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Language Change and Early Acquisition: A transgenerational corpus study on Alemannic in Southwestern Germany

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Abstract

Although the connection between early language acquisition, sociolinguistic variation, and language change has long been identified as a relevant field of research, empirical studies at this intersection remain scarce. This exploratory study seeks to address this gap by analyzing longitudinal corpus data of natural interactions between young children aged from 1;6 to 4;6 and their parents in three families living in Baden-Württemberg, a southwestern federal state of Germany. Transgenerational comparisons of four different phonological variables show that, if dialectal variants are still dominant in the input, children use significantly more standard variants compared to their parents, which is consistent with existing research on the decline of Alemannic varieties in Germany.

High Alemannic – language acquisition – language change – dialect decline – transgenerational comparison – corpus study – family interaction

1 Introduction

While research on language variation and change often focuses on adults, there is a limited understanding of the role children play in driving linguistic shifts within their communities through language acquisition. Do they merely replicate the sociolinguistic patterns they encounter in their home environment, or do they actively engage in processes of ongoing language change with the local speech community (cf. Smith, 2025)?

This study aims to contribute to these questions by analyzing longitudinal interactional corpus data of three families in southwestern Germany. It examines the extent to which these data can be utilized to observe trends in language change. To this end, the language use of four phonological variables that distinguish the local High Alemannic dialect from standard German is compared across generations and families, which represent different speaker types (cf. Kehrein, 2012) and linguistic attitudes that exist in this area.

The relevance of early language acquisition processes for understanding sociolinguistic variation and language change is already anticipated in Hermann Paul's *Principles of the*

History of Language as he states "that the processes in language acquisition are of the utmost importance for explaining changes in language use" (Paul, [10]1995 [1880]: 34, own translation). According to Paul, language change occurs "when there are shifts in the individual organisms that move in the same direction" (ibid.: 32). These shifts, i.e. deviations from the normal usage of a speech community, are mainly driven by two factors: Firstly, through individual freedom in "speaking and thinking in the forms of language" (ibid.), and secondly, through the influence other individuals, which happens throughout the lifespan, but especially in the early childhood acquisition phase, which is hence "the main period of influence" (ibid.: 34) for possible language change.
William Labov and Julie Roberts also consider the study of language acquisition to be an important component of research into language change, explicitly establishing a link between acquisition and change in various empirical analyses (cf. Labov, 1980, 1989; Roberts, 1994; Roberts & Labov, 1995). They showed for the choice of a dialectal variant (short /a/ sound in Philadelphian English) that children between the age of three and four years had largely acquired the language-internal rules for phonological dialect-standard variation (Roberts & Labov, 1995). The patterns produced by these children largely corresponded to those of their parents, including the phonological contexts, which are subject to change. Therefore, it can be concluded that even the youngest members of a speech community actively participate in sound change processes that are currently underway (see also Smith & Holmes-Elliott, 2022).
Mattheier (1980: 54) draws up two imaginary linguistic biographies (see Figure 1), one for a woman (represented by the dashed lines) and one for a man (the solid lines), both of which are intended to reflect prototypical linguistic behavior over the course of a lifetime. This model refers to individuals from the 1970s who were predominantly socialized with dialect, grew up in a rural areas and remained there throughout their lives.

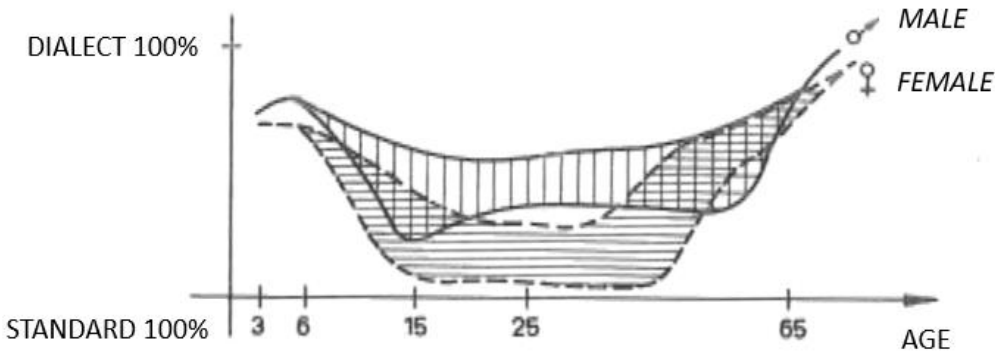

Figure 1: Mattheier's visualization of dialect-standard development across the lifespan.

According to Mattheier's model depicted in Figure 1, the degree of dialect usage, as represented on the y-axis, peaks during the initial phases of language acquisition, with corresponding ages depicted on the x-axis. This level of dialectality is only revisited and even surpassed after retirement (for additional insights on the influence of major life-events on sociolinguistic variation see: Wirtz & Pickl, 2025). Thus, Mattheier hypothesizes that the dialect predominance in early childhood gradually diminishes in favor of the standard language upon entering school (with age six), which today likely includes kindergarten already, and continues throughout the subsequent educational career. This U-shaped curve has also empirically been proven (cf. Grama, et al., 2023; Wirtz & Pickl, 2025) and implies that young children reproduce the language of their parents or their closest environment, who speak to them in dialect in this model. The input is indeed crucial in language acquisition (cf. Kauschke, 2012), or "[i]n other words, there is a strong relationship between the caregivers['] and children['s linguistic

