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On the Dynamics of Constructional Idioms

A Micro-Diachronic Approach to the Entrenchment and
Conventionalization of Lexico-Grammatical Patterns in German

Abstract: Various studies have shown that lexico-grammatical patterns can emerge through creative modification of fully lexicalized multi-word expressions, especially through lexical substitution (e.g., *X oder nicht X/Y*, *das ist hier die Frage* [Engl. ‘To X, or not to X/Y, that is the question’]). Following the latest research, we ask how the development from lexically fixed idioms via modification to semi-schematic idioms (so-called constructional idioms), a process which happens over a shorter period, can be empirically determined, and theoretically explained. From a theoretical point of view, phraseological and constructionist concepts of linguistic creativity, approaches of Diachronic Construction Grammar to constructionalization, and Schmid’s (2020) Entrenchment-and-Conventionalization Model are considered. Methodologically, micro-diachronic corpus analyses (real-time data) and an online survey (apparent-time data) of German constructional idioms are combined. The method is illustrated by two case studies on the multi-word expressions [*X du noch oder Y du schon?*] [Engl. ‘Are you still X or do you already Y’] and [*Nach X ist vor X/Y*] [Engl. ‘After X is before X/Y’]. The case studies show, on the one hand, how the form and meaning of lexicalized multi-word expressions change over a few decades. On the other hand, they reveal that constructional idioms are stored very differently in the minds of individual speakers. Overall, the paper aims to provide an adequate account of the interplay between routine and creativity, variation and change, and entrenchment and conventionalization regarding the dynamics and emergence of constructional idioms in German.

1 Introduction

This paper deals with the dynamics and emergence of lexico-grammatical patterns in German. The focus is on the role of creativity “as a real engine of change” (Mellado Blanco 2024: 508) and the interaction of creativity and routine in the formation of new patterns. Creative utterances can be defined in the broadest sense as “novel utterance tokens that do not instantiate a conventional utterance type, but change such a type” (Schmid 2020: 19). We assume that semi-schematic constructions can develop because of frequent creative substitutions of lexical units

within a fully lexicalized multi-word expression. This assumption can be illustrated with examples (1)–(3) taken from the German Reference Corpus.¹

- (1) **Gesichertes Mittelfeld oder Abstiegskampf? Das ist hier die Frage.** Mannheims Trainer Rainer Ulrich blickt zunächst jedoch ausschließlich auf den morgigen Samstag, wenn der VfR vor eigenem Publikum die SpVgg Ludwigsburg empfängt.
(Mannheimer Morgen, March 18, 2005)
[Engl. ‘Safe midfield or relegation battle? That is the question here’]²
- (2) **Laden oder nicht laden, das ist hier die Frage.** Es geht um Alkali-Batterien, von denen die Hersteller behaupten, sie seien nicht wieder aufladbar.
(Süddeutsche Zeitung, June 4, 1996)
[Engl. ‘To charge or not to charge, that is the question here’]
- (3) **Sauber oder dreckig? Das ist hier die Frage!** Ungetrübte Badefreuden an den Stränden Niedersachsens verspricht ein EU-Bericht – die Wasserqualität sei 2002 sehr gut geblieben.
(Rhein-Zeitung, February 8, 2005)
[Engl. ‘Clean or dirty? That is the question here!’]

From a phraseological point of view, the highlighted expressions could be classified as occasional variations of the idiom *Sein oder nicht sein, das ist hier die Frage* [Engl. ‘To be, or not to be, that is the question’]. The reason for this interpretation is that most people are probably familiar with this catchphrase (Parkinson 2003), which goes back to Shakespeare’s “Hamlet”. If the origin of a formulaic expression is (still) known in the speech community, such idioms can also be called “geflügelte Worte” (Engl. ‘winged words’), according to the classification of German phraseology (Burger 2015: 48–49). In this case, the components *Sein* and (*nicht*) *sein* are substituted creatively. Such creative variations of familiar and fixed multi-word expressions are quite a common phenomenon called “modification”, as it has been described many times in phraseology (Barz 1992; Dobrovol’skij 1999; Ptashnyk 2009; Jaki 2014; cf. also Section 3.1).

¹ The German Reference Corpus is accessible via the platform COSMAS II: cosmas2.ids-mannheim.de/cosmas2-web/ (March 1, 2024).

² In examples, the (bold) highlighted multi-word expressions are translated in the following.

However, if we search for this idiom in the German Reference Corpus, we can see that it occurs only 56 times (about 4%) in its original form out of a total of 1,354 hits (100%) (Stumpf 2016: 318). In 96% of all instances, it is “modified”, i.e., other words or phrases are used instead of *Sein* and *(nicht) sein*, such as verbs (*laden oder nicht laden*), adjectives (*sauber oder dreckig*), nouns (*Mittelfeld oder Abstiegskampf*) and whole phrases or sentences (*die ganze Nacht für die Klausur lernen oder mit Freunden feiern gehen* [Engl. ‘study all night for the exam or go out partying with friends’]). Furthermore, it can be observed that in only very few instances the first element is repeated in the second position and combined with the negation *nicht* [Engl. ‘not’]. The use of different elements is more frequent. Thus, a simple corpus study reveals that the idiom is used much more frequently in a modified form. It is hard to say that these forms are creative variations (modifications) of a fully lexicalized idiom. Instead, the high number of variations suggests that these are fillers of an underlying semi-schematic pattern (*X oder nicht X/Y, das ist hier die Frage* [Engl. ‘To X, or not to X/Y, that is the question’]) which can be described as a “constructional idiom” (Taylor 2002: Chapter 28.2). The example shows that lexicalized idioms can develop into more flexible idioms through modification.

This paper focuses on such dynamic processes at the interface of creativity and routine, and at the interface of phraseology and Construction Grammar. The following questions are addressed:

- What methods can be used to explore the dynamics and emergence of constructional idioms?
- What formal and semantic changes take place during the development of (new) constructional idioms?
- What theoretical approaches can be used to describe such dynamic processes?

Section 2 gives an overview of the research on constructions between lexicon and grammar and defines the term “constructional idiom”. In Section 3, we introduce theoretical approaches to the analysis of the dynamics of constructional idioms. We first discuss the state of research on creativity in phraseology and Construction Grammar (Section 3.1); in addition, we address approaches to Diachronic Construction Grammar, particularly to constructionalization (Section 3.2), and we outline the Entrenchment-and-Conventionalization Model by Schmid (2020) (Section 3.3), which we apply from both an empirical and theoretical perspective. Section 4 presents our methodology (Section 4.1) and illustrates the approach with case studies of the constructions [*X du noch oder Y du schon?*] [Engl. ‘Are you still X or do you already Y’] (Section 4.2) and [*Nach X ist vor X/Y*] [Engl. ‘After X is before X/Y’] (Section 4.3). A conclusion and a discussion of the interplay between creativity and routinization in the dynamics of constructional idioms are given in Section 5.

2 Constructional Idioms

Usage-based approaches of Construction Grammar assume that linguistic knowledge can be described as a network of conventionalized pairings of form and meaning (function) called constructions (Goldberg 1995, 2006, 2019; Hoffmann and Trousdale 2013). One of the most important assumptions of constructionist approaches is that even completely syntactic and schematic structures (such as passive constructions) have meaning. The extension of form-meaning pairings to lexically unspecified abstract patterns results in the rejection of a strict distinction between lexicon and grammar. Instead, a continuum between lexical units and syntactic structures is considered. At one end of the lexicon-grammar continuum we find atomic and concrete pairings of form and meaning (e.g., simple words), at the other end schematic and complex constructions (e.g., ditransitive constructions). Between lexicon and grammar semi-schematic patterns are situated (e.g., [X *of you*], Goldberg and Herbst 2021), which in constructionist research are known as “constructional idioms” (Taylor 2002), “formal or lexically open idioms” (Fillmore, Kay and O’Connor 1988) or “schematic idioms” (Croft and Cruse 2004). They can be defined as “partially lexically-filled phrasal patterns” (Goldberg 2006: 215) of varying degrees of productivity and schematicity with a (partially or fully) non-compositional (pragmatic) meaning (Booij 2002: 320; Dobrovolskij 2011a: 114; Ivorra Ordines 2022: 33–35). In phraseology, such patterns are called “open-slot idioms” (Martí Solano 2013), “Phraseoschablonen” (Fleischer 1997) and “Modellbildungen” (Burger 2015). Dobrovolskij (2011a) brings together phraseological and constructionist approaches and establishes the term “Phrasem-Konstruktionen” (“constructional phrasemes”).

Constructional idioms have received greater attention in recent years (e.g., Corpas Pastor 2021, 2022; Mellado Blanco 2022; Mellado Blanco, Mollica and Schafroth 2022). In previous research, they have been analyzed from a product-oriented rather than a process-oriented perspective: both phraseological and constructionist studies have primarily described the lexical (e.g., meaning of the whole construction, formal and semantic properties of the fillers) and grammatical (e.g., syntax of the construction, morphosyntactic restrictions on slot filling) properties of constructional idioms based on synchronic data (for German cf. Staffeldt 2018; Mollica 2020; Stumpf 2021). So far, only a few studies deal with the dynamics of constructional idioms in general and the development of idioms into constructional idioms through creativity in particular as shown in Section 1 (for an overview cf. Mellado Blanco 2022: 9–13). For instance, Mellado Blanco (2018) analyzes the pattern [*Reden ist Silber, X ist Gold*] [Engl. ‘To talk is silver, to X is gold’] and Stutz and Finkbeiner (2022) explore the pattern [X *kam, sah und Y*]

[Engl. ‘X came, saw and Y’].³ Thus, the emergence of semi-schematic constructions from fully lexicalized idioms is an interesting phenomenon between lexicon and grammar that needs to be studied more intensively.

Also concerned with partly lexicalized patterns is research on linguistic creativity (Bergs 2018: 281–283, 2019: 176–177; Section 3.1) and constructionalization (Traugott and Trousdale 2013: 183–186, 2014: 270–272; Section 3.2) that refers to such patterns as “snowclones”. The term goes back to an entry in the linguistics blog Language Log from 2004 (for the history of the term, see in detail Hartmann and Ungerer 2024: 600–602).⁴ However, it is used quite vaguely in the literature. Traugott and Trousdale (2013: 150), for instance, consider snowclones as patterns that develop from “fixed micro-constructions that are usually formulae or clichés”. What is meant by “formulae and clichés” in this definition is unclear. In a recent study, Hartmann and Ungerer (2024) provide the first theoretical systematization of snowclones and a corpus analysis of the English constructions [*the mother of all* X] and [X *is the new* Y]. They claim that

snowclones are characterised by the extension of the source construction to new instances via partial lexical substitution. Snowclones can thus be regarded as semi-schematic constructions composed of both fixed elements (e.g. *the mother of all*) and open slots (represented by variables such as X and Y). (Hartmann and Ungerer 2024: 603).

We see that the definition of snowclones is very similar to the definition of constructional idioms, with the difference that snowclones are based on a fixed source construction (a “winged word” in terms of phraseology). For this reason, Hartmann and Ungerer (2024: 626) categorize snowclones as a subtype of constructional idioms, but still “as a class of their own”. To some extent, they also consider the dynamics of the analyzed snowclones. However, this is not the focus of their study. This paper therefore presents methodological, empirical, and theoretical perspectives on the dynamics and development of German constructional idioms.

³ For analyses of Spanish constructions developing from idioms to semi-schematic constructions, see Mellado Blanco (2020, 2023) and Ivorra Ordines (2022, in press).

⁴ itre.cis.upenn.edu/~myl/language-log/archives/000350.html (March 1, 2024).

3 Theoretical Approaches to the Analysis of the Dynamics of Constructional Idioms

3.1 Creativity in Phraseology and Construction Grammar

In both Construction Grammar and phraseology, the concept of creativity plays an important role. In recent years, both fields of research have increasingly dealt with the questions of how creativity can be defined, to what extent creativity and routinization interact with each other, and how linguistic creativity can be explained from a cognitive-linguistic perspective (Langlotz 2006; Dobrovol'skij 2008; Zeschel 2012; Hoffmann 2018b, 2020; Goldberg 2019: Chapter 3; Ungerer and Hartmann 2023: Chapter 5.1).

In phraseology, a distinction is usually made between variation and modification. Variation is defined “as a regular formal change of a pattern licensed by the norms of a given language” (Filatkina 2018a: 26). As a result, phrasemes can have two or more conventionalized forms (e.g., *mit den Achseln zucken* / *die Achseln zucken* [Engl. ‘shrug one’s shoulders’]). Thus, numerous studies have shown that phrasemes with completely fixed structure are the exception (Fellbaum and Stathi 2006; Fellbaum 2019). Different types of variation can be differentiated. For instance, there is morphological (*seine Hand/Hände im Spiel haben* [Engl. [literally] ‘have a hand/hands in the game’]) and lexical variation (*bis an/über den Hals in Schulden stecken* [Engl. [literally] ‘to be in debt up to/above the neck’]), shorter or longer variants (*sich etwas [rot] im Kalender anstreichen* [Engl. ‘mark something [red] in your calendar’]), or variation in the argument structure of the phraseme (*jmdm./für jmdn. eine Extrawurst braten* [Engl. [literally] ‘to fry sb./for sb. an extra sausage’]).

While variation refers to the usual (possibly codified in dictionaries) forms of a phraseme, modification, in contrast, is an occasional version of the canonical structure of a phraseme “that has been created ad hoc by a particular user, generally in order to attain specific stylistic effects” (Rodríguez Martín 2014: 4). Modified phrasemes usually have differences in meaning compared to the original phrasemes, while variations show at most minimal semantic differences. In (4) the idiom *jmdm. einen Bären aufbinden* (Engl. [literally] ‘to tie a bear on sb.’s back’) is modified by an expansion with an adjective attribute (*sozialistischen* [Engl. ‘socialist’]); in addition, the negation marker *keinen* is used instead of the indefinite article *einen*:

- (4) Dennoch liess Mill sich **keinen sozialistischen Bären aufbinden**.
 (Neue Zürcher Zeitung, July 26, 2018)
 [Engl. [literally] ‘Nevertheless, Mill did not let anyone tie him to a socialist bear.’]⁵

Modified phrasemes are intended by speakers, and they are “always bound to a specific contextual environment” (Gläser 2001: 130). They can be used “for unexpected semantic-pragmatic effects on the part of the hearer” (Filatkina 2018a: 27). The speakers’ decision to play with a conventionalized idiom distinguishes modifications from so-called mistakes/mispronunciations (Ptashnyk 2009: 55).⁶ Modification also exhibits certain types (such as substitution, expansion, reduction, and permutation) that do not differ significantly from those of variation (Fiedler 2007: 90–95; Ptashnyk 2009: Chapter 3.2; Dobrovol’skij 2011b). In semantic or contextual modifications, the meaning of the phraseme is “played with”, for instance, by realizing its idiomatic as well as literal meaning simultaneously without changing its form (Burger 2015: 164–165), as in (5).

