# Periphrastic *tun* in Barossa German: Between Aspectuality and Temporality

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**Abstract**

*Barossa German in Australia is on the verge of language shift and exhibits many phenomena of language erosion, including the construction tun + infinitive. In addition to its use in conditional sentences, in the subjunctive, and for emphasis, a habitual or generally imperfective character is often discussed in light of the* tun-*periphrasis. A diachronic study of Barossa German based on spontaneous language use in narrative interviews shows that periphrastic* tun *was used in both present and past tense from 1966 to 1973, whereas it occurred almost exclusively in the past tense between 2009 and 2014. The first set of data is from the Monash Corpus of Australian German by Michael G. Clyne. The second set of data was provided by Claudia C. Riehl from her project on Barossa German as a relic variety. An analysis of the contexts in which the* tun-*periphrasis, the synthetic past tense, and the perfect were used, helps to clarify whether the* tun-*periphrasis had developed into a habitual past or a general past tense marker over the course of about 45-50 years, and how the* tun-*periphrasis fits into the developmental trajectory of diminishing varieties.*

**Keywords:** tun-*periphrasis, Barossa German, aspectuality, habitual past, tense-aspect*

## 1  Periphrastic *tun* in extraterritorial varieties of German

Periphrastic *tun* has been stigmatized in standard German since late Early New High German (cf. Langer 2001: 65-66) and has been associated with colloquial register or low social status. However, if we look at the numerous dialects and nonstandard varieties of German, we find that the *tun*-periphrasis (henceforth tP, in the singular and the plural) is ubiquitous in spoken language. The term is used here for all constructions of the form *tun* + (stressed) infinitive, regardless of what function the tP has in the respective context. The term "periphrasis" is thus not reserved for constructions that have already been grammaticalized. In different varieties, the tP is used differently, but the uses are usually not obligatory. Rather, the tP is a free variant that can take on different functions. Nevertheless, there is a tendency for semantic functions in the areas of temporality, aspectuality and modality (TAM) but also syntactic functions such as the occurrence in enumerations or with morphologically complex predicates were mentioned.[1]

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[1] The following is a selection of key sources (as a comprehensive list would go beyond the scope) for the inner German area: Eroms 1984 and 1998, Abraham/Fischer 1998, Schwarz 2004 (Upper German), Kölligan 2004 (West

For the inner German area, the tP has been intensively studied both synchronically and diachronically but an investigation of extraterritorial varieties is still largely a desideratum. It is occasionally mentioned, e. g. for Pennsylvania Dutch (cf. Tomas 2018, Costello 1992, Burridge 1992) Pomerano (cf. Postma 2014, Kaufmann 2011) and Zeeland-Flemish (cf. Schaffel Bremenkamp et al. 2017), but as a side note rather than in the focus. For varieties outside of the inner German area, the general lack of contact to the standard language, the partly missing alphabetization as well as language and cultural contacts and surrounding languages have to be considered. The history of origin of the respective variety must also be taken into account: Most extraterritorial varieties have emerged through processes of koinéization from different original varieties, since people with different dialects lived together in the destination country after emigration, so that a koiné developed over several (usually three) generations (cf. Trudgill 2004: 213-214). Due to the permanent influx, also of *New Australians* after the Second World War, in the German settlements in Australia this process of koinéization has not yet come to an end. Language policy and language maintenance also play a role in extraterritorial varieties. Those varieties are often on the verge of language shift due to a lack of transmission to successive generations and show typical phenomena of language erosion. The fact that analytical constructions often develop (faster) in contact scenarios, such as the *am*-progressive in Pennsylvania Dutch (cf. Tomas 2018) or the *gehen*-future in German in Namibia (cf. Sha 2007: 32-33) and South Africa (cf. Franke 2008: 331-333), is not new. The question is in which functions the tP is used in extraterritorial varieties, whether it occurs in other functions than in the inner German area, and whether language shift or the contact language has an influence on the use of the tP.

The fact that Barossa German is a relic variety, and that the tP has been reported to be used rather frequently (cf. Clyne 1981: 20-21, Riehl 2012: 46-47) makes a more detailed analysis of the tP in Barossa German a promising endeavor. Barossa German is or was spoken in the Barossa Valley, north of Adelaide, in South Australia. In the 2000s, however, the last generation of speakers was for the most part over 80 years old, which is why the variety is on the verge of language shift (cf. Riehl 2015: 264-266, 2016: 248). The majority of the first settlers came from Northern Silesia, Lusatia and the area around Poznan in the middle of the 19th century. Accordingly, two dominant dialect groups met: the Northern Silesian and the Lusatian dialect groups, both of which belong to the East Middle German Dialects. Low German dialects (e. g. Mecklenburgish) were used until the 1920s, too, but they had little influence on the dominant East Middle German dialects (cf. Paul 1965: 6-7). Since and partly due to the First World War,

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Middle German), Keseling 1968, Rohdenburg 1986, Weber 2017 (Low German); for extraterritorial varieties of German: Costello 1992, Burridge 1992, Tomas 2018 (Pennsylvania Dutch), Schaffel Bremenkamp et al. 2017 (Zealand Flemish in Brazil), Postma 2014 (Pomerano in Brazil); for Dutch: Cornips 1998; for English: Ellegård 1953, Traugott 1972, Ihalainen 1976, Denison 1985, Stein 1990, Klemola 1994 and 1998, Garrett 1998.

immigration was stopped because of an immigration ban, German was banned in schools and in churches (cf. Riehl 2018: 13). Barossa Germans came under assimilation pressure and the German language was avoided in public spaces. However, the Barossa Valley developed into Australia's most famous wine-growing region. Not least because of this, settlers from German-speaking areas began to arrive after World War Two (*New Australians*), first from various parts of northern Germany, and later from other parts of Germany and Austria. This immigration in the 1950s and 60s seems to have halted the loss of the German language (cf. Clyne 1981: 16). By the 1960s, however, dialectal diversity had dwindled and a regional variety had developed whose characteristics could also be found in the East Central German dialect area (cf. Paul 1965: 15).

Based on two corpora, which were compiled 45-50 years apart from each other, this paper investigates the diachronic development of the tP in Australian German with a focus on Barossa German. The diachronic approach examines the quantitative and qualitative development of the tP and gives rise to considerations of how declining linguistic vitality and impending language shift are related to the use of the tP. After the corpus and methodology section, the results of the short-term diachronic study will be presented, focusing on developments of the tP in the aspectual and temporal domain. Competing past tense[2] forms such as the preterite and the perfect and their functional niches compared to the preterite tP will be considered as well. Finally, the question to what extent language attrition, language shift and language contact had an influence on the tP in Barossa German will be discussed.

