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# Researching dialects with high school students: a citizen science approach

## Nyelvjárások kutatása középiskolás diákokkal: civil tudományi megközelítés

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**Abstract:** Citizen science as a form of inquiry inviting nonprofessionals into different phases of the research process appeared in linguistics in the last decade. However, few such projects aim to study dialectal features, even though renewal would benefit dialectology. This methodological paper explores possible ways of applying citizen science in research on dialects. A specific small-scale study is presented which was conducted in the 2023/2024 academic year in Hungary with high school citizen scientists living in the Northern (so-called Palóc) dialect area. In this study, experimental and citizen scientific methods were combined, resulting in a corpus consisting of unique dialect data suitable for the acoustic study of inter- and intra-speaker variation, recorded without the presence of professional researchers. Drawing on the experiences of this project, the article examines how the contribution to science and the contribution to the public, two important criteria of citizen science projects, were achieved. It is claimed that the project helped to enhance the scientific literacy of the participating high school citizen scientists, as well as their agency in the local public.

**Keywords:** citizen dialectology; Hungarian language; Palóc dialect; talking book; youth language

**Absztrakt:** A szakmai képzettséggel nem rendelkező résztvevőket a kutatási folyamat különböző szakaszaiba bevonó civil tudományi megközelítés az elmúlt évtizedben jelent meg a nyelvészetben. Kevés kutatási projekt célja azonban a nyelvjárási sajátosságok vizsgálata, pedig az ilyen irányú megújulás a dialektológia javát szolgálná. Módszertani tanulmányunkban a civil tudományok alkalmazásának lehetőségeit vizsgáljuk a nyelvjárások kutatásában. Egy olyan kisléptékű projektet mutatunk be, amelyet a 2023/2024-es tanévben folytattunk le Magyarországon a *palóc* (északi) nyelvjárásterületen élő középiskolás civil kutatók bevonásával. Vizsgálatunkban kísérleti és civil tudományos módszereket ötvöztünk. Ennek eredményeképpen a nyelvjárási adatok egy olyan egyedi korpusza jött létre, amelyet a hivatásos kutatók jelenléte nélkül rögzítettek, és amely alkalmas a beszélők közötti és a beszélőn belüli változatosság akusztikai elemzésére. Tanulmányunk a kutatási projekt tapasztalataira támaszkodva azt mutatja be, hogy miként valósult meg a civil tudományi kutatások két

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fontos kritériuma, a tudományhoz, illetve a közösséghez való hozzájárulás. Állításunk szerint a kutatási projekt eredményeképpen bővült az abban részt vevő középiskolás civil kutatók tudományos műveltsége, de a helyi közösségben megnyilvánuló ágenciája is megerősödött.

**Kulcsszavak:** civil dialektológia; magyar nyelv; *palóc* nyelvjárás; hangoskönyv; ifjúsági nyelv

## 1 Introduction

The participatory agenda, advocating for the inclusion of nonprofessionals in research for social and epistemic change, has gained momentum in sociolinguistics (see Bodó et al. forthcoming; Charity Hudley et al. 2024a, 2024b; for an overview, see Bodó et al. 2022). Embracing such an agenda could also be useful for dialectological research in terms of methodological (and epistemological) renewal (cf. Nerbonne et al. 2016) and lead to an increase in the social impact of academic research. As demonstrated by Barbara Heinisch and colleagues, a possible route to engage with such endeavors is through the application of the assumptions and methods of citizen science in the multidisciplinary study of dialects (Heinisch 2020; Heinisch et al. 2021, 2022). On the one hand, citizen science may facilitate access to data that professional researchers would not be able to uncover, which is an important contribution to scientific advancement in the field. On the other hand, it can also contribute to social progress through public engagement. As Ibrar Bhatt puts it, citizen science in linguistics “not only enriches linguistic research but also plays a crucial role in cultural preservation and the promotion of linguistic diversity on a global scale” (in Jopling et al. 2024: 19). Furthermore, this contribution has the potential to foster commitment to democratic values (see Koreinik et al. 2024; Molek-Kozakowska and Laihonon 2024; Strasser and Haklay 2018).

In this methodological paper, we explore the potential applications of citizen science in researching dialects. We present a study conducted in Hungary during the 2023/2024 academic year with high school students living in the Northern (Palóc) dialect area. In the first phase of the project, we carried out a map task experiment (Anderson et al. 1991; Berrios et al. 2023) with 30 students to elicit spontaneous peer interactions. In the second phase, we invited these students to engage further as citizen scientists by conducting interviews with elderly people. In this subsequent phase, 12 students carried out interviews with 13 people in eight municipalities. The outputs can be classified into two categories. First, a dataset has been created for professional researchers, consisting of nearly 5 h of audio recordings. These are suitable for the acoustic investigation of inter- and intra-speaker variation of the speech of young speakers. Second, a publicly available dialect corpus has been developed comprising interview excerpts from the second phase, which are optimal for science communication and other educational purposes. Citizen scientists were mentored and accompanied by professional researchers, who monitored their activity; the researchers also documented the research process through ethnographic field notes. In this paper, we examine how the two key criteria of citizen science, as outlined by Golumbic and colleagues (2017: 2–3), namely the contribution to science and the contribution to the public, were achieved based on the experiences of this project. Throughout the paper, “we-language” is used to refer to ourselves, the authors of this text as professional researchers. The names of the citizen scientists are listed in the Acknowledgments section, and they are recognized as the authors of the product resulting from our collaborative project.

The article is organized as follows. In the next section, we present a literature review on citizen science in linguistic inquiry into dialects with a particular focus on the participation of citizens in the cited research projects. We then describe our previous endeavors in the field of citizen dialectology as a theoretical framework for acknowledging the language expertise of speakers. In Section 4, we present our current research on the acoustic variation of Hungarian dialects, a project carried out engaging with high school citizen scientists. In our concluding remarks, we argue that engagement in citizen science activities with students has the potential to enhance their language awareness and has an impact on the local level.

## 2 Citizen science in linguistic research on dialects

Citizen science involves the public in scientific research projects, allowing volunteers to contribute with resources such as time, effort, money, and observations to advance scientific knowledge (Dickinson et al. 2012; Irwin 1995). As Hilton (2021: 1–2) points out, inviting lay people to engage in research is not a new phenomenon in linguistics or dialectology. In nineteenth-century Germany, for instance, Georg Wenker – with the assistance of schoolmasters – distributed questionnaires throughout the whole country, achieving a 90 percent response rate and thereby establishing the foundations for dialectological mapping (Wenker 1881; see also Leemann et al. 2016: 2). This approach is now commonly referred to as crowdsourcing. Similarly, in the Hungarian context, at the end of the nineteenth century, József Balassa (1891: 24–25) designed a questionnaire for his monograph on Hungarian dialectal variation which he distributed to as many locations as possible throughout the country. Many assisted him in promoting the questionnaire as a common cause. Unfortunately, such early attempts to include volunteers as partners in the research process did not become the norm, either in Hungarian or in other European dialectological traditions. Instead, Jules Gilliéron’s approach (see Gilliéron and Edmont 1902–1910) has become the standard, “a starting point for later dialectological work” (Aurrekoetxea and Perea 2009: 3), whereby language expertise is only granted to those trained in data collection, keeping a distance from those who merely provide data. Replacing volunteers with “informants” in data collection for linguistic atlases (for the Hungarian context, see Deme and Imre 1975) indicates a less equal relationship in terms of authority and control (see Cameron et al. 1992). Therefore, the principles of citizen science did not gain traction for a long time in the study of dialects.

