore essential components of a properly equipped seminar room. While a language lab can make instruction more engaging and varied, it is not suitable as the sole teaching method. Although learners are not distracted by external stimuli and can concentrate on speech signals, the experience becomes monotonous, uncomfortable, and tedious after a certain point, causing students' performance to decline rapidly. Targeted support for learners with increased needs must not result in other participants losing interest in the teaching-learning process due to lack of engagement.

## **Identified Issues**

It is difficult to fully replicate the acquisition process of phonetic competence in a first language within foreign language instruction. This is due, among other factors, to the following:

- Language acquisition occurs in both cases on different levels of learner consciousness,
- Learning a foreign language does not take place under natural conditions and is not part of socialization,
- Due to time constraints, the learning process is subject to a different work rhythm and a curricular schedule,
- Time pressure generally enforces a faster learning pace and can induce stress in learners requiring more attention,
- Learning language pronunciation is based on already established movements of the speech organs and prosodic patterns,
- The suprasegments and segments of the first language can lead to negative transfer when acquiring a basis of articulation,
- The high number of learners in a group largely prevents the possibility of addressing individual learner needs and adapting exercise formats accordingly,
- Learners cannot rely solely on imitation to internalize new prosodic and sound patterns, as is the case in first language acquisition,
- With increasing age, receptive ability decreases, as the phonological filters of the first language become more dominant, and new sounds can only be discriminated receptively based on their phonetic properties,
- Interfering with the already internalized and familiar phonological-phonetic system can create internal barriers and be perceived as an intrusion, which can be overcome in instruction through sensitivity, understanding, and continuous support.

Neuber (2007) notes that academic institutions are becoming increasingly structured. Students of German studies begin their studies with very different backgrounds in linguistics and language awareness. German language skills also vary widely among applicants. This makes it difficult to tailor teaching materials to the respective language level and to plan pronunciation courses effectively.

## **Didactic Aspects of L2 Acquisition in the Planning of a Pronunciation Course**

Due to the outlined differences in the acquisition of phonetic competence in L1 and L2, a pronunciation course cannot rely on identical methods nor fully maintain the same chronology in the acquisition of phonetic skills in the foreign language as occurs in first language acquisition. The phase of discriminating all speech sounds from other acoustic signals, the fine reception of the fundamental frequency in the speech signal, and the imitation of unfamiliar sound patterns and new speech rhythms requires a great deal of time even in first language acquisition. Since most skills in language development are already completed in childhood, phonetic competence in a foreign language must be built from scratch based on this experience and familiar learning strategies. Nevertheless, it is possible to derive methods for teaching pronunciation in foreign language instruction from insights in language acquisition research.

A pronunciation course should not treat modules such as melody, rhythm, pauses, syllable stress, and segments strictly separately, as this slows down the learning process. Despite a wide range of exercises and engaging game-based activities, focusing on isolated phenomena in the planned modules can also lead to the fossilization of other deviations. Instead, it is better to always combine segmental and suprasegmental topics.

Despite the modular structure of a phonetics course, such a holistic approach necessitates addressing certain phenomena in advance through phonetic features practiced in the unit. An isolated treatment of phonetic phenomena could result in significant deviations being initially overlooked by instructors and addressed with students only after some time. For example, exercises on word stress should not only focus on the correct position of the German word accent but also draw learners' attention to its centering effect and train German reduction vowels and the elisions in final <-en> syllables. Through the use of corresponding gestures, qualitative and quantitative differences in German vowels can also be implicitly highlighted. These phonetic phenomena can likewise be integrated into exercises on German rhythm of speech.

In addition, some methods such as humming, clapping, phonogesture, and body movements can intimidate adult learners. Some may perceive their use as a pointless game or as a way of treating students like children. Teaching aids that are fundamentally intended to support the learning process can, in such a case, ultimately decline class attendance. However, this does not mean that games (Skoczek 2006) should be entirely avoided in a phonetics course. They can break the monotony of instruction and are suitable not only for reinforcing practiced phonetic phenomena but also for authenticating the learning situation.

Many students associate a pronunciation course with the correction of individual segmental articulations. Indeed, such corrections should be carried out,

particularly when productive pronunciation exercises involve prosodic units. The integration of articulation exercises with prosodic elements should be supplemented, where necessary, with references to rules conveyed in previously covered modules. This allows learners to apply them again in similar exercises in the future. In this way, the treatment of individual phenomena does not become a one-off episode in the pronunciation course.