behavior]" (Smith, et. al, 2007: 74). However, children do not merely reproduce the exact sociolinguistic pattern they perceive in their parental input, particularly when they evolve into linguistic *innovators* instead of remaining mere *imitators* (Smith, 2025: conference talk).
If "the processes in language acquisition are of the utmost importance for explaining changes in language use" (Paul, [10]1995 [1880]: 34, own translation) and children use different sociolinguistic variants (e.g. more standard variants) compared to their parents in language acquisition already (i.e., the peak of dialectal variants, cf. Mattheier, 1980; Grama, et al., 2023), it becomes evident, why transgenerational comparisons of interactional data during early childhood might be a highly interesting window into possible language change.
Against this background, this study examines dialect-standard variability in early childhood for Alemannic in Germany. This investigation is particularly intriguing due to the coexistence of diverse speaker types with varying levels of vertical sociolinguistic competence (cf. Kehrein, 2012).
Alemannic is among the most thoroughly researched dialect regions of the German language, primarily because Alemannic varieties are spoken in six different European countries (Streck, 2019: 206). Whereas, for instance, in the German-speaking part of Switzerland a stable situation of diglossia prevails (cf. Christen, 2019), the sociolinguistic situation of Alemannic is different in southwestern Germany, as described by Streck (2019: 207, own translation) as a predominantly

> "diaglossic repertoire with a continuum between dialect and standard German, where the transitions are more or less fluid. Although Alemannic has a comparatively high prestige […] and is important for the regional identification of the speakers, its use in public situations or on formal occasions tends to be avoided."

As a consequence of that, several speech levels exist between the historical local dialect and standard German (i.e., regional dialect, regiolect, regional accent), which are described as

> "a regional-language spectrum, consisting of the varieties *dialect* and *regiolect* […]. Within the dialect variety, there is a transformation from a basic dialect towards a regional dialect that can be used on a wider geographical scale, as the variants distributed on a local level are omitted." (Kehrein, 2012: 349, own translation, own emphasis).

Hence, it is no wonder that several studies have documented the ongoing decline of features of Alemannic varieties in Germany (e.g., Streck, 2012; Schwarz, 2015; Hansen, 2021; Auer et al., 2017; Auer et al., 2023; Streckenbach, 2024). Addressing this, Streck (2019: 231-232, own translation) comments the sociolinguistic dynamics in this area as follows:

> "the Alemannic dialects in Germany have turned out to be variable entities in which old and new forms often coexist. The language dynamics are characterized by a mixture of horizontal and vertical change […]. Especially for dialectal relict forms that are widespread in small areas, they are generally being phased out and replaced by more widespread dialect variants from the surrounding area. […] Overall, regional dialectal forms - which are often, but not always, also closer to the standard - often determine the direction of sound change. Thus, often precisely those realizations that are identical or at least very similar to regional dialectal forms spread."

Therefore, the analysis of this study is not only containing transgenerational comparisons, but also comparisons across different families with different (socio-)linguistic attitudes and repertoires. In addition, also the different phonological variables are not equal with regard to their frequency and salience, thus they are also important in order to address the question, to what extent the *LEKI* data allow for observations about language change, particularly dialect decline. To this end, the data, methods, and phonological variables are described in the next section (Section 2), followed by the quantitative results (Section 3), as well as by the discussion and conclusion (Section 4).

2 Data and Methods

This study builds on a longitudinal corpus of natural and spontaneous family interactions called *Longitudinalkorpus Eltern-Kind-Interaktion* (henceforth: *LEKI*; Pfeiffer & Anna, 2021). The *LEKI* corpus comprises more than 200 hours of audiovisual recordings of three families that have been collected during earlier research projects led by Martin Pfeiffer ('Exclamatives in interaction', 2017-2020; 'Language acquisition and sociolinguistic variation: n-apocope'; 2021). The participating families were instructed to record themselves at home during natural interactions with their first born child in their daily family life, which resulted in a wide range of heterogeneous activities such as puzzling, playing, singing, eating, picture book reading, and many more. Each of the three families conducted at least one recording per month over the course of three years, which allows for longitudinal analyses. The children's age span lasts from one year and six months (1;6) to almost five years (5;0). All participating families live south from Freiburg im Breisgau in the federal state of Baden-Württemberg. All the parents grew up in this area, too.

However, the families' use of and attitudes towards the local High Alemannic dialect vary significantly. Of course, they all speak also standard German. Whereas the family of Jannis mainly speaks High Alemannic at home and has a positive attitude towards the use of *basis dialect*, the family of Jana mainly speaks standard German, with only few regional features (*regional accent*, cf. Kehrein, 2012). The family of Fritz is somewhat in between: for some phonological variables, they strongly tend towards the dialectal variant, while in others, they mainly use the standard German variant. Thus, they could best described as users of the *regional dialect*, although in some phonological variables they rather use a *middle regiolect* following Kehrein (2012).

All the audiovisual recordings of the *LEKI* corpus have been transcribed in a normalized standard German orthography and uploaded in the *multimodal oral corpus administration (moca3)* tool allowing for video-transcript alignment and word-based searchability.

Within the project "Dialect-standard variability in early childhood: A longitudinal corpus study of phonological development" (part of the Collaborative Research Centre SFB 1287 "Limits of Variability in Language" at the University of Potsdam), different phonological variables that distinguish the varieties of High Alemannic and standard German were selected for the analysis. The criteria for the composition of variables were to include both different levels of salience and different phonological categories involved (e.g., consonantism, vocalism; deletion, sound shift). Following these principles, the subsequent list was selected (Table 1).

Table 1: Overview of the selected phonological variables.

