

A Corpus-based Analysis of Preterite Usage in Texas German

HANS C. BOAS and SARAH SCHUCHARD
University of Texas at Austin

0. Introduction

We present a preliminary corpus-based analysis of the usage of preterite in Texas German (TxG) to determine whether it is indicative of the dialect's imminent death.¹ Our study contributes new data to Dorian's (1977:24) proposal that the reduced use of a language also leads to a reduced form of that language. Specifically, we address the following questions: (1) What is the distribution of past tense forms (preterite and present perfect) in present-day TxG? (2) What does the distribution tell us about the current status of preterite in TxG? (3) What possible explanations are there for this distribution? The paper is structured as follows: Section one presents previous research on the distribution of preterite and present perfect forms in TxG. Section two introduces our methodology, while section three offers an analysis of the data. Section four presents our conclusions as well as suggestions for further research.

1. Previous Analyses of Preterite Loss in Texas German

Texas German is an endangered dialect with a rapidly shrinking number of speakers. While at the beginning of the twentieth century there were an estimated 140,000 speakers of TxG, this number dropped to approximately 60,000 by the 1960s (Gilbert 1965, Salmons 1983, Guion 1996, Boas 2005a), and today only an estimated 8-10,000 TxG speakers remain (Boas 2003, 2005b). One of the many interesting features of the dialect is the distribution of present perfect and preterite forms, which are both used to locate an event at a point in time that precedes the speech event. Compare, for example, *Ich bin gelaufen* ('I ran') and *Ich lief* ('I ran'), which are both used in TxG to express past tense. Eikel (1954, 1967) discusses data on past tense marking in New Braunfels German. Based on an analysis of data from three generations of speakers, Eikel finds that only half of the speakers belonging to the oldest generation use present perfect forms more often

¹ An earlier version of this paper was presented at the 36th Annual Meeting of the Linguistic Association of the Southwest and the 34th Annual Meeting of the Berkeley Linguistic Society. We thank Marc Pierce for his comments on this paper.

than the preterite. In contrast, nearly sixty percent of the second generation and one hundred percent of the third generation use present perfect forms instead of preterite forms. Similarly, Gilbert (1972) documents declining preterite usage combined with increased usage of present perfect forms in the speech of his fifteen New Braunfels area speakers.

Boas (2008) investigates preterite and present perfect marking in New Braunfels German by analyzing data from the Texas German Dialect Project (TGDP, see [http://www.tgdp.org]). A significant amount of data collected by the project since 2001 is based on the questionnaires used by Gilbert (1972) to elicit the same translations from English into TxG that were elicited by Gilbert some four decades ago (see Boas 2006, Boas and Weibacher 2007 for details). Comparing the TGDP data from 52 New Braunfels area speakers with Gilbert's data, Boas (2008) finds that there are no clear trends in the use of preterite forms. For example, Table 1 compares the elicited Texas German translations of *He came yesterday* as recorded by Gilbert (1972) with those recorded by the TGDP since 2001. The comparison shows that while the majority of Gilbert's speakers (67%) preferred the perfect form over the preterite (20%), the distribution is quite different among present-day TxG speakers (40% perfect vs. 58% preterite).

Table 1. *Er kam gestern* ('He came yesterday') (Gilbert 1972, map 97)

<i>Er ist gestern gekommen</i> (perfect)	<i>Er kam gestern</i> (preterite)	Both perfect and preterite	<i>Er ist gekommen</i> (preterite)	none
Gilbert 10 (67%)	3 (20%)	2 (13%)	0	0
TGDP 19 (40%)	28 (58%)	0	1 (2%)	4

Interestingly, Boas (2008) does not find this same pattern of preterite gain across the board. While preterite marking on the verbs *kommen* ('to come') and *sein* ('to be') has gained significant ground vis-à-vis the perfect, as Tables 1 and 3 demonstrate, it decreased on the verb *gehen* ('to go'), as Table 2 illustrates.