## 2   Corpus and Methodology

The earlier corpus of Australian German (hereafter referred to as AuG1) was created as part of a project at the Monash University in Melbourne under the direction of Michael George Clyne and is also known as the *Monash Corpus of Australian German*.[3] It includes 220 audio recordings with a total duration of over 64 hours from the years 1966-1973. The recordings are from South Australia and Victoria. They contain stories, interviews, and image descriptions by 333 elderly people whose families had lived in southern Australia for three generations. 168 (~ 32 hours) of these recordings were transcribed and thus used for analysis. This corpus includes 26 speakers from the Barossa Valley (South Australia), 32 from the Wimmera region (Victoria), and 21 from the Western District (Victoria). The speakers from the Barossa Valley

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[2] The term *past (tense)* is used here as an umbrella term for (several) grammatical forms referring to the past. The synthetic past tense is referred to as *(synthetic) preterite.*

[3] Available in the database for spoken German (*Datenbank für Gesprochenes Deutsch*, DGD) of the Institute for German Language Mannheim (https://dgd.ids-mannheim.de/dgd/pragdb.dgd_extern.welcome).

were separately.[4]

The second corpus (here referred to as AuG2) from the project *Barossa German as a Relic Variety* by Claudia Maria Riehl (Ludwig-Maximilian University Munich) is based on interviews recorded between 2009 and 2014. Since 14 of the 51 identified speakers had only a passive command of Barossa German, 37 speakers were considered. They were between 73 and 96 years old and had spent their entire lives in the Barossa Valley. Most of them had not learned standard German in school (though some had confirmation classes in German or had learned German at Saturday school or high school; cf. Riehl 2016: 249). The interviews lasted 90 minutes on average and included biographical information as well as questions about language use and attitudes. In addition to the interviews, there was a 15-20 minutes passage in English to exclude age-related erosion. However, all interviewees were able to communicate in English without any problems (cf. Riehl 2016: 250). Moreover, sentences, phrases and single words had to be translated from English into Barossa German (cf. Riehl 2016: 250).

From both corpora, all clauses with *tun* were extracted and divided into full verb, auxiliary verb (tP), and proverb (anaphoric use). The clauses that contained a tP were annotated according to morphosyntactic and semantic criteria and provided along with metadata on the speakers. The semantic categories included aspectuality, temporality (temporal reference point), and modality (factuality vs. counterfactuality). The results for the tP were compared to a random sample of 100 clauses without tP from both the Clyne corpus and the Riehl corpus in order to determine whether the results are tP-specific or reflect general language use (independent of the tP).

## 3 Short-term diachronic study on Barossa German

### 3.1 Frequency of the *tun*-periphrasis over time

The comparison of the first corpus AuG1 (1966-1973) with the second corpus AuG2 (2009-2014) should provide information on whether and how the use of the tP had developed. Especially the fact that the German variety in the Barossa Valley is probably extinct by now makes this investigation interesting, as it tries to capture the development of a variety over its last 50 years with regard to its synthetic and analytical structures.

Since the interview time varies between the two corpora, the number of tP was normalized for the purely quantitative comparison. AuG1 is based on an interview time of 49 hours and 48 minutes (303 tP therein). AuG2 is based on 38 hours of material (therein 812 tP). Both numbers of total tP were converted to 30 hours. This resulted in 183 tP for AuG1 and 654 tP for AuG2

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[4] Isolated checks in AuG1 have shown that there were hardly any differences between German spoken in the Barossa Valley (South Australia) and in Victoria. This may also be due to the fact that settlers from the Barossa Valley moved to Victoria (to the Western District and the Wimmera region) in the 1860s/70s (cf. Riehl 2018: 13).

in 30 hours interview time. The tP thus occurs more than 3.5 times as frequently in AuG2 as in AuG1 which constitutes an increase of almost 258%. (It would have been even more reliable, in retrospect, to normalize the numbers not on the basis of interview time, but on the basis of the number of finite verbs or verb phrases, in order to avoid distortions due to different speech rates and speech contributions on the side of the interviewer.)

## 3.2 Tense use with the *tun*-periphrasis over time

There were also differences in tense use concerning the tP between the two points in time: While in AuG1 the tP was used relatively equally in both present and past tense, in AuG2 the tP occurred predominantly in the past tense (in almost 83% of the cases). In a random comparison sample of 100 clauses each from the complete Clyne corpus and the complete Riehl corpus that did *not* contain a tP, 66.0% were in the present tense in AuG1 and 40.0% were in the present tense in AuG2. This sample of 100 randomly chosen sentences that did not contain a tP from each of the two corpora allows to determine whether a certain finding, e. g. the shift towards past tense, is tP-specific or just a reflection of general language use, independent of the tP. Despite the fact that the interview questions for AuG2 possibly evoked more past tense descriptions than the questions for AuG1, the present tense percentage of 17.1% in the tP in AuG2 is nevertheless less than half as low as the present tense percentage in the comparison sample in AuG2 (cf. table 1):

| corpus | AuG1 | | AuG2 | |
|---|---|---|---|---|
| *tun*-periphrases in total | 303 | 100.0% | 812 | 100.0% |
| present | 172 | 56.8% | 139 | 17.1% |
| preterite | 131 | 43.2% | 673 | 82.9% |
| comparison sample | 100 | 100.0% | 100 | 100.0% |
| present | 66 | 66.0% | 40 | 40.0% |
| preterite | 15 | 15.0% | 34 | 34.0% |
| perfect | 19 | 19.0% | 26 | 26.0% |

*Table 1: Tense use in the tun-periphrases and in the comparison samples*

As the following calculation shows, the present tense was used 13.9% more often in the comparison sample in AuG1 than in the clauses with tPs. In AuG2, however, the present tense was used 57.4% more frequently in the comparison sample than in the clauses with tP.

AuG1: 100.0% – (56.8% x 100.0%) / 66.0% = 13.9%

AuG2: 100.0% – (17.1% x 100.0%) / 40.0% = 57.4%

A chi-square test reveals that the differences between the present and non-present forms in AuG1 with tP and the random sample without tP are not significant. However, a chi-square test comparing the present and non-present forms in AuG2 with and without tP shows that these differences are significant.

|  | present | non-present | total |
|---|---|---|---|
| AuG1 (with tP) | 172   (178.94) [0.27] | 131   (124.06) [0.39] | 303 |
| AuG1 (without tP | 66     (59.06) [0.82] | 34     (40.94) [1.18] | 100 |
| total | 238 | 165 | 403 |

*Table 2: AuG1 with and without tP, present tense and non-present tense (chi-square test)*

AuG1 (present vs. non-present, with tP vs. without tP):

$x^2$ = (1, N = 403) = 2.65, p = .103 (significant, when p < .05) ($\neq$ significant)

|  | present | non-present | total |
|---|---|---|---|
| AuG2 (with tP) | 139   (159.37) [2.60] | 673   (652.63) [0.64] | 812 |
| AuG2 (without tP | 40     (19.63) [21.15] | 60     (80.37) [5.16] | 100 |
| total | 179 | 733 | 912 |

*Table 3: AuG2 with and without tP, present tense and non-present tense (chi-square test)*

AuG2 (present vs. non-present, with tP vs. without tP):

$x^2$ = (1, N = 912) = 29.55, p < .001 (significant, when p < .05) (= significant)

There are two referents for past tense, the preterite and the perfect. Since the tP is incompatible with the perfect, it would be problematic to compare the preterite with the preterite tP. Therefore, the present tense was used for the comparison of the tense use in the tP clauses with clauses that did not contain a tP. The comparison suggests that the apparent tense shift towards past tense was tP-specific and does not reflect a general shift to the past tense.