Variable	Standard German		High Alemannic		Example
fricative velarization	**[ç]**	[lɪçt]	**[x]**	[lɪxt]	*Licht* ‚light‘
fricative deletion	**[ç] / [x]**	[aʊ̯x]	**-**	[aʊ̯]	*auch* ‚also/too‘
[uː]-monophthong	**[aʊ̯]**	[haʊ̯s]	**[uː]**	[huːs]	*Haus* ‚house‘
[s]-palatalization (in front of plosives)[1]	**[st]**	[hast]	**[ʃ]**	[haʃ]	*hast* ‚(you) have‘ (2ND PS. SINGULAR)

The monophthong [uː] is not only distinguishing High Alemannic from standard German, but also relevant for the internal classification of the Alemannic area (cf. Streck, 2019: 223), since it marks at an east-west contrast as it is present in both Low and High Alemannic, but not in Swabian where it would be [ɔʊ̯], another Alemannic variety in Germany where the prevalent variant is [ɔʊ̯]. Schwarz (2015: 116, own translation) points out that for the phonological variable of the monophthong [uː], "a clear spread of diphthongization within the traditional monophthong area […] [with] 29.5% (265) of all tokens […] being realized with diphthong" can be observed. To operationalize this variable, all lexemes were examined by consulting their etymological entry in the *Digitales Wörterbuch der Deutschen Sprache* (*DWDS*, 'Digital Dictionary of the German Language') and only the ones which can be traced back to Middle High German [uː] were included.

By contrast, the word-final fricative deletion in highly frequent and morphologically simple lexemes with only one syllable present in several Alemannic dialects is less affected by dialect decline. Building on the example of the temporal adverb *gleich* [gliː] ('in a moment'), Streck (2012: 76, own translation) concludes that "the widespread variants with *ch*-deletion thus [appear] to be very stable in the dialects of southwestern Germany". However, the word-final fricative deletion is described to not be part in the middle regiolectal register (cf. Streck, 2019: 235; see Kehrein, 2012). This phonological variable was annotated for the family of Jannis and the two lexemes *auch* ('too, also') and *noch* ('yet, still') only.

The palatalization of [s] in front of [t] or [p] can be considered a very robust and widespread variable of Alemannic that is one of those "features of the regional language that apparently occur regularly in almost all sub-areas of Alemannic in Germany, even in the near-standard speech patterns of many speakers" (Streck, 2019: 238, own translation). Similarly, Kehrein (2012: 123, own translation) classifies the [s]-palatalization as "[o]ne of the most striking phenomena within the Alemannic language area".

On the fricative velarization in High Alemannic, Streck (2019: 219, own translation) explains:

> "Another very salient feature of High Alemannic is the lack of the *ich/ach* sound alternation. While in Low Alemannic (and also in Swabian) as well as in Standard German, the *ich*-sound (palatal voiceless fricative) is realized after front vowels and the *ach*-sound (mostly velar voiceless fricative) after back vowels, this positional alternation does not exist in High Alemannic. Instead of this, regardless of whether the preceding vowel is a front or a back vowel, the *ach* sound, i.e. a (mostly) velar voiceless fricative, is always realized."

[1] Often the [s]-palatalization variable co-occurs in verbal suffixes with the word-final plosive deletion of [t], as indicated in the columns for High Alemannic (cf. Kehrein, 2012: 122-123). However, this is not necessarily always the case. For this study, only the [s]-palatalization was annotated.

Both, the fricative velarization (=lacking sound alternation between [ç] and [x]) and the [s]-palatalization are described as part of the regional accent in southwestern Germany (Streck, 2019: 235; see also Kehrein, 2012).
All the above mentioned variables were annotated and included in the analysis. In order to capture the longitudinal range of the corpus, but at the same time to keep it manageable, a semi-randomized sub-corpus of *LEKI* was built. Therefore, one recording every two months of each family was randomly selected and integrated into the sub-corpus.
For each of the variables, the respective substring was searched via the *moca3* surface. False positives were excluded from the annotation. The remaining instances were manually and audibly annotated to classify them as either dialectal or standard German.
Chi-square tests were conducted for the statistical analyses using the open-source software *R*, which was also employed to create visualizations.

3 Results

The comparison of the children's early language use with the one of their parents show significant differences in the sense that a significant higher proportion of standard in contrast to dialectal variants can indeed be observed.
Figure 1 shows the fricative velarization in the family of Jannis in the form of a *mosaic plot* with stacked bars. The red bars above indicate the number of instances in the Alemannic dialect, i.e. with the velar fricative [x]. Conversely, the blue bars below represent instances in standard German with the palatal fricative [ç]. The proportion of instances per participant is represented by the width of the bars. To the left, all realizations by the child (Jannis) are depicted as indicated by the captions below. The proportion of tokens in standard German per person is written in bold. The same format will be applied to all upcoming figures of this study.

