Classifying Language Contact Phenomena:
English Verbs in Texas German

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While the transfer of English nouns into Texas German has received substantial scholarly attention, there currently exist no detailed studies on the transfer of English verbs into Texas German in particular and German-American dialects in general. This paper therefore discusses English verbs that are code-switched and loan-translated into Texas German from both a synchronic and diachronic perspective, using data collected by the Texas German Dialect Project since 2001. The analysis serves two purposes. The first is to provide an overview of English verbs used by Texas German speakers: how these verbs are integrated into German structures, and whether they have become established in the Texas German lexicon. The second goal is to show how analyzing verbal transfers in contact situations underscores the dynamic, interactive nature of language contact and structure. This part of the analysis is motivated by Backus & Dorleijn's (2009) discussion of loan translation, which emphasizes that existing classifications of language contact phenomena must be rethought, as many instances of transference are not clearly captured by existing categories. Thus, this study goes beyond a lexical analysis of English verbs in Texas German by discussing how lexical transfer interacts with morphology, semantics, and syntax.[*]

Keywords: Texas German, language contact, code-switching, loan translation, borrowing, construction grammar

1. Introduction.

Although numerous studies address developments in Texas German (TxG) due to contact with English, they focus primarily on phonological features (Boas et al. 2004; Boas 2009, chapter 4; Pierce et al. 2015),

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grammatical changes (Boas 2009, chapter 5; Boas et al. 2014), or lexical transfers involving nouns or modal particles (Gilbert 1965, Wilson 1977, Boas & Weilbacher 2009, Boas 2010, Boas & Pierce 2011, Weilbacher 2011). There currently exist no substantial studies on the transfer of English verbs into TxG.[1] This study thus provides the first major overview of English verbs in TxG and serves as a springboard for future research on transferred verbs in TxG and other contact varieties of German. Furthermore, the investigation of transferred verbs underscores the interaction of various types of transfer (for example, loan translation versus code-switching) and the traditional linguistic modules (for example, morphology, syntax, semantics), suggesting that existing classifications of language contact phenomena must be rethought (Backus 2009, Backus & Dorleijn 2009). As opposed to the transfer of nouns, which can simply be inserted into German sentence structures, incorporating foreign verbs into German requires substantial formal integration involving, among other factors, verbal inflection, case assignment, and collocations with objects and prepositions.[2] The study of English-origin verbs in TxG is thus not limited to a lexical analysis, but also sheds light on the fuzzy borders between existing categories of (contact) linguistics.

The main dataset for the analysis in this paper consists of 186 sentences, which include code-switched or loan-translated verbs in open-ended interviews with 15 TxG speakers. The data were accessed through

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[1] In this paper, the term *transfer(ence)* (see Clyne 2003) is used to refer to any type of English influence on TxG (lexical, semantic, structural) regardless of how diachronically established it is. Following Backus & Dorleijn 2009 (see section 3), *code-switch(ing)* is used to refer to English words occurring in TxG discourse, and *borrow(ing)* to refer to code-switches that have become established as part of the TxG lexicon. When *transfer, code-switch*, *loan translation*, and *borrowing* are used as count nouns (as in *three code-switches*), they refer to actual instances of these phenomena. In contrast, verbal (*to code-switch*), gerundial (*code-switching*), or adjectival (*code-switched*) uses of these terms refer to the respective processes more generally.

[2] Of course, integrating nouns into German structures requires speakers to assign gender and plural forms to the nouns. Nonetheless, the influence of transferred nouns on German structures generally does not go beyond the scope of a single noun phrase. For more information on English nouns in TxG, see Gilbert 1965, Boas 2009, and Boas & Pierce 2011.

the dialect archive of the Texas German Dialect Project (TGDP, Boas 2009, Boas et al. 2010, http://www.tgdp.org) and categorized according to Backus & Dorleijn's (2009) taxonomy of language contact phenomena. The analysis focuses on Backus & Dorleijn's three synchronic categories of transfer of words (code-switching), transfer of meanings (loan translation), and transfer of structures (structural interference); it also briefly addresses the two diachronic categories of word transfer (lexical borrowing) and meaning transfer (lexical change).

In section 2, I introduce TxG and the TGDP and discuss previous research on code-switching in TxG. I focus on the few studies that address the code-switching that involves English verbs. Section 3 presents more recent research on language contact that guides the analysis of English verbs in TxG, focusing on Backus & Dorleijn's (2009) classification of language contact phenomena. After describing the methodology of the analysis at the beginning of section 4, I first address code-switching (section 4.1): I discuss the semantic domains and morphological integration of English-origin verbs in present-day TxG. In section 4.2, I assess whether any English-origin verbs have undergone lexical borrowing, that is, whether they have become established as part of the TxG lexicon. I then compare the findings of the code-switching and lexical borrowing analyses with those of previous studies of English transfer in TxG. In sections 4.3, 4.4, and 4.6, I address loan translations, loan translation/code-switching hybrids, and structural interference, respectively, focusing on the complications involved in classifying such phenomena. Section 4.5 investigates lexical changes whereby German-origin verb meanings change due to prolonged and conventionalized loan translation. Section 5 summarizes the findings and discusses implications for future research. Section 6 provides a brief conclusion.

2. Previous Accounts of English Lexical Influence on TxG.
TxG is a mixed German contact variety spoken in and around Central Texas since the mid-19th century (Boas 2009).[3] Because the language is expected to die out within the next 20 to 30 years, the TGDP was

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[3] While the original German settlers in Texas spoke various dialects, primarily from the West Central region of present-day Germany, Boas (2009) argues that the dialects began to converge in the early years of settlement but did not coalesce to a stable dialect.

founded at the University of Texas at Austin in 2001 in order to document the language before it is entirely lost. Researchers affiliated with the project have interviewed over 550 fifth- and sixth-generation speakers, and the TGDP dialect archive contains publicly available recordings of TxG speakers, including both elicited translations from English into TxG and open-ended ethnographic interviews.[4]

The typical speaker of TxG is (often well) over 60 years old and uses English as their dominant language, as full-scale transition to English was well underway by 1950. Many speakers thus exhibit at least some level of attrition, as they have not spoken German consistently in several decades. To minimize the effects of language attrition, the 15 speakers selected for analysis produced a significant amount of fluent TxG speech in open-ended interviews about several different topics, indicating that they were still quite competent in TxG. The TGDP interviews consisted of a translation task (that is, translating English words, phrases, and sentences into TxG), open-ended ethnographic interviews, and a bio-graphical questionnaire (in English) to gather sociolinguistic speaker data. The open-ended interviews provide the data for this study, as this is the most natural speech setting, and it includes the highest number of English transferred verbs of the three interview portions.

Although TxG and modern Standard German (StG) are largely mutually intelligible, TxG has many more words transferred from English. Most scholarly knowledge about the influence of English on the TxG lexicon comes from studies published from the 1960s to the early 1980s, including Gilbert 1965, Jordan 1977, Wilson 1977, and Salmons 1983, with only one study (Boas & Pierce 2011) systematically investigating English lexical items in TxG in the 21st century among the youngest, and likely final generation of TxG speakers. I briefly review the general findings of these studies before focusing on findings specifically related to the code-switching and borrowing of verbs.[5]

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[4] The online archive currently contains a corpus of about 310,000 words of transcribed open-ended sociolinguistic interviews with more than 70 Texas German speakers. The untranscribed open-ended interviews as well as the elicited translation tasks based on resampled interviews using the data from Eikel 1954 and Gilbert 1972 are available only as untranscribed sound files.

[5] See Boas & Pierce 2011 for a detailed summary of previous literature on code-switching and borrowing in TxG.

Already a half-century ago, Gilbert (1965:110) estimated that English words accounted for approximately 5% of the TxG lexicon. More recent work suggests that this figure may be much higher in present-day TxG (Salmons 1983, Boas 2003).[6] Most English-origin items come from a limited set of semantic domains, such as agriculture, technology, transportation, education, administration, and other similar domains. Those lexical items reveal cultural differences between the Old and New World, and they may refer to concepts that did not exist in the cultures or geographies of the original settlers. The most frequently cited parts of speech that are transferred are nouns (including compound nouns or hybrid German-English compounds), discourse markers, multi-word expressions, and conjunctions.

One motivation for the present analysis is the following observation by Boas (2003:392):

> One of the most interesting current developments in Texas German includes the borrowing of verbs. Whereas previous studies […] report on the borrowing of nouns, discourse markers, and conjunctions (among others), there exists to my knowledge no previous description of verbs being borrowed into Texas German.

The lack of research on transferred English verbs in TxG is likely due to their relative infrequency compared with English nouns. While no study has yet systematically compared the frequency of transferred verbs to that of nouns in TxG, research on other languages in contact with English suggests a discrepancy. Specifically, Haugen's (1950:224) classic study of Norwegian-English contact shows that verbs comprise only around 20% of transfers, while nouns comprise around 75%. Similarly, Pfaff's (1979) corpus of Spanish-English transfers includes 818 nouns and only 71 verbs. The infrequency of transferred verbs appears to hold crosslinguistically, as captured by Muysken's (1981) hierarchy of borrowability in 1, which shows that nouns are the most frequently transferred words, followed by adjectives and then verbs.

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[6] The actual total percentage of English loan words in TxG remains to be established, but current estimates range between 5% and 7% (Gilbert 1965, Boas & Pierce 2011).

(1) Hierarchy of borrowability

nouns > adjectives > verbs > prepositions > coordinating > quantifiers > […]
conjunctions

This hierarchy captures the observation that open-class items are transferred more frequently than closed-class items. Winford (2003:51–53) suggests that verbs are less likely to be transferred because their transfer involves not only the code-switched lexical item but also the features of other elements in the verb phrase: Verbs govern other categories, determine case assignment, and involve more complex paradigmatic variation.

Furthermore, verbs are often transferred as parts of larger multi-word expressions, such as idioms or conventionalized verb-noun collocations, and thus may influence the transfer of other words related to the verb (Jordan 1977:62, Pfaff 1979:297). In addition to their close relation to other elements in the phrase, verbs themselves also encode rich information about aspect, tense, and event semantics, which is typically not associated with nouns or adjectives. These features of verbs thus shed light onto the interaction of traditional linguistic categories, as discussed in section 3 and exemplified in section 4.

At the same time, the transfer of English verbs into TxG has not been entirely neglected in the literature. Transferred verbs feature most prominently in Jordan 1977, whose appendix of English-origin words in Hill Country German includes 63 verbs.[7] Jordan (1977) discusses verbs found in hybrid (German-English) verb-noun collocations, primarily for concepts germane to Texas culture, such as *Vieh aufrounden* 'round up cattle', *Schweine butchern* 'butcher pigs', and *das Feld einfencen* 'fence in the field'. He also singles out verbs in the domain of telephone communication such as *connecten* 'connect', *aufringen* 'ring up', and *aufhängen* 'hang up (phone)', and discusses in a humorous manner how they would be misinterpreted by speakers of StG. Unfortunately, it is

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[7] The Texas Hill Country is located in the western end of the TxG dialect area, in the area between New Braunfels and Fredericksburg.

unclear whether Jordan's data are based on empirical interview data or solely on his intuition.[8]

Wilson (1977) also mentions the transfer of several English verbs in his survey of the TxG varieties around LaGrange and Giddings.[9] He notes that TxG speakers use the verb *painten* 'paint' to refer to the painting of walls or houses, but use *malen* 'paint' to refer to the painting of pictures or other artwork.[10] He also observes that the German verb *gleichen* is used in the sense of '(to) like' in TxG, whereas in StG it means only 'be similar to'—a phenomenon which is not specific to TxG but is "universal in American German" (Wilson 1977:55; see also Keel 2014). At the same time, Wilson notes that other expressions for '(to) like', such as *gefallen* or *gern haben* are still used in TxG. In discussing hybrid German-English compound verbs such as *ausgeplugt* 'unplugged' or compound loan translations such as *abgeschnitten* 'cut off' (for example, electricity), Wilson claims that the transfer of such compounds follows rigid rules in TxG; he states that forms such as *entplugt 'unplugged', *ungeplugt 'unplugged', or *offgeschnitten 'cut off' are not found in TxG speech.[11] Unfortunately, apart from listing these few purportedly unattested forms, Wilson does not specify exactly which rules are in place for using Anglicized forms.