Table 2. *Wir gingen nach Hause* ('We went home') (Gilbert 1972, map 98)

<i>wir sind ... gegangen</i>	<i>wir gingen ...</i>	other	none
Gilbert 11 (79%)	3 (21%)	1	0
TGDP 34 (91%)	3 (9%)	9	6

Table 3. *Ihr wart beide gestern hier* ('You were both here yesterday') (Gilbert 1972, map 99)

<i>ihr wart ...</i>	<i>ihr wart ... gewesen</i>	none
Gilbert 15 (100%)	0	0
TGDP 45 (94%)	3 (6%)	4

This observation leads Boas (2008) to conclude that Gilbert's translation tasks are perhaps not the most optimal way to determine the distribution of preterite versus perfect forms in TxG. Instead, he calls for an analysis of many more verbs in the transcripts of the open-ended TGDP interviews to determine whether there are any systematic patterns underlying the types of developments seen in this data. In the following section we present such an analysis in order to determine whether preterite loss in TxG has occurred across the board or not.

2. Use of Preterite vs. Present Perfect Forms in Open-ended Interviews

2.1 Methodology

To arrive at a more complete analysis of the distribution of preterite and present perfect forms, we first determined the ten most frequently occurring lexical verbs (as opposed to modal and auxiliary verbs). TxG and Standard German are almost entirely mutually intelligible (see Wilson 1977, Boas 2008). Thus, we accessed the Leipzig/BYU Corpus of Contemporary German to search for the ten most frequently occurring lexical verbs per million words in Contemporary Standard German. These verbs are (in descending order of frequency): *sagen* ('to say'), *machen* ('to do, 'to make'), *geben* ('to give'), *kommen* ('to come'), *gehen* ('to go'), *wissen* ('to know'), *sehen* ('to see'), *lassen* ('to leave'), *stehen* ('to stand'), and *finden* ('to find') (see Jones and Tschimmer 2006).

We then searched the text transcripts of open-ended sociolinguistic interviews with 62 TxG speakers. The advantage of analyzing this type of data – as opposed to the translation data discussed in the previous section – is that semi-natural speech represents a speaker's use of language more accurately (Boas 2006). We accessed the transcripts of the open-ended interviews from the online Texas German Dialect Archive, which contains more than 300,000 words. We used the concordancer interface ([http://gdp.org/staff/concordancer.php]) to search for specific preterite and present perfect forms. For both forms we documented the total number of times the search strings occurred as well as the total number of times each speaker used the forms.

2.2 Distribution of Preterite and Present Perfect Forms

The frequency ranking in Tables 4–6 below follows the ranking in the Leipzig/BYU corpus. Table 4 presents the distribution of preterite and present perfect forms among the three most frequently occurring lexical verbs in the transcripts of the open-ended sociolinguistic interviews. *Sagen* ('to say') is the most frequently occurring verb, followed by *machen* ('to make') and *geben* ('to give'). The columns listing the frequency of preterite and present perfect forms indicate the number of the speaker using a form, followed by how often the speaker uses that form. For example, speaker two uses the preterite form of *sagen* twice and the present perfect form eleven times during the open-ended interviews. In contrast, speaker one uses the present perfect seven times, but does not use the preterite form at all. A summary totaling the number of forms used with each verb is presented at the bottom of each row in Table 4. Comparing the first three verbs we

see that present perfect marking outnumbers preterite marking by an overwhelming ratio. Note that the frequency listing of verbs is based on the distribution in the Leipzig/BYU corpus.