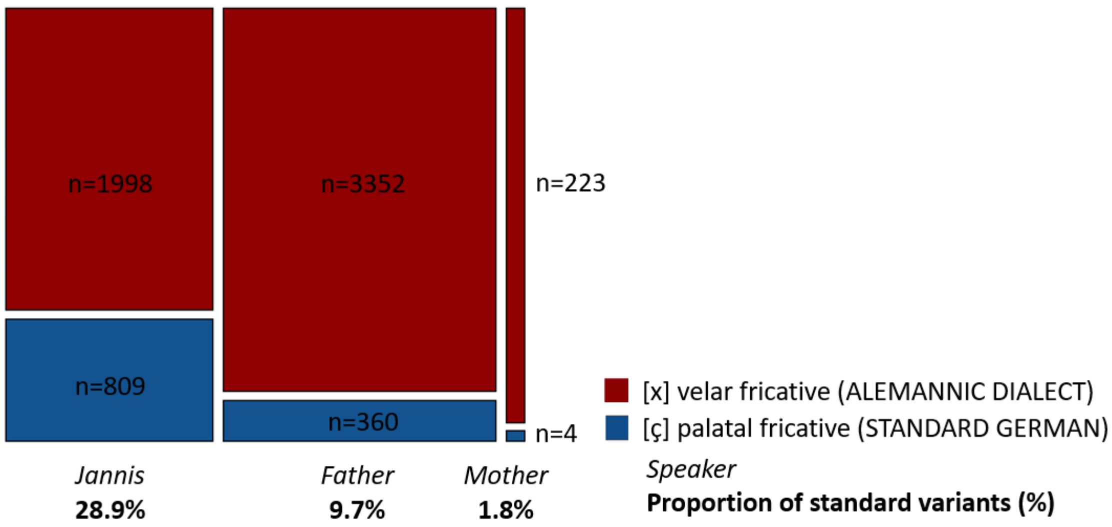

Figure 2: Proportion of fricative velarization in the family of Jannis.

First of all, Figure 1 shows that dialect-standard variation is indeed present in the *LEKI* corpus. Although the dialect is dominant in the family of Jannis, not all of the instances are produced with velar fricative. In Jannis, this is 'only' the case in 71,1% of the cases (n=1998), while 28,9% (n=809) are produced with the palatal fricative [ç]. However, this is a significant difference to Jannis' parents (χ^2[1, n=6746]=437.4, p < .001), who use overall more dialectal variants (father in 90,3% of the cases, mother even in 98,2%, which is a significant difference in itself, $\chi^2[1, n=3939]=16.1$, $p < .001$). Since the mother of Jannis does not appear often in the recordings, she has overall fewer instances and will therefore be excluded in the following analyses. Nonetheless it was worth demonstrating that she can be reasonably disregarded as a potential influence on Jannis' use of standard variants (as stated, for instance, in Labov, 1990), since she even exceeds the father in her proportion of dialectal instances.

The transgenerational difference increases, however, when certain activities (*reading aloud* for the parents and *pretend play* for Jannis) that have been shown to be highly likely produced in standard German (cf. Schmidt-Riese, forthcoming) are subtracted. This is shown by Figure 2 with the light blue bars in the middle stand for standard instance during reading aloud and pretend play, while the dark blue bars now represent the remaining instances with palatal fricative outside these activities.

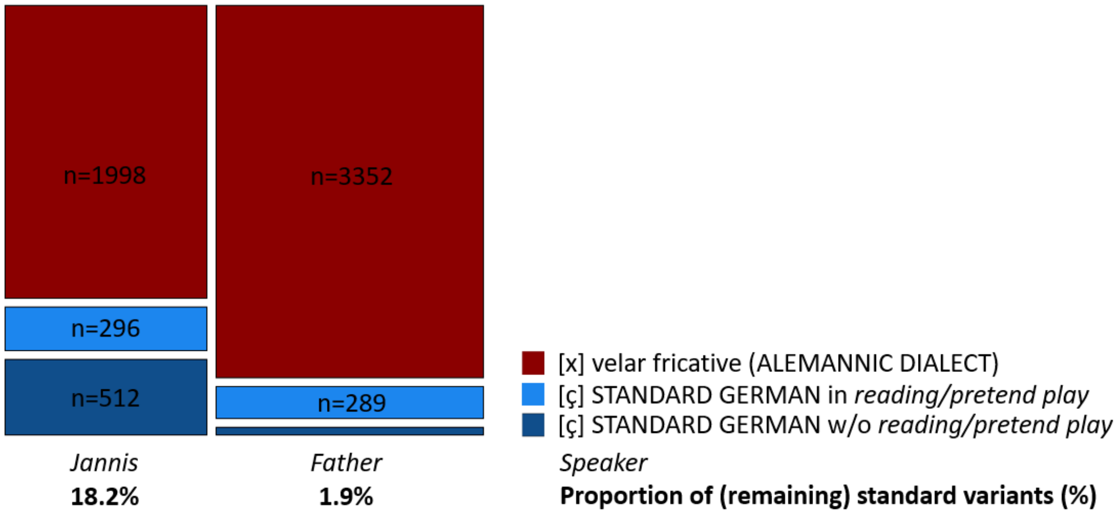

Figure 3: Fricative velarization with subtraction of *reading aloud* and *pretend play.*

A vast majority of instances of standard German fricative realization by the father of Jannis can be attributed to the activity of reading aloud (n=289/360, 80.3% of all of his standard instances). In consequence, only 71 instances of palatal fricatives outside reading aloud remain, which corresponds to only 1.9% of the overall instances by the father. The use of dialect and standard in Jannis' parents is hence rather diglossic, which is more comparable to the sociolinguistic situation of Alemannic in Switzerland than on average in southwestern Germany (cf. Christen, 2019; Streck, 2019), even though Swiss parents are reported to even read aloud in dialect (Kaiser, 2022: 46) – which has to be rather considered as a spontaneous translation given the fact picture books are mostly written in standard German.

In contrast, only about one third of the standard instances of Jannis can be linked to pretend play (n=296/809, 36.9%; in absolute numbers similar to the father's cases within reading aloud sequences). This is especially interesting, because Jannis' father barely uses standard German in pretend play sequences (Schmidt-Riese, fc.), which could already be seen as a form of transgenerational language change, probably supported by the additional input in kindergarten as well as media, which still follow a strict standard language ideology in Germany (cf. Buckler, et al., 2025).