Aside from these brief remarks in Jordan 1977 and Wilson 1977, only a handful of other English-origin verbs are mentioned in the literature: Gilbert (1965) mentions *kickdecannen* 'play kick-the-can'; Salmons (1983) notes that one of his young informants uses English

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[8] In section 4.2 below, verbs in Jordan's list are compared with the TGDP data to determine whether they are still frequent and thus potential established lexical borrowings in modern-day TxG.

[9] These settlements are located in the eastern portion of the TxG dialect area, approximately 50 miles east of Austin.

[10] StG also employs different verbs for painting walls (*streichen*) and artistic painting (*malen*), so Wilson's observation shows that *painten* has replaced *streichen* but not *malen*. However, the verb *painten* appears only one time in the post-2001 TGDP corpus (in the form *gepaint*), so it is unclear whether this verb has been established as a lexical borrowing.

[11] However, see example 31 below, in which a TxG speaker produces the verb *offgeschossen* 'shot off'.

leaden 'lead [cattle]' rather than the native form used by the other speakers he interviewed; and Boas (2003) observes that English *behaved* is used in place of German *sich benehmen* 'behave'.[12]

The literature also includes some discussion of structural properties of transferred verbs. Jordan (1977:62) observes that "[b]orrowed verbs were almost always given regular principal parts in German and they were conjugated like German verbs, for example: *cranken, crankte, habe gecrankt* 'crank, cranked, have cranked.'" This finding is corroborated by Wilson (1977:56), who states that English-origin verbs are "naturally" given the endings expected in StG.[13] These findings are in line with those of Wichmann & Wohlgemuth (2008 and Wohlgemuth (2009), who offer detailed typologies of verb borrowing strategies based on a large sample of the world's languages.[14] Specifically, they claim that the integration of English verbs into other Germanic languages follows the strategy of DIRECT INSERTION, defined as follows:

> [T]he loan verb is directly plugged into the grammar of the target language with no morphological or syntactic accommodation. […] The borrowed form may be root-like, infinitive-like, imperative-like, inflected for third person or nominalized by means of devices in the source language […]   (Wichmann & Wohlgemuth 2008:95)

[12] The introduction to Gilbert's (1972) *Linguistic Atlas of Texas German* also lists English words uttered by TxG speakers. Although Gilbert does not provide a systematic analysis of these words, they are another potential source for diachronic comparisons between modern-day TxG and that spoken in the mid-20th century.

[13] This is also the case in StG, where recently imported English words are integrated into StG inflectional patterns, for example, *faxen*, *faxte*, *hat gefaxt* 'fax' (see Boas 2003).

[14] In addition to direct insertion, there are three other major categories in Wichmann & Wohlgemuth's (2008) taxonomy of integrating foreign verbs. With the light verb strategy, the loaned verb is accompanied by a light verb such as 'do' or 'make'. When using the indirect insertion strategy, speakers apply an affix with little or no semantic contribution to mark the loaned verb as such, as well as the expected recipient language morphology. Finally, with paradigm transfer, the foreign verb is borrowed along with (some of) its foreign morphology, and the function of the foreign morphology is also maintained in the recipient language.

In section 4.1, the morphological integration of TxG verbs is analyzed in order to test these claims on a larger dataset.

More general information on (German-origin) verbs in TxG includes Gilbert's (1965:109) claim that verbal constructions are modeled on English, citing the constructions *der geht* 'he goes', *dut er gehen?* 'does he go?', and *der is an gehen* 'he is going'.[15] Wilson (1977:54–55) observes that some German verbs exhibit nonstandard forms, such as *ihr nimmt* 'you.PL. take' or *ich därf* 'I may' rather than *ihr nehmt* or *ich darf*, which he views as a potential remnant of the donor dialects. Finally, multiple sources (Gilbert 1965, Jordan 1977, Wilson 1977, Salmons 1983, Boas 2009, chapter 5) note the simplification of the German case system in TxG, where most speakers only employ nominative and accusative but not dative or genitive. While this feature is not directly related to verb code-switching, it may account for the nonstandard case assignment observed with transferred verbs in TxG. For instance, when a code-switched TxG verb assigns accusative case where dative is expected in StG, this may stem from general case syncretism rather than the transferred verb itself.

In sum, the lack of research on English verbs in TxG likely arises from the relative infrequency of transferred verbs compared to nouns, a tendency that is crosslinguistically documented. However, certain works, particularly Jordan 1977, mention several English-origin verbs in TxG and show that such verbs are often from semantic domains novel to Texas German settlers or are parts of conventionalized multi-word expressions. The only loan-translated verb mentioned in the literature is the verb *gleichen* used with the English meaning '(to) like' (Wilson 1977:55). With respect to their structural integration, most sources note that code-switched verbs are integrated into German inflectional paradigms, and that general case syncretism patterns lead to divergences in case assignment from that expected in StG. The present investigation of the distribution and integration of English verbs in TxG not only fills a research lacuna, but it can also be integrated into more recent research on

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[15] However, it is unclear how consistently this paradigm is modeled on English, as the TGDP data include several instances of questions beginning with the main verb rather than the auxiliary *tun*, for example, *geht er?* 'does he go?'. Glenn Gilbert (personal communication) suggests that these constructions exist in parallel to the StG constructions.

language contact, such as Backus & Dorleijn's (2009) discussion of how language contact phenomena are classified.

3. The Classification of Language Contact Phenomena.

The present analysis is guided by Backus & Dorleijn's (2009; henceforth B&D) investigation of loan translation and their claim that existing classifications of language contact phenomena must be rethought in order to provide a more comprehensive and unified treatment thereof. In response to perceived problems with the terminology and methodology of many approaches to language contact, Backus (2009:307) calls for a change in how researchers deal with contact-induced changes. He argues that "we must carefully separate out synchronic and diachronic issues in language contact research [and that] code-switching and contact-induced structural change should be treated together." He critiques traditional language contact studies for having too narrow a scope, as they often focus only on a single type of contact phenomenon from either a synchronic or diachronic perspective. For instance, Backus (2009:309) points out that existing studies on code-switching "tend to have a strictly synchronic outlook" and often ignore the question of how established a form is. At the same time, studies of contact-induced grammatical change deal primarily with diachronic issues and ignore the synchronic processes that lead to these changes.[16] Another criticism is that "classical [code-switching] studies often ignore other contact phenomena [...], notably loan translation and grammatical interference" (Backus 2009:311). B&D argue that a more rigorous investigation of loan translation is necessary to arrive at a more unified and complete account of the language contact phenomena, as language contact involves an interaction of words, meanings, and structures.

To remedy these issues, B&D present a model of transfer types, which recognizes the interactions between different phenomena that traditionally have been treated separately, and allows for the study of the gray areas between them. Their classification, shown in table 1 below, is based on the type of linguistic material taken from the donor language,

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[16] The importance (and difficulty) of teasing apart synchronic from diachronic issues was identified as early as Haugen 1950:216. Haugen states: "The difficulty, as elsewhere, is that the historical and the synchronic problem have not been clearly distinguished by those who have written about it."

and on whether it is a synchronic phenomenon (as seen in the speech of individual speakers) or a diachronic one (as seen in the overall structure of the language).[17] B&D's classification system includes six types of language contact phenomena, whereby the transfer of foreign words, meanings, and structures are each considered from both a synchronic and diachronic perspective.

Linguistic Source	Synchronic	Diachronic
Foreign Words	Insertional code-switching	Lexical borrowing
Foreign Meanings	Loan translation	Lexical change
Foreign Structure	Interference/Transference	Structural change/borrowing

Table 1. Synchronic and diachronic instantiations of contact phenomena, classified by the nature of the source material (B&D, p. 79).

B&D (pp. 76–79) define each category as follows. The use of an expression of language B (the "donor" language, in this case English) within language A (the "recipient" language, in this case TxG) is termed INSERTIONAL CODE-SWITCHING, while the term LEXICAL BORROWING refers to the diachronic change, whereby a code-switched expression becomes entrenched as conventional throughout the language B speech community.[18] LOAN TRANSLATION refers to the synchronic phenomenon in which a speaker uses an expression from language A with a meaning associated with a formally similar expression from language B, but not associated with the expression in language A (as with *gleichen* for 'to like' discussed above; see also section 4.3). LEXICAL CHANGE is the diachronic process whereby the loan translation becomes conventionalized throughout the community. INTERFERENCE/ TRANSFERENCE refers to the use of native (language A) grammatical structures in different ways than noncontact varieties of language A (due to contact with

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[17] Following the common view in usage-based linguistics, B&D emphasize that diachronic change is the result of synchronic decisions by actual speakers.

[18] Studies of code-switching commonly distinguish between insertional code-switches, in which a single donor-language word or phrase is embedded into recipient-language speech, and alternational code-switches, where larger chunks of language (for example, entire sentences) are switched (Muysken 1997). B&D only include insertional code-switching in their taxonomy.

language B), and the diachronic conventionalization of such usage is STRUCTURAL CHANGE/BORROWING.[19]

This taxonomy unifies language contact phenomena that are normally treated independently of one another; it facilitates the investigation of data that do not fall neatly into any category. For instance, code-switching and lexical borrowing both involve the transfer of words; however, they cannot be assigned the same category because borrowing is a diachronic process resulting from the synchronic phenomenon of code-switching. A parallel relation holds between synchronic loan translation and diachronic lexical change (the transfer of meaning), and between synchronic structural interference and diachronic structural change/borrowing (the transfer of structures).

B&D also offer a comprehensive account of loan translation, which they argue is understudied and often unidentified, thereby precluding an understanding of its relation to the transfer of words (code-switching) and structures (structural interference).[20] That is, when a speaker loan-translates an expression, they make a (conscious or unconscious) decision to use the recipient language words rather than code-switching from the donor language. B&D (pp. 91–92) suggest that the choice of loan translation versus code-switching may be partially predictable: Code-switching is used for morphemes with richer content (for example, *behave, connect, fax*), while loan-translated words generally come from more basic, semantically bleached vocabulary (for example, *do, make,*

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[19] In the remainder of this paper, I use the term *structural interference* rather than B&D's category of *interference/transference*. For one, this label seems clearer because it explicitly refers to structural properties of a language and prevents confusion with the more general term *transference*, which subsumes all types of language contact phenomena. Furthermore, B&D's definition of interference/transference is stricter than that employed in section 4.6. Specifically, B&D limit instances of interference/transference to cases where only language A structures are used, but where they have different functions from other varieties of language A, due to contact with language B. In my analysis, I also include cases where language B (English) structures are used in language A (TxG), as in example 29 in section 4.6.

[20] Indeed, the literature on English lexical influence on TxG reviewed in the previous section mentions only one loan-translated verb, *gleichen* '(to) like', but the discussion in section 4 reveals that loan translation in present-day TxG goes well beyond this example.

take). Although B&D propose no criteria for distinguishing these vocabulary types, Dux (2016) proposes that semantically rich words require definitions including both a more general word and additional phrases further specifying or restricting the word's meaning. For example, *fax* is semantically rich because its definition requires the more general verb *send*, as well as specifications that the sent entity is a document, and the instrument used is a fax machine.

Furthermore, loan translations may also trigger structural interference because they are used in a novel context in the recipient language and may influence the surrounding words and structures. Another reason for studying loan translation in more detail is that it facilitates the identification of (what speakers perceive to be) conventional combinations in a language, a topic of growing interest in Cognitive Linguistics and particularly in Construction Grammar (Croft 2001; Goldberg 1995, 2006; Höder 2012). Finally, contact varieties that have undergone significant lexical change sound strikingly unusual to speakers of noncontact varieties of that language (see Owens 1996).

B&D (pp. 82f.) offer a preliminary classification of loan translation types to facilitate future research on this phenomenon. One distinction among loan translations is based on the type of translated material: content morphemes, function morphemes, grammatical morphemes, and discourse patterns.[21] Loan-translated content morphemes are further subdivided into those involving one word, two words, or multiple words. In the discussion of loan-translated function and grammatical morphemes, B&D emphasize that certain loan translations may easily lead to structural interference (for example, when the loan-translated material maintains the donor language word order even if it differs from that of the recipient language), and in some cases even to structural change/borrowing.[22]

B&D recognize that different transfer types interact with one another, and that it may be difficult to tease them apart. In this regard, recent research on the bilingual mental lexicon (see, among others, Goldstein 2004, Grosjean 2008, Kroll et al. 2012) has shown that bilinguals have command of two (or more) linguistic systems; one of

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[21] The loan translation of discourse patterns is not treated in the present analysis.