- (5) Meinem Kumpel Benjamin **ist jetzt ein Licht aufgegangen**. Nachdem er mit seiner Familie ins Eigenheim gezogen ist, hat er es nach dem anfänglichen Stress nun endlich geschafft, in den meisten Zimmern von Nullachtfünfzehn-Birnenfassungen auf wesentlich hübschere Deckenleuchten umzurüsten.
 (Rhein-Zeitung, November 7, 2013)
 [Engl. [literally] ‘My buddy Benjamin has now seen the light. After moving into his own home with his family, he has finally managed, after the initial stress, to convert most of the rooms from zero-eight-fifteen bulb sockets to much nicer ceiling lights.’]⁷

Modification can follow certain patterns, for instance, by preferentially substituting a particular component of an idiom. In this way, patterns of modification emerge that can develop into more schematic constructions when the modified instances far exceed the original phraseme (cf. Section 1). In an earlier study, I suggested a 50%-benchmark for such phenomena (Stumpf 2016): if in corpora the

5 The German idiom *jmdm. einen Bären aufbinden* means ‘to tell someone something obviously untrue in the hope that he or she will believe it’.

6 The boundary between modifications and variations (and also mistakes/mispronunciations) is not easy to draw. In recent years, however, corpus-analytic approaches have shown how a demarcation between non-intentional errors, occasional modifications, and usual variations can be operationalized (Pfeiffer 2016, 2017).

7 The German idiom *jmdm. geht ein Licht auf* means ‘suddenly understand / grasp something’.

original phraseme occurs in less than 50% of all instances, we are dealing with a constructional idiom that has emerged from the original phraseme. The original phraseme in this case can co-exist with the constructional idiom as a fully lexicalized micro-construction (Traugott 2008: 236).

Recent work in Construction Grammar is mostly oriented towards Sampson's (2016) distinction between F-creativity ("fixed creativity") and E-creativity ("enlarging" or "extending creativity") (Hoffmann 2018a, 2019, 2022; Bergs 2018, 2019). F-creativity is the creation of new linguistic units based on existing patterns, which could also be described as productivity (Barðdal 2008). The creation of new constructions by breaking linguistic rules is called E-creativity: "Speakers also have the ability to go beyond their existing constructional possibilities" (Hoffmann 2022: 266). Strictly speaking, it is thus only E-creativity "that enlarges or expands our system(s)" (Bergs 2019: 175). From a constructionist perspective, E-creativity, and the interaction between E-creativity and F-creativity seems to be of particular interest because "F-creativity to a great degree derive from the creative slot filling of schematic constructions" (Hoffmann 2018a: 266).

For instance, Hoffmann (2019: 2) asks how speakers use their cognitive grammar to produce utterances that break existing rules. He refers to the Blending Theory (Fauconnier and Turner 2002) to explain combinations of constructions (Hoffmann 2019, 2022; cf. Herbst 2018, who also argues for this theory). Using the example *Messi is the Mozart of football*, he shows how two input spaces (FOOTBALL and CLASSICAL MUSIC) are blended "into a joint, new space that contains the creative, new meaning" (Hoffmann 2019: 5). Hoffmann (2022: 266) also illustrates E-creativity with a modified idiom (*they kick the proverbial bucket*). Phraseological modification can thus be interpreted as E-creativity. Bergs (2018, 2019) discusses the phenomena of snowcloning (cf. Section 3.1), mismatch/coercion (e.g., *She tried to eat her way out of her clothes*, Bergs 2019: 283), and aberration (e.g., *A fun thing to talk about*, Bergs 2019: 286) and asks whether these phenomena are E-creativity or F-creativity. He points out that from an empirical point of view "differentiating between the two on the basis of real-life utterances is a lot more difficult" and that there "is not so much a clear dichotomy between F-creativity and E-creativity but rather a continuum between these two poles" (Bergs 2018: 181). Overall, however, Construction Grammar is still at the beginning of investigating verbal creativity.⁸

⁸ It can be added that the distinction between F-creativity and E-creativity has similarities with the distinction between "system" and "norm" according to Coseriu (1975, 2007) (for an overview cf. Kabatek 2023: Chapter 3). While "system" refers to the regularities inherent in language, "norm" refers to the social conventions underlying language use. According to Coseriu (2007: 267), the language system (virtually) comprises everything that is realizable in a language based

3.2 Constructional Change and Constructionalization

Since the development of an idiom into a constructional idiom involves language change, we consider diachronic constructionist approaches to its study. Thus, in recent years, numerous articles, monographs, edited volumes, and special issues have been published that deal with language variation and change and belong to the paradigm of Diachronic Construction Grammar (Noël 2007; Hilpert 2008, 2013; Fried 2009, 2013; Bergs and Diewald 2008; Barðdal et al. 2015; Merten 2018; Filatkina 2018b; Noël and Coleman 2021; Hilpert, Cappelle and Depraetere 2021; Huber and Herbst 2022; Sommerer and Smirnova 2022; Lasch and Ziem 2023). The central questions are “how constructions can change on the form or meaning side, or both” (Bergs 2017: 373) and how new constructions emerge. In addition, there is a discussion about how constructionist approaches to language change differ from or can be combined with other usage-based theories such as grammaticalization and lexicalization (Traugott 2003, 2007, 2015; Trousdale 2008, 2010, 2012; Hilpert 2011; Traugott and Trousdale 2013: 30–38).

Within Diachronic Construction Grammar, a distinction is usually made between constructionalization and constructional change. In the case of constructional change, only the form or the meaning of a construction changes (Traugott and Trousdale 2013: 22–26). Since only one side of a construction changes, constructional change does not necessarily “result in conventionalized units in which both morphosyntactic form and semantics are new” (Traugott and Trousdale 2014: 273) (e.g., *going to* → *gonna*, Bergs 2017: 373–374). In the case of constructionalization, in contrast, both the form and the meaning of a construction change, resulting in a new construction (Traugott and Trousdale 2013: 26–27). Examples are the development of the *BE going to* future (Traugott 2015: 65–73) and the development of *all-* and *what-*pseudo-clefts in English (Traugott and Trousdale 2013: Chapter 3.5). It should be mentioned, however, that the line between constructionalization and constructional change cannot be drawn clearly. Both language change processes often are interrelated with each other (Traugott and Trousdale 2013: 27).

Traugott and Trousdale (2013: Chapters 3 and 4) differentiate between grammatical and lexical constructionalization. While the output of the lexical construc-

on general rules (e.g., word formation rules/patterns). The norm, on the other hand, is that which constrains speakers and limits their freedom of formulation and the possibilities given by the system to utterances that are conventionalized in the speech community (Coseriu 1975: 88). As a result, there are, first, expressions which conform to the system as well as to the norm (*essbar* [Engl. ‘eatable’]), second, expressions which conform to the system but do not belong to the norm (*hassbar* [Engl. ‘hateable’]), and third, expressions which deviate from the system (and therefore also from the norm) of a language (*türbar* [Engl. ‘doorable’]).

tionalization is contentful, the output of grammatical constructionalization is procedural and at the grammatical end of the lexicon-grammar continuum (Traugott and Trousdale 2013: 193, 2014: 275–276; Traugott 2019: 127). For the present study, lexical constructionalization is relevant since it focuses among other things on the development of productive formulaic patterns out of phrases and clauses (Traugott and Trousdale 2013: Chapter 4.7). Thus, the change concerning the “Hamlet” quote (cf. Section 1) is a typical case of lexical constructionalization. It can be described as the emergence of a semi-schematic pattern through a series of constructional changes based on a fully lexicalized idiom. Traugott and Trousdale (2013: 183) refer to such changes as snowcloning (cf. Section 3.1), as “a fixed specific expression becomes less fixed by virtue of introducing a variable (a formal change), while the original meaning of the micro-construction generalizes”. The approach of lexical constructionalization allows us to explain “the role of specific constructions in the formation of schemas” and “a pattern-based view on changes undergone by contentful constructions” (Traugott and Trousdale 2014: 276–277).

A crucial factor for the development of (semi-schematic) constructions is analogy (Fischer 2007: Chapter 3.5; Hunston and Francis 2000: Chapter 4.2.2; De Smet 2013: Chapter 2.2).⁹ The emergence of a constructional idiom such as [X *oder nicht* X/Y, *das ist hier die Frage*] (cf. Section 1) can be seen as the result of the interplay of analogization and modification: certain components of an idiom are substituted by formal and semantically similar components in a creative way to achieve certain effects (e.g., to be funny or to arouse interest). In her study of Spanish constructions, Mellado Blanco (2023: 123) comes to the same conclusion:

In lexically filled constructions (idioms) with high token frequency and a high degree of semantic coherence and entrenchment [. . .], the analogical substitution of one or several of its constituents by semantically related ones is a frequent process [. . .], which leads to the emergence of a schematic construction [. . .].

Furthermore, according to Traugott and Trousdale (2013: Chapter 5), context plays an important role in constructionalization since “change occurs only in context” (Traugott 2019: 129). Under “context” they include such factors as linguistic co-text (i.e., linguistic environment, including syntax, morphology, phonology, semantics, pragmatic inference, mode) and wider discourse and sociolinguistic contexts (Traugott and Trousdale 2013: 196). Change usually begins when constructions are used in unusual contexts that lead to “slight, ‘untypical’ shifts in the use of existing constructions” (Traugott 2019: 130). Through repetitive use in other contexts,

⁹ Traugott and Trousdale (2013: 37–38) use the term “analogization”.

new pairings of form and meaning can emerge (Diewald and Smirnova 2010: 114). Both entrenchment and conventionalization are involved here.

3.3 The Entrenchment-and-Conventionalization Model

The Entrenchment-and-Conventionalization Model (in the following “EC-model”) developed by Schmid (2014, 2015, 2016, 2020) “constitutes a universal and unified theory of how language(s) work(s)” (Schmid 2015: 3). The model combines cognitive with sociopragmatic considerations to explain language use, language variation, and language change. It thus considers both the differences between individual speakers and the patterns of usage within a speech community. Of central importance for the model are therefore the two interrelated processes of entrenchment and conventionalization, which Schmid (2020: 2; emphasis in original) defines as follows:¹⁰

Conventionalization is the continual process of establishing and readapting regularities of communicative behaviour among the members of a speech community, which is achieved by repeated usage activities in usage events and subject to the exigencies of the entrenchment processes taking place in the minds of speakers.

Entrenchment is the continual reorganization of linguistic knowledge in the minds of speakers, which is driven by repeated usage activities in usage events and subject to the exigencies of the conventionalization processes taking place in speech communities.

The EC-model (cf. Figure 1) comprises four central components, which include further concepts (Schmid 2015: 6–9, 2016: 548–549):

- (a) Usage and the repeated (motor, sensory, cognitive, and social) activities it consists of
- (b) The cognitive processes of association, routinization, and schematization are referred to as entrenchment
- (c) The sociopragmatic processes of innovation, co-adaption, diffusion and normation as stages of increasing conventionalization
- (d) A set of cognitive, emotive-affective, pragmatic, and social forces influencing usage, entrenchment, and conventionalization and the interaction between them

¹⁰ See also Langacker (2008: 32): “For ease of discussion, I am conflating two parameters that eventually have to be distinguished: entrenchment or unit status (pertaining to a particular speaker) and conventionality (pertaining to a speech community)”. It should also be emphasized that although the term “entrenchment” is rarely used in phraseology, “it displays many theoretical and practical similarities with the notions of reproducibility, fixedness and even idiomaticity” (Colson 2021: 28).

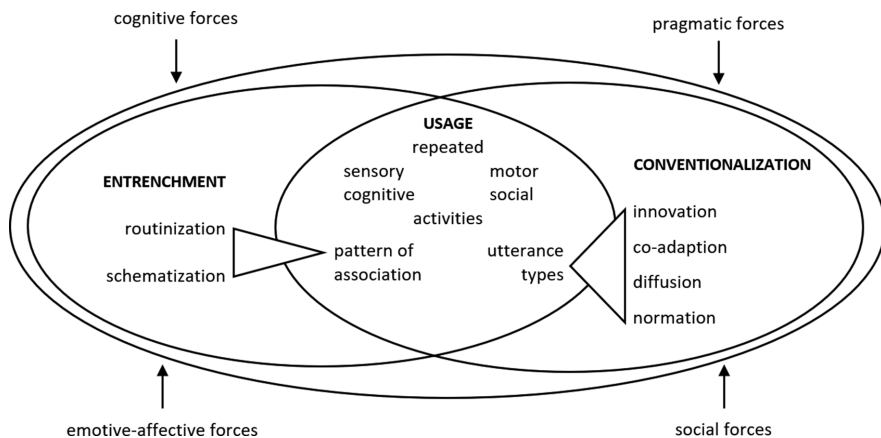


Figure 1: General outline of the Entrenchment-and-Conventionalization Model (taken from Schmid 2015: 7).

Figure 1 also shows that entrenchment and conventionalization interact in language use, whereby frequency plays a key role:

[T]he usage frequency of a conventional utterance type supports the routinization of patterns of associations, which increases the likelihood of their activation and in turn the likelihood of repetition, which contributes to increasing conventionality. (Schmid 2015: 21)

The EC-model can be applied to describe the structure of (formulaic) language more precisely, since the model integrates different categories necessary for analyzing the linguistic system as

a multidimensional dynamic contingency space populated by multidimensionally competing co-semiotic potentialities afforded by the interaction of speakers' usage activities and social and cognitive processes under the influence of a wide range of forces. (Schmid 2020: 348; in original with emphasis)

Schmid (2015: 11–16; 2020: 45–48) discusses various types of association and entrenchment effects. Of particular interest for this paper is, first, that Schmid (2015: 14; emphasis in original) assumes “routinization of syntagmatic associations” defined as “the repeated processing of *sequences of identical or similar linguistic elements*”. He calls this process “cotextual entrenchment” (Schmid 2015: 15) and explicitly refers to cooccurrence patterns such as “emergent idioms, and other types of semi-fixed expressions” (Schmid 2015: 14). Second, Schmid (2015: 15) argues for the “routinization of paradigmatic association” called “emergent schematization”, which interacts with syntagmatic associations in the emergence of

schemas. Thus, paradigmatic association refers to “the repetition of *different elements in an identical or similar cotextual or contextual environment*” (Schmid 2015: 14; emphasis in original). Looking at the example in Section 1, the frequent creative substitution of the components *Sein* and (*nicht*) *sein* can be seen as a paradigmatic association leading to the emergence of a partly lexicalized syntagmatic pattern [*X oder nicht X/Y, das ist hier die Frage*]. The dynamics of the multi-word expressions analyzed in Chapter 4 can be interpreted in the same way.