Although the practice of collaborating with nonprofessionals is not new in scientific inquiry, the term “citizen science” only began to spread in the 1990s (Irwin 1995), and it took even longer for the concept to extend to the field of linguistics. For example, the term “citizen sociolinguistics” was first proposed by Betsy Rymes and Andrea R. Leone in 2014. The research paradigm under this label, which Leone-Pizzighella (2021) refers to as the “Rymesian school”, represents a substantial epistemological shift from previous research. In their conception, citizens are “people who use their senses and intelligence to understand the world of language around them” (Rymes and Leone 2014: 26). Several studies within this field examine the social function of dialect features in online comments (Aslan and Vásquez 2018; Leone 2014; Rymes 2020; Rymes and Smail 2021; see also Bridges 2021). The main contribution of the Rymesian school is an acknowledgment of the value of citizens’ language expertise (Bodó et al. 2022) in (socio)linguistic inquiry. However, a significant critique is that it merely incorporates online content created by citizens into research, without extending an invitation for them to contribute to the generation of academic knowledge, which is a fundamental tenet of citizen science (cf. Adami et al. 2024; Martín Rojo 2020). In this sense, the distinction between folk linguistics (Niedzielski and Preston 2000) and citizen sociolinguistics is not obvious (Svendsen and Goodchild 2022). In the European context, the Rymesian approach would not be considered citizen science as defined by the European Citizen Science Association, which states that citizen science should “actively involve citizens in scientific endeavour” with “a meaningful role in the project” (ECSA 2015: 1).

Fortunately, others have been able to draw on the language expertise of those outside academia in research related to spatial variation. For instance, citizen scientists classified regional accents in the From Cockney to the Queen project through the LanguageARC (Analysis Research Community) platform, among many other crowd-sourced research tasks (Cole 2020; Fiumara et al. 2020). In the case of the Stimmen project, an app was launched to promote data collection on the “voices” of Friesland through various dialectological exercises and quizzes (Hilton 2021). Other studies have also demonstrated that a citizen science approach can be effectively used to outsource certain tasks, such as the collection and labeling of linguistic landscape data (LinguaSnapp in Manchester, Lingscape in Luxembourg; see Purschke 2017) or the ethnographic observation of discursive phenomena (on “fat talk”, see Agostini et al. 2019; SturtzSreetharan et al. 2019). These examples illustrate that one potential benefit of citizen science in linguistics is that citizen scientists can gain access to naturally occurring language data that a professional researcher would not be able to uncover (SturtzSreetharan 2020).

The work of Bente Ailin Svendsen, who defined citizen sociolinguistics as “the engagement of non-professionals in *doing* sociolinguistic research” (Svendsen 2018: 137; emphasis in the original), has

demonstrated that students can also become citizen scientists (see also Svendsen and Goodchild 2023). Their potential involvement in research is not limited to crowdsourcing and outsourcing as illustrated in the examples above. Svendsen and her colleagues implemented a nationwide quantitative citizen scientific study on language diversity in Norwegian schools, in which student volunteers became fieldworkers, with some also contributing to data analysis (Svendsen 2018: 143–146). Another example of expanding the scope of tasks performed by citizen scientists is *IamDiÖ*, a research project based in Vienna, which has carried out a variety of activities under the term “citizen humanities”. These entail collaboration between citizens and academic actors, including the formulation of research questions on dialectological topics by citizens (Heinisch 2020; Heinisch et al. 2021). Highlighting the educational potential of citizen science, projects involving young citizen scientists have proliferated across Europe in recent years, for example in England (Escott and Pahl 2019), Sweden (Nielsen et al. 2020), Germany (Farag et al. 2023), Austria (Soukup et al. 2023), Estonia (Koreinik et al. 2024), and Finland and Poland (Laihonen et al. 2025; Molek-Kozakowska and Laihonen 2024). These projects, in general, demonstrate that citizen science with young people has the potential to enhance scientific understanding, expand participation and inclusivity, and foster community connections, which are crucial features for science’s contribution to the public. In the following sections, we present a small-scale study on a Hungarian dialect, in which we aimed to facilitate the potential of citizen science to contribute to both public and scientific outcomes.

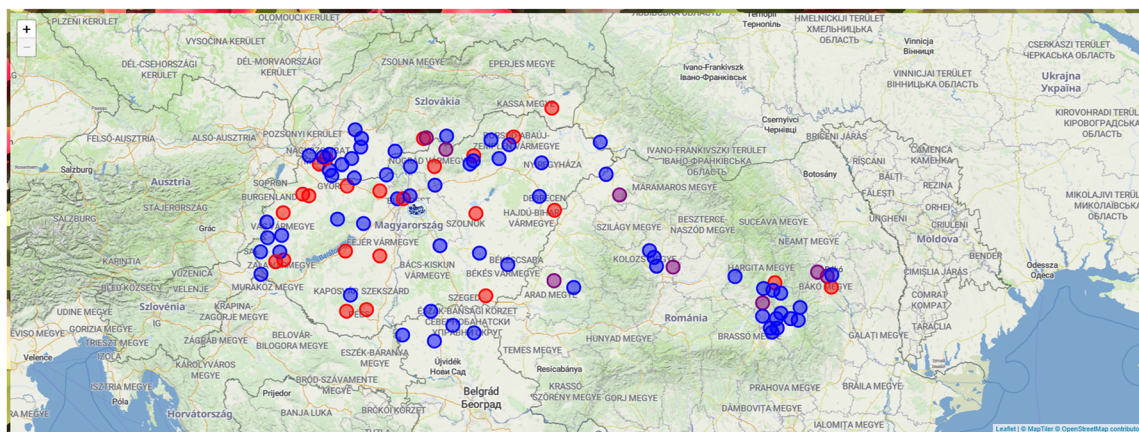
### 3 Towards a citizen science approach in studying Hungarian dialects

Before discussing the specific project undertaken with high school citizen scientists, we first describe our academic context. Research on Hungarian dialects faces problems common to dialectology worldwide, such as a lack of institutional support or the issues of theoretical debates about what constitutes a dialect and what counts as authentic speech (cf. Bucholtz 2003). Concurrently, the stigmatization of dialect speech is still documented in public discourse (Kontra 2018) and educational settings (Jánk 2023) despite the efforts of scholars who advocate for the equality of all language varieties within the Labovian “error correction” paradigm (for a critique, see Lewis 2018). We posit that the participation of speakers in the academic production of knowledge about dialects could prove an effective means of addressing these issues.

