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Comparative Study of Language Structure and Grammatical Universals

Iryna Horokhova 

ABSTRACT

BACKGROUND

The study compares the linguistic structure and grammatical features of two West Germanic languages – English and German – in order to identify and describe linguistic universals. The research is relevant as it highlights the tendency toward convergence within the Germanic language family. A review of scholarly literature provides a theoretical foundation for the comparative analysis of these languages.

MATERIALS AND METHODS

The study employs a range of linguistic methods, including synthesis and analysis, diachronic and synchronic approaches, and comparative, structural, genetic, and generalisation methods. These approaches enable an in-depth examination of both grammatical structures and lexical phenomena in English and German.

RESULTS

Findings confirm the kinship of English and German through shared lexemes and structural similarities at both the lexical and grammatical levels. A German study on professional nomenclature revealed two main types of lexical borrowing: direct borrowing, with complete preservation of form and meaning, and hybrid borrowing, where only one component of a compound word is borrowed. Historical contact led to significant German influence on English, particularly in the late 18th century and the 1930s–1940s. Many Germanisms subsequently became internationalisms, while others are now regarded as historicisms. The analysis also underscores differences in the use of verb tenses, which carry specific semantic nuances in each language.

CONCLUSION

The study contributes to understanding the processes of language convergence and lexical interaction between English and German. Its novelty lies in the examination of professional terminology and lexical borrowing in contemporary contexts, a field that requires continuous scholarly attention. The findings have practical implications for foreign language learning, as knowledge of underlying genetic processes and shared linguistic features can facilitate mastery of both languages.

Keywords: English-German lexical borrowing, West Germanic comparative typology, Professional-domain anglicisms, Verb tense mismatches, German V2 and verb-final syntax

Highlights

- Comparative analysis reveals both convergence and divergence in English and German
- Lexical borrowing occurs directly or in hybrid form, shaping professional terminology.
- English strongly influenced German in the 20th–21st centuries, leading to “Denglish.”

- Grammatical universals evolve, with verb usage showing major cross-linguistic contrasts.
- German word order rules create syntactic distinctions absent in English.

Introduction

Languages are dynamic, ever-evolving phenomena that change with time and place. This discrepancy is mostly the result of forced standardization, even though Dutch and German are recognized as distinct languages with different vocabulary, syntax, and orthography. It is evident from monitoring the situation on the ground that regional dialects progressively converge. Similar to nations, static languages are man-made, lack an innate basis, and frequently have arbitrary borders.¹

As a language of international communication, English is one of the most widely spoken languages in the world and the second most widely spoken language in the world after Chinese, with approximately 400 million speakers, which is two and a half times more than the number of people who speak other Germanic languages. Most of the world’s scientific literature is published in English.² Modern trends in social development in Europe contribute to the growing role of German among the world’s top ten languages. German is the mother tongue of more than one hundred million people (Germans, Austrians, residents of Liechtenstein, a large part of Switzerland, the Northern Provinces of Italy, and several small territories of Belgium and Luxembourg).

English and German share a common mother tongue, the Indo-European language family. Both languages belong to the West Germanic branch of the language family. English and its ancestral language, Old English, belong to the Anglo-Frisian group, while German belongs to the Proto-Germanic group. German is divided into High and Low German. While High German is the official language of Germany, Low German is seen as a dialect still spoken in the northern part of Germany. Both are important to the history of the language because they gave rise to the languages still spoken today. This affinity is confirmed by the presence of a large number of similar lexemes and at the level of grammatical structures. Old English was once heavily influenced by the Viking (Scandinavian) language. Later, with the invasion of the Normans, Old French was introduced to Britain. The basis of the English language remained Germanic, but it contains many French, Latin, Celtic and Scandinavian borrowings. German is based on the dialects of the ancient Germanic tribes. Old French did not influence this language, but, like English, it contains many Latin loanwords. English is an analytical language, meaning that grammatical meanings are expressed through word order, prepositions, and

auxiliary verbs. This makes English grammar much simpler and less dependent on morphology. German is a synthetic language, with the relationship between words expressed through four cases and conjugation. Significant differences exist between the tenses used in English to convey special meaning and those in German. Christian Ludwig's 1706 Dictionary of English, German and French and his 1716 German-English Dictionary were the first bilingual dictionaries published in response to the growing interest of Germans in learning English.³

Overall, due to their common West Germanic origin, English and German show convergence in vocabulary and grammatical structures. Contact-induced changes such as the adoption of English loanwords into German ("Denglisch") and the influence of German on English are also examples of this. Despite being separate languages, they have linguistic similarities that lead to some convergence because of their shared ancestry and ongoing contact.

English and German share key grammar universals, such as the presence of distinct noun and verb categories and the ability to convey notions using terms like "big" or "quickly", even though their grammatical systems differ. While both are Germanic languages, they differ in important ways, such as German's V2 word order in major clauses (unlike English) and its usage of grammatical case and gender for nouns, which English does not have. Other theoretical universals, such as *wh*-constraints, have been demonstrated to apply to German grammar in nuanced ways, defying previous assumptions about their absence.

A tantalizing problem for the theoretical linguist is to compare the grammars of modern English and modern German. Despite being so similar when the earliest historical documents were written, these two genetically closely related languages currently show significant differences in their grammars. One is therefore prompted to inquire as to why the ratio of similarity to contrast is as it is, that is, why the areas of contrast involve the structures that they do rather than the structures that are shared. And why, instead of contrasting in other possible ways, do those structures that contrast actually contrast in this way?