Table 4. Use of Preterite and Present Perfect forms – Part 1

Frequency	Verb	Preterite	Present Perfect
1	<i>sagen</i>	#2 (2), #25 (1), #55 (1), #59 (2), #64 (2), #80 (1), #86 (1), #96 (1), #118 (1), #134 (2)	#1 (7), #2 (11), #3 (2), #7 (6), #8 (3), #21 (5), #24 (5), #25 (6), #27 (1), #28 (18), #29 (11), #30 (5), #32 (48), #33 (10), #34 (8), #35 (6), #36 (5), #37 (9), #38 (12), #39 (10), #42 (1), #43 (4), #45 (2), #51 (6), #54 (6), #55 (12), #56 (10), #57 (9), #58 (1), #59 (44), #60 (11), #61 (4), #62 (11), #63 (4), #64 (2), #76 (6), #77 (2), #79 (2), #80 (19), #82 (5), #83 (2), #84 (6), #85 (9), #86 (4), #90 (1), #91 (15), #92 (2), #94 (7), #96 (2), #97 (2), #98 (8), #115 (4), #118 (17), #129 (3)
2	<i>machen</i>	(14 total) #64 (1), #79 (2)	(441 total) #1 (4), #2 (15), #7 (7), #8 (6), #21 (10), #24 (12), #25 (6), #27 (18), #28 (15), #29 (20), #30 (2), #32 (35), #33 (3), #34 (8), #35 (6), #36 (3), #37 (2), #38 (8), #39 (1), #40 (10), #42 (5), #45 (22), #51 (9), #54 (3), #55 (9), #56 (5), #57 (9), #58 (3), #59 (14), #60 (22), #61 (12), #62 (8), #63 (2), #64 (6), #71 (8), #76 (13), #77 (7), #79 (3), #80 (8), #82 (9), #83 (2), #84 (7), #85 (5), #90 (3), #91 (3), #92 (3), #94 (5), #96 (5), #97 (3), #98 (4), #114 (2), #115 (1), #118 (2), #129 (1), #134 (2), #135 (2)
3	<i>gehen</i>	(3 total) #1 (1), #7 (1), #8 (1), #21 (2), #25 (2), #30 (1), #33 (1), #35 (1), #38 (1), #45 (3), #71 (1), #82 (1)	(419 total) #1 (4), #2 (3), #3 (1), #7 (3), #8 (2), #24 (3), #25 (2), #27 (1), #28 (1), #29 (4), #32 (16), #33 (1), #34 (1), #35 (1), #36 (1), #37 (1), #38 (1), #39 (1), #42 (1), #45 (1), #51 (2), #54 (1), #55 (3), #57 (1), #60 (1), #61 (1), #62 (3), #64 (1), #71 (1), #80 (1), #85 (1), #90 (1), #91 (3), #94 (2), #96 (2), #97 (1), #98 (2), #115 (1), #118 (2), #129 (2), #134 (1)

sent perfect marking than preterite marking, *kommen* ('to come') and *wissen* ('to know') show the opposite pattern, with 781 occurrences of preterite marking among 55 speakers and 75 occurrences among 27 speakers, respectively.

Table 5. Distribution of Preterite and Present Perfect forms – Part 2

Frequency	Verb	Preterite	Present Perfect
4	<i>kommen</i>	#1 (16), #2 (30), #3 (8), #7 (13), #8 (19), #21 (5), #24 (40), #25 (20), #27 (20), #28 (53), #29 (29), #30 (29), #32 (31), #33 (4), #34 (19), #35 (1), #36 (12), #38 (11), #39 (17), #40 (6), #42 (15), #43 (7), #45 (4), #51 (34), #54 (6), #55 (20), #56 (14), #57 (19), #58 (17), #59 (14), #60 (15), #61 (13), #62 (40), #63 (2), #64 (11), #71 (21), #76 (14), #77 (1), #79 (10), #80 (14), #82 (3), #83 (5), #84 (9), #85 (7), #86 (2), #90 (4), #91 (4), #92 (6), #94 (16), #97 (5), #115 (10), #118 (12), #129 (16), #135 (3), #158 (5)	#1 (1), #2 (1), #7 (9), #21 (1), #24 (6), #28 (2), #29 (2), #32 (9), #33 (7), #34 (2), #36 (6), #37 (3), #45 (2), #51 (8), #54 (1), #56 (1), #57 (5), #58 (3), #59 (7), #61 (2), #62 (8), #63 (4), #64 (5), #78 (1), #79 (2), #80 (4), #82 (2), #83 (2), #85 (4), #90 (3), #94 (3), #96 (9), #115 (3), #118 (6), #129 (2), #134 (6), #135 (2), #158 (4)
5	<i>gehen</i>	(781 total) #1 (3), #2 (5), #3 (3), #8 (3), #24 (3), #25 (4), #27 (11), #28 (8), #29 (2), #30 (1), #32 (7), #33 (1), #35 (5), #37 (1), #38 (1), #39 (2), #40 (1), #42 (2), #43 (1), #45 (5), #51 (5), #55 (1), #56 (1), #57 (1), #58 (1), #59 (1), #60 (1), #63 (3), #76 (4), #77 (1), #84 (3), #90 (1), #91 (1), #96 (1), #97 (3), #118 (5), #134 (8), #135 (3)	(148 total) #1 (1), #2 (9), #3 (1), #7 (7), #8 (3), #21 (1), #24 (10), #25 (5), #27 (9), #28 (13), #29 (11), #30 (3), #32 (17), #33 (3), #34 (5), #35 (1), #37 (14), #38 (1), #39 (3), #40 (13), #42 (5), #43 (4), #45 (4), #51 (8), #54 (6), #55 (10), #56 (10), #57 (3), #58 (7), #59 (18), #60 (8), #61 (4), #62 (38), #63 (6), #64 (3), #71 (1), #78 (5), #79 (1), #80 (3), #82 (4), #83 (15), #85 (4), #86 (6), #90 (8), #91 (1), #92 (6), #94 (2), #97 (5), #98 (2), #114 (1), #115 (5), #118 (2), #129 (4), #134 (6)
6	<i>wissen</i>	(113 total) #1 (1), #2 (8), #7 (7), #25 (3), #28 (5), #32 (3), #34 (7), #36 (1), #37 (2), #39 (2), #40 (1), #51 (2), #55 (3), #58 (3), #59 (3), #61 (1), #62 (2), #64 (2), #79 (1), #83 (2), #84 (2), #90 (1), #96 (3), #118 (6), #129 (2), #134 (1), #158 (1)	(348 total) #1 (1), #36 (1), #37 (1), #38 (1), #80 (1), #86 (1), #118 (4), #158 (1)