Thus, in 2021, the first author of this article approached several colleagues with a proposal to create a database of materials accessible on the internet that deliberately showcase Hungarian dialects or local linguistic features and to visualize them on a publicly accessible map. The originality of the idea lies in the endeavor to combine dialect corpora shared by scholars with content published by citizens interested in promoting their own dialects. This approach allows for the inclusion of material that may be considered invalid or scientifically irrelevant by professional dialectologists (for an overview of what is considered valid in dialectology, see Aarikka 2023). We argue that such materials can also be regarded as authentic sources of linguistic variation, albeit requiring an alternative approach to that typically employed in traditional dialectology. By situating them on the same map with datasets created by professional researchers, we aim to promote their recognition as valuable contributions to the study and representation of linguistic diversity, both within the academic community and to the wider public.

We published the map on the website *Civil Dialektológia* (2021; ‘Citizen Dialectology’) in September 2021 and have regularly updated it since then. On the map, we differentiate between content published by citizens voluntarily (in a bottom-up manner, independent of research institutes; colored blue), content published by professional researchers working in research institutes (colored red), and participatory content based on collaboration between citizens and professional researchers (colored purple). Most data points are currently represented by blue dots (see Figure 1), indicating that there is a significant interest in dialectal phenomena among citizens. Nevertheless, we would like to see more purple dots on the map in the future to build further connections between the emic perspectives of the speakers and the scholarly perspectives of the academic community.





**Figure 1:** Screenshot of the Civil Dialektológia map (20 December 2024). (© OpenStreetMap, <https://openstreetmap.org/copyright>; © MapTiler, <https://maptiler.com/copyright/>; Leaflet, <https://leafletjs.com/>)

Although we employed Civil Dialektológia for the examination of dialect features on social media (see Krizsai and Szabó 2024; Kocsis et al. 2022; Szabó and Bodó 2020), our objective extends beyond the mere pursuit of research. We are committed to engaging with the public in various forms to facilitate change, despite the constraints imposed by limited resources. This can be viewed from the perspective of researchers being increasingly expected to participate in public outreach activities (D’Este et al. 2018; Kassab 2019). However, we intended to create the map as a communication tool to promote participatory engagement rather than to view it merely as a disseminating platform (Giardullo et al. 2023). We posit that showcasing the content created by citizens on the map together with other dialectal data can facilitate the recognition of these speakers as language experts who provide knowledge that is relevant both within and beyond academia. As part of these endeavors, we have written about and with them in alternative forms of academic publishing (see Jakab-Benke 2021; Presinszky 2024) and have invited them to linguistic conferences. On one occasion, one of the content creators even agreed to participate in a roundtable discussion on the representation of spatial variation in the Hungarian language (for the written version, see Szabó et al. forthcoming). These activities can also be viewed as contributions to the integration of citizen science with science communication (Golumbic et al. 2024; Veeckman et al. 2023).

In this section, we have described our path in identifying a format through which to contribute to the public. However, informed by a recent citizen science project involving young people, we have recently taken further steps towards a citizen dialectology. The output of this recent project is presented in the next section and is represented on the Civil Dialektológia map with a purple dot, which indicates its participatory nature.

## 4 Building a dialect corpus with high school citizen scientists

The project described in this section is part of a four-year research program investigating variation and change in Hungarian dialects. The program is primarily based on recordings from the 1960s, as these constitute the only available audio sources suitable for acoustic measurements (Kocsis et al. 2024; Vargha et al. forthcoming). To facilitate comparisons between dialect talk in the 1960s and 2020s, we initiated a collaboration with a high school situated in the center of the Palóc dialect area (for the classification of Hungarian dialects, see Vargha 2024) in the third year of the program. The school was selected based on a combination of scientific and social considerations. From a scientific point of view, Palóc dialects are distinguished by their notable divergence from other Hungarian dialects in terms of vowel pronunciation, making them optimal for investigating change (Vargha 2017: 84–88). From a social perspective, the speakers of these dialects are the most exposed to stigmatization (Kontra 2002). Consequently, we believe that a project employing collaborative research practices (Szabó 2024) within a citizen science framework would be most beneficial in this context. Previous personal connections led us to the Madách

Imre High School in Salgótarján, which expressed interest in our initiative at the beginning of the 2023/2024 academic year.

In our project with the high school students, we combined experimental and citizen science methods. Our scientific objective was to contribute to the rather limited corpus of research on the acoustic variation of Hungarian dialect speech (see Presinszky 2016), while simultaneously engaging with the public. Accordingly, the project design comprises four phases, each with distinct objectives and varying levels of participation. Drawing on the taxonomy of Strasser and colleagues (2019: 55), Phase 2 can be classified as contributory citizen science, where citizen scientists contribute through crowdsourcing. Phases 3 and 4 qualify as collaborative citizen science as citizen scientists assist in the analysis and other research tasks (see also Molek-Kozakowska and Laihonon 2024: 2). The research process and our own experiences were documented in ethnographic field notes throughout all four phases. The specificities of these phases are outlined in Table 1 and will be discussed in further detail.

In Phase 1, we conducted an experiment to elicit quasi-spontaneous peer interactions among students. To this end, we used the map task method (Anderson et al. 1991; Berríos et al. 2023; Molnár et al. 2023), a well-established approach in the field of speech sciences (distinct from the mental mapping task used in perceptual dialectology, on which see Preston [1989] and, more recently, Jeszenszky et al. [2024]). This method entails participants engaging in a two-person cooperative map-based game while being recorded. During the game, the participants have to find a route while looking at two slightly different maps depicting an imaginary world. The method was designed to observe various linguistic aspects of the participants' spontaneous dialogues.

We collected over 2 h of audio recordings from 30 students (15 pairs) who had volunteered to participate in the experiment. This took place over a single school day in October 2023. The participants were between the ages of 16 and 17, and thus the prior written consent of their legal guardians was obtained. The research team provided the equipment for the recording of data suitable for subsequent acoustic analysis, while the school organized the activities in accordance with the students' schedules and made two silent classrooms available for the experiment. Furthermore, the school provided additional assistance by allocating empty classrooms for the subsequent stages of the project.

Phase 1 was designed to elicit spontaneous conversational data from peers who were not trained dialectology fieldworkers. This was intended to serve as an icebreaker activity before Phase 2, during which students would become acquainted with the researchers. On our next visit to the high school, at the beginning of Phase 2, we provided the students with a more detailed account of our research and asked them about their interest in collaborating with us as coresearchers (citizen scientists) on a longer-term basis. Twelve students volunteered for this activity. As citizen scientists, they were invited to design and conduct unstructured interviews with older speakers. Our objective was to afford them as much agency as possible. To achieve our scholarly aim of recording their speech with other interlocutors and gaining access to speakers to whom we would not be able to reach out, we did not provide them with any other directives; they were at liberty to select the speakers and topics for discussion at their discretion. The only recommendation provided was to find individuals whose voices they would like to record (e.g., an older relative) and select a topic that the respondent could easily talk about.