The article aims to compare the linguistic structure and grammatical features of two languages of the Germanic family—English and German— to identify and describe the linguistic universals of these languages. To achieve this goal, the following specific tasks were set:

- to conduct a critical review of the literature that addresses related or related issues in the comparative analysis of Germanic languages;
- to compare the linguistic structure of German and English as languages of the West Germanic branch;
- to describe the grammatical features of German and English through the prism of comparative analysis;
- to identify linguistic universals in German and English.

Literature Review

Despite many variations in methodology, a large portion of recent grammatical theory research has had a similar objective. Developing a theory of universal grammar, or a theory outlining the characteristics and regularities that apply to all languages, is the aim. Chomsky's (1965) requirement that a linguistic theory define the concept of "possible human language"⁴ is where the modern era's quest for this objective began. For Chomsky, this amounted to defining the fundamental building blocks of all language grammars in terms of 'formal' and 'substantive' universals. Formal universals refer to the form and shape of the language, such as the numerous grammatical components (syntactic, semantic, etc.), rule kinds (phrase-structure rules, transformations), rule interaction principles (the cycle), and so on. Substantive universals include the contents of these rules, syntactic categories like NP, distinguishing aspects within the phonological component, and so on.

In the 1960s and 1970s, Chomsky and his colleagues used in-depth grammatical research of a small number of languages, usually just English, to discover such absolute universals. As a reply to this methodology, several linguists advocated for a more comparative approach. They noted that there is significant variety amongst languages, yet there appear to be substantial regularities underpinning and constraining this variance.⁵ These restrictions can also be considered language universals because they limit the types of grammatical characteristics and property combinations that languages can exhibit, thereby contributing to a definition of the concept of 'possible human language'. In this view, a conceivable human language has qualities that fall within the limitations authorized by the variation-defining language universals, whereas an impossible language does not.

The analysis of scientific sources confirms that the issue of evolutionary changes in the grammar and lexical structure of English and German is a topical scientific issue. The issue of genetic and lexico-grammatical features of languages was studied by Bickerton.⁶ Biber et al.⁷ conducted a holistic analysis of the grammatical features of English in the diachronic development from Old English to Modern English. According to scientists, grammatical changes in English are not a simple linear development; it is a dynamic process influenced by internal linguistic factors and external social pressures.⁸ Shan⁹ studied the evolution of grammatical categories during the three main periods of English development (Old English, Middle English, and New English). Special attention is devoted to this scientist's work in studying the role of modal verbs in English.

Gramley et al.⁸ in their monographic work argue that standard English is a relatively narrow concept as compared with General English, and the type of language associated with it is closely associated with a fairly high degree of education. It stands for the explicit, widely accepted standard. StE is the type of English that is typically taught in schools and to non-native

speakers who are learning the language. It is also the type of English that is typically used in print. It is also the variant that is used in news broadcasts and other such contexts and is, at least in theory, spoken by educated people. It should be mentioned that the distinction between standard and nonstandard language is, in theory, unrelated to the distinction between formal and informal language. Both formal and informal forms of StE exist. An example of StE is the negated third person singular present tense form of the auxiliary *do*, which is *doesn't* (e.g., *He doesn't care what you do*). This stands in contrast to Non-Standard General English (NSGenE) *He don't care what you do*.

There are several different variations of general English that are widely used and understood. Only the English creoles and the traditional dialects of the British Isles do not fall under the category of General English because their speech is not commonly understood by anyone outside of their immediate speech community. One can presume that other GenE speakers will understand a speaker who choose a nonstandard option within the GenE framework. Their selection is especially noteworthy because the speaker's transgression of the explicit StE rules is probably an indication of their support for a speech community that is more regional in nature than the international StE-speaking community. NSGenE is a stealth norm in this regard. We may, however, conclude that GenE is the more general term that encompasses StE because its various versions include the forms that are employed in StE. The third person singular present tense form of the auxiliary *do* is the example we have previously examined before. A further example is sentence negation, which in NSGenE has a variant with double negation, viz. *He don't care about nothing you do*, which is commonly used (especially for emphasis). StE rules double negation strictly out, allowing only *He doesn't care about anything you do*. Here is a short list of further nonstandard features of GenE.⁸

Hermon,¹⁰ Good,¹¹ and Haspelmath¹² studied the issue of linguistic universals in the context of linguistic typology, focusing on the categories of gender, number, and tense of verbs. Good¹¹ has studied the influence of linguistic universals on grammatical modifications, particularly the problem of grammatical category reduction, as the simplification of grammatical inflections in English is an example of a broader trend observed in many languages towards analytical structures. The issue of language contacts and borrowings, including among Romance and Germanic languages, was studied by Gardani.¹³

Zwart¹⁴ and Culicover and Jackendoff¹⁵ studied the syntax of English in its diachronic development and at different synchronic sections. Schelleter¹⁶ studied the peculiarities of the construction of negation constructions in English and German in the linguistic environment of bilingualism. The author pays special attention to the expressive syntax of German. The syntactic order of German sentences has undergone significant changes from the more flexible word order in Old High German to the more rigid subject-verb-object order in Modern

German. Kortmann¹⁷ made a typological comparison of German and English using the methodology of contrastive linguistics.

A typological and comparative analysis of the grammatical features of English and German was carried out by Hawkins,¹⁸ Berg,¹⁹ and Brinton,²⁰ who concluded that although English and German share a common Germanic origin, their morphosyntactic structures have evolved significantly differently, with German retaining a more complex verb system

Lohse et al.²¹ studied the peculiarities of building syntactic constructions in English, and Weyerts et al.²² studied this issue based on German. Misersky et al.²³ and Braun et al.²⁴ studied the grammatical category of gender in German in a typological comparison with English. While English has primarily abandoned grammatical gender, German retains a rich system where gender differences heavily influence article and adjective forms.

