

## “Die Sprach-Checker”<sup>a</sup>: Young Citizen Scientists Explore their Languages in Mannheim’s Neckarstadt-West

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### Abstract

“Die Sprach-Checker” (Eng. “Language Checkers”) are young citizen scientists from Mannheim’s highly diverse district Neckarstadt-West. Together with linguists, they investigate a tremendous treasure: their own multilingualism. They are exploring and (re)discovering their own languages and the other languages used in their environment while documenting and reflecting on their everyday experiences in and with different linguistic practices. Our aim is to raise awareness of their strengths and to promote appreciation for their language biographies, thus fostering a sense of identification with one’s own linguistic surroundings. Such a joint research endeavour offers empirical opportunities to address (linguistic) issues of societal relevance by collecting authentic data from the multicultural district and involving its residents and local stakeholders.

In this paper, we will provide insights regarding the project’s background, conception, and outcomes. We address everyone who is planning or conducting a citizen science project with young people, especially children and adolescents, or who works at the interface between science and society.

*Austrian Citizen Science Conference 2023, ACSC2023  
19 - 21 April 2023  
Linz, Austria*

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## 1. Introduction

Multicultural communities harbour linguistic treasures that are often overseen, and little attention is paid to the voices and linguistic practices of the people living there – particularly those of young residents. In our project, we are working with citizen scientists to shed light on these hidden treasures and voices by investigating language use in Neckarstadt-West: a centrally located district of Mannheim, Germany, which is shaped by its highly diverse demographics.

“Die Sprach-Checker: So sprechen wir in der Neckarstadt” (Eng. “Language Checkers: This is how we speak in Neckarstadt”) is a state-funded, prize-winning citizen science project regarding multilingualism in Mannheim. It is targeted at guiding children and adolescents as they explore and (re)discover their own languages and the other languages used in their environment together with linguists from the Leibniz Institute for the German Language.

In the following, we will briefly outline the significance of Neckarstadt-West for the project and explain the reasons for choosing a citizen science approach to explore the district’s linguistic peculiarities (chapters 2 and 3). Finally, we will provide insights regarding the participatory formats we have developed to involve citizens in the research process (chapter 4).

## 2. Linguistic Citizen Science in Neckarstadt-West

Neckarstadt-West, a district in which approximately 21.000 people from over 100 nations reside,<sup>1</sup> is defined by the migration stories of its citizens. In 2022, nearly 70% of its residents had a migratory background.<sup>2</sup> The district is known for its dynamic and urban aura. However, the (re)development of the district is proceeding slowly, as development efforts are often overshadowed by a problem-centred news coverage [1: p. 11–12]. The same applies to the language proficiency of its residents, which is often cast in a negative light: the focus is kept on certain deficiencies. Despite the fact that the children of migrants grow in a multilingual environment by default and can usually understand and/or speak at least two languages, they still face negative stereotypes and their heritage languages are hardly promoted (e.g. [2]).

We believe that citizen science can help to change the negative (self-)views accompanying migration backgrounds through projects which encourage mutual appreciation of multilingualism.<sup>3</sup> The aim is to deconstruct the utopian vision of a monolingual society and the alleged necessity of monolingual communication. Our project helps young people in Neckarstadt-West to better understand their linguistic practices. Ultimately, it aims to raise the awareness of young people for their own linguistic abilities and to foster positive identities by establishing an authentic dialogue in which young citizen scientists and their families are respected as co-researchers.

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<sup>1</sup> <<https://www.mannheim.de/de/stadt-gestalten/daten-und-fakten/bevoelkerung/einwohner-mit-migrationshintergrund>> (30 August 2023).

<sup>2</sup> <[https://web2.mannheim.de/statistikatlas/pdf/02\\_neckarstadt-west.pdf](https://web2.mannheim.de/statistikatlas/pdf/02_neckarstadt-west.pdf)> (30 August 2023).

<sup>3</sup> For deconstructing deficit views on multilingualism see, e.g., [3].