Next, consider the distribution of preterite and present perfect forms among the next three most frequently occurring lexical verbs (*again*, frequency here refers to that found in the Leipzig/BYU Corpus). While *gehen* ('to go') exhibits more pre-

Finally, compare the distribution of preterite and present perfect forms of *sehen* ('to see'), *lassen* ('let'), *stehen* ('stand'), and *finden* ('to find') in Table 6.

Table 6. Distribution of Preterite and Present Perfect forms – Part 3

Fre-quency	Verb	Preterite	Present Perfect
7	<i>sehen</i>	#1 (2), #3 (1), #7 (1), #24 (1), #25 (1), #27 (1), #28 (5), #29 (5), #39 (1), #54 (1), #59 (1), #62 (1), #71 (1), #94 (2), #98 (1)	#7 (3), #21 (4), #24 (9), #28 (1), #30 (1), #32 (5), #37 (1), #38 (1), #39 (3), #40 (1), #45 (2), #51 (3), #54 (3), #55 (1), #56 (2), #59 (2), #60 (3), #61 (2), #62 (2), #62 (3), #64 (1), #78 (1), #79 (1), #80 (1), #82 (1), #83 (2), #84 (1), #85 (1), #91 (1), #92 (2), #94 (1), #96 (1), #97 (1), #98 (2), #118 (4), #134 (2), #135 (1)
8	<i>lassen</i>	(25 total)	(76 total) #1 (1), #2 (2), #24 (1), #28 (1), #36 (1), #51 (2), #56 (1), #57 (2), #58 (1), #59 (1), #62 (1), #64 (1), #96 (1)
9	<i>stehen</i>	#96 (1), #134 (1)	(16 total) #2 (5), #28 (2), #32 (1), #42 (1), #51 (3), #54 (1), #57 (3), #59 (1), #62 (6), #82 (2), #94 (2)
10	<i>finden</i>	(2 total)	(27 total) #1 (2), #2 (2), #8 (2), #24 (3), #25 (4), #27 (3), #28 (1), #30 (3), #32 (2), #33 (2), #34 (1), #39 (1), #40 (1), #42 (1), #51 (1), #55 (2), #57 (6), #59 (11), #60 (4), #61 (2), #62 (2), #63 (2), #64 (1), #90 (2), #91 (1), #94 (5), #96 (1), #118 (3), #134 (2)

All four verbs in Table 6 exhibit a clear preference for present perfect marking. In summary, present perfect marking consistently outnumbers preterite marking in eight of the ten verbs. Although the data in Tables 4-6 show a clear preference for present perfect it is not clear why verbs such as *kommen* ('to come') and *wissen* ('to know') clearly prefer preterite marking. In addition *gehen* ('to walk') exhibits substantial preterite marking vis-à-vis present perfect marking, as shown in Table 5. Thus, while our analysis of the open-ended interviews demonstrates a clear preference for present perfect marking over preterite marking, we are still left with the question – already raised by Boas (2008) – of why certain verbs prefer preterite marking while others do not. There are a number of possible explanations, to which we now turn.