Despite a considerable number of scientific articles and monographs on the typology of Germanic languages, the least studied issue, in our opinion, is the issue of lexical borrowings, especially at the present stage of language development, because this process is ongoing, so our research attention will focus on the lexical interactions between English and German at the present stage of their development. At the grammatical level of languages, the issue of conformity of verb tenses in these languages remains the least studied, so these two aspects will be the main ones in our further research.

Research Methods

The study is based on integrative review framework and did not imply empirical quantitative analysis, thus no quantification procedures were applicable. The search for publications to be included in the sample for analysis was carried out in ScienceDirect, MDPI, JSTOR, and ResearchGate databases.

The empirical material for the research was the lexical structure and grammatical constructions of the English and German languages. The research topic required a comprehensive approach, so the following research methods were applied:

- the method of critical analysis, the method of synthesis and analysis to describe the concepts of "linguistic universality", "grammatical structure", "analytical language", "synthetic language";
- diachronic and synchronic methods (to study the ways of evolutionary changes in the development of grammatical structures of English and German);
- structural method (for studying the grammatical structure of the compared languages, paradigmatic and syntagmatic relations between different levels of language);
- genetic method (for studying the common origin of languages and the nature of linguistic universals);
- the method of generalisation (for formulating theoretical conclusions of the study on the distinctive features and typological similarities in the grammatical structures of English and German).

Table 1 | Examples of identical and similar vocabulary in English and German

Examples of Identical Vocabulary		Examples of Similar Vocabulary	
English Language	German Language	English Language	German Language
Analog	Analog	Good	Gut
Blond	Blond	Morgen	Morning
Arm	Arm	Milk	Milch
Hand	Hand	Brother	Bruder
House	Haus	Sister	Schwester
Fish	Fisch	Family	Familie
Glass	Glas	Uncle	Onkel
Sun	Sonne	Aunt	Tante
Wind	Wind	Nephew	Neffe
Gold	Gold	Niece	Nichte
Sand	Sand	Table	Tabelle

Source: Compiled by the author

Results

There are many cognates in German and English at the lexical level: *Garten* - *garden*, *Familie* - *family*, *helfen* - *help*. However, in some cases, this similarity in pronunciation and spelling is deceptive; for example, the German *Gift* is not a “gift” as in English, but a “poison or deadly poison”. Some words, especially the vocabulary of in-laws, are almost entirely the same in both languages, and some words are very close in sound (Table 1).

Words originally came from Latin or Greek are almost always identical in German and English:

die Information – information
 die Station – station
 die Konsequenz – consequence
 die Familie – family
 das Theater – theater
 die Galaxie – galaxy
 der Dinosaurier – dinosaur

Furthermore, many words remain the same in both German and English. Some of these words are so ubiquitous that they are used in ordinary speech without the speaker being aware they are employing a German word. Here are several instances (refer to Table 2):

However, not all the vocabulary of the kinship sphere has similar roots in the lexicon; some words are completely different in English and German. For example, *grandson*—*Enkel*, *granddaughter*—*Enkelin*, *father-in-law*—*Schwiegervater*, *mother-in-law*—*Schwiegermutter*, *twins*—*Zwillinge*, *daughter-in-law*—*Schwiegertochter*, *son-in-law*—*Schwiegersohn*, *orphan*—*Waise*.

English words are so common in spoken German that in the realities of Germany, such a concept as “denglish” (Denglish is a combination of Deutsch “German” and English “English”) has emerged. A distinction should be made between anglicisms and denglish. Anglicisms are words borrowed from English, most often nouns and substantive verbs (e-mail, messenger, laptop, workshop), often neutral in stylistic colouring. Denglish is a hybrid of German and English, including so-called pseudo-anglicisms. One of the most apparent examples of denglish is the English word “download”, which in denglish takes the form “Ich habe das downgeloadet” or “Ich habe das gedownloaded”.

Lexical borrowings from English became especially active in German in the late twentieth and early twenty-first centuries, particularly in professions. They exclude the possibility of additional, connotative meanings and also have a concise form with informative content, which, in turn, meets the requirements of saving linguistic effort and the law of concentrating information in a minimum number of terminological units. On one of the largest specialised *job* search sites *jobboerse.arbeitsagentur.de*, English job titles are more or less represented in each of the search categories, and in such industries as IT, DV, Computer, job titles consist almost entirely of English variants that can be classified as follows:

- direct borrowings (both the form and the meaning coincide with English as a source of borrowing), for example: *Property Manager*, *Sales Manager*, *Financial Analyst*, *Quality Assurance Manager*, *Office Coordinator*, *Executive Assistant to CEO*, *Customer Service Agent*, *Service Solution Specialist* - Agriculture, IT Consultant MS Exchange, IT Solution Designer;
- hybrid borrowings (German has adopted only the first or last component): *Projektmanager Anlagenbau*, *Junior Java-Entwickler/in*, *IT Support Mitarbeiter/in*, *IT-Servicetechniker/in*, *Softwareentwickler/in*, *Fullstack-Entwickler/in*, *IT-Security Specialist*.