## Significance of Prosody in L2 Acquisition

In first language acquisition, prosody is internalized at an early stage and belongs to the most strongly fossilized yet at the same time least accessible levels of language that can be trained in the pronunciation instruction of any foreign language. Prosodic deviations are known to significantly impair communication (cf. Hirschfeld 1995; Hirschfeld / Reinke 2018). When designing a pronunciation course, the specific characteristics of the learners' source language must be taken into account. Thus, in a phonetics course with Chinese participants, exercises on German prosody are assigned a different status than in courses with Polish learners of German. Nevertheless, it must be noted that suprasegmental features always occur together with sound segments. For example, weak dynamics in word or phrase stress can influence the pronunciation of individual sounds. When articulation energy is distributed within a word or phrase, the strongly centered stress pattern of German is less closely connected to unstressed syllables than in Polish, where articulation energy is shifted away from unstressed syllables toward the stressed one. Strictly speaking, this means that speech organs in unstressed syllables are no longer able, due to energy loss, to perform articulatory movements with sufficient precision. As a result, they are centralized and subject to further weakening. Consequently, some articulatory gestures are omitted, e.g.: *auf den Straßen* (ba ba BAM ba) [aʊ̯nʃtʁ'ɪ:sn̩] vs. *przedszkolanka* (ba ba bam ba) [pʃɛʃkɔl'anka].

Therefore, prosodic features should always be trained alongside segment-focused correction, since in connected speech autosemantic words are stressed and thus articulated more precisely and more loudly. Synsemantic elements, by contrast, form clitics that are realized more quickly, less distinctly, and more quietly (Stock 1996,

52). Through this regular alternation between loud and quiet, strong and weak, slow and fast, precise and reduced, German acquires its characteristic staccato rhythm.

This means that a Polish learner can fully pronounce all syllables regardless of the correct stress position in the word or phrase without being aware of these processes and without training. In contrast to German, which has a stress-timed rhythm, Polish belongs to syllable-timed languages. In this respect, the dynamics of German must be consistently practiced across all phonetic phenomena. Internalizing these rhythmic structures promotes, on the one hand, the reduction processes mentioned above; on the other hand, they must be made explicit to learners and trained. The correct realization of reduction phenomena lends spoken language its characteristic sound. Prosodically conditioned sound weakening does not emerge automatically, even with correct stress placement and a clear dynamic contrast between stressed and unstressed parts of speech. This brings us full circle. In order to make optimal use of class time, each course must be planned so that exercises on important segments are always combined with prosodic units, so that both levels are always trained simultaneously.

### Plan of a Two-Semester Pronunciation Course within the German Studies / DaF Program

When planning a pronunciation course, both the degree of difficulty of a phonetic phenomenon and its frequency must be taken into account. The teaching units should be structured so that students first practice speech movements that are necessary for acquiring further phonetic phenomena. For example, in order to initiate the pronunciation of ö-sound [œ œ œ], the teaching unit on e-sound [e e e] ensures appropriate tongue positioning, whereas the teaching unit on o-sounds [o o o] provides the necessary lip rounding. This articulatory relationship argues in favor of training e-sound and o-sounds before ö-sounds. There is no doubt that, in the case of Polish learners of German, training in selected consonants should be preceded by exercises on German vowels, which are the carriers of prosodic features whose relevance has been outlined above.

In view of the preceding discussion, the following proposal for planning a two-semester pronunciation course can be put forward for Polish students of German studies. The concept is based on my many years of teaching experience in the field of German phonetics in DaF.

**Table 1: Plan of the Pronunciation Course with Comments and Teaching Hours**

Main focus	Commentary	Teaching hours
<b>Module 1: Suprasegmental Features</b>		
1. Melodization	The focus should be on final (terminal) intonation. In this context, the strong falling intonation in w-questions (w-fragen) should be practiced. Attention should be paid to ensuring that in information-seeking questions, the sentence stress does not fall on the interrogative word.	4
2. Word Stress in Simple Words and Derivatives	At this stage, the effect of the centering stress on unstressed syllables should already be explained. The elisions of the schwa sound can also be easily visualized.	4
3. Stress in Compound Words		2
4. Rhythmization and Pausing	Differences between stress groups and rhythm groups. The elisions of the schwa sound in the ending <-en> should be practiced at the same time.	4
<b>Module 2: Long and Short Full Vowels</b>		
1. Syllable and syllable division in German	Foundation for the correlation between syllable type and vowel quantity	1
2. Full vowels in the stressed syllable and syllable structure	Syllable types: closed, open, potentially open; loose and tight connection, ambisyllabic consonants	6
<b>Module 3: Reduced Vowels and Unstressed Syllables &lt;-en&gt; &lt;-el&gt; and &lt;-em&gt;</b>		
1. Influence of word stress on unstressed syllables. Reduced vowels exercises.	Building on the already discussed characteristics of the main stress.	2