## 4   The *tun*-periphrasis as a tense marker?

### 4.1   Aspectual use of the *tun*-periphrasis over time

In contrast to the tense use that had changed with the tP in these investigated 45-50 years, the aspectual contexts had not changed. Table 4 demonstrates that imperfective contexts (the use of the tP co-occuring with imperfective aspectuality) dominated in AuG1 with 85.2% and in

AuG2 with 83.7%. The imperfective contexts were subdivided into habitual (HAB), stative (STAT), progressive (PROG) and generic (GEN).[5] The habitual contexts took the largest share with 63.7% in AuG1 and 62.6% in AuG2. However, the tense distinction in table 4 also shows that the tense differences already observed between AuG1 and AuG2 are also reflected within the imperfective contexts: In AuG2, the past tense predominated, while there were no major tense differences in AuG1.

| aspectuality | HAB | STAT | PROG | GEN | IPF in total | corpus |
|---|---|---|---|---|---|---|
| total | 63.7% | 13.9% | 3.0% | 4.6% | 85.2% | |
| preterite | 30.4% | 6.3% | 0.3% | 0.0% | 37.0% | AuG1 |
| present | 33.3% | 7.6% | 2.6% | 4.6% | 48.2% | |
| total | 62.6% | 12.8% | 6.2% | 2.2% | 83.7% | |
| preterite | 52.1% | 11.2% | 4.3% | 1.2% | 68.8% | AuG2 |
| present | 10.5% | 1.6% | 1.9% | 1.0% | 14.9% | |

*Table 4: Aspectuality and tense use in the tun-periphrases in AuG1 and AuG2*

The consideration of the comparison sample reveals differences in the aspectual uses of the tP compared to the randomly chosen clauses that did not contain a tP (see table 5). At least a less frequent use in habitual contexts and a more frequent use in static contexts can be observed.

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[5] Predominantly based on the works of Comrie 1976, Bertinetto/Lenci 2011, and Binnick 2001.

comparison samples

| | AuG1 | | | | | AuG2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| aspect | HAB | STAT | PROG | GEN | IPF | HAB | STAT | PROG | GEN | IPF |
| % | 27.0 | 42.0 | 2.0 | 7.0 | 78.0 | 15.0 | 37.0 | 0.0 | 1.0 | 53.0 |

*tun*-periphrases

| | AuG1 | | | | | AuG2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| aspect | HAB | STAT | PROG | GEN | IPF | HAB | STAT | PROG | GEN | IPF |
| % | 63.7 | 13.9 | 3.0 | 4.6 | 85.2 | 62.6 | 12.8 | 6.2 | 2.2 | 83.7 |

*Table 5: Aspectuality in the tun-periphrases and the comparison samples*

The fact that the aspectual uses with the tP had not changed over time, but that a shift in favor of the preterite tP was observed, raises the question whether the tP took on a temporal function over time. In order to investigate this question, we need to look at whether the synthetic preterite and the perfect, as competing forms of reference to the past, were still used in AuG2.

## 4.2    Distribution of the preterite *tun*-periphrasis, the synthetic preterite and the perfect

Preterite loss, as can be observed e. g. in Russian German dialects,[6] was not evident in Barossa German. These observations correlate with the areas of origin of the Russian and Barossa Germans: The Russian German speakers spoke predominantly Upper German and West Middle German dialects or mixed varieties. The Upper German area is regarded as a preterite loss area and the West Middle German area as a transitional area (cf. Fischer 2018: 36-75, 82). The first settlers in the Barossa Valley, however, came to a large extent from the East Middle German area. Here, an expansion of the perfect was and is observable, but the complete form inventories were often still documented for the preterite (cf. Fischer 2018: 5). Especially older descriptions from the 19th century and even still from the 20th century suggest that the preterite was vividly used in East Middle German dialects – in contrast to the Upper German dialects: "The imperfect

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[6] During the work in the DFG project *Irregular Morphology in Language Islands*, it was noticed that the Russian German speakers hardly used preterite forms, with the exception of auxiliary verbs, modal verbs, and a few weak verbs (cf. Baumgärtner 2018: 20). The perfect expansion that accompanies the decline of the preterite is a general phenomenon of German. However, it also affects other Germanic varieties (cf. Fischer 2018: 9). Within Germany, there is a north-south divide: While in the south, the preterite is hardly used at all, towards the north, the preterite forms increase continuously. The West Middle German area (Rhine-Franconian and East-Franconian region) is considered a transitional area (cf. Fischer 2018: 82).

is there, as everywhere in Meissen and Lusatian, in lively use and is strictly separated from the perfect"[7] (Palm 1936: 136). That the preterite was still used in Barossa German could be based on the fact that many settlers came from areas where the decline of the preterite had hardly progressed. In AuG2, in any case, the preterite and the perfect occurred *in addition to* the preterite tP. In the next step we want to see if there is a functional distribution of these three possibilities of past reference, since the preterite tP was not used as a substitute for the synthetic preterite that was still frequently used.

In contrast to some other (especially extraterritorial) varieties of German, in which the preterite decline is already well advanced, in the Barossa German of the 2000s the preterite was still actively used. In AuG2, there were 673 uses of the preterite tP. Synthetic preterite was used 2571 times; minus the forms of *sein* and the modal verbs (which are generally incompatible with the tP), 928 synthetic preterite forms remain. The perfect was used 1206 times and the past perfect was used 153 times. However, the past perfect was used almost exclusively as pre-past (as anterior to a reference point in time in the past), and thus did not compete with the perfect, the synthetic preterite and the preterite tP as reference forms for past time from a reference point in the present. Thus, the past perfect does not appear in the following table 6, which shows the distribution of the preterite tP, the perfect and the synthetic preterite.

| | preterite tP | perfect | synthetic preterite | | total |
|---|---|---|---|---|---|
| | | | (without *sein* and modals) | (with *sein* and modals) | |
| n | 673 | 1206 | 928 | 2571 | 2807 |
| % | 24.0 | 43.0 | 33.1 | --- | 100.0 |

*Table 6: Distribution of past tense reference forms in AuG2*

### 4.3 Hypothesis 1: Aspectual distinction as motivation for tense shift

Since the preterite and the perfect were also used, it cannot be stated that the tP had evolved into a preterite marker (however, it might have been on its way there[8]). Interestingly, the three options occupied different functional niches: In particular, the perfect was used mainly in perfective contexts (singular, completed actions from an external perspective) and almost

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[7] Direct quote translated from German. Original: "Das Imperfektum befindet sich dort, wie überall im Meißnischen und Lausitzischen, in lebendigem Gebrauch und wird vom Perfekt streng geschieden."

[8] Since speakers in AuG2 were the last 37 speakers of Barossa German who were already very old and did not pass on the variety to the following generations, it can be assumed that the variety no longer exists before a possible development into a past tense marker could have taken place.

exclusively with punctual, telic verbs (e. g. *sterben* 'die', *heiraten* 'marry', etc.). Perfective or resultative contexts (e. g. *Kabminye haben sie nun wieder Krondorf genannt* 'Kabminye was renamed Krondorf again') and imperfective contexts (e. g. *Zuhause haben wir immer Deutsch gesprochen* 'at home we always spoke German'). The perfect seems to have largely preserved its original perfective character. Table 7 shows the distribution of the perfect uses. The resultative and the completive are considered subcategories of the perfective uses (77.9%) and are, therefore, contrasted to the imperfective uses, which amounted to only 22.1%.

|   | prefect uses in total | resultative or experiential[9] | completed | perfective | imperfective |
|---|---|---|---|---|---|
| n | 1206 | 134 | 806 | 940 | 266 |
| % | 100.0 | 11.1 | 66.8 | 77.9 | 22.1 |

*Table 7: Aspectual uses of the perfect in AuG2*

Table 8 and figure 1 show the range of variation in the perfective usages in the individual transcripts. It shows that, for example, in 9 transcripts (25.7%), 90-100% of all perfect uses were in perfective contexts, while in only 2 transcripts (5.7%), only 50-60% of all perfect uses were perfective (there was no less frequent use than 50-60% perfective uses of all perfect form).

|   | 50-60% | 60-70% | 70-80% | 80-90% | 90-100% | transcripts |
|---|---|---|---|---|---|---|
| n | 2 | 7 | 8 | 9 | 9 | 35 |
| % | 5.7 | 20.0 | 22.9 | 25.7 | 25.7 | 100.0 |