**Table 1:** Research phases of the project.

	Phase 1	Phase 2	Phase 3	Phase 4
Time frame	October 2023	November 2023–March 2024	April–May 2024	May 2024
Research method	Map task experiment	Conducting interviews	Processing interviews	Publishing selected excerpts
Role and number of students involved	Research participants (30)	Citizen scientists (12)	Citizen scientists (12)	Citizen scientists (12)
Research tasks for citizen scientists	–	Crowdsourcing	Primary analysis	Participation in dissemination
Data availability	For professional researchers	For professional researchers	For professional researchers	For the wider public

The research team provided instruction to citizen scientists on the proper utilization of ZOOM H2n recorders, research ethics, and the creation of a safe environment for the interviewees, thereby ensuring their comfort throughout the recording process. Training was provided during our scheduled visits to the high school on school days. We conducted nine visits, during which we discussed the students' own lived experiences of language, as well as their perceptions regarding conducting interviews. Between visits, students were encouraged to contact us via instant messaging platforms when they needed further assistance with their interviews. By the end of Phase 2, a total of two and a half hours of high-quality audio recordings suitable for acoustic measurements had been collected from 13 speakers in eight investigation points (two cities – Bátonyterenye and Salgótarján – and six nearby villages – Bárna, Cered, Karancslapujtő, Istenmezeje, Nógrádmegyer, and Szalmatercs). While the citizen scientists were almost gender balanced, with seven women and five men participating, this was not the case for their selected interviewees. Eleven of them were women, with only two men (and an average age of 69 years). The participants discussed a wide array of topics, encompassing traditions associated with holidays such as Christmas and Easter, as well as aspects of life related to healthy living, childhood experiences, first jobs, family dynamics, and other spontaneously emerging themes.

The integration of experimental and citizen science methodologies in Phases 1 and 2 yielded unique data for (Hungarian) dialectology. First, data was generated in the absence of professional researchers. In the past, data for dialect atlases was typically collected through structured interviews with presumed dialect speakers, to elicit specific language features (Bailey 2018). The methods by which new data are currently generated appear to remain largely unchanged, despite the potential for remote solutions, enabled by technological advancements that reduce the resource demands of such research (Gardner and Kostadinova 2024; Leemann et al. 2020). Finding alternative data generation methods may facilitate the acquisition of a more accurate representation. An examination of the scientific contribution of our project reveals similarities with the line of research in citizen sociolinguistics that underscores the capacity of citizens to identify data sources that are challenging for professional researchers to access (cf. SturtzSreetharan 2020). Second, focusing the inquiry on the younger generation, who are significantly underrepresented in dialectological research compared to the elderly, can facilitate a more comprehensive understanding (for a critique of NORM informants, see Chambers and Trudgill 1998: 29–30). The younger generation is often disregarded as a source of reliable and authentic dialect data. Third, the speech of these younger speakers was recorded on two separate occasions, which allows for the examination of both intra- and inter-speaker variation. This topic has only recently and sporadically been discussed in dialectology (Llamas 2018: 257–261). In conducting this investigation, we rely on the acoustic analysis of the vowels pronounced by the speakers in the recordings. We have started the processing of the material from this perspective and carried out preliminary analyses (see Kocsis et al. 2024). However, a comprehensive study is planned for a future research stage, as we prioritized the local impact of our activities, leading to Phases 3 and 4.

It can be argued that Phases 1 and 2 exploited citizen scientists as data providers for the benefit of professional scientists (cf. Stewart in Jopling et al. 2024). From a research perspective, this proposition may be deemed valid. However, our objective transcends the mere fulfillment of academic interests. Through our presence, we intended to support community members with Palóc linguistic backgrounds and contribute to the local public (for a similar initiative, see Hall-Lew et al. 2022). In this regard, “public” can be understood in two distinct ways: (i) as the wider public and (ii) as the local community, particularly the high school students participating in the project. Phase 3 was designed to engage with the local public, while Phase 4 also incorporates elements aimed at a broader audience. In agreement with the high school citizen scientists, their interviews were designed in a way that would allow for eventual publication online. Consequently, in our Phase 3 meetings, we presented the interview transcripts to the students. They were then invited to engage in a joint revision process, which we also understand to be a primary analysis. Together, we selected the excerpts to be published. Finally, the students confirmed that the interviewees provided consent for the material to be published. Despite treating the students as individuals with relevant language expertise, and thus as coresearchers, the joint revision of transcripts frequently proved insightful for the students regarding their linguistic repertoires. An illustrative example can be seen in the field notes of the last author. It describes a moment when one of the high schoolers, Eszter, identifies features in her own talk:

A lejegyzés ellenőrzése során pótoltuk azokat a részleteket, ahol bizonytalan voltam abba, mi hangzott el. Nem ismertem a rúra tájszót, Eszter azt mondta, ‘lábás’-t jelent, ezt írtuk be a magyarázatba. Eszter egy korábbi beszélgetésünk során azt mondta nekem, ő egyáltalán nem tud palócosan beszélni, mert a szülei nem beszéltek így vele. Ezen a felvételen többször is hallható, hogy a kiejtésében öntudatlanul igazodni kezd a dédmamájához. Eszter meglepetten vette észre, hogy időnként palócos kiejtéssel szólalt meg az interjú során. (field notes of Fruzsina S. Vargha)

During the revision of the transcription, we filled in the details where I was unsure about what was on the recording. I wasn’t familiar with the word *rúra*; Eszter said it meant ‘saucepan’, so we put that in the explanation. Eszter had told me during a previous conversation that she couldn’t speak Palóc-like at all because her parents didn’t speak to her that way. Several times in this recording, she can be heard unconsciously adjusting her pronunciation to that of her great-grandmother. Eszter was surprised to notice that at times during the interview she spoke with a Palóc-like accent.

As a result of such experiences, the students reported feeling more equipped with relevant knowledge of their linguistic environment than they had before. This can be seen as an important contribution to the project at the local level in terms of language awareness. Furthermore, the students’ level of involvement increased with each subsequent visit: they were reluctant at first, but over time, they began to recognize the relevance of their language expertise and the acceptability of their novel ideas. This can be attributed to the fact that the Hungarian education system is quite centralized and hierarchized (see Semjén 2023; Semjén et al. 2018), which leaves limited space for students to achieve their full potential. Consequently, participation in a collaborative citizen science project can also train high school participants to exercise democratic functioning.