Regarding the conventionalization processes, the aspect of innovation is particularly important for this study. For Schmid (2015: 19) linguistic innovations are new utterances that are not instances of a conventionalized pattern, but that change such a pattern. Conventionalization and innovation are two sides of the same coin, as innovations are only innovative against the background of what is considered conventional in a speech community and not against the background of the mind of individual speakers (Schmid 2015: 19).

As an extension to Diachronic Construction Grammar, the EC-model is applied in this study, because it “distinguishes systematically between speakers and communities to provide a clearer picture of the way in which a given change unfolds” and it “defines conventions as dynamic regularities of behaviour and mental representations as dynamic patterns of associations” (Schmid 2021: 317). Thus, the benefit of the EC-model is that rather than considering and modeling cognitive and socio-pragmatic processes separately, both entrenchment and conventionalization and the relations between them are considered. The EC-model enables the description of “the systematicity and stability, on the one hand, and the flexibility and variability of languages, on the other” (Schmid 2015: 22). Furthermore, it is not just a theoretical model of language, but a model useful for empirical research. In particular, it can be used for the analysis of lexico-grammatical patterns (constructional idioms) and for the examination of change that take place over a few years, as shown by several studies (Schmid and Mantlik 2015; Mantlik and Schmid 2018; Schmid et al. 2020; Schmid et al. 2021). Since the model captures both the linguistic knowledge of individual speakers and the language use in the speech community, a differentiated methodological approach is needed to explore both sides equivalently.

4 Empirical Insights

4.1 Data and Methods

Besides a theoretical purpose, the paper also aims to propose a methodology for studying the dynamics of constructional idioms. Following the EC-model, two methods are chosen to examine both conventionalization and entrenchment.¹¹

(a) Corpus Analysis: Conventionalization

Corpus analysis is used to investigate the variation and change of phrasemes in the speech community. To determine the dynamics of constructional idioms, especially regarding the process from a lexicalized multi-word expression, via the modification of this expression, to a semi-schematic pattern, it is not adequate to use static, synchronous corpus data. To explore micro-diachronies on selected constructions, we manually created six sub-corpora (each covering 5 years) based on the four archives (W, W2, W3, W4) of the German Reference Corpus. It is important to note that the German Reference Corpus consists mainly of these four archives, each containing approximately 10 to 12 billion tokens. However, the archives can only be used separately from each other. To find, therefore, a sufficient number of constructs for the selected constructional idioms, we carried out corpus analyses in the four archives in the different sub-corpora. Then we combined the lists of constructs covering the same periods. This is a complex procedure, since 24 search queries are carried out for each constructional idiom and then the lists covering the same periods must be merged. The result is six lists of constructs (for a particular constructional idiom) covering six different time periods (cf. Table 1).

For the analysis of the constructs, we use the tool “Lexical Pattern Analyzer” (lexpan),¹² which was developed in the IDS project “Usuelle Wortverbindungen” (Engl. ‘multi-word expressions which are common in usage’).¹³ The tool identifies and calculates the fillers of the slots, which are presented in so-called filler tables. These tables can be used to gain results about preferred fillers and about the productivity of a construction. The analysis of sub-corpora can reveal changes in the productivity of the constructions as well as in the fillers of the slots. We generated

¹¹ I would like to thank Janina Böhlen, who assisted me with the corpus study, and Simon Jakobs, who was a great help with the statistical analysis of the online survey.

¹² uwv.ids-mannheim.de/lexpan/ (March 1, 2024).

¹³ www.ids-mannheim.de/lexik/uwv/ (March 1, 2024).

Table 1: Compilation of the sub-corpora from the German Reference Corpus (in brackets the approximate number of tokens).

	Sub-corpus I	Sub-corpus II	Sub-corpus III	Sub-corpus IV	Sub-corpus V	Sub-corpus VI
Archive W	1995–1999 (1.2 billion)	2000–2004 (1.5 billion)	2005–2009 (2 billion)	2010–2014 (2 billion)	2015–2019 (2 billion)	2020–2022 (1.2 billion)
Archive W2	1995–1999 (47 million)	2000–2004 (1.6 billion)	2005–2009 (2.6 billion)	2010–2014 (2.8 billion)	2015–2019 (3.4 billion)	2020–2022 (1.9 billion)
Archive W3	1995–1999 (45 million)	2000–2004 (1.6 billion)	2005–2009 (2.2 billion)	2010–2014 (2.6 billion)	2015–2019 (3.4 billion)	2020–2022 (2.2 billion)
Archive W4	1995–1999 (34 million)	2000–2004 (1.8 billion)	2005–2009 (2.4 billion)	2010–2014 (2.9 billion)	2015–2019 (3 billion)	2020–2022 (1.4 billion)
Size in tokens	approx. 1.33 billion	approx. 6.48 billion	approx. 9.34 billion	approx. 10.31 billion	approx. 11.83 billion	approx. 6.65 billion

filler tables for the two constructions of the case study, covering five (cf. Section 4.2.1) respective six (cf. Section 4.3.1) time periods. In addition, we calculated the productivity of the constructions in the different sub-corpora (time periods), using the type-token ratio and the hapax-token ratio.

The sub-corpora cover a total of 28 years of contemporary German. Thus, the study asks about changes within a few decades and not about changes that take place over centuries. We follow Buerki (2019: 8), who has shown that formulaic language “can undergo perceptible shifts in usage over relatively short periods”. Changes in the structure and semantics of idioms can thus be explored even over short periods of time. This is mainly because change in the field of formulaic language “proceeds very much faster than lexical change” (Buerki 2019: 29).¹⁴ Overall, the micro-diachronic analysis of the sub-corpora provides insights into the variation and conventionalization of (constructional) idioms.

(b) Survey Study: Entrenchment

In previous research, entrenchment in the framework of the EC-model is mainly investigated (like conventionalization) using corpus studies (“from-corpus-to-cognition-

¹⁴ Buerki (2019: 29) concludes that change in formulaic language “is about a third faster than lexical change” and “appears not to be a (special) case of lexical change, but a different type of change altogether”.

principle”,¹⁵ Schmid 2000: 38–40). However, in my opinion, it is also fruitful to complement corpus analysis with further empirical methods, especially when focusing on the mental consolidation of patterns (cf. also Van Lancker Sidsis et al. 2015). We therefore conducted an online survey of 21 formulaic expressions that can be traced back to a specific source.¹⁶ Participants had to indicate the following for each expression (e.g., *Sein oder nicht sein, das ist hier die Frage*, cf. Section 1):

- (a) I do not know the expression.
- (b) I know the expression, but I do not know where it comes from.
- (c) I know the expression and where it comes from.

If people indicated (c), they had to write in a free text field where they think the expression comes from. We evaluated and recoded the answers to determine whether the source was named correctly. A distinction was made between correct naming of the source (e.g., Shakespeare, Hamlet), partially correct naming of the source (e.g., from a literary work) and incorrect naming of the source (e.g., quote from a politician). In this way, it is possible to distinguish whether participants who think they know the source of an idiom know the original context.

Formulaic expressions were selected for the survey study where it can be assumed that they have developed or are developing into more schematic constructions over time due to extensive modification. In addition, formulaic expressions were chosen whose original usage comes from different domains (such as politics, literature, movies, advertising, fashion, sports, social media, religion).¹⁷ We assume that especially sentence-like expressions are modified by substituting components, resulting in open slots in the structure. Sentence-like phrasemes include, above all, proverbs, and catchphrases. The latter are the focus of this study, as we are interested in whether speakers know and can name the source of such phrasemes.

¹⁵ The principle states the following: “Frequency in text instantiates entrenchment in the cognitive system” (Schmid 2000: 39).

¹⁶ The online survey was conducted between 9 July and 11 August 2023 using the tool SoSci Survey (www.sosicisurvey.de/ March 1, 2024).

¹⁷ The survey consists of German catch phrases such as *Am Anfang war das Wort, Es ist besser, nicht zu regieren, als falsch zu regieren, Ich habe heute leider kein Foto für dich, Nach dem Spiel ist vor dem Spiel, Schlaflos in Seattle, Sein oder nicht sein, das ist hier die Frage, Wohnst du noch oder lebst du schon?*. The compilation is oriented on a list of German snowclones that can be found online: emmanuel.dammerer.at/snowclonerey (March 1, 2024). Other collections of (German) catchphrases (winged words) that are referred to include Duden (2021), the compilation of famous sentences from politicians by Klein (2013, among others), and various lists of funny and popular quotes from celebrities (e.g., footballers, actors) that can be found on the Internet.

We collected metadata (such as age, education level, media consumption, and interests) on the 270 participants of the online survey to find out sociodemographic differences in knowledge of idioms.¹⁸ Table 2 presents the frequency distributions of the knowledge of the idioms that we will focus on in this paper (*Wohnst du noch oder lebst du schon?* [Engl. ‘Are you still residing or are you already living?'] and *Nach dem Spiel ist vor dem Spiel* [Engl. ‘After the game is before the game']) as well as the frequency distributions of the independent variables. It must be emphasized that some participants did not give any statements for some idioms and metadata queries (for this reason, the numbers of participants in the two case studies are somewhat lower, cf. Sections 4.2.2 and 4.3.2). The central question is whether speakers know certain idioms and whether they can indicate the source of these idioms. If speakers know the source, this suggests that they have more knowledge of the construction (regarding discourse-functional [etymological] attributes) than if speakers do not know the source. If speakers do not know the idiom at all, this logically suggests that they have no entry in the mental lexicon for the fully lexicalized (original) expression.

The online survey method can also be seen as an apparent-time approach if we focus on the variable ‘age’ (Labov 1963; Bailey et al. 1991; Cukor-Avila and Bailey 2013). This sociolinguistic approach assumes that “differences among generations of adults mirror actual diachronic developments in a language” (Bailey et al. 1991: 242). Against this background, by comparing younger and older speakers, differences in knowledge of lexico-grammatical constructions can be determined that indicate language change.

For this paper, results of the corpus analysis and the survey on two phrasemes are presented. The two phrasemes originate from different domains and decades. The first case study examines the idiom *Wohnst du noch oder lebst du schon?*, which goes back to a slogan of the furniture company IKEA (cf. Section 4.2). The second case study focuses on the idiom *Nach dem Spiel ist vor dem Spiel*, which

¹⁸ Media consumption was queried using the following scale: (1) never, (2) once a month or less often, (3) two or three times a month, (4) about once a week, (5) several times a week, (6) (almost) daily, (7) several times a day. Interest was asked with the following scale: (1) do not agree at all, (2) disagree, (3) undecided, (4) agree, (5) fully agree. Education is divided into the following items (they are partly listed in German, since there are no equivalents in English due to the different school systems): (1) Volkshoch-/Hauptschulabschluss (school leaving qualification), (2) Mittlere Reife, Realschulabschluss (intermediate school-leaving certificate) or equivalent education, (3) Fachabitur, Fachhochschulreife (subject-related entrance qualification, specialized A-levels), (4) Abitur, Hochschulreife (A-levels, university entrance qualification). Age is composed as follows: (1) 11–29 years, (2) 20–39 years, (3) 40–49 years, (4) 50–59 years, (5) 60–69 years, (6) 70 and older.

Table 2: Frequency distributions of the variables in the data set of the online survey.

Variable	M	SD	Min	Max
Knowledge of the expression <i>Wohnst Du noch oder lebst Du schon?</i>	2.73	.52	1.00	3.00
Answer recoded by the researcher: knowledge of the expression <i>Wohnst du noch oder lebst Du schon?</i>	2.94	.24	2.00	3.00
Knowledge of the expression <i>Nach dem Spiel ist vor dem Spiel</i>	2.30	.58	1.00	3.00
Answer recoded by the researcher: knowledge of the expression <i>Nach dem Spiel ist vor dem Spiel</i>	2.34	.24	1.00	3.00
Media consumption television	5.26	1.40	1.00	7.00
Media consumption newspaper	4.55	1.95	1.00	7.00
Media consumption social media	4.64	2.49	1.00	7.00
Media consumption radio	4.97	1.91	1.00	7.00
Media consumption magazines	2.50	1.47	1.00	7.00
Interest in movies	3.84	.96	1.00	5.00
Interest in literature	3.75	1.10	1.00	5.00
Interest in music	4.15	.87	1.00	5.00
Interest in social media	3.13	1.28	1.00	5.00
Interest in politics	3.69	1.45	1.00	5.00
Interest in football (soccer)	2.39	1.45	1.00	5.00
Interest in advertising	1.84	.97	1.00	5.00
Interest in fashion	2.90	1.18	1.00	5.00
Interest in technology	3.01	1.14	1.00	5.00
Interest in religion	2.45	1.23	1.00	5.00
Age	2.88	1.58	1.00	6.00
Education	3.46	.93	1.00	4.00

comes from a former German football coach (cf. Section 4.3). The two examples were chosen because, although they undergo a similar constructionalization, the changes are quite different regarding conventionalization and entrenchment.

4.2 Case Study 1: [X du noch oder Y du schon?]

4.2.1 Corpus Analysis

The first case study deals with the multi-word expression *Wohnst du noch oder lebst du schon?*, which was originally a slogan created by the furniture company IKEA in 2002.¹⁹ Examples (6)–(8) show that the two verbs *wohnen* and *leben* are often substituted.

¹⁹ www.slogans.de/slogans.php?GInput=wohnst&SCheck=1 (March 1, 2024).

- (6) **Mietest du noch oder besitzt du schon?** Die Flucht ins „Betongold“ treibt auch in Deutschland die Immobilienpreise hoch.
(Nürnberger Zeitung, August 4, 2012)
[Engl. ‘Are you still renting or do you already own?']
- (7) Dabei geht es nicht um Inhalte, sondern leidenschaftlich wird diskutiert, wie man es sich einverleiben soll, das Buch. **Liest du noch oder kindlest du schon?**
(St. Galler Tagblatt, November 26, 2012)
[Engl. ‘Are you still reading or are you already kindling?']
- (8) **„Koblenz, planst du noch oder baust du schon?“** Das fragten die Wirtschafts-junioren Mittelrhein [. . .].
(Rhein-Zeitung, February 8, 2005)
[Engl. ‘Koblenz, are you still planning or are you already building?']

We used the five sub-corpora from 2000–2022 for the analysis. Since the slogan was created in 2002, it makes little sense to use the sub-corpus covering the years 1995–1999.²⁰ Table 3 illustrates the 10 most frequent fillers for the analyzed periods.²¹

Table 3: The ten most frequent fillers of the multi-word expression [X *du noch oder* Y *du schon?*] in the German Reference Corpus between 2000 and 2022.