3. Towards a Multi-factorial Explanation of the Data

The first factor influencing the distribution of present perfect and preterite forms may be found in the methodology underlying the open-ended sociolinguistic interviews. Interviewers follow an eight-page long questionnaire covering diverse topics such as genealogy, religion, farming and ranching, local history, weather, and cooking. In interview questions, *kommen* ('to come'), for example, is used almost exclusively in its preterite form to elicit information about where people came from (e.g. *Woher kamen Ihre Vorfahren?* ('Where did your ancestors come from?')). Similarly, *wissen* ('to know') and *gehen* ('to go') are predominantly used with the preterite in open-ended questions eliciting information from TxG speakers. Compare, for example, *Wohin gingen Sie nach der Kirche?* vs. *Wohin sind Sie nach der Kirche gegangen?* ('Where did you go to after church?') and *Wussten Sie damals woher das Essen kam?* vs. *Haben Sie damals gewusst woher das Essen kam?* ('Did you know then from where the food came?'). In contrast, questions involving *sagen* ('to say'), *machen* ('to make'), and *geben* ('to give') are typically asked using the present perfect instead of the preterite form. The use of preterite in interview questions may thus encourage speakers to use it more frequently in their answers than the present perfect (see Wray and Perkins (2000) on the use of formulaic language).

The second factor influencing the diverse distribution of preterite and present tense forms may be found in the different German donor dialects that formed the basis of TxG beginning in the 1840s. The loss of preterite forms is well attested in German dialects in Europe. For example, Rowley (1983) analyzes preterite loss in Upper, Middle, and Low German dialects based on data from the *Deutscher Sprachatlas*. He proposes that the loss of preterite is a well-documented historical process that originated in the dialects of Southern Germany, slowly spreading northwards. The traditional explanation for this development is that the apocope of final unstressed *-e* in preterite forms such as *er betete* ('he prayed') led to the loss of preterite (a widespread European areal phenomenon (McWhorter 2005)). Newer research suggests that the loss of the preterite is triggered by the rise of auxiliary *tun* ('to do') constructions stemming from oral processing needs (Abraham and Conradie (2001)). Hessian – one of the donor dialects of TxG – exhibits preterite loss as well as auxiliary *tun* constructions (Durrell and Davies 1989), which would partially explain the development in TxG. Thus, the influence of Hessian on the dialect mixture in Texas may have provided the initial basis for preterite loss in TxG. Even if the various Hessian dialects did not directly contribute to providing preferential preterite forms to TxG beginning in the 1840s, similar developments in European German dialects would suggest internal factors as one of the contributing factors to preterite loss in TxG. The loss of preterite in other German *Sprachinseln* ('language islands') further supports an explanation of the TxG data in terms of internal factors (see, e.g., Nützel 1998, Rosenberg 2005).

The third factor leading to fewer preterite forms in TxG may be the reduced usage of the dialect in both public and private domains. Across the board, TxG usage has consistently declined since the 1920s (Salmons 1983, Guion 1996). In two recent studies, Boas (2005b, 2008) analyzes data on the language use of 52 TxG speakers from the New Braunfels area, finding that the dialect is spoken less and less in church, at local shops, among neighbors, with siblings, and with parents. Figures 1 and 2 summarize Boas' (2005b) findings on the reported use of TxG over a period of about seven decades at church and at local shops, respectively.

Figure 1. Reported use of TxG at church 1930-2005 (Boas 2005b)