[22] As the main focus of B&D is loan translation, they do not offer a detailed subclassification of code-switching or structural interference.

these systems must be activated and/or inhibited depending on the discourse situation.[23] Specifically, when a bilingual speaker transfers a word, they may also employ foreign structures or meanings associated with the transferred word, as the foreign language is activated during the transfer. This idea is captured in more detail in recent work on Diasystemic Construction Grammar (Höder 2012). This work adopts the Construction Grammar view (Goldberg 1995, 2006) that all linguistic patterns are constructions (or form-meaning pairings), which are not clearly divisible into formal, semantic, and structural components, and which often consist of both schematic and fixed elements.[24] In this view, speakers do not transfer single words or structures; they transfer entire constructions involving both formal and semantic properties.

A constructional approach to verb transfers may also help predict what types of expressions (that is, lexical constructions) are prone to code-switching and/or loan translation. Drawing on the notion that constructions are form-meaning pairings, one could predict that if two verbs (one German and one English) have overlapping formal and

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[23] Grosjean (2008) proposes various modes to account for which language is activated in a given discourse, including monolingual (one mode for each of the languages the speaker knows), bilingual (activating both languages), and intermediate modes (ranging between mono- and bilingual modes). Other studies (Grosjean 1995, Treffers-Daller 1998) have shown that speakers will use different modes depending on the situation and participants in the interaction, among other things. Given these findings, the formal interview setting in which TGDP data were collected (that is, StG-English bilinguals interviewing TxG-English bilinguals) may have influenced the linguistic choices of TxG speakers. It is currently unclear whether more natural conversation between two or more TxG-English bilinguals leads to differences in the number and types of loan verbs used.

[24]   All levels of grammatical analysis involve constructions: learned pairings of form with semantic or discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns. […] Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency […].   (Goldberg 2006:5)

semantic properties, they would be susceptible to loan translation. Consider the example of German *gleichen* and English *like* discussed above: The form of German *gleichen* is highly similar to English *like*, as phonologically its root differs only in the presence of the initial /g/ and the manner of articulation of the final consonant (fricative /ç/ versus stop /k/). The semantic properties of the two verbs also overlap, in that both forms have a 'be similar to' meaning. Based on this phonological and semantic similarity, TxG speakers have extended the meaning of German *gleichen* to also include 'be fond of', which is another meaning associated with the English lexical construction: [*like*—'be fond of']. A similar relation appears to hold between other German words that are loan-translated in TxG and their English counterparts, such as the German verb *machen*, which is formally and semantically similar to English *make* (discussed in section 4.3 below). Similarly, the German noun *Grad*, which means 'level' or 'degree', like the formally similar English *grade*, is loan-translated in TxG to also mean 'academic grade level' on the basis of its English counterpart (for example, *in der ersten Grad* 'in first grade').

A more simplistic constructional account may be proposed to explain those code-switches involving concepts novel to the migrated speech community: The novel concepts serve as meaning sides of lexical constructions that do not exist in the migrants' home dialects, due to the absence of the concept. Thus, the migrant community appeals to the contact language construction and associates these novel meanings with the form (that is, lexical item) used in the contact language (for example, *graduate, connect*). A detailed discussion of implications of this research for the bilingual mental lexicon and (Diasystemic) Construction Grammar must be left for future work. Nonetheless, many of the examples in section 4 (especially those involving loan translation and structural interference) demonstrate that the transfer of verbs often influences the meanings, structures, and words uttered in the surrounding context; thus, these verbs cannot simply be labeled as code-switches or loan translations.

To build on B&D's revised view of classifying language contact phenomena, the following analysis investigates both code-switched and loan-translated verbs in TxG, as well as how these may influence the TxG structures in which they are embedded. The results of the analysis also address several questions B&D pose about the characterization and

classification of language contact phenomena, such as i) determining the relative prevalence of loan translation and code-switching, ii) comparing the semantic richness of code-switched versus loan-translated verbs, iii) assessing what types of expressions are susceptible to loan translation (B&D, p. 92 hypothesize that Object-Verb and Preposition-Verb combinations are prone to loan translation), and iv) identifying what grammatical structures may be influenced by the loan translation of verbs.

4. Analysis of English Verbs in TxG.

The data for the analysis were accessed through the TGDP's online archive using the concordancer search tool provided on the staff pages of the TGDP website. This tool allows one to search the entire TGDP corpus for linguistic items of English origin, which are marked in annotation using square brackets. Such a search was conducted by typing a single close square bracket ( ]) into the search bar, in order to extract all annotated instances of English transference in the corpus.[25] From the search results, 15 speakers were identified with a significant amount of annotated interview material, suggesting they were still competent speakers of TxG with minimal levels of attrition. All instances of transference involving verbs were then extracted for each of these speakers, resulting in 186 total examples.[26] Occasionally, an example was searched out specifically to get a better picture of data from the main dataset, in which case the example is marked as such.

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[25] This method unfortunately does not capture all instances of English transference in the corpus. For one, English transference may be overlooked by the transcriber and thus left unmarked (see B&D, p. 76). Also, the archive does not include all TxG data because not all interview segments have been completely transcribed and archived as yet.

[26] The original search produced 195 examples in which the annotator marked a verb as English-influenced by putting it in square brackets. However, nine of these examples were omitted because they were not clearly based on English. For example, there was only minimal phonological difference between the English and German. These include sentences such as *Der ist [umgecome]* (1-8-1-16-a) and *Ich [had] Glas gehabt* (1-8-1-11-a), where the bracketed word was marked as English influence, while exhibiting subtle phonological differences from its StG counterpart.

I then categorized each example (as best as possible) according to B&D's categories of transferred words, meanings, and/or structures, focusing primarily on the three synchronic categories in table 1. I analyzed 136 instances of code-switched English-origin verbs, including their semantic domains and morphological marking, in order to test the previous claims regarding TxG, discussed in section 2. Loan translations were categorized according to the number and types of morphemes involved, as proposed by B&D (pp. 82f.). Certain code-switched and loan-translated verbs occur frequently in the corpus, and frequency analyses of these verbs in the entire TGDP corpus were conducted to determine whether they may be deemed as entrenched and conventional in TxG. Finally, I discuss how transferred verbs may trigger structural interference, considering some examples of divergent word order, case assignment, and preposition and particle choice.

4.1. Code-Switching.
Of the 186 instances of transferred verbs in the main dataset, 136 are categorized as code-switches because they involve the use of English-origin verbs.[27] This figure of slightly over 73% suggests that code-switching is the most common strategy for integrating English verbs into TxG.[28] Here, I discuss the semantic domains of code-switched verbs and then classify them according to the type of morphological marking they display.

A total of 79 different verbs from a wide range of semantic domains occur among the 136 code-switching instances. Table 2 provides an overview of the code-switched verbs (in their English forms) organized according to semantic domains.

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[27] Because this study looks at the transfer of individual verbs, it only deals with insertional code-switching, although alternational code-switching occurs frequently in the TGDP corpus.

[28] This figure may not be fully representative of the ratio of code-switching to loan translation in TxG, as it does not draw on the entire TGDP corpus, and loan translations may have been overlooked by annotators (see B&D, p. 82).

Domain	Verbs
Administration/Work/School	*affiliate, retire, naturalize, organize, file [for election for office], hire, retire*
Agriculture	*farm, pick (cotton), hack, share (i.e. crop sharing), rope, chuck (corn), raise (cattle), clear (field)*
Religion	*confirm, baptize, pastor*
Transportation	*drive, pave, shift (gear)*
Other Texan culture	*skin, stew, can (fruits), hunt, scalp, trap*
New concepts and technologies	*rent, move, phone, weld*
Education	*graduate*
Military	*station, join*
Other (contentful verbs)	*agree, attack, behave, believe, board, bounce, bump, cap (bottle), capture, cramp, dance, deprive, drink, explain, fight, flap, frame, grab, house, join, kick, learn, mix, move, murder, pick, play, prove, rotate, separate, sterilize, suppose, thump, translate, visit, volunteer, watch*
Basic verbs	*be, come, do, get, go, like, make, run*

Table 2. Verb types and semantic domains in the main TGDP dataset.

Many verbs come from domains identified in previous research as prominent sources of code-switches, such as administration, agriculture, religion, and transportation. Several other code-switches name concepts that did not feature in 19th-century European culture or were integral to the rural Texan lifestyle. Boas & Pierce (2011) also noted the domains of education and transportation as prominent sources of code-switches, but only four verbs in the dataset come from these domains, namely, *graduate, drive, pave,* and *shift [gears]*.[29] Another source of multiple code-switches, including the verbs *join* and *station*, is the domain of military service, which was not identified in previous research.

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[29] While code-switched *learn* also relates to the domain of education, the concept of learning is much more general and less culturally significant than that of graduation.

However, the exact range of domains of code-switched verbs does not entirely overlap with the code-switching domains identified in previous studies, which focus primarily on code-switched nouns. Interestingly, over half of the code-switched verb types (45 of 79) are not expected based on previous research, as they do not pertain to prominent domains for code-switching (such as agriculture or administration); or they refer to concepts not novel to U.S. or Texan life and for which the donor dialect would have its own verb. These are listed in the final two rows of table 2. Most of these verbs have fairly rich semantics (for example, *behave, believe, deprive, fight, rotate, separate*), but a handful of them are highly general verbs (for example, *do, go, make, like, run*).

There are several possible explanations for the use of English verbs by TxG speakers and for the lack of overlap between the semantic domains of code-switched verbs and the domains identified in previous research. Of course, the verbs in the top rows of table 2 are likely code-switched because the original immigrants did not have verbs to express these concepts. In the case of the verbs in the "Other" row, one probable explanation for code-switching is that speakers had never (or only rarely) been exposed to the StG counterparts of those verbs. This is likely the case with infrequent verbs such as *deprive, sterilize,* or *volunteer*.

Another potential reason for TxG speakers to code-switch English verbs could relate to differences in the argument structure of English and German verbs. For instance, while English *agree* only requires a prepositional object in a *with* PP, German equivalents such as *zustimmen, einigen,* and *übereinstimmen* further require reflexive direct objects and/or additional prepositional phrases. Another such verb is English *retire*, which can be used in simple intransitive constructions (*She retired*) but has several German equivalents, which involve several words, such as *in Rente gehen* 'go into retirement', *sich pensionieren lassen* 'let oneself be pensioned', or *in den Ruhestand treten* 'step into retirement'. While these structural differences may not necessarily trigger code-switching in fluent bilinguals, TxG speakers may have a weaker command of these complex structures because of language attrition (or because they might have never learned them in the first place). These verbs underscore the complex nature of integrating foreign verbs into native language structures: Verbs—unlike nouns—are an integral part of their argument structure construction, and they cannot

simply be inserted into foreign structures, as is often the case with code-switched nouns.

The code-switching of more general verbs such as *be, make,* and *run* (bottom row of table 2), however, cannot be attributed to attrition or structural differences, as these verbs are highly frequent and do not involve complex structures. Indeed, these code-switches are quite infrequent in the dataset, with each verb occurring only one time except for *make* (3 instances) and *like* (21 instances, discussed below). One potential explanation is that these verbs are borrowed as parts of idioms or English-specific senses.[30] Their usage in TxG may result from the simultaneous activation of multiple linguistic systems in speech production (see Goldstein 2004), during which speakers utter the more easily accessible verb: Because the speakers activate a multi-word expression based on an English idiom (that is, a grammatical construction), they adopt the English verb as part of the expression. In sum, rather than attributing the use of English verbs to attrition or unfamiliarity, one must also recognize that structural complexity and idiomatic collocations may determine whether a verb is code-switched or not.[31]

The analysis of code-switched verbs must also go beyond a mere lexical and semantic description because German morphological marking for tense, person, number, and so forth differs from that of English. Here, I investigate how English verbs are morphologically integrated into TxG. The phonological similarity of several affixes in German and English makes it very challenging to determine which language provides the morphology.[32] Thirteen examples could not clearly be assigned German

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[30] For example, both of the instances of English *run* in the main corpus exhibit idiomatic senses of the verb rather than the more literal 'move quickly by foot' meaning. One such example exhibits the 'manage an operation' sense (*Willst du die Farm runne?* 'Do you want to run the farm?' 1-21-1-7-a) and the other exhibits the 'move something through another' sense (*Der Stengel tuste durch so ne Maschine run*. 'You run the rod through the machine.' 1-21-1-7-a).