Moreover, the remaining 512 instances (18.2% of Jannis' overall instances) beyond pretend play sequences could be a window into possible transgenerational language change, indicating that Jannis' use of standard German, unlike his parents' one, 'spreads' into normal conversation. However, some of the instances could be linked to other activities associated with standard language, like singing, or reprimanding (Schmidt-Riese, fc.) that have not been annotated for this study. Additionally, it could be case that some of the child's palatal fricatives are not really instances of standard German, but rather a result of the fact that "especially in the early stages of phonological acquisition, a high degree of individual variation in phonetic realizations is documented" (Katerbow, 2013: 69, own translation).

Comparing the pattern of fricative velarization in the family of Jannis' with different phonological variables, the same tendency (of overall dialect dominance, but significantly more standard variants by Jannis in comparison to his parents) holds true, although the proportion of standard German instances is lower than for fricative velarization, as shown in Figure 3 for the Alemannic monophthong [uː] vs. standard diphthong [aʊ̯], word-final fricative deletion in *auch* ('too') and *noch* ('yet', 'still'), and [s]-palatalization. The grey bars on the left represent a group of lexemes which either would historically be predicted as dialectal, but are always realized with diphthong (for example, *Pause* 'pause', *Laune* 'mood', or *tausend* 'thousand'), or are proper nouns, which are also realized in standard German only (e.g. *Mickimaus* 'Mickey Mouse').[2] This is in contrast to proper nouns with fricative velarization such as *Benjamin Blümchen* realized as [ˈbɛnjamiːn ˈblyːmxn]. Both types of lexemes are hence included in the plot within the grey bars, but excluded for the statistical analysis, since only lexemes that allow in principle for variation were included.

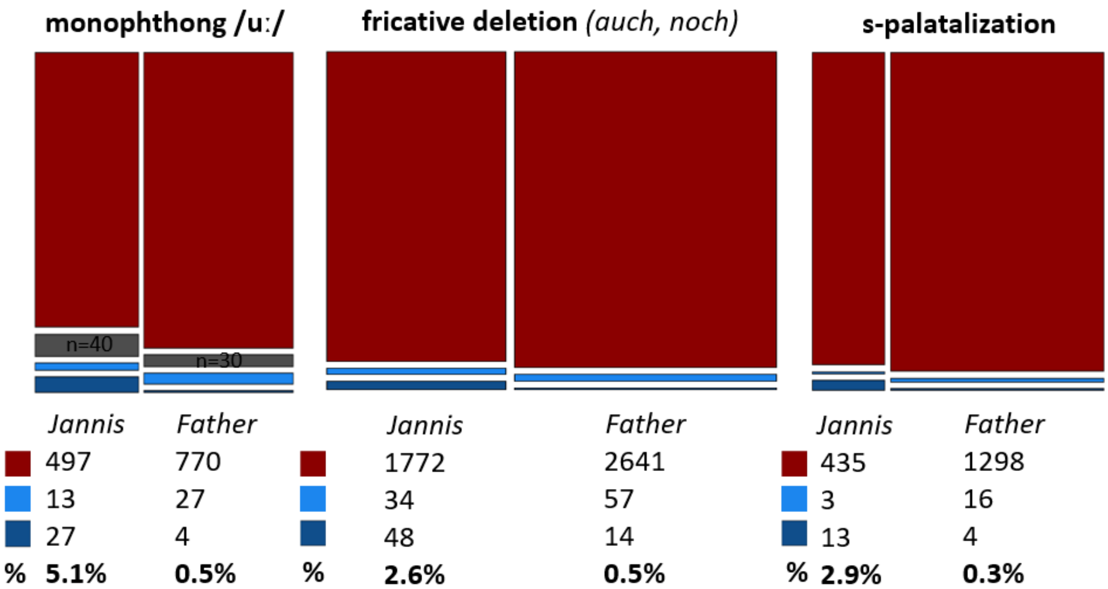

Figure 4: Comparison of different phonological variables in the family of Jannis.

Figure 3 shows similar tendencies for all phonological variables. The few standard variants produced by Jannis' father occur mostly (≥80%) during reading aloud sequences, while for Jannis pretend play is only able to explain between 18.8% (for [s]-palatalization) and 41.5% (for fricative deletion) of all standard instances. Jannis is producing more standard variants in all variables. This difference, like for fricative velarization (Figure 2), even increases, when the

[2] One could also valuably argue that 'Mickey Mouse' is still conceptualized as an English loan name and for this reason, the dialectal monophthongization is blocked.

explainable instances during pretend play and reading aloud are subtracted.[3] The reason, why the difference of numbers of instances by Jannis' parents and himself is visibly far greater in s-palatalization (see width of the stacked bars), is that the relevant combination *<st>* is predominantly used as a verbal suffix of the 2nd person singular, a form that is quite rarely used by young children (see Behrens, 2002), but presumably even more typical for child-directed speech produced by parents.

For the family of Jannis, a clear tendency towards more standard variants in the young generation has been demonstrated (even though the Alemannic dialect is still strongly predominant in both, parents and Jannis). Against this background, it is necessary to add the other two families with very different sociolinguistic attitudes and situations. As described in Section 2, the family of Fritz can be seen as a more typical example for Alemannic in Baden-Württemberg with a rather diaglossic repertoire (cf. Streck, 2019; Auer et al., 2023). In contrast, the family of Jana is strongly oriented toward standard German, even though they produce some regional features. Figure 4 shows the results for the variable of [s]-palatalization in the family of Fritz on the right contrasted with the previously already shown results in the family of Jannis on the left.