2000–2004			2005–2009		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Wohnst . . . lebst</i>	96	24.74	<i>Wohnst . . . lebst</i>	215	18.96
<i>Lernst . . . lebst</i>	26	6.70	<i>Poppst . . . zeugst</i>	34	3.00
<i>Lachst . . . denkst</i>	19	4.90	<i>Lebst . . . wohnst</i>	21	1.85
<i>Lebst . . . wohnst</i>	16	4.12	<i>Arbeitest . . . bettelst</i>	20	1.76
<i>Lernst . . . sparst</i>	11	2.84	<i>Lebst . . . stirbst</i>	20	1.76
<i>Schraubst . . . wohnst</i>	8	2.06	<i>Rennst . . . lebst</i>	18	1.59
<i>Spielt . . . lebst</i>	7	1.80	<i>Suchst . . . lebst</i>	18	1.59

²⁰ Among a total of 5,322 hits that can be found for the pattern [X *du noch oder* Y *du schon?*] in the four DeReKo archives, only one example dates from a year before 2002, when IKEA created the slogan: ‘Doch der ‚Blindflug‘ hat seine Tücken: Geht es bergauf oder bergab, **fährst du noch oder stehst du schon?**’ (Süddeutsche Zeitung, December 20, 1996) [Engl. ‘Are you still driving or are you already standing?']. It can therefore be strongly assumed that the IKEA slogan is the starting point for the conventionalization of this syntactic pattern.

²¹ Search query in COSMAS II: (((du /+w2 „noch“) /+w1 oder) /s0 (du /+w1 schon)).

Table 3 (continued)

2000–2004			2005–2009		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Träumst . . . lebst</i>	6	1.55	<i>Glaubst . . . denkst</i>	14	1.23
<i>lernst . . . lebst</i>	6	1.55	<i>Rauchst . . . lebst</i>	13	1.15
<i>Suchst . . . googlest</i>	5	1.29	<i>Lachst . . . schwingst</i>	9	0.79
2010–2014			2015–2019		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Wohnst ... lebst</i>	114	9.53	<i>Wohnst ... lebst</i>	123	11.93
<i>Sprichst ... kommuniziert</i>	60	5.02	<i>Versteuert ... lebst</i>	48	4.66
<i>Rennst ... lebst</i>	36	3.01	<i>Chillst ... kletterst</i>	30	2.91
<i>Mietest ... kaufst</i>	35	2.93	<i>Träumst ... lebst</i>	21	2.04
<i>Übersetzt ... verstehst</i>	20	1.67	<i>Kehrst ... zahlst</i>	16	1.55
<i>Versteuert ... lebst</i>	18	1.51	<i>Schwitzt ... klebst</i>	15	1.45
<i>Träumst ... gründest</i>	15	1.25	<i>Fährst ... teilst</i>	14	1.36
<i>Fragst ... glaubst</i>	14	1.17	<i>Lachst ... swingst</i>	13	1.26
<i>Lernst ... lebst</i>	14	1.17	<i>Lebst ... wohnst</i>	13	1.26
<i>Lebst ... wohnst</i>	13	1.09	<i>Lebst ... funktionierst</i>	12	1.16
2020–2022					
Filler	Freq.	Percentage			
<i>Wohnst ... lebst</i>	38	12.26			
<i>Lebst ... stirbst</i>	20	6.45			
<i>Fliegst ... fährst</i>	9	2.90			
<i>lebst ... stirbst</i>	9	2.90			
<i>Lernst ... verstehst</i>	8	2.58			
<i>Grillst ... smokst</i>	7	2.26			
<i>Siezt ... duzt</i>	7	2.26			
<i>Prüfst ... impfst</i>	6	1.94			
<i>Hoffst ... schraubst</i>	5	1.61			
<i>Lebst ... wohnst</i>	5	1.61			

It is noticeable that in the period from 2000–2004 the original multi-word expression occurs in only about 25% of all hits. This means that the slogan was modified in numerous ways immediately after it was created. In the most recent sub-corpus (2020–2022), the original phraseme is used in only about 12% of all hits. Overall, the frequency of the original expression decreases over time compared to other realizations. It is interesting to note that the type-token ratio as well as the hapax-token ratio do not change much (cf. Table 4). If at all, we can speak of a slight increase in the type-token ratio when comparing the two sub-corpora from 2000–2004 (0.39) and from 2020–2022 (0.46). Thus, comparing only these two sub-corpora marking the beginning

and the end of the period, we can say that the construction becomes more productive. However, regarding the data, it is worth mentioning that these two corpora contain the least number of hits of the construction. Thus, it can be questioned how comparable these two are with the other three corpora (2005–2009, 2010–2014, 2015–2019).

Table 4: Type-token and hapax-token ratio of the multi-word expression [X *du noch oder* Y *du schon?*] in the German Reference Corpus between 2000 and 2022.

Sub-corpus / time period	2000–2004	2005–2009	2010–2014	2015–2019	2020–2022
Types	153	485	496	416	142
Tokens	388	1,134	1,196	1,031	310
Hapax legomenons	107	335	314	268	91
Type-token ratio	0.39	0.43	0.41	0.4	0.46
Hapax-token ratio	0.28	0.3	0.26	0.26	0.29

It should be noted, that the two verbs *wohnen* and *leben* are not always replaced completely. On the one hand, there are examples in which the verbs are used in reversed order (cf. [9]).

- (9) Der arme Mann musste leiden für einen Möbeltransport. Ich würde ihn jetzt gern fragen: **Lebst du noch oder wohnst du schon?**
(Braunschweiger Zeitung, March 16, 2006)
[Engl. ‘Are you still alive or are you already residing?’]

On the other hand, there are many instances in which one of the two verbs is still used, either in the first or second position. Thus, in these instances, only one of the original verbs is substituted with a new verb. Four variants can be observed:

- [*Wohnst du noch oder* X *du schon?*] (e.g., *Wohnst du noch oder liebst du schon?* [Engl. ‘Are you still living or are you already in love?’])
- [*X du noch oder lebst du schon?*] (e.g., *Träumst du noch oder lebst du schon?* [Engl. ‘Are you still dreaming or are you already living?’])
- [*Lebst du noch oder* X *du schon?*] (e.g., *Lebst du noch oder guckst du schon?* [Engl. ‘Are you still living or are you already looking?’])
- [*X du noch oder wohnst du schon?*] (e.g., *Suchst du noch oder wohnst du schon?* [Engl. ‘Are you still searching or are you already living?’])

If we add up the tokens of all instances in which the lexemes *wohnen* and/or *leben* occur, we find an overall decrease of these verbs (cf. Table 5). In the period between 2000–2004, it is still 65% of all hits in which at least one of the verbs is realized. In the period between 2005–2009 this percentage already falls to 50%.

From 2010–2014, the proportion decreases to about 40% and remains at this level until the period between 2020–2022. This means that the original verbs *wohnen* and *leben* are used less frequently within the 20 years examined. Overall, the corpus data show that a process of lexical constructionalization (cf. Section 3.2) from a more lexicalized idiom to a more schematic idiom can be observed.

Table 5: Proportion of the verbs *wohnen* and *leben* within the constructs of the multi-word expression [X du noch oder Y du schon?] in the German Reference Corpus between 2000 and 2022.

Sub-corpus / time period	2000–2004	2005–2009	2010–2014	2015–2019	2020–2022
Tokens / constructs in the sub-corpus	388	1,134	1,196	1,031	310
<i>Wohnst du noch oder lebst du schon?</i>	96	215	114	123	38
<i>wohnst du noch oder lebst du schon?</i>	4	3	4	2	1
<i>Lebst du noch oder wohnst du schon?</i>	17	22	14	14	6
<i>Wohnst du noch oder X du schon?</i>	21	58	66	65	13
<i>X du noch oder lebst du schon?</i>	75	150	164	165	30
<i>Lebst du noch oder X du schon?</i>	25	105	64	44	34
<i>X du noch oder wohnst du schon?</i>	14	21	41	54	8
Tokens with the lexemes <i>wohnen</i> and/or <i>leben</i> (in total and in percentage)	252 (65%)	574 (50.6%)	467 (39%)	467 (45.3%)	130 (41.9%)

The meaning as well as the semantic change of the construction can be described as follows. The starting point is the catchphrase (winged word) *Wohnst du noch oder lebst du schon?* with a specific meaning based on the original advertising context. A paraphrase might be: ‘Do you have only functional furniture in your apartment (bed, table, chair) or have you made your apartment your home (i.e. furnished it comfortably, decorated it, etc.) (attitude towards life “hygge”)?’ The catchphrase moves in the continuum from lexicon to syntax in a very short time because of the frequent modification and the formation of slots. In other words, the fully lexicalized phraseme with specific meaning and strong contextual binding develops into a partly lexicalized constructional idiom with a more abstract, wider meaning and more flexible function. The use in other contexts entails a strong extension of the meaning.

The construction no longer refers only to the narrow semantic domain of ‘living’, but to numerous other domains. The semi-schematic construction has the fol-

lowing meaning: ‘Are you (still) doing activity X or are you (already) doing activity Y, which has a more positive connotation compared to activity X (e.g., more advanced, healthier, etc.)?’ or ‘Used when asking whether one state is still desirable or another is preferable’.²² The variants in which either *wohnen* or *leben* are realized (cf. Table 5) stand between the fully lexicalized catchphrase and the constructional idiom. One thing is clear: with the formal change and the formation of slots, the meaning of the construction also expands. Schematization enables verbs other than *wohnen* and *leben* to appear in the construction.

It should be noted that there are also instances in which the constructional meaning described deviates and in which the second verb does not have a more positive connotation than the first. This variation can be observed in some instances where only one slot exists in the second position and *wohnen* or *leben* is realized in the first position (cf. [10] and [11]).

- (10) *Wohnst du noch oder haust/kapitulierst/klagst/stirbst/weinst* etc. *du schon?*
[Engl. ‘Are you still residing or are you already dwelling/capitulating/complaining/dying/crying etc.’?]
- (11) *Lebst du noch oder arbeitest/dopst/hartzt/herbst/schufst/stirbst/vegetierst* etc. *du schon?*
[Engl. ‘Are you still living or are you already working/doping/being on welfare/harvesting/shuffling/dying/vegging etc.’?]

However, there are also some instances in which neither *wohnen* nor *leben* is used and in which the second verb has a more negative connotation than the first. For instance, *Trinkst du noch, oder säufst du schon?* in a report about alcohol addiction (cf. [12]), *Fährst du noch, oder kriechst du schon?* as a quote from a politician on the idea of lowering the speed limit in cities (cf. [13]) and *Arbeitest du noch oder bettelst du schon?* in the context of strikes (cf. [14]).

- (12) „**Trinkst du noch, oder säufst du schon?**“ Die Grenzen zwischen unschädlichem Alkoholgenuss und Sucht sind fließend. Die gute Nachricht ist: „Man kann zu jedem Zeitpunkt etwas dagegen tun“, sagt Suchtexperte Wolf Dietrich Braunwarth.
(Nürnberger Nachrichten, May 1, 2013)
[Engl. ‘Are you still drinking, or are you already boozing?’]

22 www.owid.de/artikel/404090 (March 1, 2024).

- (13) Die Lobby der Autofahrer läuft trotzdem Sturm. **„Fährst du noch, oder kriechst du schon?“**, lästert die FDP und befürchtet, dass die „wirtschaftliche Entwicklung“ der Stadt leidet.
(die tageszeitung, November 20, 2010)
[Engl. ‘Are you still driving, or are you already crawling?']
- (14) Im dichten Schneetreiben wurden Plakate geschwenkt: **„Arbeitest du noch oder bettelst du schon?“** Das Motto einer kleinen, aber wichtigen neuen Streikgruppe unter den Demonstranten.
(Hamburger Morgenpost, March 11, 2006)
[Engl. ‘Are you still working or are you already begging?']

Thus, another meaning can be formulated in which the second verb has a more negative connotation than the first, describing a state that is not desirable or preferable to another. The construction thus also undergoes an expansion of meaning. While in the original slogan the first verb had a more negative connotation than the second (in the opinion of the advertisers and the company IKEA), the more schematic construction also allows the slots to be filled with verbs in which the connotation is in the other way around (a verb with a more positive connotation is followed by a verb with a more negative connotation).

Notably, there are examples in which meta-linguistic comments on the origin of the construction can be found. In (15) and (16), the underlined phrases make a direct reference to the original advertising context (*Werbeslogan/-spruch*). In addition, the expressions are referred to as variations (*Abwandlungen*) from the original slogan. Such meta-linguistic corpus comments indicate that knowledge of the origin of the construction is still present in the speech community (*bekannten*).

- (15) **Deckst du noch oder dämmst du schon?** So könnte man es in Abwandlung eines bekannten Werbeslogans formulieren. Gemeint sind die Dachdecker, deren Berufstätigkeit sich mehr und mehr den modernen Erfordernissen angepasst hat.
(Berliner Morgenpost, March 4, 2011)
[Engl. ‘Are you still covering or are you already insulating? This is how one could put it in a variation of a well-known advertising slogan.’]
- (16) In Hessen zeigt sich unterdessen, wie schwierig eine von der Lafontaine-Partei tolerierte Regierung werden könnte. Da sagen Linke wie Wolfgang Gehrke bereits lange vorher, sie würden den eher konservativen Sozialdemokraten Jürgen Walter nicht zum Minister wählen. In Abwandlung eines

bekannten Werbespruchs werden ihn wohl manche fragen: **Duldest du noch, oder regierst du schon?**

(Nürnberger Nachrichten, August 13, 2008)

[Engl. 'In a variation of a well-known advertising slogan, some will probably ask him: Do you still tolerate, or do you already rule?']

The following must be mentioned: If we look at the constructs that deviate from the original phraseme *Wohnst du noch oder lebst du schon?* in context, we see that they are quite often titles of, for instance, cabaret events (cf. [17]) or books (cf. [18]). Because of their title character, these are used in different texts, which increases their frequency of use and thus their percentage of all hits.

- (17) Dabei bringen die Kabarettisten aus der Zweiburgenstadt alltägliche Kuriositäten so gekonnt auf den Punkt, dass der ganze Saal vor Lachen bebt. „**Lachst Du noch oder denkst Du schon?**“ heißt denn auch das neue Programm.

(Mannheimer Morgen, February 12, 2004)

[Engl. 'Are you still laughing or are you already thinking?']

- (18) Er haut nicht, er schaut den Deutschen aufs Maul: Satiriker Wiglaf Droste stellt heute in Nürnberg sein neues Buch „**Sprichst du noch oder kommunizierst du schon?**“ vor.

(Nürnberger Zeitung, April 17, 2012)

[Engl. 'Are you still talking or are you already communicating?']

Here, an analogy process can be observed by using the advertising slogan of IKEA in a modified form for the naming of certain titles (Bebermeyer and Bebermeyer 1977). The semi-schematic construction that emerges is thus strongly tied to the context of the use of naming titles. Indeed, such instances are not the productive filling of the slots, but merely the repetition of fixed titles. In other words, an instance of a construction is repeated, i.e., the construction is not instantiated with new lexical material. The percentage distribution of the slot fillers (cf. Table 3) should thus be considered with caution. However, it cannot be denied that in the various corpora the use of the original phraseme is decreasing. Thus, the naming of titles by modifying the slogan has itself become a usage pattern.