[31] See also Thomason 2003 for arguments in favor of a multi-factorial analysis of language contact and language change phenomena.

[32] Specifically, the English past tense suffix is pronounced as [t], [d], or [ɪd], depending on the context, and German past (and past participle) forms are often associated with a final [t] or [ɪt] ending. The widespread lenition of /t/ to [d] in TxG further complicates the issue (Boas 2009:145–149). Similarly, the English

or English morphology due to such overlap between the German and English verbal affixation systems. Another eight examples were omitted from the morphology analysis due to background noise or other issues in the original recordings. The remainder of this section therefore describes the affixation patterns of the remaining 115 code-switches. The examples fall into four main categories: German morphology, partial German morphology, English morphology, or combined English and German morphology. Each category is discussed in turn below.

The most common strategy involves the use of an English root and one or more German morphological markers. Thirty-four of the 115 analyzable examples exhibit StG morphological marking, while 46 examples exhibit German marking with slight deviations from the standard variety. Among the 34 purely German affixed examples, 22 have the final *-en* affix, which marks infinitives and 1st/3rd person plural forms, as in 2a and 2b, respectively.

(2) a. [...] in Braunfels irgendwo   bei eine Familie **boarden** müssen
        in Braunfels somewhere   by a   family board   must
        'had to board with a family in (New) Braunfels'

        'in Braunfels irgendwo bei einer Familie **bleiben/logieren**
        müssen'   (StG; 1-51-1-11-a)[33]

   b. Aber   die Touristen **thinken** das ja.
      but   the tourists   think   that yes
      'But the tourists think that.'   (1-71-1-17-a)
      'Aber die Touristen denken das ja.'   StG

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present participle and nominalizing suffix *-ing*, which is often pronounced [ən] in rapid speech and in certain sociolinguistic contexts, fulfills similar functions as the German infinitival suffix *-en*, which is also pronounced [ən]. Furthermore, 1st person singular present tense forms in English do not have any additional marking, and the corresponding forms in German colloquial speech often elide the *-e* suffix, thus making them identical to the verb root.

[33] Numbers following TxG examples refer to the file ID number for the interview segment in the TGDP archive (www.tgdp.org).

Seven examples exhibit the *ge-* prefix and a *-t* suffix, as in 3a, and one an *-en* suffix, as in 3b.[34]

(3) a. […] sin se   hierher **gemovt**
        are they here-to   moved
        'they moved here'   (1-55-1-3-a)

    'Sie sind hierher **gezogen**.'   StG

    b. […] und   haben Corn   **gebroken** im Feld
        and   have corn   broken in-the field
        'and we broke corn in the field'   (1-42-1-8-a)

    'und wir haben im Feld Mais **ausgekernt**'   StG

Finally, four examples exhibit only a suffix clearly pronounced as German [t]. Three such examples mark past tense or past participle, while one indicates a 3rd person singular present tense, as in 4.

(4) Der **kickt** in Football mit   die linge Fuss.
    he   kicks in football with the left   foot
    'While playing football, he kicks with the left foot.'   (1-43-1-3-a)

    'Er **tritt** im Football mit dem linken Fuß und alles.'   StG

    I now turn to the 46 examples exhibiting partial German morphology that differs slightly from that expected in StG. Ten such examples exhibit the *ge-* prefix, but do not have any suffixes, as in 5.

(5) un   so ham wir das **gerotate**
    and so have we   that rotated
    'and so we rotated that'   (1-42-1-10-a)

    'und so haben wir das **umgedreht**'   StG

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[34] Example 3b could also be a loan translation. German *brechen* (past participle *gebrochen*) is a cognate of English *break*, but it is not used in the sense of 'breaking corn'. Future work should compare the integration of English regular and irregular verbs, as many of the former have German cognates and thus may be more easily integrated into German morphological and phonological structures.

The most prevalent pattern, both in this category and in the entire main dataset, are verbs with the German *ge-* prefix and suffixes that are indistinguishable between German *-(e)t* and English *-(e)d*. Thirty-six such examples were found in the dataset. The majority of such examples involve a root that ends in a voiceless consonant and would thus require the [t] allomorph in English, as in the following example:

(6) Mein Vater hat ma auf ein Platz **getrapt**…
    my   father has ADV at a   place   trapped…
    'My father used to trap at a place…"   (1-56-1-10-a)

    'Mein Vater hat mal an einem Ort **Fallen gestellt**…'   StG

Because these examples follow the affixation patterns virtually identical to those expected for StG verbs, it is unlikely that they have been influenced by English morphology.

The next major category is comprised of 22 examples. The English-origin TxG verbs in this category carry morphological marking closely related to that of the English-origin verbs. In 13 instances, the verbs exhibit no (*ge-*) prefix and a voiced *-(e)d* suffix, as in *paved* in 7, which makes this the most frequent pattern.

(7) Jetzt ist das alles […] **paved**.
    now is that all   […] paved
    'Now that is all paved.'   (1-21-1-10-a)

    'Jetzt ist das alles **gepflastert**.'   StG

Seven of the examples that carry English morphology do not involve any affixes; they correspond to English forms that do not require tense-marking affixes. Five such unaffixed forms are used in infinitival contexts, as in 8a, while two unaffixed forms are used for plural present tense forms, as in 8b, both cases in which StG verbs require *-en* suffixes.

(8) a. Der wollt nich nach die Stadt **move**.
       he   wanted not no   the city move
       'He didn't want to move to the city.'   (1-40-1-4-a)

       'Er wollte nicht in die Stadt **ziehen**.'   StG

    b. Die **look** von […] selber gemacht.
      they look from […] self   made
      'They look like they are self-made.'   (1-21-1-15-a)
      'Sie **sehen** aus, als ob sie selbst gemacht sind.'   StG

Two other examples clearly exhibit English morphology, in that the verb form undergoes ablaut, as expected in English (*got* in 9).[35]

(9) Ich **got** pregnant.
    I   got pregnant
    'I got pregnant.'   (1-39-1-16-a)
    'Ich **wurde** schwanger.'   StG

The final type involves a combination of English and German morphological marking. Most prevalent among these cases (11 examples in the main dataset) are verb forms exhibiting the German *ge-* prefix and a suffix, which is clearly voiced as -*e(d)*, as expected in English:[36]

(10) Und die   ham … sind sie **geretired**.
     and they have … are they retired
     'And they are retired.'   (1-56-1-16-a)
     'Und sie sind **in Rente gegangen**.'   StG

The two remaining examples exhibit the *ge-* prefix with an ablauted form of the verb, as expected in English. In 11, for example, the verb *drive* has an English past participle form with a German prefix.

(11) … und der Freund dariber **gedriven**
         and the friend over-that drove
         'and the friend drove over that'

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[35] This example could also be an instance of *transversion* in Clyne's (2003:80) terminology, in which a single code-switched word triggers a switch into the other language.

[36] This particular type of morphological marking is rather unexpected, as German verbs with unstressed prefixes (or unstressed initial syllables in general) typically show the -*(e)t* suffix, but not the *ge-* prefix.

'und der Freund ist darüber **gefahren**'   StG

Table 3 summarizes the distribution of morphological marking types in the main dataset.

Morphological marking type	Number	Example(s)
German marking	34	*thinken, gemovt, kickt*
Partial or likely German marking	46	*gerotate, getrapt*
English marking	22	*move, got*
Both English and German marking	13	*geretired, gedriven*
Unanalyzable: Ambiguous German/English	13	*farmen, like*
Unanalyzable: Unclear audio	8	n/a

Table 3. Morphological marking types
for 136 code-switched English verbs in TxG.

Most code-switched verbs (80 of the 115 analyzed examples; 70%) exhibit some aspects of German morphological marking, as expected based on previous research discussed in section 2. Thirty-four examples clearly exhibit German marking, while 46 exhibit partial German marking or German marking that is partially ambiguous. Twenty-two examples (19%) exhibit marking identical to that expected in English. Thirteen examples (11%) involve some aspects of both German and English morphology. Finally, 21 examples were omitted from analysis due to ambiguity between German and English marking or to technical issues (for example, unclear audio). These findings largely corroborate the results of earlier research on TxG and those of Wichmann & Wohlgemuth (2008), who claim that English verbs borrowed into (other) Germanic languages follow the direct insertion strategy, whereby the foreign verb is directly inserted into recipient language structures.[37]

[37] The preponderance of German morphological marking is also expected in Myers-Scotton's (2002, 2006) Matrix Language Frame model, which states that transferred items typically adhere to the structure of the matrix language (here TxG). Within her 4-M classification of morphemes, English past tense endings are early system morphemes and thus typically do not appear in code-switched language. However, they are not entirely excluded on the basis of her System Morpheme Principle, which only applies to late system morphemes (2002:95).

However, the existence of forms that do not follow the expected TxG morphology suggests that the direct insertion strategy does not fully capture all instances of code-switched verbs in TxG.

So far, it has been shown that code-switches make up the majority of instances of English verb transfers in the main dataset. Nearly half of the verb types come from domains that reflect cultural differences between Texas and 19th-century Europe—such as administration, agriculture, religion, new technologies, and rural life. The existence of such domains is expected based on previous studies on TxG code-switched nouns. However, there are just as many verb types that belong to more general semantic domains or express concepts that existed in 19th-century Europe. With respect to their formal integration, code-switched verbs can be subclassified according to the type of morphology assigned. In most cases, they are integrated into the German morphological structure, but they may also occur with English morphological marking, or a combination of both English and German marking.

4.2. Lexical Borrowing.

I now discuss B&D's category of lexical borrowing. This category includes synchronic code-switches that become conventionalized as lexical items of the recipient language. The difficulty of distinguishing nonce code-switches from established borrowings is well-documented in the literature (Haugen 1950, Backus 2009).[38] Ideally, one may look at data from earlier stages of the language to determine whether transferred words from those stages are also prominent in synchronic data. Here, Jordan's (1977) list of frequent English-origin words is compared with the present-day TGDP data to determine whether the verbs on that list are frequently used today. Another strategy is to compare the frequencies of code-switched words with their native counterparts under the assumption that a high relative frequency of a foreign word suggests that this word is established as a borrowing. This strategy is employed when

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[38] Of course, there is a continuum between code-switching and borrowing, as some words may be more entrenched than others (Thomason 2003). Furthermore, the degree to which a code-switch is established as a lexical borrowing is better viewed on a speaker-to-speaker basis rather than for the language system as a whole. Therefore, it is more appropriate to say that a verb is a borrowing for individual speakers, rather than a conventional lexical item in TxG.

dealing with the three most frequent verbs in the main dataset: *retire, like,* and *move* (change residence).[39]

Jordan's (1977) list of English-origin verbs in TxG includes 63 verbs. The entire TGDP corpus was searched to determine whether the verbs on Jordan's list also occur frequently in the more recent TGDP data, which would suggest that they have become established borrowings in the TxG lexicon. Only three verbs from Jordan's list appear with high frequency in the TGDP corpus. These verbs are *farmen* 'farm' (27/23), *raisen* 'raise (livestock)' (20/15), and *(auf)picken* 'pick (up)' (19/15).[40] Six other verbs appear relatively frequently in the TGDP corpus (four to nine utterances in total uttered by two to six different speakers): *(auf)ringen* 'ring up' (9/5), *changen* 'change' (6/6), *fixen* 'repair' or 'prepare (a meal)' (7/2), *phonen* 'phone' (4/4), *shucken* 'shuck (corn)' (7/6), *smoken* 'smoke meat', (6/4), *kicken* 'kick' (4/3), *killen* 'kill' (4/3), and *fighten* 'fight' (3/3).[41] Seventeen other verbs appeared less

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[39] One may also determine whether a lexical item has been borrowed through phonological analysis, as previous studies (for example, Matras 2009) suggest that transferred words that are more phonologically integrated into the recipient language system are likely to be established borrowings. However, Boas & Pierce (2011) argue that this criterion for distinguishing nonce code-switches from established borrowings is not always dependable, noting, for instance, that TxG *Candy* 'candy' exhibits German phonology but has long been established as a TxG borrowing.