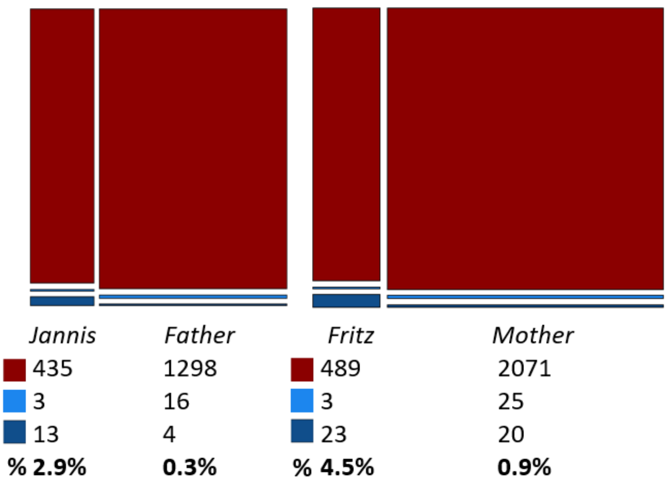

Figure 5: Adding the family of Fritz for [s]-palatalization.

For s-palatalization, the family of Fritz behaves very similarly to the family of Jannis (Figure 4). Dialect instances are by far more common in both, parents (97.9%) and child (95.0%), although it is significant that, like in the family of Jannis, the child (Fritz) produces more standard variants without [s]-palatalization than his mother ($\chi^2[1, n=2631]=13.5$, $p < .001$). Again, the activity of reading aloud is responsible for the majority of standard instances produced by the mother (n=45/65, 55.5%), while pretend play is less relevant for Fritz' use of standard German (n=3/26, 11.5%), which even increases their difference after subtracting these 'explainable' instances ($\chi^2[1, n=2603]=31.6$, $p < .001$). Even though not significant, it is still remarkable that the use of standard instances seems minimally higher in the family of Fritz compared to the family of Jannis, especially with regard to the instances outside reading aloud and pretend

[3] Monophthong: $\chi^2(1, n=1408)=7.3$, $p =.007$; without *pretend play/reading aloud*: $\chi^2(1, n=1298)=28.81$, $p < .001$; fricative deletion: $\chi^2(1, n=4566)=11.1$, $p < .001$; w/o *pretend play/reading aloud*: $\chi^2(1, n=4475)=35.2$, $p < .001$; [s]-palatalization: $\chi^2(1, n=1769)=6.9$, $p = .008$; w/o *pretend play/reading aloud*: $\chi^2(1, n=1740)=23.3$, $p < .001$.

play. Nevertheless, both families show very similar results. This changes drastically, when the family of Jana with higher orientation toward standard German, is added, as shown in Figure 5.

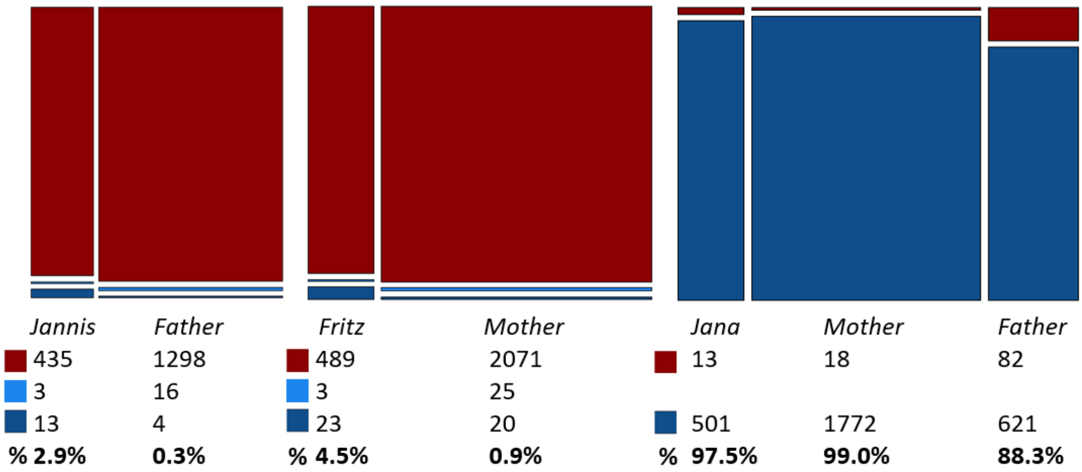

Figure 6: Comparison of all three families in the results for [s]-palatalization.

For the family of Jana (Figure 5, on the right)[4] both parents are included, because both are sufficiently present in the recorded data of the *LEKI* corpus. In contrast to the other families, in which the dialectal form [ʃ] is strongly dominant (≥90%), the standard realization [st] is the default in the family of Jana (>85%), although some dialectal instances are produced by all three family members. Since language change in Alemannic in southwestern Germany is going in the direction of dialect decline (cf. Section 1; Streck, 2012; Hansen, 2021; Auer et al., 2023) and standard German is already highly present in this family, Jana does not exceed her parents in the use of standard instances (no significant trans-generational differences). On the contrary, it is remarkable that even a few dialectal instances in the input are sufficient for a child to consider them as relevant for acquisition in order to more or less reproduce the parents' pattern (as implied by Mattheier, 1980).However, there is a significant difference between the father and mother of Jana (χ^2[1, n=2493]=148.9, $p < .001$) in the direction of traditional sociolinguistic work (e.g., Labov, 1990), meaning the father is using more dialectal variants (at least in 82 instances, 11.7%), whilst the mother shows a stronger orientation toward the prestige variety, i.e. standard German (only 18 dialectal instances, 1.0%). Interestingly, Jana seems to be heading for a middle way (2.5% instances with [s]-palatalization), although with a stronger tendency towards the linguistic behavior of her mother.

Unlike for [s]-palatalization, variation (i.e. the occurrence of dialectal variants also) is completely absent for the monophthong in the family of Jana. Out of 1448 instances in this family, not a single one is realized with monophthong [uː] instead of the standard German diphthong [aʊ̯].