4.2.2 Online Survey

That the modified slogan is used very frequently to name titles could be explained by the fact that the slogan is still well known in the speech community, as the results of the online survey show. Thus, out of 267 participants, 204 (76.4%) say that they know where the multi-word expression comes from. 53 (19.9%) people know the idiom, but not where it comes from. Only 10 (3.7%) participants said they are not familiar with the construction. Furthermore, after checking the answers to which context the expression is related, we conclude that 192 of the 204 answers are completely correct. The participants therefore know that the expression is an IKEA advertising slogan. 12 people were able to determine the rough context, for instance, by stating only “advertising”. No one named a source that is completely wrong or too imprecise.

Since the number of those who know the expression is very high (approx. 96% of the participants), there are very few significant correlations regarding the sociodemographic factors queried (cf. Table 6). For instance, a certain media con-

Table 6: Simple correlations between the knowledge of the multi-word expression *Wohnst du noch oder lebst du schon?* (not recoded by the researcher) and the other variables.²³

Knowledge of the expression <i>Wohnst du noch oder lebst du schon?</i>	Correlation
Media consumption television	.01
Media consumption newspaper	.07
Media consumption social media	-.11
Media consumption radio	.10
Media consumption magazines	.03
Interest in movies	-.05
Interest in literature	.14*
Interest in music	.05
Interest in social media	-.12*
Interest in politics	.13*
Interest in football (soccer)	-.10
Interest in advertising	-.03
Interest in fashion	-.11
Interest in technology	-.02
Interest in religion	.01
Age	-.00
Education	.18**

²³ *p < .05; **p < .01; ***p < .001. Variables were assumed to be interval scaled. Accordingly, Pearson's r was used.

sumption is non-significant at the 5 percent level. Age also shows no statistically significant correlation between whether someone knows the expression and its context of origin. The only statistically significant results are the following (marked with an asterisk in Table 6): the more interested people are in literature and politics and the higher their level of education, the more likely they are to know the expression. The more interested the participants are in social media, the less familiar the expression is. However, the data should be interpreted with caution.

Considering this result, it makes little sense to statistically analyze the data of those who have indicated a source. This is because there is no completely incorrect naming of the original context. Nevertheless, the answers are very interesting considering the EC-model (cf. Section 3.3), as these are quite different (cf. Table 7). Some people were able to specify the advertising context more precisely than others (e.g., indicating the time when the slogan was born and was common in the media [cf. interview numbers 88, 327, 266]).²⁴ This suggests that for them the knowledge of its origin is stored with greater precision in the mental lexicon than for other participants who only gave a rather vague or only partly correct description of the source (e.g., some participants did not name IKEA but other furniture companies or home improvement stores [cf. interview numbers 546, 528, 421]). Thus, there are interindividual differences in the knowledge of (the origin of) this construction.

It must be emphasized that the results and their interpretation are based on the (in part quite brief) answers of the participants. Some participants may know the exact original context of the expression, but they only provided the broader context in the survey. Reasons for this could be that the participants were in a hurry or that they considered it sufficient to classify the expression in the advertising context in general without indicating that it originates from IKEA.

4.3 Case Study 2: [*Nach X ist vor X/Y*]

4.3.1 Corpus Analysis

The second example is the multi-word expression *Nach dem Spiel ist vor dem Spiel* which goes back to legendary German football coach Sepp Herberger (1897–1977).²⁵

²⁴ The slogan dates to 2002. While some people were quite specific about when the slogan was first used (cf. Table 7), some cited, for instance, the 1990s and others even the 2020s as the origin of the slogan.

²⁵ de.wikipedia.org/wiki/Sepp_Herberger (March 1, 2024).

Table 7: Selected answers about the origin of the multi-word expression *Wohnst du noch oder lebst du schon?*

Accuracy of the answer	Answer	Sociodemographic information about the participant (looking at age and other statistically significant parameters)
Precise indication of the original context	Werbeslogan Ikea seit ca 2005?! [Engl. ‘Advertising slogan Ikea since ca 2005?!’]	Interview number: 88 Age: 30–39 Education: A-levels, university entrance qualification Interest in literature: agree Interest in social media: agree Interest in politics: agree
	Werbeslogan der schwedischen Möbel-Firma IKEA (2000er-Jahre) [Engl. ‘Advertising slogan of the Swedish furniture company IKEA (2000s)’]	Interview number: 327 Age: 50–59 Education: A-levels, university entrance qualification Interest in literature: fully agree Interest in social media: do not agree at all Interest in politics: fully agree
	IKEA Werbeslogan, ca 2000–2006 [Engl. ‘IKEA advertising slogan, ca 2000–2006’]	Interview number: 266 Age: 60–69 Education: A-levels, university entrance qualification Interest in literature: fully agree Interest in social media: undecided Interest in politics: fully agree
Rough or partly correct indication of the original context	Werbung [Engl. ‘Advertising’]	Interview number: 546 Age: 60–69 Education: Volkshoch-/Hauptschulabschluss (school leaving qualification) Interest in literature: agree Interest in social media: agree Interest in politics: agree
	Werbeslogan Baumarkt [Engl. ‘Advertising slogan hardware store’]	Interview number: 528 Age: 50–59 Education: A-levels, university entrance qualification Interest in literature: agree Interest in social media: do not agree at all Interest in politics: agree

Table 7 (continued)

Accuracy of the answer	Answer	Sociodemographic information about the participant (looking at age and other statistically significant parameters)
	Werbung eines Möbelhauses (raab?) [Engl. 'Advertising of a furniture store (raab?)]	Interview number: 421 Age: 11–29 Education: A-levels, university entrance qualification Interest in literature: fully agree Interest in social media: undecided Interest in politics: disagree

Articles in newspapers and magazines, as well as the Wikipedia entry on common sayings, point out that this quote has become a catchphrase in German.²⁶ Unfortunately, it is not documented in which year Sepp Herberger made this statement.²⁷ In addition, it must be mentioned that from today's perspective, it cannot be said with absolute certainty that it was Sepp Herberger who used the pattern [*Nach X ist vor X/Y*] for the first time.²⁸

However, there is knowledge in the speech community that the expression *Nach dem Spiel ist vor dem Spiel* comes from Sepp Herberger. Several instances of both the original phraseme (cf. [19]) and modified forms (cf. [20]) are linked to the source utilizing meta-linguistic comments (*diese Weisheit Sepp Herbergers* [Engl. 'This wisdom of Sepp Herberger'; *frei nach Sepp Herberger* [Engl. 'freely after Sepp Herberger']).

26 de.wikipedia.org/wiki/Liste_gefl%C3%BCgelte_Worte/N#Nach_dem_Spiel_ist_vor_dem_Spiel (March 1, 2024).

27 de.wikiquote.org/wiki/Diskussion:Sepp_Herberger (March 1, 2024).

28 The question of whether the syntactic pattern already existed before the quote can only be determined by analyzing corpora that contain texts prior to Herberger's lifespan. One problem that cannot be solved is that – as mentioned above – it is not known in which year Herberger said this sentence. However, it is interesting to note that the earliest hits for the semi-schematic pattern from the mid-1970s in the four archives of the German Reference Corpus are Herberger's quote. The earliest example is from 1975: "Eine Generation von Trainern setzte Herbergers scheinbar platte Binsenweisheiten in Erfolge um: 'Nach dem Spiel ist vor dem Spiel' [. . .]." (Der Spiegel, June 16, 1975). In addition, there are no hits for the syntactic pattern in the HIST archive of the German Reference Corpus, which comprises 5,245 texts with a size of 66,582,941 tokens from the second half of the 17th century to 1962.

- (19) **Nach dem Spiel ist vor dem Spiel:** Diese Weisheit von Sepp Herberger gilt auch für die Sicherheitskräfte, die alle drei Spiele der Mini-WM in Nürnberg als Testlauf für die Weltmeisterschaft in einem Jahr verstanden haben. (Nürnberger Nachrichten, June 27, 2005)
[Engl. ‘After the game is before the game’]
- (20) **Frei nach Sepp Herberger** gilt in der Rentengesetzgebung aber unverändert weiter: **Nach der Reform ist vor der Reform.** (Protokoll der Sitzung des Parlaments Deutscher Bundestag, October 1, 2004)
[Engl. ‘After the reform is before the reform’]

The corpus study also shows that the catchphrase has an enormous influence on the total number of constructs of the pattern [*Nach X ist vor X/Y*] (cf. Table 8).²⁹

Table 8: The ten most frequent fillers of the multi-word expression [*Nach X ist vor X/Y*] in the German Reference Corpus between 1995 and 2022.

1995–1999			2000–2004		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Spiel . . . Spiel</i>	104	40.47	<i>Wahl . . . Wahl</i>	766	19.19
<i>Wahl . . . Wahl</i>	39	15.18	<i>Spiel . . . Spiel</i>	661	16.56
<i>Krieg . . . Krieg</i>	18	7.00	<i>Reform . . . Reform</i>	227	5.69
<i>Hochwasser . . . Hochwasser</i>	10	3.89	<i>Fest . . . Fest</i>	139	3.48
<i>Rennen . . . Rennen</i>	6	2.33	<i>Saison . . . Saison</i>	136	3.41
<i>Saison . . . Saison</i>	4	1.56	<i>Flut . . . Flut</i>	80	2.00
<i>Schlacht . . . Schlacht</i>	3	1.17	<i>Krieg . . . Krieg</i>	79	1.98
<i>Demo . . . Demo</i>	2	0.78	<i>Rennen . . . Rennen</i>	42	1.05
<i>Fest . . . Fest</i>	2	0.78	<i>Festival . . . Festival</i>	38	0.95
<i>Film . . . Film</i>	2	0.78	<i>Turnier . . . Turnier</i>	35	0.88

2005–2009			2010–2014		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Spiel . . . Spiel</i>	1,496	15.41	<i>Wahl . . . Wahl</i>	1,516	10.52
<i>Wahl . . . Wahl</i>	1,472	15.16	<i>Spiel . . . Spiel</i>	1,369	9.50
<i>Saison . . . Saison</i>	428	4.41	<i>Saison . . . Saison</i>	811	5.63
<i>Fest . . . Fest</i>	364	3.75	<i>Fest . . . Fest</i>	584	4.05
<i>Reform . . . Reform</i>	207	2.13	<i>Krise . . . Krise</i>	295	2.05

²⁹ Search query in COSMAS II: ((nach /+w1 (dem oder (der oder den))) /+w3 ((ist /+w1 vor) /+w2 (dem oder (der oder den)))).

Table 8 (continued)

2005–2009			2010–2014		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Krise . . . Krise</i>	144	1.48	<i>Turnier . . . Turnier</i>	209	1.45
<i>Turnier . . . Turnier</i>	144	1.48	<i>Reform . . . Reform</i>	162	1.12
<i>WM . . . WM</i>	137	1.41	<i>WM . . . WM</i>	161	1.12
<i>Rennen . . . Rennen</i>	111	1.14	<i>Festival . . . Festival</i>	152	1.05
<i>WM . . . EM</i>	106	1.09	<i>Session . . . Session</i>	148	1.03
2015–2019			2020–2022		
Filler	Freq.	Percentage	Filler	Freq.	Percentage
<i>Wahl . . . Wahl</i>	1,600	8.60	<i>Wahl . . . Wahl</i>	607	7.90
<i>Spiel . . . Spiel</i>	1,204	6.47	<i>Spiel . . . Spiel</i>	461	6.00
<i>Saison . . . Saison</i>	1,074	5.77	<i>Saison . . . Saison</i>	379	4.93
<i>Fest . . . Fest</i>	710	3.82	<i>Krise . . . Krise</i>	189	2.46
<i>Festival . . . Festival</i>	238	1.28	<i>Fest . . . Fest</i>	161	2.09
<i>Turnier . . . Turnier</i>	228	1.23	<i>Pandemie . . . Pandemie</i>	115	1.50
<i>Baustelle . . . Baustelle</i>	217	1.17	<i>Streik . . . Streik</i>	104	1.35
<i>Konzert . . . Konzert</i>	180	0.97	<i>Derby . . . Derby</i>	103	1.34
<i>Derby . . . Derby</i>	173	0.93	<i>Sturm . . . Sturm</i>	93	1.21
<i>Session . . . Session</i>	166	0.89	<i>Baustelle . . . Baustelle</i>	76	0.99

In the first sub-corpus (1995–1999), the filler *Spiel . . . Spiel* represents more than 40% of all instances. *Wahl . . . Wahl* follows on the second rank with about 15%. However, this distribution should be taken with caution, as the total number of constructs is not very high. Overall, a decrease of the filler *Spiel . . . Spiel* can be observed. Remarkably, the filler *Wahl . . . Wahl* is even used more frequently than *Spiel . . . Spiel* in the sub-corpus 2000–2004 and then consistently from sub-corpus 2010–2014 onwards.³⁰ The construction is therefore very often used in the press after (important) elections, to emphasize that the next election is already soon (cf. [21]). However, the use of *Wahl . . . Wahl* also decreases during this short period.

- (21) **Nach der Wahl ist vor der Wahl:** Während in Berlin noch darüber debatiert wird, wer mit wem und unter welchen Umständen die nächste Bundesregierung bildet, richten die kleineren Parteien den Blick bereits auf das kommende Wahljahr.

(Norddeutsche Neueste Nachrichten, November 19, 2013)

[Engl. ‘After the election is before the election’]

³⁰ In sub-corpus 2005–2009 *Spiel . . . Spiel* is used slightly more often than *Wahl . . . Wahl*.

Across the sub-corpora, we find other lexemes that are (almost consistently) among the top ten fillers (*Saison . . . Saison* [Engl. ‘season’], *Fest . . . Fest* [Engl. ‘party’], *Turnier . . . Turnier* [Engl. ‘tournament’]). Their use does not change much over time. However, the use of *Saison . . . Saison* is becoming closer to that of *Wahl . . . Wahl* and *Spiel . . . Spiel* (cf. Figure 2).

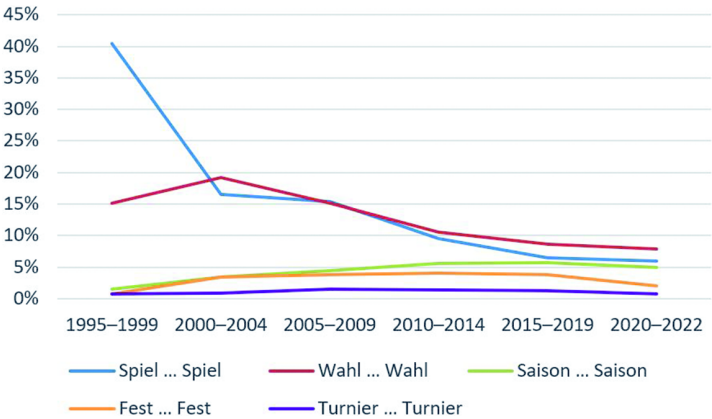


Figure 2: Usage frequency of selected fillers in the multi-word expression [*Nach X ist vor X/Y*] in the German Reference Corpus between 1995 and 2022.