In Phase 4, we and the students designed a website entitled “Mai Magyar Nyelvjárási Hangoskönyv 1. – Salgótarján és környéke” (2024; ‘Contemporary Hungarian dialectal talking book 1 – Salgótarján and surroundings’). This website contains a dialect corpus, comprising both audio recordings from Phase 2 and time-aligned phonetic transcriptions of the interviews created in Phase 3. In line with previous efforts to disseminate Hungarian dialectal audio recordings with transcriptions, we designate this type of publication as a *hangoskönyv* (see Presinszky 2021). Despite the divergence between the corpus and the traditional concept of a “talking book”, we argue that this format is equally applicable. The dialect corpus is completed with a multimedia section comprising visual and textual descriptions of the investigation points. Additionally, the students produced written text about the municipalities and took photographs that accompany the transcriptions and the recordings. Thus, the students created innovative and multimodal representations of these municipalities and their dialects, thereby asserting their agency within the local public sphere.

Publishing excerpts from the interviews may contribute to the broader objective of popularizing language variability and challenging the misconception that dialects are exclusively spoken by the elderly. Conversely, our objective was to refrain from utilizing the data for exclusively academic purposes, while concurrently aligning ourselves with the emerging trend of integrating open science and citizen science (see Hecker et al. 2018). It is evident to us that the contributions of high school citizen scientists warrant wider dissemination. While we consider the process itself to be of significant value, our project aligns with a body of work that yields a product of interest to a broader audience beyond the academic community (e.g., Svendsen 2018).

## 5 Conclusions

In this paper, we outlined how citizen science methods can be and have been applied in linguistic inquiry into dialects. To this end, we provided a summary of previous research and our own framework, followed by a description of a high school citizen science project aiming to create novel representations of the Palóc dialect. We evaluated this project according to two criteria: its scientific contribution and its benefit to the public (Golumbic et al. 2017: 2–3).

First, we argued that the study combining experimental and contributory citizen science methods (in Phases 1 and 2) provides unique data for Hungarian dialect research. This is achieved by examining the speech of the same speaker in different situations with different interlocutors, without the presence and involvement of professional researchers. This allows for the examination of both inter- and intra-speaker variation, a topic that is



less frequently discussed in dialectology. Collaboration with young citizen scientists also enables us to move away from the assumption that dialects are only spoken by the elderly. Such innovative methodological approaches have the potential to assist researchers in “embracing the future of dialects” (Nerbonne et al. 2016).

Second, the contribution to the public is evident in the role that the published dialect corpus serves, namely to showcase excerpts of spontaneous talk and thereby promote the Palóc dialects in general. From another perspective, Phases 3 and 4 contributed to the enhancement of the scientific literacy of the participating high school citizen scientists, as well as their agency in the local public. While this study was conducted on a relatively small scale compared to others (it involved a considerably smaller number of participants than, for instance, the 4,500 individuals included in a Norwegian study; see Svendsen 2018: 145), it has the potential to have an impact on the local level. In contrast with the position taken by Koreinik and colleagues (2024: 396), which suggests that citizen science with youths is “recommended for use in settings where teenagers are independent and responsible agents both online and offline, and where a generalized trust can be built with schools and/or parents”, this is not necessarily the case in the centralized Hungarian educational system. Instead, we claim that one positive outcome of collaborative citizen science initiatives is that young citizen scientists may become independent and responsible agents within their sociolinguistic environments.

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## References

- Aarikka, Lotta. 2023. *Murre ja sen tutkimus: Näkökulmia fennistisen murteentutkimuksen historiaan ja kieli-ideologioihin 1871–2017*. [Dialect and its study: Perspectives on the history and language ideologies of Finnish dialectological research 1871–2017]. *Annales Universitatis Turkuensis*. Turku: Turun yliopisto. <https://urn.fi/URN:ISBN:978-951-29-9301-7> (accessed 23 January 2025).
- Adami, Elisabetta, Emilia Djonov & Zhe Liu. 2024. Doing citizen sociosemiotics in the Covid-19 pandemic. *Discourse & Communication* 18(5). <https://doi.org/10.1177/17504813241241958>.
- Agostini, Gina, Cindi SturtzSreetharan, Amber Wutich, Deborah Williams & Alexandra Brewis. 2019. Citizen sociolinguistics: A new method to understand fat talk. *PLoS One* 14(5). e0217618.
- Anderson, Anne H., Miles Bader, Ellen Gurman Bard, Elizabeth Boyle, Gwyneth Doherty, Simon Garrod, Stephen Isard, Jacqueline Kowtko, McAllister Jan, Jim Miller, Catherine Sotillo, Henry S. Thompson & Regina Weinert. 1991. The HCRC map task corpus. *Language and Speech* 34(4). 351–366.
- Aslan, Erhan & Camilla Vásquez. 2018. “Cash me ousside”: A citizen sociolinguistic analysis of online metalinguistic commentary. *Journal of Sociolinguistics* 22(4). 406–431.
- Aurrekoetxea, Gotzon & Maria-Pilar Perea. 2009. The dialectal survey: A critical revision of some methodological aspects. *Dialectologia et Geolinguistica* 17(1). 3–11.
- Bailey, Guy. 2018. Field interviews in dialectology. In Charles Boberg, John Nerbonne & Dominic Watt (eds.), *The handbook of dialectology*, 284–299. Hoboken: Wiley.
- Balassa, József. 1891. *A magyar nyelvjárások osztályozása és jellemzése [The classification and description of Hungarian dialects]*. Budapest: Magyar Tudományos Akadémia.
- Berrios, Juan, Angela Swain & Melinda Fricke. 2023. Implementing the map task in applied linguistics research: What, how, and why. *Research Methods in Applied Linguistics* 2(3). 100081.
- Bodó, Csanád, Blanka Barabás, Noémi Fazakas, Judit Gáspár, Bernadett Jani-Demetriou, Petteri Laihonon, Veronika Lajos & Gergely Szabó. 2022. Participation in sociolinguistic research. *Language and Linguistics Compass* 16(4). e12451.
- Bodó, Csanád, Noémi Fazakas & Gergely Szabó (eds.). Forthcoming. Participatory approaches in researching multilingualism: Democratisation and social impact [special issue]. *Journal of Multilingual and Multicultural Development*.
- Bridges, Judith. 2021. Explaining “-splain” in digital discourse. *Language under Discussion* 6(1). 1–29.