Table 2 | ‘General language’ similar words in German and English

German Word	English Meaning
der Kindergarten	This term, which translates to “children’s garden” in German, describes a nursery or preschool. It means the same thing in English.
die Angst	In both German and English, the word means “fear” or “anxiety”.
die Autobahn	This term, which is frequently used in English to refer to a German highway, refers to the German highway system.
der Zeitgeist	This term describes the zeitgeist or the cultural milieu of a certain era. Both German and English use it.
der Doppelgänger	This term describes someone who is a person’s double or lookalike. Both German and English use it.
der Rucksack	In both German and English, this word describes a backpack.
die Wanderlust	This term describes a tremendous desire to see the globe and travel. Both German and English use it.
die Schadenfreude	This term describes the joy that comes from seeing other people suffer. Both German and English use it.

Source: Compiled by the authors

Nowadays, it has become more common for many Anglo-American job titles to be adopted into the recipient language without any transformation. However, in order to prevent the excessive and incorrect use of English loanwords, the Gesellschaft für deutsche Sprache (Society for the German Language) and the Verein Deutsche Sprache (Society for the German Language) were established in Germany to classify English-American loanwords and suggest substitutions for them with native German words and to promote the purity of the German language. As a result of their activities, some sites offer German equivalents to Anglicisms and Americanisms in the profession, for example: *customer adviser* - *Kundenberater/in*; *content manager* - *Planer, Gestalter von (Web-) Inhalten*; *administrative officer* - *Verwaltungsbeamte/-r*; *account manager* - *Kundenbetreuer/in*; *information technologist* - *Informatiker/in*; *insurance broker* - *Versicherungsmakler/in*; - *sales manager* - *Vertriebsleiter/in*; *real estate broker* - *Immobilienmakler/in*.

German has also influenced English as a result of language contact. The massive borrowing of German words into English began in the second half of the eighteenth century (*Delicatessen* - *delicacies*, *doppelgänger* - *ghost double*, *ersatz* - *surrogate*, *schadenfreude* - *gloating*, *privatdozent* - *private docent*, *dachshund* - *dachshund*). The era of Germany's military and political dominance on the world stage began in the 1930s and 1940s. The 20th century caused a new wave of Germanisms in English, most of which became internationalisms. Most are perceived today as historicisms, for example: *führer* (*fuhrer*, *leader*), *gauleiter* (*gauleiter*, *governor of a region*), *sturmmann* (*corporal*), *wehrmacht* (*German armed forces of the Second World War*), *bunker* (*bomb shelter*), *SS-man* (*SS man*), *hitlerite* (*Hitlerite*), *blitzkrieg* (*lightning war*), and others. At the present stage of language development, this influence is insignificant.

English impacts on German are categorized into distinct types of borrowing, independent of the lexical domains in which they occur. The lexical influence of English on German is the focus of the great majority of publications in this topic. Most research on Anglicizations focuses more on written language than spoken language.^{25,26}

Meanwhile, numerous English borrowings, especially in the last century, have enhanced the German verbal lexicon. However, although many verbal anglicisms are widely used and approved by language authorities, little research has been done on the status of new, uncommon, and non-standard verbal anglicisms in German. In the meantime, a sizable and unique corpus gathered from social media platforms contains nonstandard German verbal anglicizations. The morphological behavior of non-standard verbal anglicisms, which are often employed, is influenced by phonological, pragmatic, and semantic factors in addition to frequency effects.

Words that show some degree of orthographic integration in the German lexicon but are not yet commonly attested or codified in sources like dictionaries are known as non-finite verbal anglicisms. The majority of new anglicisms (and other loan terms) have a

short lifespan because, although they are created as neologisms in certain contexts, they are not accepted by the larger speech community or established in the lexicon of a receptive language. However, rare and new anglicisms are well-suited for the study of some processes of semantic and morphological change because they show variability in morphological assimilation to standard paradigms and are frequently coined to fill a semasiological gap in a receptor language. This is especially true if their prevalence and variability can be recorded and measured using a corpus-based approach.

Many verbs have forms that exhibit varying degrees of assimilation, although verb borrowings in German generally conform to the German orthographic paradigm for the creation of the past participle. In examples (1) and (2) from the corpus, the past participle of the anglicism *liken* ('to like', esp. social media) exhibits full assimilation to the paradigmatic norm for weak verb past participles (*gelikt*, in the first example) or partial assimilation (*geliked*), in which the English -ed ending is retained. In the first example, the text notes that the Duden publishing house, an important German language authority, officially adopted the fully assimilated form in its dictionary in 2017.

- (1) @user Jetzt ist es offiziell: du hast gelikt, er/sie/es likt. #Duden [Now it's official: you have liked, he/she/it liked. #Duden]
- (2) @user Grade erst gesehen :3 Das meist geliked Video auf mein Kanal mittlerweile, Dankeschön!!! [Just saw it:3 The most liked video in my channel in the meantime, Thankyou!!!]

New non-finite verbal anglicisms in the corpus are attested from diverse semantic fields and exhibit variation in orthography. As for the new anglicisms, some of the types in the corpus are relatively frequent: Twenty most frequent types include: *twittern*, *streamen*, *getwittert*, *liken*, *googlen*, *gestreamt*, *geliked*, *supporten*, *gefixt*, *geflasht*, *adden*, *geupdated*, *haten*, *rendern*, *coden*, *followen*, *gevotes*, *cachen*, *tracken*, *sharen*.