*Table 8: Range of variation of perfective uses of the perfect in AuG2*

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[9] Experiential use of the perfect means that a past event or state has current relevance at the time of utterance. The event or state has taken place in the course of life up to the time of speech (cf. Comrie 1976: 58 f.).
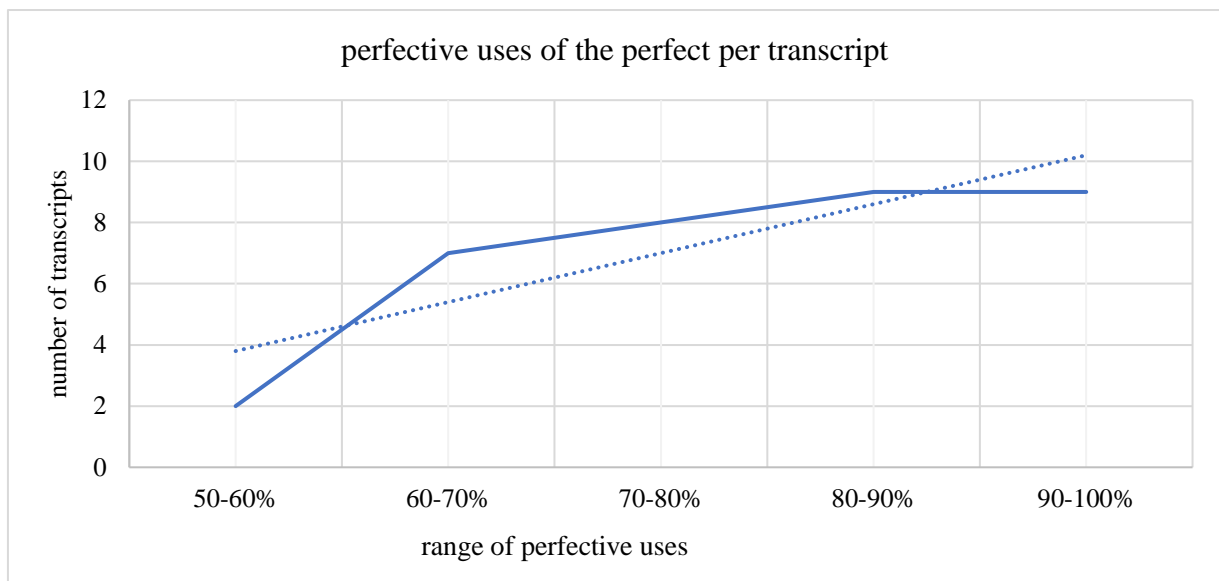
perfective uses of the perfect per transcript

*Figure 1: Range of variation of perfective uses of the perfect in AuG2*

Adding up the resultative (or experience-related) and the completive uses, we obtain 940 perfective uses of the perfect tense (~78% of all perfect uses). Between the speakers, this percentage varied between 55% and 100% in the respective transcripts but most speakers used the perfect perfectively in 80-100%.

Quite in contrast to the perfect, which was only occasionally used in imperfective contexts as well (which is possible by reanalysis and has also happened in the development of standard German[10]), the synthetic preterite as well as the preterite tP seem to show a tendency towards imperfective use. The synthetic preterite appeared mainly in contexts that were not perfective and/or were described with punctual verbs. Now the question arises how the use of the two ways of expressing imperfectivity in the past (synthetic preterite and preterite tP) is motivated. The following transcript excerpts illustrate how perfect, synthetic preterite, and the preterite tP were systematically used to express aspectual nuances. The preterite tP are marked in green, the synthetic preterite forms are marked in red, and the perfect forms are marked in blue.

> wenn man dem nächst Mal **wollt'** wieder **backen**, [you see] denn **tat** man die die alte Hefen **reingießen** auf die anderen, was sie hatten gemacht, [you know] mit die Kartoffeln und und äh, denn ham wir immer **musst'** wir biss'l Hef'n **reintun** und äh … und denn **taten** wir den wieder **nimm'** und in die Flasche rein für des nächste Backen. Ich **tat** auch Kuchen **backen**. Ich **hab'** vieles **gebacken**. Eigentlich Kuchen ... wir **haben** ma' [competition] **gehabt** in Greenock. Es **waren** ungefähr s-sweiundreißig Frauen und äh **hab** ich erscht' Preis

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[10] In the course of its grammaticalization, the perfect has expanded and spread functionally and semantically to new contexts. While the perfect initially had an aspectual character and was still restricted to the expression of resultative present in Middle High German, it has been increasingly used in a temporal sense from Middle High German onwards and has increasingly lost its aspectual character so that it can take on perfective as well as imperfective past meanings (cf. Fischer 2018: 264-265, 214-218, 241-243).

**gekriegt** für Kuchen und **hab** auch erscht' Preis **gekriegt** [for äh cream pubs]. (AuG2, GG 10, f., 90 years)

der Schw-äh-Schwiegervater, der **hat** a Schlag **gekriegt**, der **konnte** nicht die ... linke Seite **arbeiten**, da er und der **war** denn in Fahrstuhl [for] elf'nhalb Jahre. Und das **war** nich' a leichtes Leben […] und denn […] wenn wir **taten** irgendwo **hinfahren**, oh der Sch-Schwiegervater, der **wollt'** doch immer mit. (AuG2, GG 10, f., 90 years)

These excerpts are from the same speaker but depict what was evident in several informants (although not all). The tP in the past tense (green) was exclusively used in habitual contexts in the past. The perfect (blue) was used for completed, singular actions in the past (a single exception being the habitual *Ich hab' viel gebacken* 'I used to bake a lot'). The synthetic preterite (red) was used for static background information. In many instances, the synthetic preterite was used with modal verbs such as *wollen* 'will/want', *müssen* 'must', and *können* 'can' as well as the verb *sein* 'be', which per se have a static character. This strengthens the argument that the synthetic preterite occupied the niche of the *State Past*. Out of all 2571 synthetic preterite forms, 1643 ($\triangleq$ 63.9%) were modal verbs and forms of *be*. That is, almost two thirds of the synthetic preterite per se expressed states in the past. Among the remaining 928 full verbs, the proportion of static verbs – 28.0% (n=260) – was still more than twice as high as that of the preterite tP. This results in a total of 1903 synthetic preterite forms that expressed states, accounting for 74.0% of all 2571 synthetic preterites.

A distinction between the preterite tP and the synthetic preterite could thus be semantic-aspectually motivated, namely that a distinction was made between *State Past* and *Habitual Past*. There is also an overlap between aspectual uses and verbal characters (aktionsart): The synthetic preterite was predominantly used with static verbs (*State Past*) and the preterite tP predominantly with dynamic verbs (*Habitual Past*). In this context, it is necessary to refer to the distinction made by Quirk et al. (1985) between three semantic-aspectual past time reference forms, which can be well applied to the use of the discussed options in Barossa German, namely between *Event Past* (unique event in the past), *State Past* (state in the past), and *Habitual Past* (habit in the past) (cf. Quirk et al. 1985: 186-187):

| | | |
|---|---|---|
| Event Past: | The eruption of Vesuvius destroyed Pompeii. | (~ perfect) |
| State Past: | Archery was a popular sport for the Victorians | (~ preterite) |
| Habitual Past: | In ancient times, the Olympic Games were held at Olympia in Southern Greece. | (~ preterite tP)[11] |

This assignment is functionally-semantically oriented and a counterargument to the hypothesis that the tP in Barossa German was in the process of becoming a pure tense marker, since

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[11] A very similar use of the *do*-periphrasis (in this case not to be compared with the *do*-support) is also described by Klemola (1998) for the Southwest English dialect in Somerset.

aspectuality and verbal character (in this case static vs. dynamic verbs) also seem to play a role for the choice between perfect, synthetic preterite and preterite tP.