- Bucholtz, Mary. 2003. Sociolinguistic nostalgia and the authentication of identity. *Journal of Sociolinguistics* 7(3). 398–416.
- Cameron, Deborah, Elizabeth Frazer, Penelope Harvey, M. B. H. Rampton & Richardson Kay. 1992. *Researching language: Issues of power and method*. London: Routledge.
- Chambers, J. K. & Peter Trudgill. 1998. *Dialectology*, 2nd edn. Cambridge: Cambridge University Press.
- Charity, Hudley, Anne H., Christine Mallinson & Mary Bucholtz (eds.). 2024a. *Inclusion in linguistics*. New York: Oxford University Press.
- Charity, Hudley, Anne H., Christine Mallinson & Mary Bucholtz (eds.). 2024b. *Decolonizing linguistics*. New York: Oxford University Press.
- Civil Dialektológia [Citizen dialectology]. 2021. [Website] [https://bihalbocs.hu/civil\\_dialektologia/](https://bihalbocs.hu/civil_dialektologia/) (accessed 23 January 2025).
- Cole, Amanda. 2020. Identifications of speaker ethnicity in south-east England: Multicultural London English as a divisible perceptual variety. In James Fiumara, Christopher Cieri, Mark Liberman & Chris Callison-Burch (eds.), *Proceedings of the LREC 2020 Workshop on “Citizen Linguistics in Language Resource Development”*, 49–57. Marseille: European Language Resources Association. <https://aclanthology.org/2020.clrld-1.7> (accessed 23 January 2025).
- Deme, László & Imre Samu (eds.). 1975. *A magyar nyelvjárások atlaszának elméleti-módszertani kérdései [The theoretical-methodological issues of the “Atlas of Hungarian dialects”]*. Budapest: Akadémia Kiadó.
- D’Este, Pablo, Irene Ramos-Vielba, Richard Woolley & Nabil Amara. 2018. How do researchers generate scientific and societal impacts? Toward an analytical and operational framework. *Science and Public Policy* 45(6). 752–763.
- Dickinson, Janis L., Jennifer Shirk, David Bonter, Bonney Rick, Rhiannon L. Crain, Jason Martin, Phillips Tina & Purcell Karen. 2012. The current state of citizen science as a tool for ecological research and public engagement. *Frontiers in Ecology and the Environment* 10(6). 291–297.
- ECSCA (European Citizen Science Association). 2015. *Ten principles of citizen science*. Berlin.
- Escott, Hugh Francis & Kate Heron Pahl. 2019. “Being in the bin”: Affective understandings of prescriptivism and spelling in video narratives co-produced with children in a post-industrial area of the UK. *Linguistics and Education* 53. 100754.
- Farag, Rahaf, Christine Möhrs & Elena Schoppa-Briele. 2023. “Die Sprach-Checker”: Young citizen scientists explore their languages in Mannheim’s Neckarstadt-West. *PoS (ACSC2023)* 1. <https://doi.org/10.22323/1.442.0001>.
- Fiumara, James, Christopher Cieri, Jonathan Wright & Mark Y. Liberman. 2020. LanguageARC: Developing language resources through citizen linguistics. In James Fiumara, Christopher Cieri, Mark Liberman & Chris Callison-Burch (eds.), *Proceedings of the LREC 2020 Workshop on “Citizen Linguistics in Language Resource Development”*, 1–6. Marseille: European Language Resources Association. <https://aclanthology.org/2020.clrld-1.1/> (accessed 23 January 2025).
- Gardner, Matt Hunt & Viktorija Kostadinova. 2024. Gettin’ sociolinguistic data remotely: Comparing vernacularity during online remote versus in-person sociolinguistic interviews. *Linguistics Vanguard* 10(s5). 417–429.
- Giardullo, Paolo, Federico Neresini, Esther Marín-González, Cristina Luís, Joana Magalhães & Rosa Arias. 2023. Citizen science and participatory science communication: An empirically informed discussion connecting research and theory. *Journal of Science Communication* 22(2). A01.
- Gilliéron, Jules & Edmond Edmont. 1902–1910. *Atlas linguistique de la France [Linguistic atlas of France]*, vol. 13. Paris: Champion.
- Golumbic, Yaela N., Daniela Orr, Ayelet Baram-Tsabari & Barak Fishbain. 2017. Between vision and reality: A study of scientists’ views on citizen science. *Citizen Science: Theory and Practice* 2(1). 6.
- Golumbic, Yaela N., Joana Magalhães, Alice Motion & Joseph Roche. 2024. Editorial: Bridging citizen science and science communication. *Frontiers in Environmental Science* 12. 1474221.
- Hall-Lew, Lauren, Claire Cowie, Catherine Lai, Nina Markl, Stephen Joseph McNulty, Shan-Jan Sarah Liu, Clare Llewellyn, Beatrice Alex, Zuzana Elliott & Anita Klingler. 2022. The Lothian diary project: Sociolinguistic methods during the COVID-19 lockdown. *Linguistics Vanguard* 8(s3). 321–330.
- Hecker, Susanne, Muki Haklay, Anne Bowser, Zen Makuch, Johannes Vogel & Aletta Bonn. 2018. Innovation in open science, society and policy – setting the agenda for citizen science. In Susanne Hecker, Muki Haklay, Anne Bowser, Zen Makuch, Johannes Vogel & Aletta Bonn (eds.), *Citizen science: Innovation in open science, society and policy*, 1–24. London: UCL Press.
- Heinisch, Barbara, Kristin Oswald, Maike Weißpflug, Sally Shuttleworth & Geoffrey Belknap. 2021. Citizen humanities. In Katrin Vohland, Anne Land-Zandstra, Luigi Ceccaroni, Rob Lemmens, Josep Perelló, Marisa Ponti, Roeland Samson & Katherin Wagenknecht (eds.), *The science of citizen science*, 97–118. Cham: Springer International.
- Heinisch, Barbara, Rebecca Stocker & Esther Topitz. 2022. A different kind of dictionary – collecting lexemes used in Austria together with citizens. *PoS (ACSC2022)*. 1–6. <https://doi.org/10.22323/1.407.0006>.
- Heinisch, Barbara. 2020. Citizen humanities as a fusion of digital and public humanities? *Magazén* 1(2). 143–180.
- Hilton, Nanna Haug. 2021. Stimmen: A citizen science approach to minority language sociolinguistics. *Linguistics Vanguard* 7(s1). 20190017.
- Irwin, Alan. 1995. *Citizen science: A study of people, expertise and sustainable development*. London: Routledge.
- Jakab-Benke, Nándor. 2021. “Peccsdzsem maszlinás borkányban” [“Rosehip jam in an olive jar”]. *Replika* 119–120. 121–132.
- Jánk, István. 2023. Are bilingual teachers more liberal than monolingual teachers? Differences between the language attitudes of Hungarian teachers in multilingual and monolingual environment. *International Journal of Multilingualism*. 1–23. <https://doi.org/10.1080/14790718.2023.2233547>.
- Jeszenszky, Péter, Carina Steiner, Nina von Allmen & Adrian Leemann. 2024. What drives non-linguists’ hands (or mouse) when drawing mental dialect maps? *Digital Scholarship in the Humanities* 39(2). 593–608.
- Jopling, Michael, Georgina Tuari Stewart, Shane Orchard, Juha Suoranta, Sara Tolbert, Laurène Cheilan, Fei Yan, Catherine Price, Sarah Hayes, Howard Scott, Annabel Latham, Ibrar Bhatt, Vyacheslav Dodonov, Adam Matthews, Rami Muhtaseb, Alison MacKenzie, Owaineh Mohamed, Sarah Earle, Ben Simmons, Zoë Clarke, Linda la Velle, Benjamin J. Green, Cheryl Brown, Richard Watermeyer &