[40] In these descriptions, the number prior to the slash mark indicates total number of instances that the verb was uttered, and the number after the slash mark indicates the total number of speakers that uttered the verb. All potential forms for each of the verbs on Jordan's list were searched. One exception is the verb *farmen*, for which I only searched the form *farmen* and *gefarm** (where "*" captures both spelling variants *gefarmed* and *gefarmt*) because of the identical spelling of nominal uses of *Farm*. Nonetheless, the high frequency of this verb in just these two forms shows that it is well-established in the TxG lexicon.

While Jordan's list contains separate entries for prefixed and nonprefixed verb forms with the same root (for example, *picken* and *aufpicken*; *fencen* and *einfencen*), these forms are combined in the present analysis.

[41] In addition to these four instances in its general 'kick' sense, the verb *kicken* also occurred six times in the collocation *kick the can*.

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frequently, uttered only once or twice by one or two speakers.[42] Finally, 33 verbs identified as borrowings by Jordan (1977) did not appear in the TGDP corpus.[43]

As with the code-switches from the main dataset, most verbs that have likely become established borrowings refer to concepts prominent in 20th- (and 21st-) century Texan society but not in 19th-century Europe, such as *(auf)ringen*, *phonen, shucken,* and *smoken*. However, other borrowed verbs—such as *changen, fixen, kicken, killen,* and *fighten*—are not so easily explained, as they express concepts that were likely as prominent in the original settlers' culture as they are today. In fact, of the 11 most frequent verbs out of 136 code-switched verbs in the main TGDP dataset, only two (*shucken [corn]* and *farmen*) were identified by Jordan (1977). Among these 11 verbs, six verbs were code-switched by two different speakers (*graduate, shuck [corn], farm, join, separate, suppose*), and two verbs were code-switched by three different speakers (*rent, run*). In general, this comparison of TGDP data against historical data from Jordan 1977 shows that although several verbs mentioned by Jordan are used frequently today and thus have likely established themselves in the TxG lexicon, many other verbs used nearly 40 years ago are no longer prominent in present-day TxG.

Returning to the main dataset of 136 code-switches, three verbs are highly frequent and may be established as borrowings in TxG: *retire* is used five times by five different speakers, *move* (change residence) is used 11 times by six speakers, and *like* is used 21 times by six speakers. Here, I compare the frequencies of these verbs (exemplified in 12) with that of their German counterparts on the assumption that a high relative frequency of the English-origin verb suggests that it is an established borrowing (see B&D, p. 77).

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[42] These verbs include *(auf/hoch)jacken* (1/1), *(auf)butchern* (2/2), *cannen* (2/2), *(auf)catchen* (2/2), *grinden* (2/2), *jumpen* (1/1), *marken* 'mark livestock' (1/1), *meeten* (1/1), *pitchen* (1/1), *ranchen* (2/2), *ropen* (1/1), *scrapen* 'dig water holes for livestock' (1/1), *shiften* (1/1), *skinnen* (2/2), *spellen* (1/1), *tickeln* (1/1), and *trappen* (1/1).

[43] Again, as not all interviews have been uploaded to the TGDP archive, these verbs may occur in TGDP interviews, but their absence in all of the uploaded and transcribed interview segments suggests that they are very infrequent, if they occur at all.

(12) a. un   die Kinder   werden alle beide hier **retiren**
    and the children will   all   both   here retire
    'and both the children will retire here'   (1-8-1-17-a)

    'und die Kinder werden alle beide hier **in Rente gehen**'   StG

   b. der hat Deutsch nicht **geliked**
    he has German not   liked
    'he didn't like German'   (1-40-1-5-a)

    'er hat Deutsch nicht **gemocht**'   StG

   c. Wir   sind nach die Stadt **gemoved**.
    we   are to   the city   moved
    'We moved to the city.'   (1-40-1-3-a)

    'Wir sind in die Stadt **gezogen**.'   StG

For each of these verbs, the entire TGDP corpus was searched for both the code-switched English verb and any possible German-origin or loan-translated equivalents (for example, *gleichen* for '(to) like').

    Table 4 shows the frequency of English *retire* in comparison with two German equivalents. Note that the English verb is frequently used as a past participle with an adjectival function, as in *He is retired*. The same is true for the German equivalent *pensionieren*, which often occurs in adjectival form as *pensioniert*. Other common German equivalents are the nouns *Rente* 'retirement', as in *in die/der Rente gehen/sein* 'go/be into/in retirement'. These nonverb equivalents are nonetheless taken into account, as they express the same concept as the frequently code-switched verb *retire*.

Verb	# of instances
retire	44
pension(iert)	8
Rente / Rentner	8

Table 4. Occurrences of *retire* and equivalents
in the TGDP online archive.

Table 4 shows that the English verb *retire* is much more frequent than expressions used for similar concepts in StG, occurring over five times more frequently than any possible equivalent. This high relative frequency thus suggests that *retire* is an established borrowing in TxG.

Table 5 shows the frequency of code-switched *like* compared with German equivalents *gefallen* 'please' and *mögen* '(to) like' and the related loan-translated verb *gleichen* '(to) like' (loan-translated from English *like*, discussed in more detail below). *Gleichen* and *mögen* exhibit the same argument structure pattern as English *like*, with the agent appearing as subject and the liked entity as direct (accusative) object, whereas *gefallen* realizes the liked entity as subject and the entity who likes it as a dative object.

Verb	# of instances
like	61
gleichen	11
gefallen	19
mögen	3

Table 5. Occurrences of *like* and equivalents in the TGDP online archive.

The data show that the verb *like* is more frequent than any of its (German or loan-translated) equivalents. However, its relative frequency over its counterparts is not as drastic as that of *retire*, as *gefallen* and *gleichen* also occur regularly in the data. Therefore, while *like* is likely an established borrowing for many TxG speakers, it still competes with native German forms and the loan-translated *gleichen*.[44]

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[44] This finding falls in line with that of Wilson (1977), who notes the coexistence of *gleichen* with German equivalents *gefallen* and *gern haben*. Future research must determine whether *like* is more established for some speakers than others or whether the different forms appear in different functional or sociolinguistic contexts. An anonymous reviewer also commented that the high frequency of English *like* in TxG may result from its high frequency in English as well.

Table 6 shows the number of occurrences of English code-switched *move* (change residence) compared with German equivalents containing the root *ziehen*. Similar to English *move*, which appears with particles as in *move in, move out,* or *move around*, German *ziehen* occurs with various prefixes and prepositions to specify different aspects of the moving process.

Verb	# of instances
move	68
-zieh-	60

Table 6. Occurrences of *move* (change residence*)* and equivalents in the TGDP online archive.

A code-switched form of English *move* occurs 68 times in the data, but various forms of the German verb *ziehen* 'move', such as *einziehen* 'move in', *nach X ziehen* 'move to X', or *hierherziehen* 'move here', occur almost as frequently as *move*, with 60 instances in the corpus. Therefore, although English *move* is frequent, the stability of its StG counterpart(s) in TxG makes it difficult to classify as a fully established borrowing. It also remains to be determined whether the English verb is used variably by different individuals or speaker communities, or whether it is in free variation with its German counterpart(s).

This comparison of English code-switches with their German counterparts, based on relative frequency data in the TGDP corpus, shows that *retire* is an established lexical borrowing, *like* is fairly well established but still competes with various German counterparts, and *move* is also well established but still competes (more fiercely) with *ziehen*, whose various forms appear equally frequently in the corpus. There are several potential reasons for the borrowing of these verbs. *Move* and *retire* express concepts that were not as relevant in 19th-century Europe as they are nowadays: The original settlers were much less mobile than Texas Germans are today, and there was not an established system for retirement. However, a cultural explanation does not hold for *like*. Another reason may involve the argument structure of German equivalents, as described above: The complexity of the German patterns of argument realization could have encouraged speakers to employ an English item with simpler grammatical requirements. Again,

this explanation may hold for *move* and *retire*, but the German verb *mögen* exhibits a similar argument structure to English *like*. Thus, while cultural and structural factors may (partially) explain the borrowing of *rent* and *move*, no plausible explanation for the frequent code-switching of *like* is available at present.

4.3. Loan Translation.

As discussed in section 3, loan translation involves translating an English word using a formally related German word that does not have the same meaning in the original dialect. Repeated use of the loan-translated word with this meaning leads to the (diachronic) process of lexical change, whereby the meaning of the German translation is extended to include the meaning of the formally related English original (see section 4.5). Loan translations occur less frequently than code-switches in the dataset, as 37 loan translations were found among 186 total transferred verb instances (20%).[45] The analysis in the remainder of this section draws on B&D's subclassification of loan translations based on the type and number of morphemes involved; it also builds on their finding that loan translation may lead to structural interference. My analysis facilitates a comparison between loan-translated and code-switched verbs and enables one to assess B&D's specific claims presented at the end of section 3.

   With respect to loan translations of content words, B&D (pp. 82f.) propose different categories for single-word, two-word, and multi-word loan translations. Examples 13–15 contain what seem to be one-word loan translations. In 13, the English verb *like* 'be fond of' is loan-translated into TxG as *gleichen*, which can only mean 'be similar to' in StG.

(13) **Gleichen**   Sie   Kochkäse?
       like   you cooked-cheese
       'Do you like cooked cheese?'   (1-8-1-2-a)

       '**Mögen** Sie Kochkäse?'   StG

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[45] However, as B&D (p. 82) point out, loan translations often go unidentified, suggesting that a more careful analysis may reveal loan translations to be more frequent than originally thought. For instance, example 17 was not annotated as an instance of English transference (by marking with square brackets) in the TGDP corpus, but was found through manual inspection of the data.

B&D (p. 83) refer to this type of loan translation as *semantic extension*, as the original meaning of the verb 'be similar to' is supplemented with a new meaning '(to) like' based on its phonological similarity to the English verb.

In 14, the English expression *to make it (to a place)* is translated using the German verb *machen* 'make', even though StG does not use *machen* in this sense.

(14) haben denn … mit den Wagen bis nach Braunfels **gemacht**
     have then … with the wagon to to   Braunfels   made
     'then they made it to (New) Braunfels with the wagon'   (1-51-2-3-a)

   'Sie haben es dann mit dem Wagen nach New Braunfels **geschafft**'
                                                                    StG

Although this example also involves one loan-translated verb, it differs somewhat from the example in 13 with *gleichen*: The verb *machen* is modeled on a more complex English idiomatic expression, which requires not only the verb but also a directional prepositional complement. Here, only the verb is loan-translated, but the remaining portions of the construction are expressed using TxG.

In 15, the verb *nehmen* 'take' is used in the sense of 'take an exam', whereas StG employs the verb *schreiben* 'write' in this context.

(15) Aber mir mussten Exams **nehmen.**
     but   we had-to exams take
     'But we had to take tests.'   (1-39-1-6-a)

   'Aber wir mussten Klausuren **schreiben**.'   StG

In the case of 15, it is possible that the loan translation of the verb is triggered by the code-switching of the preceding noun *exams,* which in English requires the verb *take*. While the most appropriate category in B&D's taxonomy for examples 14 and 15 is one-word loan translations, these examples differ from the semantic extension of *gleichen* in 13, as they are used as parts of larger collocations. In fact, B&D (pp. 91–92) claim that loan translations often occur as parts of larger fixed expressions, particularly object-verb or prepositional phrase-verb collocations.

There are several other cases, particularly those that involve complex verbs with prefixes or particles. These cases cannot be clearly classified

as one- or two-word loan translations due to structural and orthographic differences between German and English. In 16, the speaker wishes to express that certain families in the area housed children. The speaker translates the English expression 'take in (for example, guests)' directly into German as *reinnehmen* (participle *reingenommen*), an expression not found in StG.