If we exclude the first period due to the small number of absolute hits, it is evident that the construction becomes more productive. Between 2000–2004 and 2020–2022, the type-token ratio increases from 0.19 to 0.27 and the hapax-token ratio from 0.12 to 0.18 (cf. Table 9).

Table 9: Type-token and hapax-token ratio of the multi-word expression [*Nach X ist vor X/Y*] in the German Reference Corpus between 1995 and 2022.

Sub-corpus / time period	1995–1999	2000–2004	2005–2009	2010–2014	2015–2019	2020–2022
Types	69	740	1,708	3,003	4,293	2,064
Tokens	257	3,992	9,711	14,411	18,598	7,686
Hapax legomenons	51	475	1,088	2,016	2,813	1,366
Type-token ratio	0.27	0.19	0.18	0.21	0.23	0.27
Hapax-token ratio	0.2	0.12	0.11	0.14	0.15	0.18

The first noun is not repeated in the second slot in all instances. There are numerous cases where the two nouns are not identical (cf. [22] and [23]).

- (22) **Nach dem Trainingslager ist vor dem UI-Cup**, und daher flog der Hertha-Troß vom Flughafen Wien direkt in die russische Hauptstadt, wo die Berliner heute im UI-Cup-Rückspiel auf FK Moskau treffen.
(Berliner Morgenpost, July 22, 2006)
[Engl. ‘After the training camp is before the UI Cup’]

- (23) **Nach der Fußball-WM ist vor der Fecht-EM**: Die Vorbereitungen auf das internationale Sport-Event in Leipzig laufen auf Hochtouren.
(Leipziger-Volkszeitung, July 1, 2010)
[Engl. ‘After the World Cup is before the European Fencing Championships’]

The variant [*Nach X ist vor Y*] increases over time as we look more closely at the hapax legomenons (cf. Table 10). Its proportion among all hapax legomenons develops from 21.6% (1995–1999) to 63.8% (2020–2022).

Table 10: Two different nouns as slot fillers according to the pattern [*Nach X ist vor Y*] in the German Reference Corpus between 1995 and 2022 (only hapax legomenons are counted).

Sub-corpus / time period	1995–1999	2000–2004	2005–2009	2010–2014	2015–2019	2020–2022
Hapax legomenons	51	475	1,088	2,016	2,813	1,366
<i>Nach X ist vor Y</i> (in total and in percentage)	11 (21.6%)	167 (35.2%)	528 (48.5%)	1,164 (57.7%)	1,736 (61.7%)	872 (63.8%)

It must be mentioned that in several instances the lexemes *Spiel* or *Wahl* are used as one of the two slot fillers (cf. [24] and [25]).

- (24) **Nach dem Jubel ist vor dem Spiel**: Noch sind bei den HCL-Handballerinnen die Glückshormone über das Erreichen des EC-Achtelfinals nicht ganz abgebaut, da wird schon wieder an die Konzentration appelliert.
(Leipziger-Volkszeitung, November 15, 2011)
[Engl. ‘After the cheer is before the game’]

- (25) **Nach der Wahl ist vor der Fastnacht.** Oder war die Wahl schon Fastnacht?
 Das fragten sich die Leser des gestrigen SÜDKURIER.
 (Südkurier, November 30, 2016)
 [Engl. 'After the election is before the carnival']

Comparable to the corpus analysis of the catchphrase *Wohnst du noch oder lebst du schon?* (cf. Section 4.2.1, Table 5), it is therefore interesting to look at those constructs in which neither of the two words occurs. Table 11 shows that the slots are filled less and less often by *Spiel* or *Wahl* during the examined period.

Table 11: Proportion of the nouns *Spiel* and *Wahl* within the constructs of the multi-word expression [*Nach X ist vor X/Y*] in the German Reference Corpus between 1995 and 2022.

Sub-corpus / time period	1995–1999	2000–2004	2005–2009	2010–2014	2015–2019	2020–2022
Tokens / constructs in the sub-corpus	257	3,992	9,711	14,411	18,598	7,686
<i>Nach dem Spiel ist vor dem Spiel</i>	104	661	1,496	1,369	1,204	461
<i>Nach dem Spiel ist vor X</i>	2	48	115	156	103	69
<i>Nach X ist vor dem Spiel</i>	1	8	30	17	25	5
<i>Nach der Wahl ist vor der Wahl</i>	39	766	1,472	1,516	1,600	607
<i>Nach der Wahl ist vor X</i>	5	23	67	138	185	139
<i>Nach X ist vor der Wahl</i>	–	18	41	29	25	11
Tokens with the lexemes <i>Spiel</i> and/or <i>Wahl</i> (in total and in percentage)	151 (58.8%)	1,524 (38.2%)	3,221 (33.2%)	3,225 (22.4%)	3,142 (16.9%)	1,292 (16.8%)

The corpus analysis shows a development from a (more) lexicalized multi-word expression to a (more) semi-schematic construction. This is indicated, for instance, by a constant decrease in the frequency of the word *Spiel* (and the word *Wahl*) and the constant increase in productivity. Like the first example, a semantic change is taking place. The formulaic expression referring to Herberger's quote and thus to a specific football context is used less and less often compared to other realizations of the construction. The meaning of the construction thus becomes more abstract. The expansion of the (abstract) meaning of the construction can also be seen in the formal development. Thus, those instances in which two different lexemes (*Nach X ist vor Y*), each with its own meaning, occur in the slots increase over time.

4.3.2 Online Survey

The online survey on knowledge of the source of the formulaic expression *Nach dem Spiel ist vor dem Spiel* provides interesting results. Out of 263 participants, 96 (36.5%) say that they know where the multi-word expression comes from. 150 (57%) people are familiar with the idiom, but do not know where it comes from. And 17 (6.5%) participants said they do not know the construction. Thus, far fewer participants indicated a source than in the case of the idiom *Wohnst du noch oder lebst du schon?* (cf. Section 4.2.2). Table 12 presents the correlations between the expression *Nach dem Spiel ist vor dem Spiel* according to the respondents' indication in the correlations with the other items.

Table 12: Simple correlations between the knowledge of the multi-word expression *Nach dem Spiel ist vor dem Spiel* (not recoded by the researcher) and the other variables.³¹

Knowledge of the expression <i>Nach dem Spiel ist vor dem Spiel</i>	Correlation
Media consumption television	.15*
Media consumption newspaper	.23***
Media consumption social media	-.24***
Media consumption radio	.18**
Media consumption magazines	.15*
Interest in movies	.01

³¹ * $p < .05$; ** $p < .01$; *** $p < .001$. Variables were assumed to be interval scaled. Accordingly, Pearson's r was used.

Table 12 (continued)

Knowledge of the expression <i>Nach dem Spiel ist vor dem Spiel</i>	Correlation
Interest in literature	.15*
Interest in music	-.01
Interest in social media	-.22***
Interest in politics	.25***
Interest in football (soccer)	.18**
Interest in advertising	.09
Interest in fashion	-.05
Interest in technology	.10
Interest in religion	.13*
Age	.34***
Education	-.12

The analysis shows some sociodemographic factors that influence whether people (think they) know where the expression comes from. The higher the consumption of television, newspaper, radio, and magazines and the lower the consumption of social media, as well as the more interest in literature, politics, football, and religion and the less interest in social media, the more pronounced is the knowledge of the source of the expression. Of course, not all statistically significant results can be reasonably explained. We therefore highlight only two of them: interest in football influences knowledge of the catchphrase. This is quite plausible since the expression originates from a quote by a German football coach. In addition, age plays a crucial role. The older the participants are, the more likely they are to believe they know the origin of the expression. This is also plausible, as Sepp Herberger was active between the 1930s and 1960s, winning the 1954 World Cup as Germany's national coach.

However, our evaluation of the answers shows that the given answers of the participants do not always completely correspond to the actual source of the multi-word expression. For instance, some participants do not name Sepp Herberger or remain extremely vague. We recoded answers as quite vague, but partially correct, when it was mentioned that the expression comes from football or from a football coach. We also considered answers as partially correct when people named another German (national) coach. The knowledge that the expression comes from a football coach is therefore present here. We recoded answers as very vague when only *Sport* [Engl. 'sports'] was mentioned as a source. Table 13 presents the correla-

tions between the multi-word expression *Nach dem Spiel ist vor dem Spiel* after the researchers' recoding of the correlations with the other items.³²

Table 13: Simple correlations between the knowledge of the multi-word expression *Nach dem Spiel ist vor dem Spiel* (recoded by the researcher) and the other variables.³³

Knowledge of the expression <i>Nach dem Spiel ist vor dem Spiel</i> (recoded by the researcher)	Correlation
Media consumption television	.29**
Media consumption newspaper	.27**
Media consumption social media	-.01
Media consumption radio	.12
Media consumption magazines	.11
Interest in movies	.17
Interest in literature	-.12
Interest in music	-.03
Interest in social media	.07
Interest in politics	.21*
Interest in football (soccer)	.36***
Interest in advertising	.20
Interest in fashion	-.06
Interest in technology	.25*
Interest in religion	-.03
Age	.23*
Education	-.16

Table 13 is particularly interesting as it illustrates that interest in football is indeed a very important factor. Among the people who think they know where the expression comes from, the ones who give a very precise answer are those who show a higher interest in football than the others. In other words, the more interested people are in football, the more likely they are to name the formulaic expression as a saying from Sepp Herberger. This example suggests that the origins of winged words are particularly familiar to people who are interested in the domain from which the winged word originates (politics, literature, films, football, etc.). However, this still needs to be proven on a broader empirical basis.

³² It must be emphasized that in this analysis the number of cases is significantly lower, since only 96 participants stated that they knew where the phrase comes from. 36 determined the source completely correctly, 57 answered partially correctly, and 3 answered very vaguely.

³³ * $p < .05$; ** $p < .01$; *** $p < .001$. Variables were assumed to be interval scaled. Accordingly, Pearson's r was used.

It must be emphasized (as already seen in the case of the expression *Wohnst du noch oder lebst du schon?*, Section 4.2.2, Table 7) that the answers are quite diverse. Table 14 gives an insight into different answers.

Table 14: Selected answers about the origin of the multi-word expression *Nach dem Spiel ist vor dem Spiel*.

Accuracy of the answer	Answer	Sociodemographic information about the participant (looking at age and other statistically significant parameters)
Precise indication of the original context	Sepp Herberger, Dt. Fußball-Nationaltrainer, um 1954 [Engl. ‘Sepp Herberger, German national football coach, around 1954’]	Interview number: 514 Age: 40–49 Media consumption television: several times a week Media consumption newspaper: two or three times a month Interest in football: fully agree
	Zitat von Sepp Herberger nach Fußballspiel [Engl. ‘Quote from Sepp Herberger after football match’]	Interview number: 295 Age: 60–69 Media consumption television: (almost) daily Media consumption newspaper: several times a day Interest in football: fully agree
Rough or partly correct indication of the original context	Von einem Fußballtrainer [Engl. ‘From a football coach’]	Interview number: 397 Age: 11–29 Media consumption television: several times a day Media consumption newspaper: two or three times a month Interest in football: do not agree at all
	Zitat Berti Vogts nach Niederlage [Engl. ‘Quote from Berti Vogts after defeat’]	Interview number: 160 Age: 50–59 Media consumption television: (almost) daily Media consumption newspaper: (almost) daily Interest in football: disagree

Table 14 (continued)

Accuracy of the answer	Answer	Sociodemographic information about the participant (looking at age and other statistically significant parameters)
Very imprecise indication of the source	Sagt man in jedem Sport. [Engl. 'It's said in every sport']	Interview number: 517 Age: 40–49 Media consumption television: several times a week Media consumption newspaper: two or three times a month Interest in football: agree
	Sport [Engl. 'sports']	Interview number: 484 ³⁴ Age: 40–49 Media consumption television: about once a week Media consumption newspaper: once a month or less often Interest in football: do not agree at all

Table 14 shows that some people, in the sense of the EC-model, have memorized the expression more strongly in connection with its original context. In some cases, they can even specify when Sepp Herberger was the national coach (cf. interview number 514). Thus, the fully lexicalized expression is presumably a node of its own in the individual's constructicon. Some people can only name the football context or associate the expression with other (famous) German coaches (cf. interview numbers 397, 160).³⁵ Two participants indicate only the rough context 'sports' (cf. interview numbers 517, 484). In addition, many participants are familiar with the expression but do not know where it comes from. And some people do not know the fully lexicalized unit at all. This means that they do not have an entry for this micro-construction in their constructicon. However, there is the possibility that they have stored the partly lexicalized pattern [*Nach X ist vor X/Y*] as a meso-construction (Traugott 2008: 236), which a participant explicitly refers to (cf. [26]).

³⁴ The person stated not to be a German but an Austrian native speaker. Where a speaker comes from certainly also plays a role in knowing the source of catchphrases. Austrians and Swiss, for instance, are generally less familiar with German football coaches, politicians, actors, commercials etc. than Germans (and vice versa).

³⁵ The following coaches were named: Franz Beckenbauer (4x), Berti Vogts (3x), Joachim Löw (3x), Lothar Matthäus (2x), Jürgen Klopp (2x) and Erich Ribbeck (1x).

- (26) kenne ich so nicht, aber in der allgemeinen Form “nach dem/der X ist vor dem/der X”, z.B. “nach dem Konzert ist vor dem Konzert”
 (Response of a participant regarding the multi-word expression *Nach dem Spiel ist vor dem Spiel*, Interview number 140)
 [Engl. ‘I don’t know it like that, but in the general form “after X is before X”, e.g., “after the concert is before the concert”’]

Language knowledge thus varies from speaker to speaker (Dąbrowska 2015), and further research on interindividual variation in lexico-grammatical patterns is needed.

5 Conclusion and Discussion

Following the EC-model and the theory of constructionalization, this paper assumes that “[n]ew patterns come to be entrenched not only in individual minds (“innovations”) but come to be shared and entrenched within a community of speakers (“changes”)” (Traugott 2019: 129). In contrast to previous studies on (the dynamics of) constructional idioms, this paper, therefore, considers conventionalization (sociopragmatic perspective) and entrenchment (cognitive perspective) by combining corpus analyses and online surveys.

In sum, we can conclude that creative variation defined as modification in phraseology can be a driving force of changes in the form and meaning of idioms. However, it should be emphasized, that the boundary between idiom modification and semi-schematic idioms is fuzzy. It is not possible to determine exactly for every phraseme which is not used in its conventionalized form whether empirically attested variations are creative modifications of a fully lexicalized idiom or rather already fillers of an underlying semi-schematic construction with slots.