By identifying similarities and differences between languages, typology emphasises their semantic uniformity. In any case, it is undeniable that all languages are characterised by universals, i.e., universal properties that reflect the so-called universals of human thinking, or *Lingua Mentalis* ("language of thought"). Considering temporal parameters, linguistic universals can be actualised as synchronous and diachronic, and according to how they are revealed as deductive or inductive, as well as extralinguistic and linguistic ones. In addition, linguistic universals can be subdivided into universals of language and speech. It should be remembered that universals are manifested at all language levels. The grammatically expressed meanings of time, space (the latter tends to be more weighty in lexical and syntactic ways of its linguistic actualisation), type, modality and state form the most essential system-forming categories in the form of a particular functional unity, the cementing force of which is the temporal meaning, which is always present as an

Table 3 | Correspondence of German cases to certain prepositions in English

Case of the German Language	Compliance in English	Example Sentence in German	Example Sentence in English
Genitive case	It is conveyed by the preposition of	<i>Der Beginn des Jahres war warm (The beginning of the year was warm)</i>	<i>The start of the year was warm</i>
Dative case	Corresponds to the prepositions to, for	<i>Ich schreibe meiner Mutter einen Brief Ich habe diesem Bruder eine Uhr gekauft (I'm writing a letter to my mother I bought this brother a watch)</i>	<i>I'm writing a letter to my mom</i>
		<i>Ich habe diese Uhr für meinen Bruder gekauft (I bought this watch for my brother)</i>	<i>I bought this watch for my brother</i>

Source: Own development of the authors

obligatory component in any of the mentioned grammatical categories, regardless of the specific linguistic realisation.

German is an inflectional language, which means that most parts of speech change according to their function in a sentence. The word remains unchanged in English, which is the primary grammatical difference between the languages under comparison, as it is an analytical language.

In English, there are three articles - a, an (indefinite) and the (definite), while in German, there are five articles: 3 definite (der/die/das) and 2 indefinite (ein/eine). Specific rules determine their use. There are four cases in German: Nominative, Genitive, Dative, Accusative, Akkusativ. The English language lost its cases during the formation of Middle English (late 11th - late 15th century), and this function of cases in English is taken over by prepositions (Table 3).

For both the observed and composed complex word vectors, Günther et al.²⁷ calculated the cosine similarity between each complex word vector and the vector of its corresponding base word vector. Figure 1 shows, by vector type and language, the average cosine similarity between semantically transparent or opaque complex phrases and their corresponding base words. The authors

used Linear Mixed Effects Models for the studies. They anticipated a three-way interaction between language (German/English), vector type (observed/compositional), and semantic transparency (transparent/opaque), with a stronger correlation between the two in English than in German. They evaluated whether adding the three-way interaction to the baseline model, which included all possible effects except for this one, significantly improved the model fit in order to test for this major hypothesis.

German and English differed in their morphological systematicity, according to Günther et al.'s²⁷ comparison of the similarities and differences between transparent and opaque words and their stems. The current findings suggest that quantitatively described variations in speakers' language experience, as estimated by linguistic corpora, are responsible for the examined cross-linguistic effect.

Becher et al.²⁸ simultaneously tackle the question of whether and how translation, a traditional instance of language interaction, might serve as a catalyst for two-language convergence and divergence occurrences. The authors present two studies that demonstrate that translation-induced convergence is not always

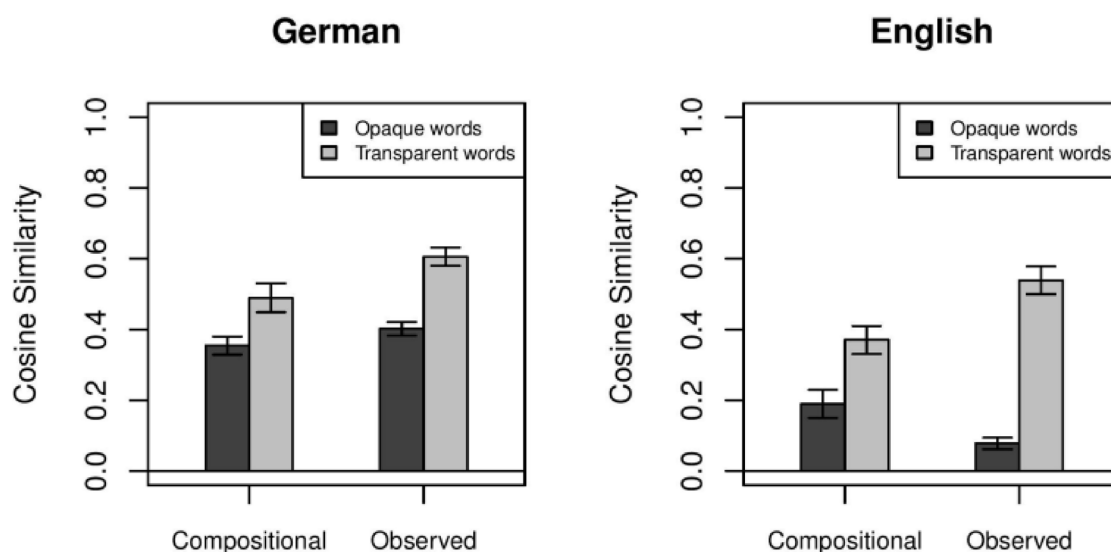


Fig 1 | Cosine similarity (means and standard errors) between the semantically transparent as well as the opaque complex words and their respective base words, by vector type (compositional vs. observed). Left panel: Similarities computed for the German item set. Right panel: Similarities computed for the English item set²⁷ *presented in original

true. In study 1, we did not find any evidence of English-German convergence in the use of modal verbs, but in study 2, we observed convergence with Anglophone usage patterns in the use of sentence-initial concessive conjunctions in translated and comparable German texts. The authors speculate that in order to explain these contradictory findings, bilinguals experience divergence when they perceive significant differences between the source and target languages (for example, English and German lexicogrammatical means for expressing modality) and convergence when they perceive items as having the same form and function (for example, English and German concessive conjunctions). Thus, translation also represents a factor of linguistic convergence.