### 3. Excursus: Forum Deutsche Sprache – Consolidation of Citizen Science at the Leibniz Institute for the German Language

The Leibniz Institute for the German Language (Ger. “Leibniz-Institut für Deutsche Sprache”; IDS) is the leading international scientific institution for the documentation and research of the German language in present and recent history. Currently, it is establishing the *Forum Deutsche Sprache*<sup>4</sup> (Eng. “German Language Forum”; FDS) in the aforementioned district Neckarstadt-West. The FDS will serve as a lively institution where citizens and linguists can come together to explore questions about the German language (within the context of multilingualism): through exhibitions, events, and citizen science activities.<sup>5</sup> Various formats will provide a space for visitors of all generations and backgrounds to experience language in its diversity through digital and interactive exhibits centred on a wide range of linguistic topics (e.g. language varieties, transformation, societal debates). Visitors of the FDS will receive an immersive museum experience, in which they are encouraged to contribute to linguistic research by “donating” their language in a featured communication and survey area (i.e. providing authentic data through dialect recordings, taking part in language games/surveys, and sharing extracts from virtual chats).

Since Neckarstadt-West is going to be the home of the FDS, we are already establishing a dialogue with local stakeholders. Launching citizen science projects in this district (such as “Die Sprach-Checker”) enables us to establish credibility among (potential) partners, determine the needs of citizens and experiment with new approaches. By identifying best practices for communication and cooperation in this environment (e.g. face-to-face conversations, interpreter-mediated communication, word of mouth), we hope to extend the reach of the FDS to those who would normally feel intimidated or detached by conventional scientific discourse.

### 4. “Die Sprach-Checker”: Insights and Impressions

“Die Sprach-Checker” paves the way for future citizen science projects at the IDS. During the project, elementary and middle school pupils investigated this question with us: How do young people and their families perceive their multilingual environment in Neckarstadt-West? Drawing on a reciprocal citizen science approach (see [4]), the role of the students included:

- developing research questions;
- collecting language data (e.g. language biographical interviews);
- categorising language data (e.g. linguistic traces in public spaces);
- evaluating methods and results (e.g. a joint reflection on the activities).

So far, these tasks were embedded in different activities<sup>6</sup> and accompanied by appropriate training:

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<sup>4</sup> For further information, see the English flyer on the FDS’s homepage: <https://www.forumdeutschesprache.de/> (30 August 2023).

<sup>5</sup> The IDS is building the FDS with the help of the Klaus Tschira Stiftung (KTS), the city of Mannheim, and the state of Baden-Württemberg.

<sup>6</sup> <https://www.youtube.com/watch?v=qTwQlkZOyL4> (30 August 2023).

| Activity                         | Citizen scientists               | Period            | Output  |
|----------------------------------|----------------------------------|-------------------|---|
| idea sprint workshop             | elementary school students       | September 2022    | <ul style="list-style-type: none"> <li>• visual design of the project’s logo</li> <li>• language portraits (cf. [5])</li> </ul>   |
| kick-off workshop                | elementary school students       | November 2023     | draft for the book project (incl. figures, places, emotions)  |
| book project                     | elementary school students       | January–July 2023 | literary story narrated by the children of Neckarstadt-West highlighting their languages (Fig. 1)   |
| linguistic landscaping           | 7 <sup>th</sup> -graders         | June 2023         | photographical and annotated collections of linguistic traces (signs and lettering: Fig. 2) on an interactive map provided by the research app <i>Lingscape</i> <sup>7</sup>  |
| language biographical interviews | 8 <sup>th</sup> -graders         | June 2023         | compilation of language biographical film footage   |
| summer festival of languages     | students, families, stakeholders | July 2023         | <ul style="list-style-type: none"> <li>• presentation of the project’s current outcomes</li> <li>• song “Bitte hör mir zu!” (Eng. “Listen to me, please!”)<sup>8</sup> on multilingualism and identities composed by the Repagogen</li> </ul> |

Table 1: Overview of the “Sprach-Checkers” activities (September 2022–July 2023)

<sup>7</sup> <<https://lingscape.uni.lu/>> (30 August 2023).