While the family Fritz behaved similarly to the one of Jannis for s-palatalization with a clear dialect dominance, they differ a lot, when it comes to the variation between diphthong and

[4] Since the standard German realization is so present in this family, the annotations of pretend play and reading aloud sequences have been omitted.

monophthong, as shown in Figure 6 (including the results for the family of Jannis, as shown already in Figure 3). As in Figure 5 for the family of Jana, the instances of standard German are not differentiated in pretend play and reading aloud anymore (see footnote 4).

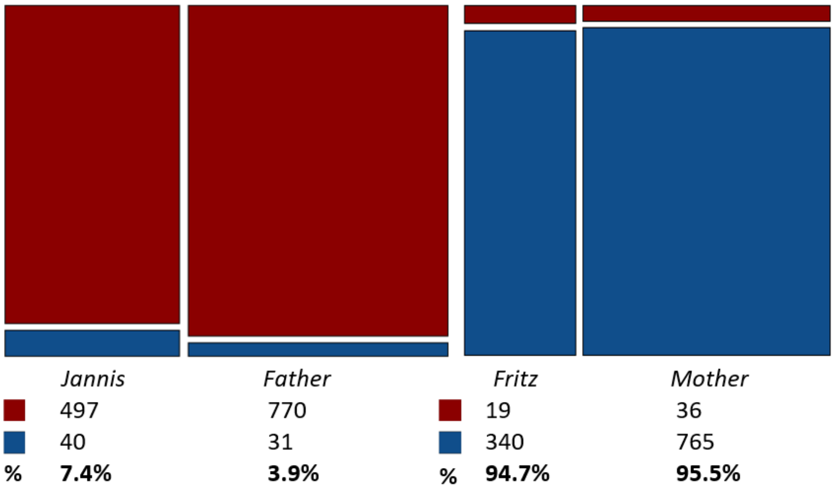

Figure 7: Monophthong [uː] vs. diphthong [aʊ̯] in the families of Jannis and Fritz.

Figure 6 shows that the family of Fritz only produces the dialectal monophthong in around 5% of all instances, whereas the Standard variant is dominant (with 340/359 instances in Fritz and 765/801 for his mother). Like for [s]-palatalization in the family of Jana, when the standard is already very dominant, although dialectal variation is still present, no differences across the two different generations (parents and their child, in this case Fritz) can be found.

Another similarity between the results for [s]-palatalization in the family of Jana and the ones for the dialectal monophthong [uː] in the family of Fritz is that there seem to be prototypical uses of the corresponding variant that are responsible for the vast majority of the few dialectal instances. As mentioned beforehand, for [s]-palatalization the by far most frequent use is in the verbal suffix of the 2nd person singular. However, whereas the father of Jana also realizes the dialectal [ʃ] in other linguistic contexts (for example in *Samstag* [ˈzamʃdaːk] ‘Saturday’ or *Kasten* [‘kaʃdn] ‘box’), for both Jana and her mother it could be observed in verbal suffixes of the 2nd person singular only. Similarly, Fritz and his mother produce the dialectal monophthong [uː] instead of the standard German diphthong [aʊ̯] mostly as the pre-verb particle *auf*, especially in combination with the lemma *aufpassen* [‘ʊfpasə] (‘to pay attention’, ‘to be careful’).

The comparison of the last phonological variable, i.e. fricative velarization is somewhat more puzzling as Figure 7 shows.

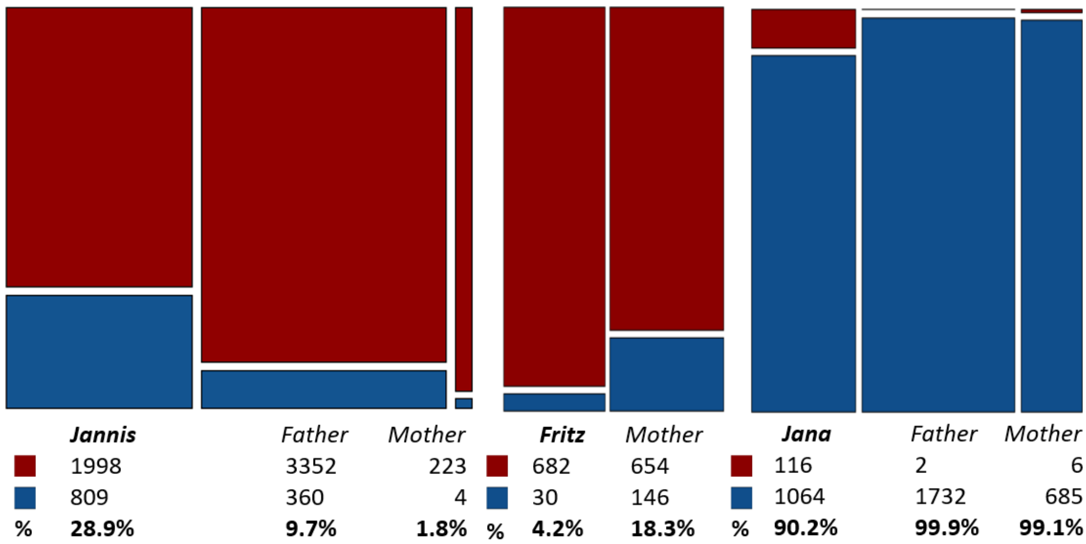

Figure 8: Comparison of all three families for fricative velarization.

In line with the previous results, it is clear that the standard German realization (in blue) is dominant for the family of Jana, in contrast to the families of Jannis and Fritz who produce the fricative more often with the Alemannic velarization (in red).