(16) Welche Familien ham die Kinder **reingenommen.**
  some families have the children in-taken
  'Some families took in the children.'   (1-56-1-9-a)

  'Einige Familien haben die Kinder **untergebracht**.' StG

Similarly, 17 is based on the complex English expression 'set somebody up in something', in the sense of assisting them and providing them with opportunities. When talking about a man who received land and 'set his sons up' in farming, the speaker translates this expression into TxG as *aufsetzen*, which is not used in this sense in StG; rather it is used as 'put on' or 'attach'.

(17) Der hat jeder einer von seine Sohne **aufgesetzt** in farming.
  he has every one of his sons up-set in farming
  'He **set up** each of his sons in farming.' (1-55-1-3-a)

  'Er hat für jeden seiner Söhne eine Karriere in der Landwirtschaft **arrangiert**.'   StG

Orthographic differences between English and German muddle the classification of this example according to the number of words involved. On the one hand, the lexico-grammatical rules of StG require the particle and verb root of participle forms to occur together, suggesting that it is a one-word loan translation. On the other hand, equivalent English expressions are written with the particle separate from the verb, which suggests that they should be classified as two-word loan translations. Such data show that it is not always trivial to categorize loan translations based on the number of morphemes involved.

An example of a two-word loan translation is given in 18, where 'make a living' is directly translated as *Leben machen*. This expression does not exist in StG; instead, a similar meaning would be expressed

using *Auskommen haben* lit. 'have subsistence' or *Leben bestreiten* lit. 'contest life'.

(18) Junge Leute kennen kein **Leben machen** auf 'ne kleine Ranch.
     young people can   no   living make   on a small ranch
     'Young people can't make a living on a small ranch.' (1-51-1-25-a)

    'Junge Leute können hier auf einer kleinen Farm kein **Auskommen haben**.'   StG

Example 18 is quite similar to the *Exams nehmen* example in 15 above, as both of these utterances involve the loan translation of a verb within a specific verb-object collocation. They differ only in that the object in 15 (*Exams*) is code-switched from English, while the object in 18 (*Leben*) is loan-translated. Once again, these two examples show the difficulty of classifying loan translations based on the number of morphemes involved.

    Multi-word loan translations consisting of more than two content morphemes are slightly less frequent in the main dataset.[46] Indeed, many of these loan translations involve the translation of just one morpheme, but with repercussions for the surrounding words. One candidate for such a loan translation is provided in 19, which involves the use of German *machen* 'make' in the sense of 'cause someone to do something'. While only the verb *machen* is loan-translated, it is likely that the speaker is translating the entire construction 'it made me think' along with *machen*.

(19) Das hat mich denken **machen** vor 'ne masse Dinge.
     that has me   think made   for a   lot-of things
     'That made me think about a lot of things.'   (1-55-1-5-a)

    'Das hat mich dazu gebracht, über viele Dinge **nachzudenken**.' StG

    A similar situation holds for 20, which contains the loan translation of the phrase 'take up someone's time'. As in the previous example, this

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[46] The infrequency of multi-word loan translations likely results from the data collection method, which targets only verbs and may thus miss out on multi-word loan translations involving other parts of speech.

utterance involves only the translation of one complex verb (or a verb-particle pair), but it is modeled on a multi-word English expression.

(20) Mir **nimm** euer Zeit **auf.**
　　 we   take   your time up
　　 'We are taking up your time.'　　　　　　　　　　(1-43-1-3-a)

　　 'Wir **beanspruchen** eure Zeit.'　　　　　　　　　　StG

These examples show that B&D's classification of content word loan translations into one-, two-, and multi-word categories is not as clear-cut as it appears. Specifically, while these examples contain only one (or two) clearly loan-translated words, the speakers are structuring the entire utterance based on complex grammatical constructions rather than on individual words.

　　 B&D's next major category of loan-translated items covers functional morphemes. One type of functional morpheme that seems prone to loan translation in TxG is argument-marking preposition. In these cases, TxG speakers use a German preposition with the same (or similar) phonological form as the English preposition (assigned by the verb), and not the preposition used with the same verb in StG. In 21, for instance, the speaker uses the preposition *in* analogously to the English construction 'be interested in', rather than *an*, which is used in the StG construction *interessiert sein an* 'be interested in'.

(21) Ich bin da   gar   nicht mehr interessiert dr**in**.
　　 I   am there ADV not   more interested   there-in
　　 'I'm definitely not interested in that anymore.'　　(1-85-1-3-a)

　　 'Ich bin gar nicht mehr dar**an** interessiert.'　　　　StG

Similarly, in 22, the speaker uses the preposition *für* 'for' on the basis of English 'wait for', rather than the expected preposition *auf*.[47]

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[47] European German dialects may vary in the type of preposition used to introduce prepositional objects of verbs, for example, *warten für* does occur in some varieties of European German. The following sentence, for example, was found on the DeReKo corpus (Kupietz et al. 2010), accessed through COSMAS-II: *Wie lange müsste eine Frau warten **für** einen Termin bei Ihnen zur jährlichen Kontrolle*? 'How long must a woman wait for an appointment with you for the

(22) […], der auch gewartet **für** uns.
          he   also   waited   for us
          '…, he also waited for us.'   (1-56-1-2-a)

          '…, der auch **auf** uns gewartet [hat].'   StG

Another type of functional morpheme susceptible to loan translation is the auxiliary in perfect tense constructions. StG employs either *haben* 'have' or *sein* 'be' to support past participles, depending on whether the verb expresses motion toward something or a change in state (*sein*) or not (*haben*), with some exceptions. English, however, only uses the auxiliary *have* to introduce participles, except in some fossilized collocations (for example, *He is risen*). In 23, the verb *gehen* 'go' (participle *gegangen*) is used with the auxiliary *haben*, rather than the expected *sein*.

(23) Wo   das Geld   gegangen hat, mi **weiß** nich.
      where the money   gone   has   we know   not
      'We don't know where the money went.'   (10-139-1-13-a)[48]

      'Wohin das Geld gegangen ist, **wissen** wir nicht.'   StG

While the above examples of code-switching and loan translation could largely be subsumed within the categories proposed by B&D, I now turn to another type of language contact phenomenon that requires an extension of B&D's classification.

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yearly check-up?' (Corpus ID: A09/APR.07029). However, the use of nonstandard prepositions in TxG is considerably more likely to reflect the influence of the English expression than a feature of the donor dialect(s).

[48] This example was not part of the main dataset but found through manual inspection of the TGDP corpus. The search was prompted by a similar example in the main dataset, which was annotated as a loan translation: *und die Pferde* **haben** *gestanden* 'and the horses have stood' (1-42-1-12-a). However, this example is not a clear case of loan translation, as many German dialects use the auxiliary *haben* rather than *sein* to support the main verb *stehen*.

4.4. Loan Translation/Code-Switching Hybrids.

One type of phenomenon that does not clearly fit into any of the relevant categories proposed by B&D are verbal constructions involving both code-switching and loan translation. Thirteen such instances were found in the dataset, comprising nearly 7% of all examples. Each of these cases involves a complex particle or prefix verb, with either the root or the particle/prefix being code-switched and the other element being loan-translated. Eleven of the 13 hybrid examples involve a code-switched root and a loan-translated prefix/particle. In 24, for instance, the speaker imports the English phrasal verb 'look up (information)', but loan-translates only the English particle *up* with the German verbal prefix *auf* (rather than StG *nach*), while using the German verb root *gucken* 'look'.

(24) Ich hab Papiere irgendwo   dann kann ichs **aufgucken**.
    I   have papers somewhere then can I-it up-look
    'I have papers somewhere, then I can look it up.'   (1-85-1-3-a)

    'Ich habe irgendwo Papiere, dann kann ich es **nach**gucken.'   StG

Similarly, 25 is modeled on English 'jack up (a car)'. Here, the speaker code-switches the English verb *jack* and uses the German prefix *hoch* 'high/up'.

(25) […] ham sie   das Rad **hochgejackt**
        have they the tire up.jacked

        und   ham   dieModel T laufen lassen.
        and   have   theModel T run   let

        'they jacked up the tire and let the Model T run' (1-42-1-10-a)

        'haben sie das Rad **hochgebockt** und haben das Model T
        laufen lassen.'   StG

    Less frequently (in only two of the 13 instances), the main verb is of German origin and the prefix/particle is code-switched from English. This is shown in 26, where the German main verb participle *geschossen* 'shot' is combined with the English particle *off*.[49]

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[49] This example contradicts Wilson's (1977) claim that certain compound words modeled on English verbs follow strict constraints as to what material may be

(26) Mein navigator hat sein Arm beinah **offgeschossen**.
　　my　　navigator has his　arm　nearly off-shot
　　'My navigator nearly shot his arm off.'　　　　　(1-78-1-6-a)

　　'Mein Navigator hat sich den Arm beinahe **ab**geschossen.'　　StG

　　These types of combinations of loan-translation and code-switching have been identified in previous research. Haugen (1950, 1953) uses the term *loan blends* for these cases, while Johanson (1998) refers to them as *mixed copies*. Such hybrids appear at the intersection of B&D's categories, as they involve the transfer of both, words (code-switching) and meanings (loan translation). To accommodate these cases, B&D's model must be expanded to include the combination of multiple transfer types within the same utterance (and even within the same word).

4.5. Lexical Change.
B&D's (p. 77) category of lexical change involves the diachronic establishment of loan translations, whereby a native lexical item becomes conventionally associated with a foreign meaning. As discussed in section 4.2, nonce loan translations may be distinguished from those that have undergone lexical change (that is, they have become established within the speech community) by means of relative frequency: If a loan-translated expression is used more frequently with the foreign-motivated meaning than with its native meaning, or if it is used more frequently than a native expression with an equivalent meaning, then such loan-translated expression has likely been established as a lexical change. The term *lexical change* thus emphasizes that the range of a word's possible functions has expanded (or changed altogether) in the contact variety (for example, TxG) relative to noncontact varieties of the language (for example, StG). Potential candidates for lexical change in the TxG data include *gleichen*, which is frequently used to express the non-native meaning 'like/be fond of', as well as a group of verbs that are highly frequent and have very general and broad meanings, such as *machen* 'make' and *nehmen* 'take', as described in the following paragraphs.

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code-switched or loan-translated. Namely, Wilson contends that the verb *abschneiden* 'cut off (electricity)' can be loan-translated from English, but similar hybrid forms such as *offschneiden* 'cut off' with the loan-translated root and code-switched prefix are not possible.

Here, the relative frequency of loan-translated *gleichen* '(to) like' is compared against its use in the StG sense 'be similar to', following the method employed in section 4.2. A search for *gleich* in the TGDP concordancer revealed 11 instances of the loan-translated meaning compared with zero instances of the StG meaning 'be similar to'. These results suggest that *gleichen* has changed its meaning from 'be similar to' in the original dialects to '(to) like' in TxG.[50] However, such an investigation is complicated because in StG, the form *gleich* also has an adverbial meaning of 'soon' or 'immediately', which is used in TxG, as shown in 27. Such adverbial uses of *gleich* greatly outnumber the loan-translated usages of the verb *gleichen* (66 to 11).

(27) Der hat dann sich   **gleich** ne Farm gekauft.
     he   has then himself ADV   a   farm bought
     'Then he immediately bought himself a farm.'   (1-40-1-2-a)

     'Er hat sich dann gleich eine Farm gekauft.'   StG

At present, therefore, it appears that the verb *gleichen* has undergone lexical change from StG 'be similar to' to the English-based meaning of '(to) like'. However, as a morpheme, *gleich* still retains the adverbial meanings it had in the original dialect. As mentioned in the preceding section, the loan translation of *gleichen* is likely due to the fact that its form and meaning overlap with those of English *(to) like*.