- Petar Jandrić. 2024. Postdigital citizen science and humanities: A theoretical kaleidoscope. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-024-00481-5>. <https://link.springer.com/article/10.1007/s42438-024-00481-5> (Accessed 7 March 2025).
- Kassab, Omar. 2019. Does public outreach impede research performance? Exploring the “researcher’s dilemma” in a sustainability research center. *Science and Public Policy* 46(5). 710–720.
- Kocsis, Zsuzsanna, Fruzsina Krizsai, Csanád Bodó, Fruzsina Sára Vargha & Gergely Szabó. 2022. Civilek a nyelv térbeli változatosságáról szóló tudás létrehozásában [Citizens in knowledge production on the spatial variability of language]. In Karmacs Zoltán, Márku Anita & Máté Réka (eds.), *A határ mint konvergáló és divergáló tényező a nyelvben: Tanulmányok a 21. Élőnyelvi Konferenciáról [The border as a converging and diverging factor in language: Proceedings of 21st Hungarian sociolinguistics conference]*, 101–118. Törökbálint: Termini Egyesület & II. Rákóczi Ferenc Kárpátaljai Magyar Főiskola, Hodinka Antal Intézet.
- Kocsis, Zsuzsanna, Fruzsina S. Vargha & Gergely Szabó. 2024. Dialectometric and acoustic research on Hungarian vowel pronunciation. In Saramandu Nicolae, Manuela Nevaci, Irina Floarea, Ioan-Mircea Farcaș, Alina Bojoga, Francisco R. Constantin, Alexandra Loizo, Mara Manta, Mihaela Morcov & Oana Niculescu (eds.), *Proceedings of the Xth congress of the international society for dialectology and geolinguistics*, 377–386. Alessandria: Edizioni dell’Orso.
- Kocsis, Zsuzsanna, Gergely Szabó & Fruzsina Sára Vargha. 2024. A nyelvi változatosság és változás vizsgálata salgótarjáni középiskolásokkal [Studying language variation and change with high school students in Salgótarján]. *Public talk for the Hungarian linguistic society, Budapest, 5 November 2024*. <https://www.youtube.com/watch?v=p3oXMzLgKhg> (accessed 29 January 2025).
- Kontra, Miklós. 2002. Where is the “most beautiful” and the “ugliest” Hungarian spoken? In Daniel Long & Dennis R. Preston (eds.), *Handbook of perceptual dialectology*, 207–220. Amsterdam: John Benjamins.
- Kontra, Miklós. 2018. Language subordination on a national scale: Examining the linguistic discrimination of Hungarians by Hungarians. In Betsy E. Evans, Erica J. Benson & James Stanford (eds.), *Language regard*, 118–131. Cambridge: Cambridge University Press.
- Koreinik, Kadri, Aive Mandel, Maarja-Liisa Pilvik, Kristiina Praekli & Virve-Anneli Vihman. 2024. Outsourcing teenage language: A participatory approach for exploring speech and text messaging. *Linguistics Vanguard* 9(s4). 389–398.
- Krizsai, Fruzsina & Gergely Szabó. 2024. Személyjelölés a térbeli változatosság tapasztalatainak internetes megjelenítésében [Grammatical persons in the online representations of experiencing linguistic diversity]. In Ibolya Czetter, Renáta Hajba & Péter Tóth (eds.), *VII. Dialektológiai Szimpozion [7th dialectology symposium]*, 128–139. Szombathely: Savaria University Press.
- Laihonen, Petteri, Marcin Deutschmann & Katarzyna Molek-Kozakowska. 2025. Enabling empowerment and activism through co-creative citizen science: Insights from three years of school projects on multilingualism. *Journal of Multilingual and Multicultural Development* 1–15. <https://doi.org/10.1080/01434632.2024.2449064>. <https://www.tandfonline.com/doi/full/10.1080/01434632.2024.2449064> (Accessed 7 March 2023).
- Leemann, Adrian, Marie-José Kolly, Ross Purves, David Britain & Elvira Glaser. 2016. Crowdsourcing language change with smartphone applications. *PLoS One* 11(1). e0143060.
- Leemann, Adrian, Péter Jeszenszky, Carina Steiner, Melanie Studerus & Messerli Jan. 2020. Linguistic fieldwork in a pandemic: Supervised data collection combining smartphone recordings and videoconferencing. *Linguistics Vanguard* 6(s3). 20200061.
- Leone, Andrea R. 2014. Ideologies of personhood: A citizen sociolinguistic case study of the Roman dialect. *Working Papers in Educational Linguistics* 29(2). 81–105.
- Leone-Pizzighella, Andrea. 2021. The evolution of splain terms and the spirit of citizen sociolinguistics: A note on methods. *Language Under Discussion* 6(1). 30–37.
- Lewis, Mark C. 2018. A critique of the principle of error correction as a theory of social change. *Language in Society* 47(3). 325–346.
- Llams, Carmen. 2018. The dialect questionnaire. In Charles Boberg, John Nerbonne & Dominic Watt (eds.), *The handbook of dialectology*, 253–267. Hoboken: Wiley.
- Mai Magyar Nyelvjárás Hangoskönyv 1. 2024. Salgótarján és környéke [Contemporary Hungarian dialectal talking book 1 – Salgótarján and surroundings]. [Website]. <https://mmnyhk1.nytud.hu/> (accessed 23 January 2025).
- Martín Rojo, Luisa. 2020. Blog: Citizen sociolinguistics. *Journal of Sociolinguistics* 24(1). 151–155., <https://doi.org/10.1111/josl.12396>.
- Molek-Kozakowska, Katarzyna & Petteri Laihonen. 2024. Fostering language awareness through citizen science: Results and implications of a project with Polish teenagers doing language-related research. *Language Awareness* 1–19. <https://doi.org/10.1080/09658416.2024.2428184>. <https://www.tandfonline.com/doi/full/10.1080/09658416.2024.2428184> (Accessed 7 March 2025).
- Molnár, Cecília Sarolta, Katalin Mády, Péter Mihajlik & Gyuris Beáta. 2023. The Akaka Maptask corpus. In Tekla Etelka Grácsi, Viktória Horváth, Kornélia Juhász, Anna Kohári, Valéria Krepesz & Katalin Mády (eds.), *Speech research conference: Hungarian research centre for linguistics Budapest, 23–24. February 2023*, 81–83. Budapest: Nyelvtudományi Kutatóközpont.
- Nerbonne, John, Remco Knooihuizen & Marie-Hélène Côté. 2016. Embracing the future of dialects. In Marie-Hélène Côté, Remco Knooihuizen & John Nerbonne (eds.), *The future of dialects*, 1–12. Berlin: Language Science Press.
- Niedzielski, Nancy A. & Dennis R. Preston. 2000. *Folk linguistics*. Berlin: De Gruyter Mouton.
- Nielsen, Helle Lykke, Tove Rosendal, Johan Järlehed & Christopher Kullenberg. 2020. Investigating bulletin boards with students: What can citizen science offer education and research in the linguistic landscape? In David Malinowski, Hiram H. Maxim & Sébastien Dubreil (eds.), *Language teaching in the linguistic landscape: Mobilizing pedagogy in public space*, 349–371. Cham: Springer International.
- Presinszky, Károly. 2016. Az á előtti illabiális á-zás a Csallóközben [pronouncing illabial á before /a:/ in Csallóköz]. *Magyar Nyelv* 112(2). 218–227.
- Presinszky, Károly. 2021. Digital methods in researching Slovakia Hungarian regional dialects. *Hungarian Studies* 34(1). 98–107.
- Presinszky, Károly. 2024. Szaval a jó öreg csallóközi ... (az iskolában is) [The good old man from the Csallóköz recites ... (even in the school)]. *Katedra* 31(6). 4–6.