## 4.4 Hypothesis 2: Periphrastic *tun* in the preterite as an attrition phenomenon

However, since this phenomenon could also be caused by attrition, the use of the tP was also analyzed with different verb types. People who mainly spoke English in everyday life could no longer access irregular forms, e. g., ablaut, so quickly and, therefore, used the analytic construction with *tat(en)* for which only the past tense for the verb *tun* has to be remembered. In order to pursue the question if this was the case, we will investigate whether the tP was used more often with strong verbs than with weak verbs.

The analytic construction of the tP leads to using the full verb in the infinitive. This makes it possible to avoid ablaut forms in the preterite with strong verbs, which are stored individually in the lexicon and are more difficult to recall when the language is used infrequently. Assuming that the tP is an attritional phenomenon and that it was, hence, used increasingly frequently in the preterite, it would be expected that the tP was used predominantly with strong verbs. This is supported by the fact that partly English verbs were used, such as *watch, inject, try to cheer up*, because the German ones could possibly no longer be accessed. In addition, there were some morphological uncertainties, e. g. strong verbs were inflected analogically to weak verbs without ablaut (*erscheinten, laufte, wächsten*)[12] or an alternative ablaut was used (*gang, frug*). On closer examination, however, it is noticeable that these phenomena were relatively rare and occurred only with a small number of verbs. In total, there were four weakened verbs (*erscheinen* 'appear', *laufen* 'run', *wachsen* 'grow'); *gehen* 'go' used five times with both ablaut and with dental suffix (*gingte(n)*);[13] 14 times an alternative ablaut was used (*gang(en), darfte(n), wisste, sturb*);[14] and 13 times the past time reference was formed (deviating from the standard) with umlaut (*könnte(n), müsste(n), hätte(n)*)[15] or with missing rückumlaut (*kennte*). All these phenomena amounted only to a share of 0.5-1.7% of the 812 tP uttered in total.

In the preterite tP in AuG2, strong verbs (n=334, ≜ 49.6%) and weak verbs (n=333, ≜ 49.5%) were used almost equally often. In AuG1, the ratio for the preterite tP was 51.9% strong verbs (n=68) and 47.3% weak verbs (n=62). Thus, there was no tendency for the tP in AuG2 to be used more frequently with strong verbs than with weak verbs. It is also interesting to compare the share of strong and weak verbs in the synthetic preterite to the preterite tP. The evaluation

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[12] To be expected: *erschienen* ('appeared'), *lief* ('ran'), *wuchsen* ('grew').

[13] To be expected without the dental *-t-*, since ablaut already marks past tense.

[14] To be expected: *ging(en)* 'went', *durfte(n)* 'was/were allowed to', *wusste* 'knew', *starb* 'died'.

[15] To be expected: *konnte(n)* 'could', *musste(n)* 'had to', *hatte(n)* 'had'.

of synthetically formed preterites shows that, of the 928 synthetic preterites, 510 were used with strong verbs (≙ 55.0%), 377 were used with weak verbs (≙ 40.6%), and 41 verbs were preterite-present verbs (≙ 4.4%). Table 9 shows an overview of the use of strong and weak verbs as well as of irregular preterite-present verbs in the tP and the synthetic preterite in AuG2:

| | strong verbs | weak verbs | pret.-pres. verbs | total |
|---|---|---|---|---|
| preterite tP | | | | |
| number (n) | 334 | 333 | 6 | 673 |
| share (%) | 49.6 | 49.5 | 0.9 | 100.0 |
| preterite | | | | |
| number (n) | 510 | 377 | 41 | 928 |
| share (%) | 55.0 | 40.6 | 4.4 | 100.0 |

*Table 9: Strong and weak verbs in the preterite tP and in the past tense in AuG2*

Running the chi-square test with these data (strong verbs and preterite-present verbs taken together, since both have irregular forms), we find that the synthetic preterite occurred more frequently with irregular verbs and that the deviation is significant (cf. Stangroom 2021, chi-square test calculator):

| | strong/irregular verbs | weak/regular verbs | margin total |
|---|---|---|---|
| preterite tP | 340    (374.54) [3.19] | 333   (298.46) [4.00] | 673 |
| preterite | 551    (516.46) [2.31] | 377   (411.54) [2.90] | 928 |
| margin total | 892 | 710 | 1601 |

*Table 10: Strong and weak verbs in the preterite tP and in the past tense in AuG2 (chi-square test)*

$x^2 = (1, N = 1601) = 12.39$, p = .000431 (significant, when p < .05) (= significant)

In AuG1, the 131 instances of the preterite tP were distributed between 52.7% irregular verbs (n=69[16]) and 47.3% regular verbs (n=62) – very resemblant to the distribution in AuG2. The proportions of irregular and regular verbs in the preterite tP had not changed significantly over

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[16] 68 strong verbs and 1 preterite-present verb.

time, as shown by the following chi-square test (cf. Stangroom 2021, chi-square test calculator):

| | strong/irregular verbs | weak/regular verbs | margin total |
|---|---|---|---|
| AuG1 | 69 (66.64) [0.08] | 62 (64.36) [0.09] | 131 |
| AuG2 | 340 (342.36) [0.02] | 333 (330.64) [0.02] | 673 |
| margin total | 409 | 395 | 804 |

Table 11: Strong and weak verbs in the preterite tP in AuG1 and AuG2 (chi-square test)

$x^2 = (1, N = 804) = 0.2031, p = .652202$ (significant, when $p < .05$) ($\neq$ significant)

There had been no shift towards using more or fewer strong or weak verbs with the preterite tP in AuG2. The fact that there is no tendency for the tP to be used more frequently with strong or irregular verbs can be interpreted as an indication that the increasing preterite use in the tP in AuG2 is not solely due to attritional phenomena in the sense of a strategy to avoid ablaut. However, strong verbs are highly frequent,[17] so that it is possible that they can be retrieved more easily and more quickly than rarely used weak verbs. The shares of strong and weak verbs in the preterite tP in AuG1 and AuG2 suggest that the shift toward using the tP noticeably more frequently in the preterite in the later corpus cannot clearly be attributed to language attrition.

# 5 Discussion: Possible explanation for the development of the *tun*-periphrasis in a variety before language shift

The study showed that there were changes in the tense use with the tP between 1966-1973 and 2009-2014. Whereas in the earlier corpus the tP occurred in both the present and the past tense in a relatively balanced way, in the later corpus it was used almost exclusively in the past tense. It is likewise striking that a proportion of 83-86% of all tP in both corpora were used in imperfective contexts. Habitual uses accounted for the largest proportion, with more than 62-64%. There were no major changes between the two investigated time periods with regard to aspectuality. The imperfective semantics cannot be attributed to adverbials since they were only used in less than 30% of all imperfective contexts in both corpora. This means that a correlation between the use of the tP and the imperfective or habitual context is likely.