The loan translation data also include many semantically light verbs, which are often loan-translated as parts of larger idiomatic collocations or light verb constructions; they can also acquire more structural

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[50] The loan translation of *gleichen* with the meaning '(to) like' is not limited to TxG; it has been documented for several other German-American speech islands as well: Pennsylvania German (Lambert 1924:66, Bloomfield 1933:462, Schach 1951:258–259) and Kansas German (Keel 2014). This form also surfaces frequently in the Pomeranian Low German varieties spoken in Central Wisconsin (unpublished data collected by the author). A detailed treatment focusing on this verb is not possible here, but Keel (2014:170) refers to it as "a truly puzzling development, not only in the Kansas German varieties, but throughout the German-American dialects." At the same time, this extension of the meaning of *gleichen* is understandable, as English *like* expresses both similarity and fondness.

functions. Two such loan translations are the verbs *machen* 'make' and *nehmen* 'take'. TxG speakers use the verb *machen* in contexts where English *make* is expected, but not StG *machen*. This was shown in 19, where *machen* is used in the sense of 'make somebody do something'; in 18, in the collocation *Leben machen* 'make a living', and in 14, where it is used in the sense of 'make it to a place'. The English verb *take* is often loan-translated as *nehmen*, as in the collocation *Exams nemmen* in 15, where StG requires *schreiben* 'write exams', and in the collocation 'take up somebody's time' in 20. *Nehmen* is also used in the more general temporal sense of 'take (for example, one week of) time', as in the expression *das nemmt beinah ein Jahr* 'that takes nearly a year' (1-78-1-5-a). The preponderance of light verbs among loan translations in the main dataset is indeed striking: Over half of the loan translation examples contain the verb *nehmen* 'take', *machen* 'make', *gehen* 'go', *tun* 'do', or *laufen* 'run'. Even semantically richer verbs that are loan-translated do not have as rich of a meaning as (the vast majority) of TxG code-switched verbs listed in table 2 above. These include *setzen* '(to) set', *ziehen* 'draw/pull', *gucken* 'see/watch', and *halten* 'hold'.[51]

The high frequency of loan-translated semantically general verbs is also observed by B&D (p. 92). They claim that basic vocabulary items are more likely to be loan-translated, while items with richer meanings are more frequently code-switched. B&D propose that this complementarity may arise because "basic vocabulary patterns with functional elements are being produced without much conscious attention, while specific vocabulary is consciously selected." To reframe this proposal in a (Diasystemic) Construction Grammar view of the mental lexicon, words with rich semantics (such as the code-switched verbs *behave, deprive,* or *sterilize*) are typically not elements of larger idiomatic expressions or collocations and can thus be directly code-switched from English. In contrast, the semantically light verbs appear in larger constructions and are more frequently loan-translated while other words in the constructions are uttered in German.

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[51] That the 'like/be fond of' meaning is expressed in TxG both with loan-translated *gleichen* and code-switched *like* may relate to the semantic weight of these meanings, which falls somewhere between highly general such as *take* or *make* and highly specific such as *deprive* and *sterilize*.

From a diachronic perspective, such light verbs may have undergone lexical change in TxG and thus have a broader (or different) range of functions than in the original dialect. Specifically, they may now be associated with new functions modeled on English collocations and idioms, while also maintaining the original StG functions. The close relation between German and English may encourage such lexical changes, as many idiomatic uses of these verbs are the same in noncontact varieties of English and German. However, diachronic developments have led to divergences in the exact range of functions the verbs can fulfill in each language.

In summary, the analysis of loan translations has shown that, although they are not as frequent in TxG as direct code-switches, they are more frequent than previous research suggests. As with the Turkish-Dutch data discussed by B&D, in TxG content, functional, or grammatical morphemes may be loan translated. B&D propose a subclassification of content word loan translations according to the number of words involved. However, the data revealed several examples that were difficult to categorize as either one- or two-word loan translations, particularly, particle and prefix verbs. There are also instances of code-switching/loan translation hybrids, identified by Haugen (1950, 1953) as loan blends and by Johanson (1998) as mixed copies, which do not fall neatly into B&D's classification and require an extension of their taxonomy. The analysis also revealed three types of grammatical and functional morphemes that are susceptible to loan translation in German-English contact situations, namely, the prepositions introducing prepositional objects, particles and prefixes of complex verbs, and auxiliaries in perfect constructions. These phenomena bleed into the realm of structural interference, as they involve reinterpretations of grammatically relevant morphemes, a phenomenon discussed in more detail below. Finally, the TxG data support B&D's (p. 91) claim that loan-translated words are more semantically general than code-switched words, which likely relates to the more frequent occurrence of general words/verbs in idiomatic expressions or other complex constructions.

4.6. Structural Interference.

I now turn to the next category in B&D's taxonomy: structural interference. As this study focuses primarily on the lexical category of

verbs, I only discuss cases of structural divergence from StG related to the transfer of verbs in the main dataset.[52] The discussion is also limited to instances of structural interference not mentioned in the previous subsections (prepositions, particles/prefixes, auxiliaries), namely, verbal inflection, case assignment, and word order. The structure of 28 differs from the corresponding StG structure with respect to each of these structural properties.

(28) […] und **hat helfed** die Kirche
      and has helped the church
      'and helped the church'   (1-56-1-8-a.eaf)
      'und hat der Kirche **geholfen**'   StG

First, the StG participle of *helfen* 'help' is *geholfen*, but the verb form in this example is much more closely related to the English past (participle) form *helped*. Second, StG word order requires the inflected verb to appear in the second position in main clauses and in the final position in subordinate clauses; infinitives and participles appear in the final position in main clauses and preceding the main verb in subordinate clauses. In 28, however, the main verb appears directly after the auxiliary and before the object, an ordering expected in English.[53] Furthermore, the object of *helfen* in StG is realized in the dative case, but here it carries accusative case marking (that is, *die Kirche*). While this latter contrast may be due to influence from English, it likely results from the more general case syncretism in TxG, whereby the dative case is in decline (Boas 2009, chapter 5; see section 2).

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[52] B&D's definition of structural interference is limited to the use of donor-language structures "where there is no evidence that this usage was produced by the translation of a concrete expression" in the recipient language (p. 78). Nevertheless, it is useful to describe the influence of transferred verbs on the grammatical structure of TxG.

[53] The rightward extraposition of elements is also found in European German varieties. However, the pattern in 29b is unusual, as the elements that are extraposed in standard varieties tend to be adverbial elements, relative clauses, or other heavy sentential elements, whereas nominal arguments of the verb do not occur in the right periphery (Eisenberg 1989:415).

Another instance of structural interference is found in examples in which German *besser* is used in the modal sense associated with English *besser*, as in *better do something*. In 29, the loan translation *besser* appears in second position, but the main verb appears in third position directly after German *besser*. This type of word order is not expected in StG.

(29) a. Du **besser hast** 'n grossen Jacke.
       you better have a big   jacket
       'You better have a big jacket.'   (1-28-1-25-a)

       'Du **solltest** eine große Jacke **haben**.'   StG

   b. Mir **besser reiten** hier runter nach den Stall.
       we better ride   here down to   the stall
       'We better ride down to the stall here.'   (1-54-1-16-a)

       'Wir **sollten** hier runter zum Stall **reiten**.'   StG[54]

These data clearly support B&D's (p. 79) claim that items involved in loan translation, particularly multi-word expressions, may cause structural interference. In fact, it is more likely that the speaker is transferring an entire grammatical construction from English, including both the fixed lexical item *besser*, and the schematic slots for the main verb and its related elements. These cases thus emphasize that contact phenomena cannot be simply reduced to the transfer of words, structures, or meanings, but require a more holistic view of linguistic constructions.

The structure of TxG clauses can also be affected by code-switching. In 30, the speaker uses the English verb *supposed*, in the sense of 'be expected/supposed to'.

(30) Wir waren **supposed** kein Deutsch zu sprechen in die Schul.
     we were supposed no German to speak   in the school
     'We were not supposed to speak German in school.'   (1-21-1-5-a)

     'Es wurde **erwartet**, dass wir in der Schule kein Deutsch sprechen.'

                                                              StG

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[54] Example 29b was not part of the main dataset, but was identified through manual inspection of the search results.

Here, the speaker uses a syntactic configuration that exists in StG but is not used with the StG equivalent of the code-switched verb *suppose* (*erwartet* 'expected'). Specifically, StG expressions such as *dabei sein, etwas zu tun* 'be doing something currently' or *bereit sein, etwas zu tun* 'be prepared to do something' have the same structure as 30: The agent is subject of a predicative construction, and the activity is expressed in a final infinitival clause. However, to express the concept in 30, StG would use the participle of *erwarten* 'expected' with the dummy subject *es* 'it' and express the agent as the subject of a subordinate clause headed by *dass*: *Es wurde erwartet, dass wir kein Englisch sprechen* 'It was expected that we speak no English'.[55] While B&D (p. 81) point out that loan translation may result in structural interference, this example shows that even code-switching may influence the structure of the recipient language.

This cursory analysis of structural interference shows that the use of English verbs and verbal idioms in TxG influences TxG grammatical structures to some degree. Potential areas of structural transfer include word order, argument structure (for example, case assignment), inflectional patterns, as well as the argument-marking prepositions, verbal prefixes and particles, and auxiliaries of perfect constructions discussed above. My analysis shows how B&D's taxonomy can be refined to account for specific grammatical features of German and English that are susceptible to structural interference in these types of contact situations. A richer taxonomy would also help account for how structural interference results from loan translation and code-switching.

5. Discussion.
The analysis outlined in the previous sections achieves the two goals set forth in the introduction. The first goal was to provide an overview of how verbs are code-switched and loan-translated in present-day TxG,

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[55] Manual inspection revealed another example in which a speaker uses *supposed* after beginning the sentence in German, but then finishes the sentence in English. This is likely an instance of *transversion* in Clyne's (2003:80) terminology, in which a single code-switched word leads to alternational code-switching in the remainder of the utterance or discourse: *Da waren supposed to be wagons with oxen* 'There were supposed to be wagons with oxen' (1-76-1-20-a).

and to compare the results of this analysis with those of previous analyses of English lexical transference in TxG. Previous research on code-switching in TxG (Gilbert 1965, Jordan 1977, Wilson 1977, Salmons 1983, Boas & Pierce 2011) focused primarily on code-switched nouns. According to those studies, the major domains for code-switching were those that were new to the original settlers or germane to rural Texan life, such as administration, agriculture, education, technology, and transportation. While these domains are still a prominent source of code-switched lexical items, verbs that name concepts familiar to the original settlers constitute a large portion—or even a majority—of all code-switched verbs in present-day TxG. Such cases of code-switching cannot be explained by their novelty to the TxG community. While many of these cases could be attributed to language attrition or general unfamiliarity with the lexical items under investigation, I proposed that the structural properties of the German and English translation equivalents may motivate their code-switching. Specifically, StG equivalents of the code-switched verbs often require more complex constructions, such as those involving reflexive objects (*sich benehmen*) or light verb constructions (*in Rente gehen*). TxG speakers may have a decreased command of such constructions due to language attrition or incomplete language acquisition. Therefore, they may opt to code-switch English verbs, which have a simpler structure and do not require additional elements (for example, *behave, retire*).

When TxG speakers code-switch English verbs, they must also decide how to mark them morphologically for tense, number, and person. My analysis has shown that the majority of code-switched English verbs exhibit (at least partial) German morphology, with some verbs exhibiting English morphology or morphology that is ambiguous between German and English. Drawing on Wichmann & Wohlgemuth's (2008) taxonomy of verb integration strategies, the dominant strategy in TxG is direct insertion of verbal roots: Most English verbal roots are inserted directly into German sentences (with German morphology) without any special affixation or light verb support that would mark them as non-native.

However, direct root insertion does not apply in all cases of code-switched verbs in TxG, as some of the analyzed code-switches exhibit morphology different from that expected in StG. The typological similarity between the two contact languages—English and German—poses some challenges for the morphological analysis, as many verbal

affixes are phonologically similar. Future research should determine whether other English-German contact varieties exhibit the same distribution of morphological marking as TxG, and whether other language pairs would reveal other integration strategies for code-switched verbs.

In order to assess whether any code-switched verbs have become established as borrowings in present-day TxG, the TGDP data were compared with Jordan's (1977) list of borrowings. The comparison showed that only a handful of his 63 verbs are still frequent in modern-day TxG (*farmen* '(to) farm', *raisen* 'raise (for example, cattle)', and *(auf)picken* 'pick (up)'. I assessed the relative frequency of a handful of code-switched verbs that occurred frequently in the main dataset, compared to native forms. The results suggest that code-switched *retire* is highly conventional, whereas code-switched *move* (change residence) is frequent but still competes with native forms involving the root *ziehen*. Interestingly, both code-switched *like* and loan-translated *gleichen* '(to) like' are highly frequent in TxG, but native forms such as *gefallen* and *mögen* are far from being extinct. While the results of this study are suggestive, these findings must be tested on a larger scale, taking into account additional factors, such as the degree of morphophonological integration and paralinguistic features such as hesitations, asides, or paraphrases (see Pfaff 1979 and Matras 2009).