In the following, we discuss the interaction between creativity and routinization in the dynamics and emergence of constructional idioms and provide a more general modeling of the development process (cf. Figure 3). For illustration we use the analyzed multi-word expressions *Wohnst du noch oder lebst du schon?* (cf. Chapter 4.2) and *Nach dem Spiel ist vor dem Spiel* (cf. Chapter 4.3).

The starting point of the development is a slogan created by the furniture company IKEA and a quote from Sepp Herberger (cf. step 1). To be precise, the slogan and the quote are not yet phrasemes (not every slogan and quote develop into phraseological expressions). A routinization takes place in the next step (cf. step 2). The expressions are frequently used in everyday language outside the original contexts of IKEA advertising and football. In this way, formulaic expressions emerge which can be classified as catchphrases (winged words). In the next step the formulaic ex-


	Step 1	Step 2	Step 3	Step 4
Expression	<i>Wohnst du noch oder lebst du schon?</i>	<i>Wohnst du noch oder lebst du schon?</i>	<i>Mietest/liest etc. du noch oder besitzt/kindlest etc. du schon?</i>	<i>X du noch oder Y du schon?</i>
	<i>“Nach dem Spiel ist vor dem Spiel.”</i>	<i>Nach dem Spiel ist vor dem Spiel.</i>	<i>Nach dem Rave/der WM etc. ist vor dem Rave/der EM</i>	<i>Nach X ist vor X/Y</i>
Classification	Slogan (IKEA) / quote (Sepp Herberger)	Catchphrase (winged word)	Frequent modification through substitution	Constructional idiom / pattern-like catchphrase (snowclone)
				
	Creativity	Routinization	Creativity	Routinization

Figure 3: Interaction between creativity and routinization in the emergence of constructional idioms.

pressions are frequently modified (cf. step 3). It must be emphasized that the modification can already happen or begin during the routinization process. In general, the four steps are not clearly separable from each other and can happen simultaneously. The modification through substitution finally leads to the effect that the modified forms occur much more frequently than the original multi-word expressions. Thus, in the last step, constructional idioms emerge (cf. step 4).

We can therefore assume a “diachronic path from a fully lexicalized phraseme via (occasional) phraseme modification to a full-fledged phraseological schema” (Stutz and Finkbeiner 2022: 289). This diachronic path can be described as lexical constructionalization, since formal and semantic change takes place and a new semi-schematic pattern with open slots emerges (Traugott and Trousdale 2014: 273). The two case studies in this paper also provide evidence for Buerki’s (2019: 30) assumptions that formulaic language “changes at a rapid pace”. The phenomenon studied here does not involve processes of change that take place over centuries, but rather changes in the form and meaning of constructions that become conventionalized and entrenched in a short period of time because of creative utterances by speakers.

The constructionalization is characterized by an interaction between creativity and routine. The creation of a slogan by an advertising company and the sentence by Sepp Herberger, which he probably said in an interview, can be classified as creative (cf. step 1 in Figure 3). The development of catchphrases can be described as routinization (cf. step 2). The occasional modifications of these fixed expressions are again creative according to Langlotz (2006: 9) (cf. step 3). Often these modifications are word plays, i.e., they are intentional and funny variations of an idiom. Finally, it is precisely this creative modification that again leads to

the emergence of a fixed, but now semi-schematic construction (cf. step 4). It must be mentioned that the steps cannot be clearly distinguished from one another. Routinization and creativity overlap and can happen simultaneously in the development of constructional idioms.

Following Hoffmann (2022), modification in step 3 can be considered a typical case of E-creativity. However, the more frequently a multi-word expression is modified, the more likely it is that a (productive) pattern will emerge that can be categorized as F-creativity. Thus, the development of lexico-grammatical patterns through repeated modification can be described as a gradual transition from E-creativity (i.e., modification, breaking “rules”) to F-creativity (forming a partly schematic construction) (Ungerer and Hartmann 2023: 44).

The emergence of constructional idioms through modification can also be explained by Barðdal’s (2008) productivity cline (Ungerer and Hartmann 2023: 45). Initial changes through creative modification represent analogical processes. Through frequent modification, the multi-word expression becomes more and more productive. At a certain point in this process, there is a gray area between creative analogy and productive pattern. If the modifications exceed the original expression in the speech community to a considerable extent (conventionalization), the connection to its source in the linguistic knowledge of the individual speakers may be lost (entrenchment). In this way, semi-schematic constructions can emerge that exist completely independently of their source.

It is evident that for the change of (more lexicalized) idioms to (more schematic) semi-schematic patterns we should refer to phraseology and Construction Grammar. This is because fully lexicalized catchphrases (winged words) are initially situated at the lexicon pole of the lexicon-syntax continuum, which is the core area of phraseology. However, over time they develop more and more in the direction of the syntax pole due to schematization, which Construction Grammar is most interested in. Moreover, phraseological research on the phenomenon of modification can be useful for constructionist research on creativity. So far, however, this connection has not been made (Filatkina 2018a: 27–28). The paper thus contributes to a stronger interaction between phraseological and constructionist approaches.

The constructional idioms analyzed in this study have similarities with snowclones following Hartmann and Ungerer (2024) as they originate from a source. However, it can be questioned if snowclones are really a type of their own within constructional idioms. Instead, we are dealing with a gradual transition or a continuum. The transition ranges from snowclones (speakers know their source) to “typical” constructional idioms, which are not characterized by a source construction. Thus, the online survey of this paper shows that some speakers either cannot name the source or can name it only very imprecise. In other words, speakers are often not even aware of whether a source, and if so what source, underlies a formulaic

expression. This means that knowledge of the source of a catchphrase can be lost in the speech community. The defining criterion that snowclones are based on sources is thus only a feature assumed by linguists. Whether speakers have this knowledge is a completely different question, which can only be determined to a certain extent by corpus studies, but rather by surveys or experimental studies.

References

- Bailey, Guy, Tom Wikle, Jan Tillery & Lori Sand. 1991. The apparent time construct. *Language Variation and Change* 3. 241–264.
- Barðdal, Jóhanna, Elena Smirnova, Lotte Sommerer & Spike Gildea (eds.). 2015. *Diachronic Construction Grammar*. Amsterdam & Philadelphia: Benjamins.
- Barðdal, Jóhanna. 2008. *Productivity: Evidence from Case and Argument Structure in Icelandic*. Amsterdam & Philadelphia: Benjamins.
- Barz, Irmhild. 1992. Phraseologische Varianten. Begriff und Probleme. In Csaba Földes (ed.), *Deutsche Phraseologie in Sprachsystem und Sprachverwendung*, 25–47. Wien: Praesens.
- Bebermeyer, Gustav & Renate Bebermeyer. 1977. Abgewandelte Formeln – sprachlicher Ausdruck unserer Zeit. *Muttersprache* 87. 1–42.
- Bergs, Alexander. 2017. Diachronic Approaches. In Barbara Dancygier (ed.), *Cambridge Handbook of Cognitive Linguistics*, 347–360. Cambridge: Cambridge University Press.
- Bergs, Alexander. 2018. Learn the Rules like a Pro, so you can Break them like an Artist (Picasso): Linguistic Aberrancy from a Constructional Perspective. *Zeitschrift für Anglistik und Amerikanistik* 66. 277–293.
- Bergs, Alexander. 2019. What, If Anything, Is Linguistic Creativity? *Gestalt Theory* 41. 173–184.
- Bergs, Alexander & Gabriele Diewald (eds.). 2008. *Constructions and Language Change*. Berlin & New York: De Gruyter.
- Booij, Geert. 2002. Constructional idioms, morphology, and the Dutch lexicon. *Journal of Germanic Linguistics* 14. 301–329.
- Buerki, Andreas. 2019. Furiously fast: On the speed of change in formulaic language. *Yearbook of Phraseology* 10. 5–38.
- Burger, Harald. 2015. *Phraseologie. Eine Einführung am Beispiel des Deutschen*. 5., neu bearbeitete Auflage. Berlin: Schmidt.
- Colson, Jean-Pierre. 2021. Phraseology and Cognitive Entrenchment: Corpus-based Evidence and Applications for Language Teaching and Translation. In Joanna Szerszunowicz (ed.), *Reproducibility of Multiword Expressions in Paremiological and Linguo-cultural Studies*, 15–30. Białystok: University of Białystok.
- Corpas Pastor, Gloria. 2021. Constructional idioms of ‘insanity’ in English and Spanish: A corpus-based study. *Lingua* 254. 1–20.
- Corpas Pastor, Gloria. 2022. *You are driving me up the wall! A corpus-based study of a special class of resultative constructions*. *Lexis. Journal in English Lexicology* 19. 1–35.
- Coseriu, Eugenio. 1975. *Sprachtheorie und allgemeine Sprachwissenschaft. 5 Studien*. München: Fink.
- Coseriu, Eugenio. 2007. *Sprachkompetenz. Grundzüge der Theorie des Sprechens*. 2., durchgesehene Auflage. Tübingen: Narr.
- Croft, William & Alan D. Cruse. 2004. *Cognitive Linguistics*. Cambridge: Cambridge University Press.

- Cukor-Avila, Patricia & Guy Bailey. 2013. Real Time and Apparent Time. In J. K. Chambers & Natalie Schilling (eds.), *The Handbook of Language Variation and Change*. Second Edition, 237–262. Oxford: Wiley-Blackwell.
- Dąbrowska, Ewa. 2015. Individual differences in grammatical knowledge. In Ewa Dąbrowska & Dagmar Divjak (eds.), *Handbook of Cognitive Linguistics*, 650–668. Berlin & Boston: De Gruyter.
- De Smet, Hendrik. 2013. *Spreading patterns: Diffusional change in the English system of complementation*. Oxford: Oxford University Press.
- Diewald, Gabriele & Elena Smirnova. 2010. *Evidentiality in German: Linguistic realization and regularities in grammaticalization*. Berlin & New York: De Gruyter.
- Dobrovol'skij, Dmitrij. 1999. Zu semantischen und pragmatischen Effekten kreativer Idiom-Modifikationen. *Nouveaux Cahiers d'Allemand* 17. 363–374.
- Dobrovol'skij, Dmitrij. 2008. Idiom-Modifikationen aus kognitiver Perspektive. In Heidrun Kämper & Ludwig M. Eichinger (eds.), *Sprache – Kognition – Kultur. Sprache zwischen mentaler Struktur und kultureller Prägung*, 302–322. Berlin & New York: De Gruyter.
- Dobrovol'skij, Dmitrij. 2011a. Phraseologie und Konstruktionsgrammatik. In Alexander Lasch & Alexander Ziem (eds.), *Konstruktionsgrammatik III. Aktuelle Fragen und Lösungsansätze*, 111–130. Tübingen: Stauffenburg.
- Dobrovol'skij, Dmitrij. 2011b. Zur Typologie der Idiom-Modifikationen. In Galina I. Fadeeva, Innara A. Gusejnova & Elena I. Karpenko (eds.), *Aktuelle Probleme der modernen Lexikologie und Phraseologie. Festschrift für Professor I. I. Černyševa zum 100. Geburtstag*, 57–88. Moskau: Rema.
- Duden. 2021. *Zitate und Aussprüche. Herkunft, Bedeutung und aktueller Gebrauch*. Berlin: Dudenverlag.
- Fauconnier, Gilles & Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
- Fellbaum, Christiane. 2019. How flexible are idioms? A corpus-based study. *Linguistics* 57. 735–767.
- Fellbaum, Christiane & Ekaterini Stathi. 2006. Idiome in der Grammatik und im Kontext: Wer brüllt hier die Leviten? In Kristel Proost & Edeltraud Winkler (eds.), *Von Intentionalität zur Bedeutung konventionalisierter Zeichen. Festschrift für Gisela Harras zum 65. Geburtstag*, 125–146. Tübingen: Narr.
- Fiedler, Sabine. 2007. *English Phraseology: A Coursebook*. Tübingen: Narr.
- Filatkina, Natalia. 2018a. Expanding the Lexicon through Formulaic Patterns: The Emergence of Formulaicity in Language History and Modern Language Use. In Sabine Arndt-Lappe, Angelika Braun, Claudine Moulin & Esme Winter-Froemel (eds.), *Expanding the Lexicon. Linguistic Innovation, Morphological Productivity, and Ludicity*, 15–42. Berlin & Boston: De Gruyter.
- Filatkina, Natalia. 2018b. Historische formelhafte Wendungen als Konstruktionen: Möglichkeiten und Grenzen der diachronen Konstruktionsgrammatik. *Linguistik online* 90 (3), 115–143.
- Fillmore, Charles, Paul Kay & Mary Catherine O'Connor. 1988. Regularity and Idiomaticity in Grammatical Constructions. The Case of *let alone*. *Language* 64. 501–538.
- Fischer, Olga. 2007. *Morphosyntactic change: Functional and formal perspectives*. Oxford: Oxford University Press.
- Fleischer, Wolfgang. 1997. *Phraseologie der deutschen Gegenwartssprache*. 2. durchgesehene und ergänzte Auflage. Tübingen: Niemeyer.
- Fried, Mirjam. 2009. Construction Grammar as a Tool for Diachronic Analysis. *Constructions and Frames* 1. 261–291.
- Fried, Mirjam. 2013. Principles of Constructional Change. In Thomas Hoffmann & Graeme Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, 419–437. Oxford: Oxford University Press.