In addition to the shift towards using the tP more often in the past tense, an increase in frequency was noticeable: After normalization of interview time, it was found that the tP occurred more

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[17] According to an extrapolation by Augst (1975), there are over 4,000 basic verbs in German (excluding prefix and particle verbs), 169 of which are strong verbs. Although only 4.2% of all verbs are strong, of the 80 most frequently used verbs, 33 are strong (41.3%), 33 are weak, and 14 are irregular (cf. Augst 1975: 234-235).

than 3.5 times as frequently in AuG2 as in AuG1. This quantitative increase may be due to individual attrition, language contact, or language change. However, it is far from clear if changes in relic varieties are due to language attrition or due to language contact because language contact situations in which languages mutually influence each other entail restructuring processes. These restructuring processes are contrasted to language attrition, which is caused by a lack of language use. However, the phenomena of language contact and attrition often overlap (cf. Riehl 2014a: 91-96). Language contact influence and individual attrition are probably not the driving factors for the development of the tP, as argued below.

## 5.1 Language contact

The ambient language in the Barossa Valley is English. English *do* occurs both as an auxiliary and as a full verb. The tP in Australian German could be explained by language contact influence of English if it occurred predominantly in questions and negations, since these are the domains of the English *do*-support.[18] Questions and negations, however, accounted for only a small proportion of all tP in both corpora, in the low single-digit percentage range. Now, it could be objected that Australian English, because of its genesis, might be influenced by Irish English, in which there is a habitual use of *do* + infinitive that does not correspond to the *do*-support. However, this habitual *do*-periphrasis does not exist in Australian English. Only *used to* + infinitive is used for *Habitual Past* (cf. Burridge/Mulder 1998: 164). Fritz (2005) also does not mention a habitual *do*-periphrasis in his extensive description of Australian English. Thus, a loan construction from Australian English cannot be assumed due to the different contexts of use. This, together with the fact that tP is relatively common in other varieties which do not have English as a contact language,[19] makes a loan construction from English unlikely.

## 5.2 Language attrition

The tP could be declared as a feature of linguistic attrition if it were used as a means of structural simplification, e. g. with morphologically complex predicates[20] in order to avoid a separation

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[18] The NICE properties – i. e. the functions of the *do*-support in English – include negations and inversions (e. g. questions) as well as code (proverb) and emphasis (cf. Denison 1993: 255), but the latter are not suitable for comparison because *do* as code/proverb is not used with an infinitive, and in emphasis the *do* is stressed, but the tP in the strict sense denotes an unstressed *tun* with a stressed full verb.

[19] The tP is very frequent in Russian German dialects, although an equivalent in Russian is missing. Of course, factors such as an even stronger insular situation and preservation of dialect features could play a role in Russian German, making these two situations only partly comparable. The tP also occurs in German varieties in Brazil (cf. Postma 2014: 644-646), in Mexico, Paraguay, and Bolivia (Kaufmann 2011: 196, 211-212), although Portuguese and Spanish (the most frequent languages there) do not use a periphrasis with 'do'. The construction with the verb *estar* 'to be' + gerund is another construction than the *tun*-periphrasis.

[20] For instance, separable verbs such as *auf-räumen* 'clean up' and *weg-werfen* 'throw away', or light-verb constructions such as *eine Entscheidung treffen* 'make a decision', *Einfluss nehmen auf* 'influence', which contain a semantically bleached verb, a noun that expresses the verbal action, and most common also a preposition.

into several predicate parts and complex syntax associated with it. Alternatively, if the preterite tP were used to avoid ablaut, which can no longer be remembered due to lack of use, one could speak of linguistic attrition and thus explain the tP's tense shift to the preterite. However, neither is the case: Morphologically complex predicates accounted for only 12.2% of all tP in AuG1 and 14.7% of all tP in AuG2. The preterite tP was also not predominantly used with strong verbs to avoid ablaut. Thus, the fact that the tP was predominantly used in the preterite in the later corpus cannot be explained by the morphology of the verb. It is more likely that the tP owes its functionality to natural language change (which indirectly includes language attrition).

As in many other extraterritorial varieties, the Barossa Valley is/was facing language shift, where the dominant, official language, English, gained the upper hand and the German minority variety was no longer passed on to subsequent generations. Language shift affects the whole speech community and leads to a gradual or abrupt shift to another language (cf. Clyne 2003: 20). This leads to the regional loss of the variety, which is still spoken in a different or standardized form in other parts of the world. However, language attrition and language shift, i. e. the loss of a language on an individual and on a societal level, are closely related:

> Languages are lost through a combination of attrition within a generation and change between generations. The best input that subsequent generations get is already a "worn-out" version of the language as presented by the older generation. This can lead to this "impoverished version" no longer being sufficient as a medium of communication with the third generation. (Riehl 2014b: 94)

This phenomenon is sometimes called "incomplete acquisition" (although this term is not uncontested), which Riehl (2012: 46) has already claimed for Barossa German. If an individual maintains only little contact with a language and does not use a language regularly, a change in the language performance sets in. Depending on the theoretical orientation, it is assumed that the language becomes inactive or no longer retrievable (Threshold Hypothesis), that the language regresses to an ontogenetically earlier stage (Regression Hypothesis), or that the language changes along with communicative principles (abrasion of language demands more expressive forms; loss of common conventions through lack of use demands the use of unambiguous, transparent linguistic units, etc.) (pragmatic vs. syntactic mode).[21]

According to the Regression Hypothesis, a language that is not actively used regresses, with the elements of the language system degrading in reverse order of language acquisition: The linguistic skills that are acquired last in the acquisition process are degraded first. Hence, the tP would be a form used by children before they acquire complex verbal inflection. It has indeed

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[21] For the Threshold Theory, see Paradis 2004; the Regression Theory is based on Jakobson 1941/1969; the dependence of linguistic strategies on communicative principles is strongly linked to the evolution of syntax and was introduced by Givón 1979.

been mentioned many times that the tP occurs frequently in children's language.[22] Children's speech is not only more consistent, but also shows more general phonological and morphological patterns (cf. Eroms 1998: 141). Consequently, the tP could represent a more general form compared to an inflected verb. From the standard German point of view, the tP is perceived as marked, but this perception is due to the stigmatization of the tP in standard German. The fact that analytic structures are more natural or transparent[23] cannot be dismissed if one considers that grammatical elements (and this includes inflectional endings) have only developed from lexical elements through grammaticalization, and that in language acquisition children usually first acquire the unmarked or more transparent variants (cf. Fliedl 1999: 51).

## 5.3   Pragmatic mode

In a situation in which the speakers cannot rely on common linguistic conventions and a shared linguistic knowledge (in multilingual settings, in pidgin situations, during language acquisition, and also in the advanced stage of language shift), lexical items are more important to convey the message than grammatical items. Hence, clarity is more crucial than phonetic economy in this communicative stage. This could be one reason why more salient forms (like periphrases) are used. First, they contain free morphemes instead of bound morphemes and often still have a lexical meaning; second, they allow more time for coding and encoding since the full verb occurs later; third, they allow a better control of topicalization (greater focus on theme-rheme structure than on grammatical structure). The transfer of a message takes more time but is more transparent. In vital languages, this usually changes with altering conditions (with increasing language competence during language acquisition, in foreign-language learning, in creole situations, etc.): The more competent speakers in a community are, the more the economic principle comes to the fore and the message is to be conveyed quickly and effectively. Givón (1979: 207-233) distinguishes between the *pragmatic mode* (in early language acquisition and pidgin situations) and the *syntactic mode* (in adult language and creole situations, or, occurring during conventionalization). The conditions he mentions as requiring the *pragmatic mode* are communicative stress, lack of background world or common linguistic knowledge, and immediate obvious context. All of these conditions are true for minority varieties close to language shift:

- communicative stress:
  Speakers must communicate in a language they cannot always access easily.