The second goal of this analysis was to provide a more unified treatment of language contact phenomena and to increase recognition of the importance of loan translation, as called for by B&D. They point out that existing studies of language contact phenomena tend to focus on transferred words (code-switching) and transferred structures (structural interference), while often neglecting transferred meanings (loan translation). As a result, these studies overlook various phenomena that emerge at an intersection of the traditional categories. B&D go on to show how a more rigorous investigation of loan translations may help identify such borderline cases. Their discussion of loan translation in the speech of Turkish-Dutch bilinguals gives rise to three potential generalizations, each of which is supported by the present TxG-English bilingual data. First, loan translations often occur as parts of multi-word fixed expressions or idiomatic collocations. Second, the most frequent types of these expressions include object-verb combinations and prepositional phrase-verb combinations. Finally, there is a complementarity between loan-

translated and code-switched words: The former come from the basic vocabulary with relatively bleached semantics, whereas the latter have richer meanings. A further potential explanation for loan-translated verbs, introduced at the end of section 3, relies on the Construction Grammar view of linguistic items as pairings of form and meaning: English verbs with semantic and phonological overlap with a German verb, such as *like-gleichen* and *make-machen*, are susceptible to loan translation.

B&D propose a classification of loan translations into four categories: content morphemes, functional morphemes, grammatical morphemes, and discourse patterns; content morphemes are further subclassified into those that contain one-, two-, or multiple words. This classification, however, does not fully capture the TxG data analyzed here. First, the distinction between functional and grammatical morphemes is not clear-cut and may vary across languages (for example, dative case in German versus prepositions in English). Second, the number of (content) words involved in a loan translation is not easily determined, either due to crosslinguistic differences (for example, between German prefixed verbs and English phrasal verbs), or because the loan translation of a single element may influence surrounding words.

This analysis of transferred English verbs in TxG allows one to identify the interrelations between the traditional categories of code-switching, loan translation, and structural interference—especially because verbs generally exhibit more structural complexity than other parts of speech. A comprehensive analysis of code-switched verbs, for instance, requires an investigation of their morphological marking and any potential influence on the surrounding words and structures. By identifying and analyzing frequent collocations with similar meaning in the two languages, one can explain why English verbs such as 'make' and 'take' are often loan-translated as German 'machen' and 'nehmen', respectively.

Furthermore, the investigation of transferred verbs reveals which aspects of grammatical structure are most susceptible to structural interference in specific language contact situations. In the case of the TxG–English language contact situation, these aspects of grammar include argument marking (that is, with case or prepositions), word order, and verbal inflection. These complex interrelations between the lexicon, morphology, and syntax in language contact situations underscore recent movements in Cognitive Linguistics and Construction

Grammar (Goldberg 1995, 2006; Croft 2001; Höder 2012). These movements emphasize that language structures cannot be compartmentalized into traditional categories of phonology, syntax, semantics, and morphology; rather, they should be placed at the intersection of these categories.

6. Conclusion.

This study offered the first comprehensive account of English verbs transferred into TxG. It improved on previous analyses by addressing how the transfer of verbs relates simultaneously to several well-studied synchronic and diachronic language contact phenomena. The analysis built on and offered improvements to B&D's proposed classification of such phenomena. The discussions surrounding the data demonstrated how methods and principles of Cognitive Linguistics—particularly Construction Grammar—may give a clearer picture of how and why lexical items are transferred in language contact situations, and of how the careful analysis of such transfers may deepen our understanding of language change and language structure more generally.

<div align="center">REFERENCES</div>

Backus, Ad. 2009. Codeswitching as one piece of the puzzle of language change: The case of Turkish *yapmak*. *Multidisciplinary approaches to code switching*, ed. by Ludmila Isurin, Donald Winford, & Kees De Bot, 307–336. Amsterdam: John Benjamins.

Backus, Ad, & Margreet Dorleijn. 2009. Loan translations versus codeswitching. *The Cambridge handbook of linguistic code-switching*, ed. by Barbara Bullock & Almeida Toribio, 75–94. Cambridge: Cambridge University Press.

Bloomfield, Leonard. 1933. *Language*. New York, NY: Holt, Rinehart, and Winston.

Boas, Hans C. 2003. Tracing dialect death: The Texas German dialect project. *Proceedings of the Twenty-Eighth Meeting of the Berkeley Linguistics Society,* ed. by Julie Larson & Mary Paster, 387–398. Berkeley, CA: University of California.

Boas, Hans C. 2009. *The life and death of Texas German*. Durham, NC: Duke University Press.

Boas, Hans C. 2010. On the equivalence and multifunctionality of discourse markers in language contact situations. *40 Jahre Partikelforschung*, ed. by Theo Harden & Elke Hentschel, 301–315. Tübingen: Stauffenburg Verlag.

Boas, Hans C., Karen Ewing, Cheryl Moran, & Jana Thompson. 2004. Towards determining the influence of internal and external factors on recent developments in Texas German phonology. *Penn Working Papers in Linguistics* 10. 47–59.

Boas, Hans C., & Marc Pierce. 2011. Lexical developments in Texas German. Putnam 2011, 129–150.

Boas, Hans C., Marc Pierce, & Collin L. Brown. 2014. On the variability of Texas German *wo* as a complementizer. *STUF–Language Typology and Universals* 67. 589–611.

Boas, Hans C., Marc Pierce, Karen Roesch, Guido Halder, & Hunter Weilbacher. 2010. The Texas German dialect archive: A multimedia resource for research, teaching, and outreach. *Journal of Germanic Linguistics* 22. 277–296.

Boas, Hans C., & Hunter Weilbacher. 2009. The unexpected survival of German discourse markers in Texas German. *The Main Session. Papers from the 42nd Annual Meeting of the Chicago Linguistics Society (CLS 42-1)*, 1-15. Chicago: Chicago Linguistics Society.

Clyne, Michael. 2003. *Dynamics of language contact*. Cambridge: Cambridge University Press.

Croft, William. 2001. *Radical construction grammar*. Oxford: Oxford University Press.

Dux, Ryan. 2016. *A usage-based approach to verb classes in English and German*. Austin, TX: The University of Texas at Austin dissertation.

Eikel, Fred. 1954. *The New Braunfels German dialect*. Baltimore, MD: Johns Hopkins University dissertation.

Eisenberg, Peter. 1989. *Grundriss der deutschen Grammatik*. 2nd edn. Stuttgart: J. B. Metzlersche.

Gilbert, Glenn G. 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.

Goldberg, Adele. 1995. *Constructions: A construction approach to argument structure*. Chicago, IL: The University of Chicago Press.

Goldberg, Adele. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.

Goldstein, Brian A. 2004. *Bilingual language development and disorders in Spanish-English speakers*. Baltimore, MD: Paul H. Brookes.

Grosjean, Francois. 1995. A psycholinguistic approach to code-switching: The recognition of guest words by bilinguals. *One speaker, two languages: Cross-disciplinary perspectives on code-switching*, ed. by Lesley Milroy & Pieter Muysken, 259–275. Cambridge: Cambridge University Press.

Grosjean, Francois. 2008. *Studying bilinguals*. Oxford: Oxford University Press.

Haugen, Einar. 1950. The analysis of linguistic borrowing. *Language* 26. 210–231.

Haugen, Einar. 1953. *The Norwegian language in America: The bilingual community*. Philadelphia, PA: University of Pennsylvania Press.

Höder, Steffen. 2012. Multilingual constructions: A diasystematic approach to common structures. *Multilingual individuals and multilingual societies (Hamburg Studies on Multilingualism 13)*, ed. by Kurt Braunmüller & Christoph Gabriel, 241–257. Amsterdam: John Benjamins.

Johanson, Lars. 1998. Code-copying in Irano-Turkic. *Language Sciences* 20. 325–337.

Jordan, Terry. 1977. The German element in Texas. *Rice University Studies* 63. 1–11.

Keel, William D. 2014. German settlement varieties in Kansas. *Perspectives on phonological theory and development: In honor of Daniel A. Dinnsen*, ed. by Ashley W. Farris-Trimble & Jessica A. Barlow, 155–172. Amsterdam: John Benjamins.

Kroll, Judith F., Paola E. Dussias, Cari A. Bogulski, & Jorge R. Valdes Kroff. 2012. Juggling two languages in one mind: What bilinguals tell us about language processing and its consequences for cognition. *The psychology of learning and motivation*, vol. 56, ed. by Brian Ross, 229–262. San Diego, CA: Academic Press.

Kupietz, Marc, Cyril Belica, Holger Keibel, & Andreas Witt. 2010. The German reference corpus DeReKo: A primordial sample for linguistic research. *Proceedings of the Seventh International Conference on Language Resources and Evaluation (LREC 2010)*, ed. by Nicoletta Calzolari, Khalid Choukri, Bente Maegaard, Joseph Mariani, Jan Odijk, Stelios Piperidis, Mike Rosner, & Daniel Tapias, 1848–1854. Valletta: European Language Resources Association (ELRA).

Lambert, Marcus Bachman. 1924. *A dictionary of the non-English words of the Pennsylvania-German dialect: With an appendix*. Lancaster, PA: Pennsylvania German Society.

Matras, Yaron. 2009. *Language contact*. Cambridge: Cambridge University Press.

Muysken, Pieter. 1981. Halfway between Quechua and Spanish: The case for relexification. *Historicity and variation in Creole studies*, ed. by Arnold Highfield & Albert Valdman, 52–78. Ann Arbor, MI: Karoma.

Muysken, Pieter. 1997. Code-switching processes: Alternation, insertion, congruent lexicalization. *Language choices: Conditions, constraints and consequences*, ed. by Martin Pütz, 361–380. Amsterdam: John Benjamins.

Myers-Scotton, Carol. 2002. *Contact linguistics: Bilingual encounters and grammatical outcomes*. Oxford: Oxford University Press.

Myers-Scotton, Carol. 2006. *Multiple voices*. Oxford: Blackwell.

Owens, Jonathan. 1996. Idiomatic structure and the theory of genetic relationship. *Diachronica* 13. 283–318.

Pfaff, Carol W. 1979. Constraints on language mixing: Intrasentential codeswitching and borrowing in Spanish/English. *Language* 55. 291–318.

Pierce, Marc, Hans C. Boas, & Karen Roesch. 2015. The history of front rounded vowels in New Braunfels German. *Germanic heritage languages in North America*, ed. by Janne Bondi Johannessen & Joseph C. Salmons, 118–131. Amsterdam: John Benjamins.

Putnam, Michael T. (ed.). 2011. *Studies on German language islands*. Amsterdam: John Benjamins.

Salmons, Joseph C. 1983. Issues in Texas German language maintenance and shift. *Monatshefte* 75. 187–196.

Schach, Paul. 1951. Semantic borrowing in Pennsylvania German. *American Speech* 26. 257–267.

Thomason, Sarah G. 2003. Contact as a source of language change. *The handbook of historical linguistics*, ed. by Brian D. Joseph & Richard D. Janda, 687–712. Oxford: Blackwell.

Treffers-Daller, Jeanine. 1998. The IC model and code-switching. *Bilingualism: Language and Cognition* 1. 98–99.

Weilbacher, Hunter. 2011. Texas German discourse pragmatics: A preliminary study of the English-origin discourse markers *of course*, *see*, and *now*. Putnam 2011, 455–474.

Wichmann, Søren, & Jan Wohlgemuth. 2008. Loan verbs in a typological perspective. *Aspects of language contact: New theoretical, methodological and empirical findings with special focus on romancisation processes*, ed. by Thomas Stolz, Dik Bakker, & Rosa Salas Palomo, 89–121. Berlin: Mouton de Gruyter.

Wilson, Joseph. 1977. The German language in Central Texas today. *Rice University Studies* 63. 47–58.

Winford, Donald. 2003. *An introduction to contact linguistics*. Oxford: Blackwell.

Wohlgemuth, Jan. 2009. *A typology of verbal borrowings*. Berlin: Mouton de Gruyter.

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