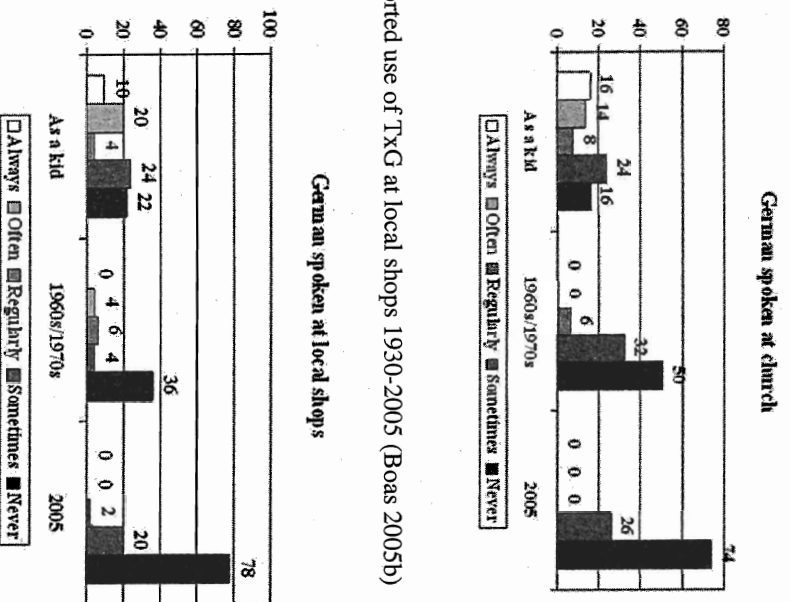


Figure 2. Reported use of TxG at local shops 1930-2005 (Boas 2005b)

relatively often at church in the 1930s (16%: always; 14%: often; 8%: regularly), these numbers declined drastically in the 1960s/1970s until the beginning of the 21st century, when only 26% of speakers reported using TxG sometimes. The remaining speakers reported never using TxG at church any more. Similar developments can be observed in other public as well as private domains. The declining usage of TxG across the board suggests that the traditional social networks have become weaker over time, leading to a slow disintegration of the TxG speech community. This course of events would lend support to Dorian's (1977) argument about the importance of using a language on a regular basis to maintain its full inventory of forms. In other words, not using TxG with the same frequency at present as before may have been partially responsible for distinct forms, in this case the preterite, being used less frequently. As with the previous two factors discussed above, further research is required to substantiate this proposal.

The fourth factor likely to contribute to the reduction in preterite forms may be the demographic backgrounds of individual informants. Comparing the data in Tables 4-6 we see that certain speakers use preterite forms with comparatively high regularity vis-à-vis present perfect forms. For example, speakers 96 and 134 exhibit preterite marking only with *sagen*, *gehen*, *wissen*, and *sehen* but not any other verbs analyzed above. While this may be coincidental, it could also suggest particular preferences among certain speakers to use preterite forms only with certain verbs. This, in turn, would raise the question of which factors influence such choices. Previous research by Rybarski (2006) on stability of morpho-syntactic forms in TxG suggests that gender plays a significant role in case maintenance. Rybarski shows that women consistently use fewer dative forms than men, leading him to suggest that case syncretism (or lack thereof) is at least partially determined by gender. Further research will have to determine whether demographic factors such as gender, age, education, religion, etc. have any influence on the preferred use of preterite forms over present perfect forms.

4. Conclusions and Outlook

We presented a preliminary corpus-based investigation of preterite use in present-day TxG by analyzing transcripts of open-ended interviews conducted by the Texas German Dialect Project with 62 speakers between 2001 and 2007. A comparison of preterite and present perfect forms of the ten most frequently occurring verbs (according to the Leipzig/BYU Corpus) has shown that while preterite marking is preferred for three verbs the seven other verbs show a clear preference for present perfect marking.

In finding an explanation we proposed four different factors that appear likely to have influenced this distribution: (1) Methodology underlying the collection of sociolinguistic interview data, by which preterite forms were predominantly used with some verbs, but not others; (2) Internal factors, by which TxG evolved in parallel to some of its European donor dialects which also exhibit loss of preterite marking; (3) Reduced usage of TxG in public and private domains, by which reduced usage leads to certain forms falling out of usage over time (Dorian 1977);

Figures 1 and 2 illustrate the use of TxG among 52 speakers in the New Braunfels area between the 1930s and 2005. The data show that while TxG was still used

(4) Linguistic behavior of individual speakers, by which certain features such as gender or age may influence choice of forms.

Space constraints prevent us from investigating each of the four factors in greater detail in this paper. However, future research needs to carefully consider each of them in order to arrive at a satisfactory explanation for the reduced use of preterite in present-day TxG. Such an analysis is likely to involve multiple factors parallel to developments found in other German-American dialects (see Rosenberg 2005). As such, we expect the outcome of such research to contribute to Thomason's (2003:705) findings regarding multiple causation scenarios in contact-induced language change:

It seems that this debate rests on a false dichotomy. The underlying assumption appears to be that a given change must have one and only one source, either borrowing from the dominant language or simplification resulting from forgetting or never properly learning one's ethnic-group language. (...) multiple causation is well known, though relatively rarely discussed, in historical linguistics (e.g. internal analogic changes), and in general a change is more likely to occur if independent forces are pushing in the same direction.