Some grammatical constructions can be expressed in German both with the help of the case (*Ich habe diesem Bruder eine Uhr gekauft*) and with the preposition (*Ich habe diese Uhr für meinen Bruder gekauft*). In German, some verbs (*helfen, danken, antworten*) and some fixed expressions (*zu Hause, im Garten, zum Geburtstag*) require the dative case. The dative case is also used with the verbs of motion such as *gehen, fahren, laufen*, and in expressions with the pronoun *mit*, which indicates that the action is shared with someone.

At the syntactic level, German has three-word order functions that do not exist in English:

1. The main verb should be the second element in the sentence. This often requires inversion of the subject and verb. For example: *Manchmal komme ich mit dem Bus in die Schule.* - *Sometimes I come to school by bus.*
2. The main verb should be the last element in the subordinate clause. For example: *Sie fragte mich, weil ich zu viel Kaffee getrunken habe.* - *I feel bad because I drank too much coffee.*
3. The past participle should be the last element in the sentence. For example: *Ich habe ihn nicht gesehen.* - *I have not seen him.*

Significant differences exist between the tenses used in English to convey special meaning and those in German. For example, there is no long tense in German. Another example of a mismatch is the present simple tense in German in contexts where English use the future tense with the auxiliary verb *will*. Another problem for Germans is choosing the correct tense when talking about the past. When discussing past events, spoken German uses the present perfect tense, e.g. *Sie hat an der Universität Literatur studiert* (*She studied literature at the university*). Using the same grammatical tense in English leads to an error: *She has studied Literature at the university*. Both English and German have regular and irregular verbs. For example, the verb “sein” in German changes to “bin”, “bist”, “ist”, “sind”, or “seid” depending on the person.

The verb's general lexical and grammatical meaning in English can be successfully used to analyse the meanings of both simple and complex lexical and grammatical constructions of the English language to help understanding internal language processes

and the peculiarities of foreign language speech and thought patterns. The English language has an extensive range of meanings of the verb *be*: *to be, to exist, to live, to happen, to occur, to take place, to be in any state, to have any quality, to be equal, to be composed, to cost*, and also distinguishes the use of this verb as a linking verb, a service word, a modal verb. In German, the verb *sein* has a somewhat more limited range of meanings. It is used as the infinitive of the verb “to be” to express the existence or state of something or someone and is also used as an auxiliary verb to form compound tenses (most often with verbs of motion).

The general meaning of the existential status of the subject is also preserved when used in lexicogrammatical constructions of the passive voice and Continuous. Based on this provision, in English, the passive voice denotes the existence of the subject (object of action) in the state of action. At the same time, there is no need to name the producer of the action; it fades into the background and can be presented after the base of the sentence in the position of complement. The meaning of existence is conveyed by the verb *be* in the corresponding form, and the Past Participle expresses the state of being subject to action.

One of the most complicated structural formulas in English is the Perfect Continuous, which is a predicate with the meaning of the fact of a lasting action (active state) at a particular moment of speech. This is the youngest category in the history of the English language. As the name implies, it arose by superimposing the meanings of Perfect (the fact of the action being performed at the time of speech) on Continuous (the existence of a possible long-lasting action). In other words, the Perfect Continuous is used when the speaker wants to communicate that he (or another subject) has been in a state of continuous action for a certain period, and the emphasis is not on the result but on the fact of being in a state of active action for some time.

The meaning of Present Continuous existence in the state of active action allows for the logical use of the compound predicate in the following cases. When it is necessary to indicate that a particular state of affairs is understood as temporary (*People are giving more money to charity these days.* / *People are giving more money to charity these days*); when referring to events that occur frequently and cause irritation or surprise to the speaker (*He is always shouting at me*).

Discussion

The problem of the existence of universal grammatical principles for all languages remains a controversial issue in modern literary studies. Some scholars believe that languages are so diverse that common principles are impossible. Not all languages have the category of gender or the traditional division of speech into parts of speech;²⁹ for example, Chinese has a significant difference in this regard. In English and German, the category of gender is different, so these languages confirm Corbett's²⁹ position that grammatical gender breaks down into two main aspects: semantic, related to gender and animate, and structural, i.e. as an

inflectional classifier (in the organisation of types of noun classification). That is, gender is not a purely morphological or purely semantic category but combines both.

Numerous functional researches on English-German contact have been conducted, again mostly relying on the dominant lexicon focus. Researchers have recently started to examine additional facets and dimensions of interaction in German-speaking Europe, moving beyond a concentration on vocabulary. They focus more intently on the pertinent historical and attitudinal elements that influence English usage (Toborek et al.³⁰, Jeuris and Niehues³¹). Context in these studies refers to the sociocultural elements that are pertinent to and impact language usage and contact. Contextual concerns include: a) contact history; b) societal views regarding English and native speakers; and c) the domains or sectors in which the language is employed in the foreign context (e.g., business, politics, education, etc.).

The notion of linguistic universals has given rise to the concept of “universal grammar”, which faces problems in its application to linguistically diverse languages, as many languages lack features that are considered universal.³¹ Another controversial issue is the definition of the boundaries between language types and language universals. Therefore, the researchers Evans and Levinson³³ ask a pretty logical question: “Typological universals, such as word order or case system, may reveal linguistic trends, but do they reflect fundamental grammatical categories common to all languages?”³² Determining grammatical principles by different types of language structures also requires further discussion. Since languages are divided into synthetic and analytical, we cannot speak of uniform approaches to analysing the grammatical structure of these languages.