- Gläser, Rosemarie. 2001. The Stylistic Potential of Phraseological Units in the Light of Genre Analysis. In Anthony Paul Cowie (ed.), *Phraseology: Theory, Analysis, and Applications*, 125–144. Oxford: Oxford University Press.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
- Goldberg, Adele E. 2006. *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, Adele E. 2019. *Explain me this. Creativity, Competition, and the Partial Productivity of Constructions*. Princeton: Princeton University Press.
- Goldberg, Adele E. & Thomas Herbst. 2021. The *nice-of-you* construction and its fragments. *Linguistics* 59. 285–318.
- Hartmann, Stefan & Tobias Ungerer. 2024. Attack of the snowclones: A corpus-based analysis of extravagant formulaic patterns. *Journal of Linguistics* 60. 599–634.
- Herbst, Thomas. 2018. Collo-Creativity and Blending: Recognizing Creativity Requires Lexical Storage in Constructional Slots. *Zeitschrift für Anglistik und Amerikanistik* 66. 309–326.
- Hilpert, Martin. 2008. *Germanic Future Constructions: A Usage-Based Approach to Language Change*. Amsterdam & Philadelphia: Benjamins.
- Hilpert, Martin. 2011. Was ist Konstruktionswandel? In Alexander Lasch & Alexander Ziem (eds.), *Konstruktionsgrammatik III. Aktuelle Fragen und Lösungsansätze*, 59–75. Tübingen: Stauffenburg.
- Hilpert, Martin. 2013. *Constructional Change in English: Developments in Allomorphy, Word Formation, and Syntax*. Cambridge: Cambridge University Press.
- Hilpert, Martin, Bert Cappelle & Ilse Depraetere (eds.). 2021. *Modality and Diachronic Construction Grammar*. Amsterdam & Philadelphia: Benjamins.
- Hoffmann, Thomas. 2018a. Creativity and construction grammar: Cognitive and psychological issues. *Zeitschrift für Anglistik und Amerikanistik* 66. 259–276.
- Hoffmann, Thomas. 2019. Language and creativity: A construction grammar approach to linguistic creativity. *Linguistics Vanguard* 5. 1–8.
- Hoffmann, Thomas. 2022. Constructionist approaches to creativity. *Yearbook of the German Cognitive Linguistics Association* 10. 259–284.
- Hoffmann, Thomas (ed.). 2018b. *Linguistic Creativity*. Special Issue of *Zeitschrift für Anglistik und Amerikanistik* 66 (3).
- Hoffmann, Thomas (ed.). 2020. *Construction Grammar and Creativity*. Special Issue of *Cognitive Semiotics* 13 (1).
- Hoffmann, Thomas & Graeme Trousdale (eds.). 2013. *The Oxford Handbook of Construction Grammar*. Oxford: Oxford University Press.
- Huber, Judith & Thomas Herbst (eds.). 2022. *Diachronic Construction Grammar*. Special Issue of *Zeitschrift für Anglistik und Amerikanistik* 70 (3).
- Hunston, Susan & Gill Francis. 2000. *Pattern Grammar. A corpus-driven approach to the lexical grammar of English*. Amsterdam & Philadelphia: Benjamins.
- Ivorra Ordines, Pedro. 2022. Comparative constructional idioms. A corpus-based study of the creativity of the [*más feo que X*] construction. In Carmen Mellado Blanco (ed.), *Productive Patterns in Phraseology and Construction Grammar. A Multilingual Approach*, 29–52. Berlin & Boston: De Gruyter.
- Ivorra Ordines, Pedro. In press. *Dime con quién te juntas y te diré quién eres*. Substantive idioms from Construction Grammar. In Torsten Leuschner, Anaïs Vajnóvski, Gauthier Delaby & Jóhanna Barðdal (eds.), *How to Do Things with Corpora – Methodological Issues and Case Studies*. Berlin: Springer Nature.

- Jaki, Sylvia. 2014. *Phraseological Substitutions in Newspaper Headlines. "More than Meats the Eye"*. Amsterdam & Philadelphia: Benjamins.
- Kabatek, Johannes. 2023. *Eugenio Coseriu. Beyond Structuralism*. Berlin & Boston: De Gruyter.
- Klein, Josef. 2013. Der saliente politische Satz – ein Kristallisationspunkt kollektiven Wissens. In Jörg Kilian & Thomas Niehr (eds.), *Politik als sprachlich gebundenes Wissen. Politische Sprache im lebenslangen Lernen und politischen Handeln*, 137–158. Bremen: Hempen.
- Labov, William. 1963. The social motivation of a sound change. *Word* 19. 273–309.
- Langacker, Ronald W. 2008. *Cognitive Grammar – A Basic Introduction*. Oxford: Oxford University Press.
- Langlotz, Andreas. 2006. *Idiomatic Creativity. A cognitive-linguistic model of idiom-representation and idiom-variation in English*. Amsterdam & Philadelphia: Benjamins.
- Lasch, Alexander & Alexander Ziem (eds.). (2023). *Konstruktionsgrammatik VII. Wandel im Sprachgebrauch*. Tübingen: Stauffenburg.
- Mantlik, Annette & Hans-Jörg Schmid. 2018. *That*-complementizer omission in N+BE+*that*-clauses – register variation or constructional change? In Alex Ho-Cheong Leung & Wim van der Wurff (eds.), *The noun phrase in English: past and present*, 187–222. Amsterdam & Philadelphia: Benjamins.
- Martí Solano, Ramon. 2013. From Idiom Variants to Open-Slot Idioms: Close-Ended and Open-Ended Variational Paradigms. In Joanna Szerszunowicz, Bogusław Nowowiejski, Takaaki Kanzaki & Katsumasa Yagi (eds.), *Research on Phraseology across Continents*. Volume II, 167–180. Białystok: University of Białystok Publishing House.
- Mellado Blanco, Carmen. 2018. Wenn modifizierte Sprichwörter zu Mustern werden. Eine korpusbasierte Studie am Beispiel von *Reden ist Silber, Schweigen ist Gold*. In Martina Nicklaus, Nora Wirtz, Wiebke Langer, Marcella Costa & Karin Ewert-Kling (eds.), *Lexeme, Phraseme, Konstruktionen: Aktuelle Beiträge zur Lexikologie und Phraseologie. Festschrift für Elmar Schafroth*, 183–203. Frankfurt am Main: Lang.
- Mellado Blanco, Carmen. 2020. (No) me importa un camino y sus variantes diatópicas: estudio de corpus desde la Gramática de Construcciones. *Estudios de Lingüística. Universidad de Alicante (ELUA)*, VII, 87–109.
- Mellado Blanco, Carmen. 2022. Phraseology, patterns and Construction Grammar. In Carmen Mellado Blanco (ed.), *Productive Patterns in Phraseology and Construction Grammar. A Multilingual Approach*, 1–25. Berlin & Boston: De Gruyter.
- Mellado Blanco, Carmen. 2023. From idioms to semi-schematic constructions and vice versa. The case of [*a un paso de* X]. In Inga Hennecke & Evelyn Wiesinger (eds.), *Constructions in Spanish*, 103–128. Amsterdam & Philadelphia: Benjamins.
- Mellado Blanco, Carmen. 2024. The way of biblical quotations are mysterious: Change of register and snowclones in Spanish and German from a constructivist point of view. In Saša Babič, Fionnuala Carson Williams, Christian Grandl & Anna T. Litovkina (eds.), *"Standing on the shoulders of giants"*. A Festschrift in honour of Wolfgang Mieder on the occasion of his 80th birthday, 495–512. Universität Osijek: Faculty of Humanities and Social Sciences.
- Mellado Blanco, Carmen (ed.). 2022. *Productive Patterns in Phraseology and Construction Grammar. A Multilingual Approach*. Berlin & Boston: De Gruyter.
- Mellado Blanco, Carmen, Fabio Mollica & Elmar Schafroth (eds.). 2022. *Konstruktionen zwischen Lexikon und Grammatik. Phrasem-Konstruktionen monolingual, bilingual und multilingual*. Berlin & Boston: De Gruyter.
- Merten, Marie-Luis. 2018. *Literater Sprachausbau kognitiv-funktional. Funktionswort-Konstruktionen in der historischen Rechtsschriftlichkeit*. Berlin & Boston: De Gruyter.

- Mollica, Fabio. 2020. Die Phrasem-Konstruktion [X_{NPnom} *sein*_{Kopula} *mir*_{Exp} (Modalpartikel) *Det*_{ein(e)} *Y_{NP}*]_{Exkl} und ihre Relationen innerhalb der Ethicus-Konstruktion und der Dativ-Familie. *Linguistische Berichte* 261. 47–83.
- Noël, Dirk. 2007. Diachronic Construction Grammar and Grammaticalization Theory. *Functions of Language* 14. 177–202.
- Noël, Dirk & Timothy Coleman. 2021. Diachronic Construction Grammar. In Wen Xu & John R. Taylor (eds.), *The Routledge Handbook of Cognitive Linguistics*, 662–675. New York & London: Routledge.
- Parkinson, Judy. 2003. *Catchphrase, Slogan and Cliché: the origins and meanings of our favourite expressions*. London: Michael O'Mara.
- Pfeiffer, Christian. 2016. *Frequenz und Funktionen phraseologischer Wendungen in meinungsbetonten Presstexten (1911–2011)*. Baltmannsweiler: Schneider.
- Pfeiffer, Christian. 2017. Okkasionalität — Zur Operationalisierung eines zentralen definitorisches Merkmals phraseologischer Modifikationen. *Yearbook of Phraseology* 8. 9–30.
- Ptashnyk, Stefaniya. 2009. *Phraseologische Modifikationen und ihre Funktionen im Text. Eine Studie am Beispiel der deutschsprachigen Presse*. Baltmannsweiler: Schneider.
- Rodríguez Martín, Gustavo A. 2014. Canonical modified phraseological units: Analysis of the paradox. *Yearbook of Phraseology* 5. 3–24.
- Sampson, Geoffrey. 2016. Two ideas of creativity. In Martin Hinton (ed.), *Evidence, experiment and argument in linguistics and philosophy of language*, 15–26. Bern: Lang.
- Schmid, Hans-Jörg. 2000. *English Abstract Nouns as Conceptual Shells. From corpus to cognition*. Berlin & New York: De Gruyter.
- Schmid, Hans-Jörg. 2014. Lexico-grammatical patterns, pragmatic associations and discourse frequency. In Thomas Herbst, Hans-Jörg Schmid & Susen Faulhaber (eds.), *Constructions – collocations – patterns*, 239–293. Berlin & Boston: De Gruyter.
- Schmid, Hans-Jörg. 2015. A blueprint of the Entrenchment-and-Conventionalization Model. *Yearbook of the German Cognitive Linguistics Association* 3. 1–27.
- Schmid, Hans-Jörg. 2016. Why Cognitive Linguistics must embrace the pragmatic and social dimensions of language and how it could do so more seriously. *Cognitive Linguistics* 27. 543–557.
- Schmid, Hans-Jörg. 2020. *The Dynamics of the Linguistic System. Usage, Conventionalization, and Entrenchment*. Oxford: Oxford University Press.
- Schmid, Hans-Jörg. 2021. How the entrenchment-and-conventionalization model might enrich diachronic construction grammar. The case of *(the) thing is (that)*. *Belgian Journal in Linguistics* 34. 312–326.
- Schmid, Hans-Jörg & Annette Mantlik. 2015. Entrenchment in historical corpora? Reconstructing dead authors' minds from their usage profiles. *Anglia* 133. 583–623.
- Schmid, Hans-Jörg, Quirin Würschinger, Melanie Keller & Ursula Lenker. 2020. Battling for semantic territory across social networks. The case of *Anglo-Saxon* on Twitter. *Yearbook of the German Cognitive Linguistics Association* 8. 3–26.
- Schmid, Hans-Jörg, Quirin Würschinger, Sebastian Fischer & Helmut Küchenhoff. 2021. *That's cool*. Computational sociolinguistic methods for investigating individual lexico-grammatical variation. *Frontiers in Artificial Intelligence* 3. 1–16.
- Sommerer, Lotte & Elena Smirnova (eds.). 2022. *Nodes and Networks in Diachronic Construction Grammar*. Amsterdam & Philadelphia: Benjamins.
- Staffeldt, Sven. 2018. *Gebrauchssemantik von Hand. Korpusbasierte Studien zu somatischen Phraseologismen des Deutschen mit der Konstituente Hand*. Tübingen: Stauffenburg.

- Stumpf, Sören. 2016. Modifikation oder Modellbildung? Das ist hier die Frage – Abgrenzungsschwierigkeiten zwischen modifizierten und modellartigen Phrasemen am Beispiel formelhafter (Ir-)Regularitäten. *Linguistische Berichte* 247. 317–342.
- Stumpf, Sören. 2021. „Star Wars ist eben mehr so ein Männerding“. Eine Korpusuntersuchung zur Syntax, Semantik und Pragmatik der Konstruktion [X Kopula ein Y-Ding]. *Deutsche Sprache* 49. 24–45.
- Stutz, Lena & Rita Finkbeiner. 2022. *Veni, vidi, veggio*. A contrastive corpus linguistic analysis of the phraseological construction *Veni, vidi, X* and its German equivalent *X kam, sah und Y*. In Carmen Mellado Blanco (ed.), *Productive Patterns in Phraseology and Construction Grammar. A Multilingual Approach*, 261–287. Berlin & Boston: De Gruyter.
- Taylor, John R. 2002. *Cognitive Grammar*. Oxford: Oxford University Press.
- Traugott, Elizabeth Closs. 2003. Constructions in Grammaticalization. In Brian D. Joseph & Richard D. Janda (eds.), *The Handbook of Historical Linguistics*, 624–647. Oxford: Blackwell.
- Traugott, Elizabeth Closs. 2007. The concepts of constructional mismatch and type-shifting from the perspective of grammaticalization. *Cognitive Linguistics* 18. 523–557.
- Traugott, Elizabeth Closs. 2008. Grammaticalization, constructions and the incremental development of language: suggestions for the development of degree modifiers in English. In Regine Eckhardt, Gerhard Jäger & Tonjes Veenstra (eds.), *Variation, selection, development: probing the evolutionary model of language change*, 219–250. Berlin & New York: De Gruyter.
- Traugott, Elizabeth Closs. 2015. Toward a coherent account of grammatical constructionalization. In Jóhanna Barðdal, Elena Smirnova, Lotte Sommerer & Spike Gildea (eds.), *Diachronic Construction Grammar*, 51–79. Amsterdam & Philadelphia: Benjamins.
- Traugott, Elizabeth Closs. 2019. Constructional pattern-development in language change. In Beatrix Busse & Ruth Möhlig-Falke (eds.), *Patterns in Language and Linguistics*, 125–155. Berlin & Boston: De Gruyter.
- Traugott, Elizabeth Closs & Graeme Trousdale. 2013. *Constructionalization and Constructional Changes*. Oxford: Oxford University Press.
- Traugott, Elizabeth Closs & Graeme Trousdale. 2014. Contentful constructionalization. *Journal of Historical Linguistics* 4. 256–283.
- Trousdale, Graeme. 2008. Constructions in grammaticalization and lexicalization: evidence from the history of a composite predicate in English. In Graeme Trousdale & Nikolas Gisborne (eds.), *Constructional approaches to English grammar*, 33–67. Berlin & New York: De Gruyter.
- Trousdale, Graeme. 2010. Issues in constructional approaches to grammaticalization. In Katerina Stathi, Elke Gehweiler & Ekkehard König (eds.), *Grammaticalization: current views and issues*, 51–71. Amsterdam & Philadelphia: Benjamins.
- Trousdale, Graeme. 2012. Grammaticalization, lexicalization and constructionalization from a cognitive-pragmatic perspective. In Hans-Jörg Schmid (ed.), *Cognitive Pragmatics*, 533–558. Berlin & New York: De Gruyter.
- Ungerer, Tobias & Stefan Hartmann. 2023. *Constructionist approaches: Past, present, future*. Cambridge: Cambridge University Press.
- Van Lancker Sidtis, Diana, Krista Cameron, Kelly Bridges & John J. Sidtis. 2015. The formulaic schema in the minds of two generations of native speakers. *Amersand. An Interdisciplinary Journal of General and Applied Linguistics* 2. 39–48.
- Zeschel, Arne. 2012. *Incipient productivity: a construction-based approach to linguistic creativity*. Berlin & Boston: De Gruyter.