<sup>8</sup> <<https://youtu.be/00fQU7qsty4?si=4gf5rxJiZKH-uQyX>> (23 October 2023).

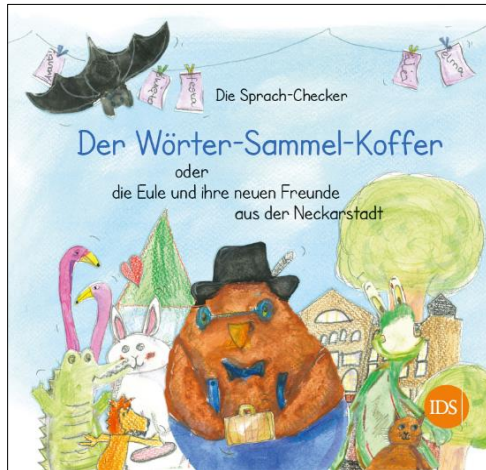


Fig. 1: Cover of the “Sprach-Checkers” book  
 “Der Wörter-Sammel-Koffer”  
 (Eng. “The Suitcase of Collected Words”)



Fig. 2: Linguistic Landscaping in Neckarstadt-West – insights into the citizen scientists’ field work and explanatory statements

Table 1 and Figures 1 and 2 depict the specific results of the activities. To date, these insights have been shared with the citizen scientists and the public through various formats as listed in Table 1 (e.g. a book) as well as in numerous social media posts which further document the project’s impact on the language checkers. Some activities (e.g. linguistic landscaping) were accompanied by a social media campaign calling upon adult audiences, too, to participate in research. Regarding the activities and scientific approaches, we developed explanatory videos on YouTube for the broader public, thus creating sustainable resources for interested communities and researchers. We consider the strengthened networks with different stakeholders as another overarching outcome that has warranted further follow-up projects.

To monitor the transfer of (linguistic) knowledge to local society, we are cooperating with a regional, state-funded universities project (TransforMA). Its team is analysing our science communication practices from different perspectives through interviews and questionnaires ([6]). Preliminary analyses of the project’s positive impact on young citizen scientists refer to gestures of enthusiasm, experiences of appreciation, and numerous indications of a growing awareness of one’s own strengths, leading to self-confidence and, in turn, to self-efficacy – quoting for instance an elementary school pupil stating after an illuminating discussion with a literary translator: “If you are an expert in your language, Arabic, then I can be an expert in my language, too.” [6: 21, 35].<sup>9</sup>

<sup>9</sup> For an elaborate reflection on the project’s impact on the participants from the point of view of the associated researchers, see [7].

## Funding information

The project described in this paper was awarded as one of the top three citizen science projects in Germany by the national competition “Auf die Plätze! Citizen Science in deiner Stadt”<sup>10</sup> (Engl. “On your marks! Citizen Science in your city”).<sup>11</sup> The competition is held by *Wissenschaft im Dialog* and the *Museum für Naturkunde Berlin* in close cooperation with the citizen science platform *Bürger schaffen Wissen*. This collaborative project is funded by the Federal Ministry of Education and Research (Ger. “Bundesministerium für Bildung und Forschung”, BMBF).

## Acknowledgements

We are deeply indebted to our local cooperation partners, especially Campus Neckarstadt-West, Neckarstadt Kids e.V., Alte Feuerwache Mannheim, and Marie-Curie-Realschule Mannheim for their support, trust, and pedagogical engagement. Sincere thanks are also due to all citizen scientists, particularly the children, adolescents, and their families, for their openness and enthusiasm.

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<sup>10</sup> <https://www.museumfuernaturkunde.berlin/en/about/news/start-citizen-science-competition-cities>; <https://www.wissenschaft-im-dialog.de/medien/pressemitteilungen/artikel/beitrag/citizen-science-auf-die-plaetze-bringen-drei-ausgezeichnete-projekte-gehen-an-den-start/> (30 August 2023).

<sup>11</sup> <https://www.ids-mannheim.de/aktuell/presse/pressemitteilungen/pm-20102022/> (30 August 2023).