We agree with most scholars who note that universal grammatical structures are also subject to change. Most often, changes affect the verb as a part of speech. According to Haspelmath,¹² linguistic universals are not fixed but evolve, with languages showing both convergent and divergent paths in their grammatical development.¹² The morphosyntactic structures of languages do not overlap straightforwardly; the same goes for their phonological and semantic systems. Even with simple verbs such as “to eat”, one can see the contrast in the context of the use of this word between English and German. The German *essen*, like the English *eat*, cannot be used for animals (for example, when a horse eats an apple, the verb *fressen* should be used in German).

We agree with the position of Thomason³⁴ and Croft³⁵ that the most striking example in the modern world is the spread of English outside of traditionally English-speaking countries, as millions of non-English speakers come into contact with English through radio, television, Hollywood films, popular music.³³ In other words, socio-cultural interaction facilitates lexical borrowing, mainly from English. However, when it comes to borrowing grammatical structures, the process is much more complicated: grammatical interference

is limited to features that are typologically consistent with the structure of the recipient language.²⁴

Conclusion

The study found that during the second half of the twentieth and early twenty-first centuries, the English language had a significant impact on the lexical composition of the German language, in particular, causing the emergence of such a concept as “denglish”. A German study of the names of professions showed that lexical borrowing occurred in two ways: direct borrowing (complete preservation of the meaning and form of the word), and hybrid borrowing, when only one component of a complex word was borrowed. However, the struggle of German NGOs and the state itself for the purity of the language has influenced the search for German equivalents, which are actively promoted through the media for active use. German has also influenced English to some extent through language contacts. The massive borrowing of German words into English began in the second half of the 18th century and peaked in the 1930s and 1940s for well-known historical reasons. Most of these Germanisms later became internationalisms, and some are perceived by English speakers today as historicisms.

English loanwords are widespread in the professional sphere in German, particularly in technology, science, advertising, and media, driven by globalization and innovation in these fields. These borrowings can be direct transfers, such as “Computer” or “Internet,” or calques, where the meaning of an English word is adapted into German, like “global Village”. The integration of these English words is influenced by the need for precise terminology, the perceived sophistication of English terms, and the international nature of specific professional communities. Meanwhile, when words are borrowed into German from English, secondary or metaphorical meanings of the English are not necessarily borrowed. Most often, the primary, literal meaning of the English word is the meaning the loan takes on.

The grammatical differences between the two languages include the differences between the tenses used in English to convey special meaning and the same tenses in German. For example, there is no continuous tense in German. Another example of a mismatch is using the present simple tense in German in contexts where English uses the future tense. Unlike German, English has extensive meanings for the verb to be and uses it as a linking, service or modal word. The general meaning of the subject’s existential status is retained even when used in lexico-grammatical constructions of the passive voice and the Continuous. Based on this position, in English, the passive voice denotes the existence of the subject (object of action) in the state of action.

At the syntactic level, German has three-word order functions in the sentence that do not exist in English: the main verb must be the second element in the sentence, which often requires the inversion of the subject and verb; the main verb must be the last element in the

subordinate clause; the past participle must be the last element in the sentence. Thus, the linguistic study of the universals and peculiarities of English and German gives grounds for the statement that there is both convergence and divergence of these languages, and the study of these phenomena requires further research, taking into account systemic factors of influence, in particular in the field of sociolinguistics and sociology of language.