References

- Abraham, Werner, and C. Jac Conradie. 2001. *Präteritumschwund und Diskursgrammatik*. Amsterdam: John Benjamins.
- Boas, Hans C. 2003. Tracing Dialect Death: The Texas German Dialect Project. In J. Larson and M. Paster, eds., *Proceedings of the 28th Annual Meeting of the Berkeley Linguistics Society*, 387-398. Berkeley, CA: University of California Press.
- Boas, Hans C. 2005a. Texas German Dialect. In T. Adam, ed., *Germany and the Americas*, 1029-1035. Santa Barbara: ABC-CLIO.
- Boas, Hans C. 2005b. A Dialect in Search of its Place: The Use of Texas German in the Public Domain. In C. Cravens and D. Zersen, eds., *Transcontinental Encounters: Central Europe Meets the American Heartland*, 78-102. Austin: Concordia University Press.
- Boas, Hans C. 2006. From the Field to the Web: Implementing Best-Practice Recommendations in Documentary Linguistics. *Language Resources and Evaluation* 40(2):153-174.
- Boas, Hans C. 2008. *The Life and Death of Texas German*. Durham: Duke University Press. [forthcoming]
- Boas, Hans C., and Hunter Wellbacher. 2007. How Universal is the Pragmatic Detachability Scale? Evidence from Texas German Discourse Markers. In F. Hoyt, N. Seifert, A. Teodorescu, and J. White, eds., *Proceedings of the Texas Linguistic Society IX Conference*, 33-58. Stanford: CSLI Publications.
- Dorian, Nancy. 1977. The problem of the semi-speaker in language death. *International Journal of the Sociology of Language* 12: 23-32.
- Durrell, Martin, and W. Davies. 1989. Hessian. In C. Russ, ed., *The Dialects of Modern German: A Linguistic Survey*, 210-240. London: Routledge.
- Eikel, Fred. 1954. The New Braunfels German Dialect. Thesis, Johns Hopkins University.
- Eikel, Fred. 1967. New Braunfels German: Part III. *American Speech: A Quarterly of Linguistic Usage* 42(2):83-104.
- Gilbert, Glenn. 1965. English Loanwords in the German of Fredericksburg, Texas. *American Speech* 40: 102-112.
- Gilbert, Glenn. 1972. *Linguistic Atlas of Texas German*. Austin, TX: University of Texas Press.
- Günz, Susan. 1996. The death of Texas German in Gillespie County. In S. Ureland and I. Clarkson, eds., *Language Contact across the North Atlantic: Proceedings of the Working Group held at University College, Galway, August 29-September 3, 1992 and the University of Göteborg, August 16-21, 1993*, 443-463. Tübingen: Niemeyer.
- Jones, Randall L., and Erwin Tschimmer. 2006. *Frequency Dictionary of German: Core Vocabulary for Learners*. New York: Routledge.
- McWhorter, John H. 2005. Rev. of Präteritumschwund und Diskursgrammatik, by Werner Abraham and C. Jac Conradie. *Studies in Language* 29(3):734-738.
- Nützel, Daniel C. 1998. Language Death and Morphological Decay: The Case of Haysville East Franconian. PhD. diss., Purdue University.
- Rosenberg, Peter. 2005. Dialect Convergence in the German Language Islands. In P. Auer, F. Hinskens and P. Kerwill, eds., *Dialect Change: Convergence and Divergence in European Languages*. Cambridge, England: Cambridge University Press.
- Rowley, Anthony. 1983. Das Präteritum in den heutigen deutschen Dialekten. *Zeitschrift für Dialektologie und Linguistik* 50(2):161-192.
- Rybarski, James. 2006. *On the Distribution of Cases in Present-Day Texas German*. Senior honors thesis, University of Texas, Austin.
- Salmons, Joseph C. 1983. Issues in Texas German Language Maintenance and Shift. *Monatshefte* 75: 187-196.
- Thomason, Sarah. 2003. Contact as a Source of Language Change. In B. Joseph and R. Janda, eds., *The Handbook of Historical Linguistics*, 687-712. Oxford: Blackwell.
- Wilson, Joseph. 1977. The German Language in Central Texas Today. *Rice University Studies* 63.3: 47-58.
- Wray, Alison, and Michael R. Perkins. 2000. The Functions of Formulaic Language: An Integrated Model. *Language and Communication* 20(1):1-28.