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[22] For instance, by Nesensohn 2012, Eroms 1998: 141, Schwarz 2004: 115 (for German); Tieken-Boon van Ostade 1990: 22 (for Dutch); Rissanen 1991: 335 (for English) and others.

[23] 'Transparent', here, means 'salient', with still recognizable lexical meaning (not in a morphosemantic way as uniform and monofunctional unit). Phonetically longer linguistic units as well as free and lexical morphemes can be considered more transparent and more salient.

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- lack of background world knowledge or common linguistic knowledge:
  Due to incomplete acquisition, there are no common conventions, yet there is a wide range of inter- and intraindividual variation in the language.
- immediate obvious context:
  Since most speakers have acquired the language only orally, they use it only in immediate face-to-face situations and for obvious topics; planning and structuring as in written language is impossible (and was not learned either).

This suggests that the tP is part of the *pragmatic mode* that is also part of children's language and of pidgins. The observed frequency increase of the tP by almost 258% is considerable and points toward the fact that the tP could be an ontogenetic earlier linguistic form that occurs in natural languages without standard influence. Standardization, vice versa, can be regarded as an "unnatural" process that inhibits natural language use and change. It could be argued that different conditions and stages of a language require different communicative strategies. As Mufwene (1989, 1991) noted throughout his early papers, the analytic strategies used in pidgins could be explained by the fact that varieties under communicative stress and with no common language, choose marked (less frequent but more salient) options in the lexifier language. In the pidgin itself, however, these options are unmarked because they fulfill the communicative needs in this situation and are, therefore, more frequent and become the default.[24]

## 6 Conclusion

This paper showed the results of a study that investigated the use of the tP in Barossa German in Australia at two different time periods: between 1966-1973 and between 2009-2014. Throughout this time span, the proportion of imperfective uses (83-86%), especially habitual uses (62-64%), remained high. In the comparative samples without tP, the imperfective and habitual uses were significantly lower so that it can be assumed that the tP was preferred to be used in habitual contexts. However, there were changes in the temporal use of the tP: While it was used rather balanced in the present and the preterite in the first corpus, there was a clear preference for the tP to be used in the preterite in the second corpus.

Furthermore, the tP was used 3.5 times as frequently in the second time span than in the first one. This quantitative increase may be due to individual attrition, language contact, or language change. There are restructuring processes during language contact situations in which languages mutually influence each other so that it is not clear for certain changes in relic varieties whether

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[24] The traditional Markedness Theory does not take account of language change and extralinguistic conditions. My view here is that different strategies come to the fore depending on the communicative and extralinguistic situation. It is not possible to make a blanket statement about what is (un)marked, but it rather depends on the circumstances of the speech community and the prevailing strategies (morphological transparency or phonetic economy).

they are due to language attrition or due to language contact. The discussion section demonstrated arguments that both contact language influence and individual attrition were probably not the driving factors for the quantitative and qualitative developments of the tP in Barossa German. It is rather likely that certain situations in a linguistic community involving communicative stress (due to attrition and retrieval problems), lack of common linguistic and/or world knowledge and immediate oral contexts make certain linguistic features, including the tP, more likely (following the theory of the *pragmatic mode* by Givón 1979). Since those features can also be found in children's language, in pidgins and creoles, and in colloquial speech, it would fall short to speak of attrition or contact language influence only (although both indisputably play a crucial role in the development of relic varieties as well).

Especially for linguistic minorities with low standard influence and a lack of literacy in the variety, it can be assumed that language changes are natural developments which are inhibited in the standard language due to standardization (and alphabetization, with written language playing a major role in our norm and structural awareness) and the associated negative evaluation of deviations. The fact that the last generations of speakers show a great deal of variation due to incomplete acquisition is thus not only a consequence of lack of use, but also of lack of standard influence. The arguments mentioned above against contact influence of the English language and against individual attrition as the sole factor for the increase in frequency and the tense shift of the tP strengthen the assumption that in the last decades before the language shift – influenced by a lack of use and a lack of norm consciousness on the side of the speakers – the tP as a more salient variant has prevailed and has developed a functional niche. In Barossa German of the 2000s, the tP was used by many speakers for *Habitual Past* and had thus functionally distinguished itself from the synthetic preterite for (predominant) *State Past* and the perfect for (predominant) *Event Past*. Thus, there may be functional developments of tP on the tense-aspectuality continuum even in the last stages before language change.

# References

Abraham, Werner/ Fischer Annette. 1998. Das grammatische Optimalisierungsszenario von *tun* als Hilfsverb. In: Donhauser, Karin/ Eichinger, Ludwig (eds.), *Deutsche Grammatik*, 35-47. Heidelberg: Winter.

Augst, Gerhard (1975): *Untersuchungen zum Morpheminventar der deutschen Gegenwartssprache*. Tübingen: Narr.

Baumgärtner, Edgar. 2018. *Sprachtod = Spracherwerb rückwärts? Zu (grammatischen) Entwicklungstendenzen in der deutschen Sprachinsel in der Altai-Region – eine korpuslinguistische Untersuchung*. M. A. Thesis, Europa University Viadrina, Frankfurt (Oder).

Burridge, Kate/ Mulder, Jean. 1998. *English in Australia and New Zealand. An Introduction to Its History, Structure, and Use*. Melbourne: Oxford University Press.

Burridge, Kate. 1992. Creating Grammar Examples from Pennsylvania German, Ontario. In: Burridge, Kate/ Enninger, Werner (eds.), *Diachronic Studies on the Languages of the Anabaptists*, 199-241. Bochum: Brockmeyer.

Clyne, Michael G. 2003. *Dynamics of Language Contact.* Cambridge: Cambridge University Press.

Clyne, Michael G. 1981. *Deutsch als Muttersprache in Australien. Zur Ökologie einer Einwanderersprache.* Wiesbaden: Steiner.

Comrie, Bernard. 1976. *Aspect. An Introduction to the Study of Verbal Aspect and Related Problems.* Cambridge: Cambridge University Press.

Cornips, Leonie. 1998. Habitual *doen* in Heerlen Dutch. In: Tieken-Boon van Ostade, Ingrid/ van der Wal, Marijke/ van Leuvensteijn, Arjan (eds.), *Do in English, Dutch and German. History and Present-Day Variation*, 83-102. Münster: Nodus.

Costello, John R. 1992. The Periphrastic *Duh* Construction in Anabaptist and Nonsectarian Pennsylvania German: Synchronic and Diachronic Perspectives. In: Burridge, Kate/ Enninger, Werner (eds.), *Diachronic Studies on the Languages of the Anabaptists*, 242-263. Bochum: Brockmeyer.

Denison, David. 1993. *English Historical Syntax.* London: Longman.

Ellegård, Alvar. 1953. *The Auxiliary Do: The Establishment and Regulation of its Use in English.* Stockholm: Almqvist & Wiksell.

Eroms, Hans-Werner. 1998. Periphrastic *tun* in present-day Bavarian and other German dialects. In: Tieken-Boon van Ostade, Ingrid/ van der Wal, Marijke/ van Leuvensteijn, Arjan (eds.), *Do in English, Dutch and German. History and Present-Day Variation*, 139-158. Münster: Nodus.

Eroms, Hans-Werner. 1984. Indikativische periphrastische Formen mit *doa* im Bairischen als Beispiel für latente und virulente syntaktische Regeln. In: Wiesinger, Peter (ed.), *Beiträge zur bairischen und ostfränkischen Dialektologie*, 123-135. Göppingen: Kümmerle.