References

- Parija R. From Anglo-Saxon to Global Linguistics: A Quantitative Analysis of English Language Development. *Contemp. Eng Lang Lit Robot Millen*. 2024;3(4):4–15. <https://doi.org/10.46632/cellrm/3/4/2>
- Lawrence L. The discursive construction of “native” and “non-native” speaker English teacher identities in Japan: A linguistic ethnographic investigation. *Int J Soc Cult Lang*. 2020;8(1):111–25. https://www.ijsccl.com/article_38734_c941cf1be9c8de4c18fc185a6b08ef43.pdf
- McLelland N. Christian Ludwig (1660–1728) and the beginnings of German/English lexicography. *Oxf Ger Stud*. 2024;1–25. <https://doi.org/10.1080/00787191.2024.2313897>
- Ziegler JC, Perry C, Jacobs AM, Braun M. Identical Words are Read Differently in Different Languages. *Psych Sc*. 2001;12(5):379–384. <https://doi.org/10.1111/1467-9280.00370>
- Hicks NS. Exploring systematic orthographic crosslinguistic similarities to enhance foreign language vocabulary learning. *Lang Teach Res*. 2021;28(6):2385–2407. <https://doi.org/10.1177/13621688211047353>
- Bickerton D. *Roots of language*. Amsterdam: John Benjamins Publishing Company; 2016. http://dx.doi.org/10.26530/OAPEN_603354
- Biber D, Gray B, Staples S, Egbert J. Investigating grammatical complexity in L2 English writing research: Linguistic description versus predictive measurement. *J Engl Acad Purp*. 2020;46:100869. <https://doi.org/10.1016/j.jeap.2020.100869>
- Gramley S, Gramley V, Pätzold K-M. *A Survey of Modern English*. London: Routledge, 2021.
- Shan Y. Analysis of a grammatical category in English – modal verbs. *Open J Soc Sci*. 2021;9:271–8. <https://doi.org/10.4236/jss.2021.99020>
- Hermon G. Language typology and universal grammar: A commentary on the paper by Eric Potsdam. *Nat Lang Linguist Theory*. 2009;27(4):773–87. <https://doi.org/10.1007/s11049-009-9079-z>
- Good J, editor. *Linguistic universals and language change*. Oxford: Oxford University Press; 2008. <https://doi.org/10.1093/acprof:oso/9780199298495.001.0001>
- Haspelmath M. The structural uniqueness of languages and the value of comparison for language description. *Asian Lang Linguist*. 2020;1(2):346–66. <https://doi.org/10.1075/alal.20032.has>
- Gardani F. Contact and borrowing. In: Ledgeway A, Maiden M, editors. *The Cambridge handbook of Romance linguistics*. Cambridge: Cambridge University Press; 2022. p. 845–69. <https://doi.org/10.1017/9781108580410.034>
- Zwart JW. A comparative approach to syntactic change in the history of English. *Engl Lang Linguist*. 2005;9(1):157–79. <https://doi.org/10.1017/S1360674305001516>
- Culicover PW, Jackendoff R. The simpler syntax hypothesis. *Trends Cogn Sci*. 2006;10(9):413–8. <https://doi.org/10.1016/j.tics.2006.07.007>
- Schelletter S. Negation as a crosslinguistic structure in a German-English bilingual child. In: *Cross-linguistic structures in simultaneous bilingualism*. Amsterdam: John Benjamins Publishing Company; 2000. p. 105–121. <https://doi.org/10.1075/sibil.21.08sch>
- Kortmann B. Contrastive linguistics: English and German. In: *English linguistics*. Stuttgart: J.B. Metzler; 2020. https://doi.org/10.1007/978-3-476-05678-8_5
- Hawkins JA. Word-external properties in a typology of Modern English: A comparison with German. *Engl Lang Linguist*. 2019;23(3):701–27. <https://doi.org/10.1017/S1360674318000060>
- Berg T. Boundary permeability: A parameter for linguistic typology. *Linguist Typol*. 2014;18(3):489–531. <https://doi.org/10.1515/lingty-2014-0020>
- Brinton LJ. *The structure of modern English: A linguistic introduction*. Amsterdam: John Benjamins Publishing Company; 2000.
- Lohse B, Hawkins JA, Wasow T. Domain minimisation in English verb-particle constructions. *Language*. 2004;80(2):238–61. <http://www.jstor.org/stable/4489662>
- Weyerts H, Penke M, Münte TF, et al. Word order in sentence processing: An experimental study of verb placement in German. *J Psycholinguist Res*. 2002;31:211–68. <https://doi.org/10.1023/A:1015588012457>
- Misersky Y, Majid A, Snijders TM. Grammatical gender in German influences how role-nouns are interpreted: Evidence from ERPs. *Discourse Process*. 2019;56(8):643–54. <http://dx.doi.org/10.1080/0163853X.2018.1541382>
- Braun F, Sczesny S, Stahlberg D. Cognitive effects of masculine generics in German: An overview of empirical findings. *Commun*. 2005;30(1):1–21. <https://doi.org/10.1515/comm.2005.30.1.1>
- Buscha H, Helbig G. *Deutsche Grammatik*. Klett (Ernst) Verlag. 2001. https://www.amazon.com/Deutsche-Grammatik/dp/3126063659/ref=sr_1_3?dib=eyJ2ljojMSJ9.h0thMuLQ00jSTuaHvYZpGW_65jEludZAWFVeA-5bSkcuwB_636Bvc8BtUTP8X4tfNMLs3LjnyTVcnoeOGWGED_qW_nj3SG99vgYueNEUz1l.p2HxdB_WIU9RXN4oCqj3qVXR_3RWPZSyXRTI8pTnJk&di_b_tag=se&qid=1758304580&refinements=p_27%3AGerhard+Helbig+and+Joachim+Buscha&s=books&sr=1-3
- Onysko A. Anglicisms in German: Borrowing, Lexical Productivity, and Written Codeswitching. Berlin/New York: Walter de Gruyter. 2007.
- Günther F, Smolka E, Marelli M. ‘Understanding’ differs between English and German: Capturing Systematic Language Differences of Complex Words. *Cortex*. 2019;116:168–175. <http://dx.doi.org/10.1016/j.cortex.2018.09.007>
- Becher V, House J, Kranich S. Convergence and divergence of communicative norms through language contact in translation. *Hamburg Studies on Multilingualism*. De Gruyter. 2009. <http://dx.doi.org/10.1075/hsm.8.06bec>
- Corbett G. *Gender*. Cambridge: Cambridge University Press; 1991. <http://dx.doi.org/10.1017/CBO9781139166119>
- Toborek V, Busch M, Bauckhage Ch, Welke P. A New Aligned Simple German Corpus. *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics Volume 1: Long Papers*, pp. 11393–11412. <https://aclanthology.org/2023.acl-long.638.pdf>
- Jeuris P, Niehues J. LibriS2S: A German-English Speech-to-Speech Translation Corpus. *Proceedings of the 13th Conference on Language Resources and Evaluation (LREC 2022)*, pages 928–935 Marseille, 20–25 June 2022, pp. 928–935.
- Chomsky N. *The architecture of language*. Oxford: Oxford University Press. 2020.
- Evans N, Levinson SC. The myth of language universals: Language diversity and its importance for cognitive science. *Behav Brain Sci*. 2009;32(5):429–92. <https://doi.org/10.1017/S0140525X0999094X>
- Thomason SG. *Language contact: An introduction*. Edinburgh: Edinburgh University Press; 2001. <http://dx.doi.org/10.1515/9781474473125>
- Croft W. *Typology and universals*. Cambridge: Cambridge University Press; 2003. <https://doi.org/10.1017/CBO9780511840579>