Whereas there seems to be a clear tendency to transgenerational language change in the family of Jannis with a significant difference of Jannis' proportional use of the Standard German palatal fricative compared to his parents (see Figure 1 and 2), this trend cannot be confirmed in the two other families (Figure 7).

Like for the other phonological variables, the mother of Fritz produces more variants in Standard German compared to the parents of Jannis (n=146/800, 18.3%). However, this pattern is not reproduced let alone exceeded by Fritz himself (only 30 out of 712 instances with palatal fricative, 4.2%). By contrast, Fritz produces significantly more dialectal variants with velarized fricatives ($\chi^2[1, n=1512]=72.2$, $p < .001$). Interestingly, this also holds true for Jana, whose parents use the velarized fricative in very few exceptions (<1%). Jana, however, produces ten times more dialectal variants than her parents (n=116/1180, 9.8%). This might be explained by developmental phenomena rather than proper dialect-standard variation, since fricatives are known to be tricky in language acquisition (cf. Kauschke 2012: 24, 36). This builds on the following observation of Katerbow (2013: 69, own translation): "Especially in the early stages of phonological acquisition, a high degree of individual variation in phonetic realizations is documented".

5 Discussion

This explorative study has shown that corpora of natural interactions between parents and their children (like *LEKI*, cf. Pfeiffer & Anna 2021) allow for interesting qualitative and quantitative observations on the intersection between language acquisition and language change (cf. Roberts & Labov, 1995; Katerbow, 2013; Smith & Holmes-Elliott, 2022). This was accomplished by comparing dialect-standard variation at a phonological level across different generations, three different families with distinctive sociolinguistic attitudes and behaviours, and different phonological variables. If in an area of general dialect decline (as it is the case for

Alemannic in southwestern Germany) the dialectal variant is still present or even dominant in the home environment, children might be drivers for language change by using more standard variants compared to their parents, they develop from *imitators to innovators* (Smith, 2025). For Jannis, this has shown to be the case for fricative velarization, monophthong [uː], word-final fricative deletion, and [s]-palatalization. Fritz produces a higher proportion of standard German variants (compared to his parents) only for [s]-palatalization. The dialectal monophthong [uː] has already become rare in this family (approx. in 5% of all instances), therefore there is few remaining potential in surpassing his parents in the proportion of standard German variants. Similar results hold true for Jana who does not show significant differences in terms of dialect-standard variation for [s]-palatalization compared to her parents. Conversely, it is remarkable that even few input of dialectal variants seems to be sufficient for the children to acquire and reproduce it (cf. Mattheier, 1980). The parents of Jana showed significant differences for [s]-palatalization in terms of the father producing more dialectal variants (in more diverse linguistic contexts). This is line with traditional sociolinguistic literature on dialect-standard variation and gender (cf. Labov, 1990). In this case, Jana was more close to her mother's linguistic behavior, even though between her parents' proportions of standard use. The increase of dialectal variants for fricative velarization in both Jana and Fritz has been attributed to more general acquisitional phenomena and difficulties especially in fricatives (cf. Kauschke, 2012; Katerbow, 2013). However, this could also be seen as a counterevidence that children contribute to language change and dialect decline. If this pattern would be stable even after age 4;0, their individual preferences could also contribute to dialect maintenance.

Beside the comparison across generations, the different families also showed interesting differences. While the dialect is dominant in the family of Jannis for all phonological variables, the family of Jana with the highest orientation toward standard German did use quite few (but still!) dialectal variants, particularly [s]-palatalization and fricative velarization. This register can be considered as *regional accent* (Kehrein, 2012). The family of Fritz is somewhere in between and could be classified as users of a *regional dialect* (ibid.). Although the family of Fritz is behaving similarly to the one of Jannis with respect to fricative velarization and particularly with respect to [s]-palatalization, they already show a slightly higher proportion of standard variants. However, for the monophthong variable, the standard German diphthong is dominant in this family. In this respect, they align with the family of Jana for [s]-palatalization. Comparing both families with orientation towards the dialect (i.e., the family of Fritz and the one of Jannis), it is noticeable that the family of Fritz emerges as a typical family for the Alemannic area in Germany with a more fluid, diaglossic repertoire (cf. Streck, 2019). In contrast, the family of Jannis can be considered closer to diglossia and hence the linguistic dynamics in Switzerland (cf. Christen, 2019), although they do switch into standard German during reading aloud sequences (cf. Kaiser, 2022: 46). This is underlined by the fact that the activity 'reading aloud' is responsible for almost all standard instances in Jannis' parents, whereas this is the case for only about 55% in the parents of Fritz.

Moreover, the comparison of different phonological variables provides insights in the implicit hierarchy with regard to their stability and maintenance within the respective dialect. Whereas monophthong [uː] instead of the standard German diphthong [aʊ̯] is already completely absent in the family with the strongest orientation toward standard German and very rare in the family of Jannis, [s]-palatalization[5] reaches the highest dialectal percentages in all families, although in the family of Jana standard German is still very dominant. This is in line with previous research on Alemannic in southwestern Germany (cf. Kehrein, 2012; Schwarz, 2015; Streck, 2012, 2019).

All in all, the overall tendency of dialect decline (cf. Auer, et al., 2017; Streck, 2019; Hansen, 2021; Auer, et al., 2023; Streckenbach, 2024) for Alemannic in the German federal state of Baden-Württemberg could be confirmed by the *LEKI* corpus data. In addition, this study highlighted the relevance of the community's youngest participants, namely young children in the process of language acquisition, for language change (see also Roberts & Labov, 1995; Smith & Holmes-Elliott, 2022; Smith, 2025).

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