- Preston, Dennis R. 1989. *Perceptual dialectology: Nonlinguists' views of areal linguistics*. Dordrecht: Foris.
- Purschke, Christoph. 2017. (T)apping the linguistic landscape: Methodological challenges and the scientific potential of a citizen-science approach to the study of social semiotics. *Linguistic Landscape* 3(3). 246–266.
- Rymes, Betsy & Andrea R. Leone. 2014. Citizen sociolinguistics: A new media methodology for understanding language and social life. *Working Papers in Educational Linguistics* 29(2). 25–43.
- Rymes, Betsy & Gareth Smail. 2021. Citizen sociolinguists scaling back. *Applied Linguistics Review* 12(3). 419–444.
- Rymes, Betsy. 2020. *How we talk about language: Exploring citizen sociolinguistics*. Cambridge: Cambridge University Press.
- Semjén, András, Le Marcell & Hermann Zoltán. 2018. The goals and consequences of the centralization of public education in Hungary. *Acta Educationis Generalis* 8(3). 9–34.
- Semjén, András. 2023. (Re)centralisation of education governance in Hungary: Its causes, declared goals, motives and some potential hidden goals. *Podstawy Edukacji* 16. 199–219.
- Soukup, Barbara, Elissa Pustka, Lisa Krammer & Sophie Seereiner. 2023. *Citizen Science goes Sprachwissenschaft* [Citizen science goes speech sciences]. *Wiener Linguistische Gazette* 94. 127–155.
- Strasser, Bruno J. & Muki Haklay. 2018. *Citizen science: Expertise, democracy, and public participation (Report for the Swiss Science Council)*. Bern: Swiss Science Council. [https://www.swir.ch/images/stories/pdf/de/Policy\\_Analysis\\_SSC\\_1\\_2018\\_Citizen\\_Science\\_WEB.pdf](https://www.swir.ch/images/stories/pdf/de/Policy_Analysis_SSC_1_2018_Citizen_Science_WEB.pdf) (accessed 23 January 2025).
- Strasser, Bruno J., Baudry Jérôme, Dana Mahr, Gabriela Sanchez & Elise Tancoigne. 2019. “Citizen science”? Rethinking science and public participation. *Science and Technology Studies* 32(2). 52–76.
- SturtzSreetharan, Cindi L., Agostini Gina, Alexandra A. Brewis & Amber Wutich. 2019. Fat talk: A citizen sociolinguistic approach. *Journal of Sociolinguistics* 23(3). 263–283.
- SturtzSreetharan, Cindi. 2020. Citizen sociolinguistics: A data collection approach for hard-to-capture naturally occurring language data. *Field Methods* 32(3). 327–334.
- Svendsen, Bente A. & Samantha Goodchild. 2022. Review of *How we talk about language: Exploring citizen sociolinguistics* by Betsy Rymes (2020). *Journal of Sociolinguistics* 26(1). 162–167.
- Svendsen, Bente A. & Samantha Goodchild. 2023. Citizen (socio)linguistics. In Bente A. Svendsen & Samantha Goodchild (eds.), *The Routledge handbook of language and youth culture*, 407–420. London: Routledge.
- Svendsen, Bente Ailin. 2018. The dynamics of citizen sociolinguistics. *Journal of Sociolinguistics* 22(2). 137–160.
- Szabó, Gergely & Csanád Bodó. 2020. A székely nyelv regisztrálása a közösségi médiában [Enregisterment of Székely in social media]. *Nyelv-és Irodalomtudományi Közlemények* 64(1). 39–56.
- Szabó, Gergely, Miklós Blankó, Noémi Fazakas, Ákos Kovács & Andrea Parapatics. Forthcoming. Civilek és nyelvészek a nyelv térbeli változatosságának megjelenítésében [Citizens and linguists in representing the spatial variation of language]. In Csanád Bodó & Gergely Szabó (eds.), *A szociolingvisztikai kutatás társadalmi hatásai [The social impact of sociolinguistic inquiry]*. Budapest: ELTE Eötvös Kiadó.
- Szabó, Gergely. 2024. Collaborative research practices in the study of diasporisation: Chronotopes of dispersion among Hungarians in Catalonia. *Journal of Multilingual and Multicultural Development* 1–15. <https://doi.org/10.1080/01434632.2024.2357143>. <https://www.tandfonline.com/doi/full/10.1080/01434632.2024.2357143> (Accessed 7 March 2025).
- Vargha, Fruzsina Sára. 2017. *A nyelvi hasonlóság földrajzi mintázatai: Magyar nyelvjárások dialektometriai elemzése [Geographical patterns of linguistic similarity: Dialectometric analysis of Hungarian dialects]*. Budapest: Magyar Nyelvtudományi Társaság.
- Vargha, Fruzsina S. 2024. Hungarian dialect classification. *Dialectologia Special issue* 12. 237–272.
- Vargha, Fruzsina Sára, Zsuzsanna Kocsis & Gergely Szabó. Forthcoming. Magyar nyelvjárás magánhangzók az akusztikai térben [Hungarian dialect vowels in the acoustic space]. In Csanád Bodó & Gergely Szabó (eds.), *A szociolingvisztikai kutatás társadalmi hatásai [The social impact of sociolinguistic inquiry]*. Budapest: ELTE Eötvös Kiadó.
- Veeckman, Carina, Claes Sandy, Leo Van Audenhove & Shenja Van Der Graaf. 2023. A framework for making citizen science inclusive with storytelling methods. *Frontiers in Environmental Science* 11. 1211213.
- Wenker, Georg. 1881. *Sprach-Atlas von Nord- und Mitteldeutschland [Language atlas of northern and central Germany]*. Strassburg: Trübner.