2. Elisions and assimilations in the final syllable □□□□ and other unstressed final syllables.	Reduced stress words practice. Basic information on assimilations is explained in more detail to raise awareness of the process.	2
<b>Module 4: Selected Individual Full Vowels</b>		
1. <i>e</i> -sounds	Particular emphasis is placed on training the long tense vowel, which is absent in Polish. Training these vowels introduces a modification to the three-level tongue height distinction in the Polish vowel system. This allows finer differentiation of the tongue height levels that do not exist in Polish and that are necessary for the □□□□□□ sounds.	4
2. <i>o</i> -sounds	Training these vowels introduces a modification to the three-level tongue height distinction in the Polish vowel system. This allows finer differentiation of the tongue height levels that do not exist in Polish and that are necessary for the □□□□□□ sounds. In addition, increased lip activity training is introduced.	4
3. <i>ö</i> -sounds	The <i>ö</i> -sounds are the most difficult vowels for Polish learners of German. The automatization of <i>e</i> -sound and <i>o</i> -sounds should precede this training.	4
4. <i>i</i> -sounds	Particular attention should be paid not only to the quantitative differences but also to the qualitative differences between the two vowels. The short lax vowel □□□ must be specially trained due to graphemic interference, as it is otherwise pronounced as □□□. Training these vowels introduces a modification to the three-level tongue height distinction in the Polish vowel system. This allows finer differentiation of the tongue height levels that do not exist in Polish and that are necessary for the □□□□□□ sounds.	2
5. <i>u</i> -sounds	Training these vowels introduces a modification to the three-level tongue height distinction in the Polish vowel system. This allows finer differentiation of the tongue height levels that do not exist in Polish and that are necessary for the □□□□□□ sounds. Surprisingly, the long /u:/ should not pose articulatory problems for Polish learners; nevertheless, it is often produced as □□□□ or □□□□ or □□□□ or □□□□.	2
6. <i>ü</i> -sounds	After the <i>i</i> - and- <i>u</i> vowels have been automatized, the close rounded front vowels can be taught. Compared to □□□□□□, □□□□□□ are articulated correctly much more quickly. To prevent the pronunciation of □□□□□□ from being transferred to □□□□□□, the proposed sequence counteracts the generalization of these articulatory movements. It is also recommended to conduct listening and speaking exercises that include all four vowels.	4
<b>Module 5: Consonants</b>		
7. <i>r</i> -sounds	The vocalized <i>r</i> □□□ was discussed in Module 3. This earlier discussion allows us to systematize and reinforce the sound phenomenon in this unit.	2
8. <i>ach</i> - and <i>ich</i> - sounds	In this unit, the focus is on the articulation of the palatal fortis fricative, which does not occur in the Polish phonemic system. Since this fricative is often replaced by the Polish postalveolar fricative, the correct articulation of this sound can be derived from it. Associations, such as a hissing cat, are also helpful.	4
9. Nasal Consonant □□□.	This consonant occurs in Polish only as an allophone of the nasalized diphthong represented by the letters <ę> and <ą>. Since this nasal is not represented graphemically in Polish orthography, its existence is known to Polish learners of German. However, its pronunciation can be derived from	2

	words in which these graphemes <ę> and <ą> appear before <k> or <g>, e.g., <reka>, <drağ>. Reference can also be made to the differences between the Kraków and Warsaw pronunciations in words such as <winko>, <sukienka>.	
10. Progressive Voiceless Assimilation and Final Obstruent Devoicing, Production of the □□□□-ending	The production of the □□□□-ending was already addressed in Modules 2 and 3. Here, it is reviewed, systematized, and reinforced within the context of the teaching unit. The focus of the unit should be on the devoicing of obstruents.	4

It should be emphasized that individual phonetic phenomena should not be trained in isolation but combined with previously practiced phonetic features. Prosodic units should always be integrated into communicatively oriented tasks. Many phonetic phenomena occur simultaneously in every act of speech; therefore, the presented course plan should avoid both an atomistic approach, in which individual sounds are treated in isolation in successive units and previously practiced material is neglected, and a holistic approach, in which all phenomena are exercised simultaneously, causing the unit to lose its structural coherence.

Pronunciation teachers should, when necessary, also draw attention during class to previously covered or new phonetic phenomena, especially in the case of significant deviations. Such situational corrections can also help to shorten or eliminate the need for training of the respective phenomenon in a separate teaching unit. The time gained can then be devoted to other phonetic phenomena. Learners should never get the impression that they are constantly making pronunciation errors, as this can quickly discourage them and reduce their motivation. Corrections should always be made by pronunciation instructors with sensitivity, patience, and recognition of even small progress in order to maintain motivation and willingness to learn.

## Conclusion

Although pronunciation courses within German studies programs in Poland typically comprise around 60 teaching hours, it is difficult to determine an exact number of hours for correcting individual phenomena during course planning. This inflexibility would only mean that individual pronunciation problems are only addressed in class. Due to time constraints, not all phonetic phenomena can be covered in a single-semester pronunciation course. Priority should be given to training those phenomena that learners find particularly difficult and that most significantly impair spoken communication. Teachers should therefore decide which phenomena may be omitted.

Sikorski (2002: 44) asserts that intensive practice is the best way to overcome the disproportion between the acquisition of phonetic competence in first language acquisition and the learning of pronunciation in the classroom. In my view, phonetic training should not rely on *drills* with isolated word pairs repeated according to predetermined patterns. Pronunciation instruction must take into account different learning types and employ a variety of teaching methods and materials to activate multiple perceptual channels, analogous to first language acquisition. Low learner motivation leads to superficial completion of exercises. Pronunciation instruction, when conducted and experienced with enjoyment and engagement, is more effective and efficient than when dominated by fear of failure. Only in this way does instruction truly work. Pronunciation teachers take on the roles of mentor, coach, and motivator. They design lessons efficiently and make rapid learning progress visible.

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