Fischer, Hanna. 2018. *Präteritumschwund im Deutschen. Dokumentation und Erklärung eines Verdrängungsprozesses.* Berlin: De Gruyter.

Fliedl, Günther. 1999. *Natürlichkeitstheoretische Morphosyntax. Aspekte der Theorie und Implementierung.* Tübingen: Narr.

Franke, Katharina. 2008. *'We Call it Springbok-German!': Language Contact in the German Communities in South Africa.* PhD Dissertation, Monash University Melbourne.

Fritz, Clemens W. A. 2005. *From English in Australia to Australian English. 1788-1900.* Frankfurt (Main): Lang.

Garrett, Andrew. 1998. On the origin of auxiliary *do. English Language & Linguistics* 2(2). 283-230.

Givón, Talmy. 1979. *On Understanding Grammar.* New York: Academic Press.

Ihalainen, Ossi. 1976. Periphrastic *DO* in Affirmative Sentences in the Dialect of East Somerset. *Neuphilologische Mitteilungen* 77(4). 608-622.

Jakobson, Roman. 1968. *Child Language, Aphasia and Phonological Universals*. Paris: Mouton.

Kaufmann, Göz. 2011. Looking for order in chaos: Standard convergence and divergence in Mennonite Low German. In: Putnam, Mike (ed.), *Studies on German-Language Islands*, 187-230. Amsterdam/ Philadelphia: Benjamins.

Keseling, Gisbert. 1968. Periphrastische Verbformen im Niederdeutschen. *Niederdeutsches Jahrbuch* 91. 139-151.

Kölligan, Daniel. 2004. Zur präteritalen *tun*-Periphrase im Ripuarischen. In: Patocka, Franz/ Wiesinger, Peter (eds.), *Morphologie und Syntax deutscher Dialekte und Historische Dialektologie des Deutschen*, 429-452. Vienna: Praesens.

Klemola, Juhani. 1998. Semantics of *do* in southwestern dialects of English English. In: Tieken-Boon van Ostade, Ingrid/ van der Wal, Marijke/ van Leuvensteijn, Arjan (eds.), *Do in English, Dutch and German. History and Present-Day Variation*, 25-52. Münster: Nodus.

Klemola, Juhani. 1994. Periphrastic *DO* in South-Western dialects of British English. A reassessment. *Dialectologia et Geolinguistica* 2. 33-51.

Langer, Nils. 2001. *Linguistic Purism in Action: How Auxiliary Tun was Stigmatized in Early New High German.* Berlin: De Gruyter.

Mufwene, Salikoko. 1991. Pidgins, Creoles, Typology, and Markedness. In: Byrne, Francis/ Huebner, Thomas (eds.), *Development and Structures of Creole Languages*, 123-143. Amsterdam/Philadelphia: Benjamins.

Mufwene, Salikoko. 1989. Some explanations that strike me as incomplete. Column. *Journal of Pidgin and Creole Languages* 4(1). 117-128.

Nesensohn, Eva-Maria. 2012. *Die tun-Periphrase in der Kindersprache*. Diploma Thesis, University of Vienna.

Palm, Ernst. 1936. Alte Imperfekte in einer meissnisch-oberlausitzer Übergangsmundart. *Zeitschrift für Mundartenforschung* 12. 135-141.

Paradis, Michael. 2004. *A Neurolinguistic Theory of Bilingualism* (= Studies in Bilingualism 18). Amsterdam/Philadelphia: Benjamins.

Paul, Peter. 1965. *Das Barossadeutsche. Ursprung, Kennzeichen und Zugehörigkeit. Untersuchungen in einer deutschen Sprachinsel.* M. A. Thesis, University of Adelaide.

Postma, Gertjan. 2014. Complex complementizers and the structural relation with weak T. New (morpho)syntactic data from a Pomeranian language island in Brazil. *STUF - Language Typology and Universals* 67(4). 627-663.

Quirk, Randolph/ Greenbaum, Sidney/ Leech, Geoffrey/ Svartvik, Jan. 1985. *A Comprehensive Grammar of the English Language.* London: Longman.

Riehl, Claudia M. 2018. Australien. In: Riehl, Claudia M./ Plewnia, Albrecht (eds.), *Handbuch der deutschen Sprachminderheiten in Übersee*, 9-32. Tübingen: Narr.

Riehl, Claudia M. 2016. Reliktvarietät, Herkunftssprache, Minderheitensprache und neue Mehrsprachigkeit: Das Barossa-Deutsche als Beispiel für die Dynamik der deutschen Sprache in Übersee. In: Lenz, Alexandra (ed.), *German Abroad. Perspektiven der Variationslinguistik, Sprachkontakt- und Mehrsprachigkeitsforschung*, 241-267. Vienna: V&R.

Riehl, Claudia M. 2015. Language attrition, language contact and the concept of a relic variety: the case of Barossa German. *International Journal of the Sociology of Language* 236. 261-293.

Riehl, Claudia M. 2014a. *Sprachkontaktforschung. Eine Einführung*. 1st ed. Tübingen: Narr.

Riehl, Claudia M. 2014b. *Mehrsprachigkeit. Eine Einführung*. Darmstadt: WBG.

Riehl, Claudia M. 2012. Deutsch als Reliktvarietät: Der Fall des Barossa-Deutschen (Australien). In: Knipf-Komlósi, Elisabeth/ Riehl, Claudia M. (eds.), *Kontaktvarietäten des Deutschen synchron und diachron,* 37-49. Wien: Praesens.

Rissanen, Matti. 1991. Spoken language and history of the *do* periphrasis. In: Kastovsky, Dieter (ed.), *Historical English Syntax*, 321-342. Berlin: De Gruyter.

Rohdenburg, Günter. 1986. Phonologisch und morphologisch bedingte Variation in der Verbalsyntax des Niederdeutschen. *Niederdeutsches Jahrbuch* 109. 86-117.

Schaffel Brememkamp, Elizana/ Rys, Kathy/ Nevins, Andrew/ Postma, Gertjan. 2017. Zeeuws-Flemish in Brazil: multilingualism and language decay. *Gragoatá* 22(42). 435-472.

Schwarz, Christian. 2004. *Die tun-Periphrase im Deutschen.* M. A. Thesis, Ludwig-Maximilians University Munich.

Shah, Sheena. 2007. German in a contact situation: The case of Namibian German. *eDUSA* 2(2). 20-45.

Stangroom, Jeremy. 2021. Chi-Square Test Calculator. Social Science Statistics. https://www.socscistatistics.com/tests/chisquare2/default2.aspx [accessed 2021-12-01].

Stein, Dieter. 1990. *Do* and *tun.* A semantics and varieties based approach to syntactic change. In: Gerritsen, Marinel/ Stein, Dieter (eds.), *Internal and External Factors in Syntactic Change*, 131-155. Berlin/ New York: De Gruyter.

Tieken-Boon van Ostade, Ingrid.1990. The Origin and Development of Periphrastic Auxiliary *DO*: A Case of Destigmatization. *Nowele* 16(3). 3-52.

Tomas, Adam. 2018. *Der am-Progressiv im Pennsylvaniadeutschen. Grammatikalisierung einer normfernen Varietät*. Tübingen: Narr.

Traugott, Elizabeth. 1982. *A History of English Syntax.* New York: Holt, Rinehart and Winston.

Trudgill, Peter J. 2004. *New-Dialect Formation: The Inevitability of New Englishes*. Edinburgh: Edinburgh University Press.

Weber, Thilo. 2017. *Die TUN-Periphrase im Niederdeutschen. Formale und funktionale Aspekte.* Tübingen: Stauffenburg.