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ID: 189 / TS2.1: 2

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions
Keywords: motion, SLA, typology, crosslinguistic influence, interlanguage

L2 acquisition of voluntary and caused motion: a case of crosslinguistic influence or acquisitional path?

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Motion is a fundamental cognitive ability (Papafragou & Selimis 2010). Nevertheless, languages across world greatly vary in the way they talk about it. Talmy (2000) shows that in French or other *V-languages*, Path of Motion is generally lexicalized in the main verb (e.g. *entrer* 'to enter'), while Manner is coded outside the main verb (e.g. *en courant* 'running'). Conversely, in English or other *S-languages*, Manner is predominately mapped onto the main verb (e.g. *run*), while Path appears in a satellite (e.g. *in*).

However, much research shows that many languages are in-between the two Talmyan types, offering less systematic lexicalization strategies for motion (Cini 2008, Ibarretxe-Antuñano & Hijazo-Gascón 2013). Within the V-languages, for instance, Italian seems to be more path-salient than French via the syntagmatic verbs (SV; see Simone 1997, Anastasio 2021), i.e. *correre via* 'run away'.

Restructuring the L1 spatial patterns in the process of second language acquisition (SLA) is highly complex for learners (Cadierno & Ruiz 2006; Slobin 1996), since they are supposed to learn new ways to map concepts onto the relevant linguistic forms in the L2.

This study contributes to L2 crosslinguistic research on the verbalisation of voluntary and caused motion events. Specifically, we studied story-telling tasks (*Frog story*, Mayer 1969) produced by university learners of L2 French and Italian, whose L1 is either typologically close (Italian or French) or distant (English) from the TL. 110 informants participated in the study: 30 native speakers of English, French and Italian (10 per group) and 80 learners of two proficiency levels (intermediate *vs*. advanced; cf. Bartning & Schlyter, 2004).

We examine expression patterns of motion, focusing on (a) the developmental trajectory followed by learners to code motion events (*focus* and *locus* of information) and (b) the role of crosslinguistic influence (CLI) on learners' developmental trends according to their L2 proficiency level and the typological properties of language pairs.

Specifically, story-telling tasks allowed us to wonder:

RQ1: which types of spatial component(s) is(are) mainly lexicalised (*focus*) and by which linguistic means (*locus*)?

RQ2: to what extent do the similarities/differences of language pairs lead to CLI phenomena or to a re-adjustment of spatial patterns appropriated to the TL?

RQ3: from which interlinguistic level are learners' productions more target-like?

Findings show common tendencies related to general acquisitional path for the intermediate learners, such as idiosyncratic verb and prepositional forms, and an important focus on Path. Contrary to our expectations, CLI appears in the *locus* instead of the *focus*, in particular at more advanced level, if L2-L1 have formal analogous structures (*transfer to somewhere*, Andersen 1983). As such, advanced English learners resort to satellite devices in L2 Italian (via SV), whereas they (along with Italian learners) do not in L2 French. In sum, this study highlights evidence of distinction between CLI phenomena and general learning trends. Various factors may explain the role of CLI in the SLA field against the backdrop of learner sensitivity to typological differences vs similarities in the input, learner conceptualisation of motion and the task effect.

ID: 221 / **TS4.3: 1**
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: Construction morphology, constructicon, frame semantics, word formation

From freizügig to blauäugig: What's the family of morphological A-N-ig constructions doing in the German Constructicon?

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Constructicography aims at documenting languages in terms of "constructicons": digital networks of constructions and the relations among them (cf. the overview in Lyngfelt 2018). Ultimately, constructicography seeks a full-coverage approach, documenting "constructions all the way down" (Goldberg 2006: 18). It is therefore all the more surprising that morphological constructions play no, or only a marginal, role in existing and emerging constructicon projects (cf. Boas, Lyngfelt & Torrent 2019). In view of the wealth of morphological constructions (cf. Booij 2010 on English and Dutch), we consider this to be a serious gap.

This talk presents first steps to tackle this issue. Taking German parasynthetic compound constructions of the type A-N-ig (e.g., blauäugig 'blue-eyed', kurzärmelig 'short-sleeved') as an exemplary case, our goal is to show (a) how morphological constructions can be identified and documented constructographically, (b) what specific challenges and complications arise from building a morphological constructicon, and (c) to what extent morphological units can be integrated into existing resources (here: the German Constructicon, Ziem & Flick 2019, Boas & Ziem 2018).

Based on the German Wikipedia corpus, an automated corpus search on the structure A-N-ig yields about 1,537 instances (including about 150 false positives), using a BERT and HanTa tagger for lemma tagging and morphological decomposition. The list allows for sorting and clustering instances by their first (A) or second (N) unit. Along with the target type [AN]NP -ig, exemplified by kurzbeinig 'short-legged', we find closely related complex words of the type [AN]N -ig (vollblutig 'full-blooded') as well as 'look-alikes' with the structure [A][N-ig] (hochgiftig 'highly poisonous').

Analyzing and classifying the instances requires identifying 'sister' constructions within the constructicon (Jackendoff & Audring 2020), as well as considering specific semantic properties.

Instances range from fully compositional (e.g. rotflügelig 're-winged') to individually idiomatic (e.g. einsilbig 'taciturn' as well as 'monosyllabic'). Especially interesting are clusters of systematic idiosyncrasy. For example, when N denotes a body part, the construction often metaphorically or metonymically encodes a character trait (engstirning 'narrow-minded, lit. narrow-foreheaded', hartnäckig 'persistent, lit. hard-necked', warmherzig 'warm-hearted'; see also Gaeta & Angster 2019). Such clusters suggest the existence of subconstructions within the family.

So, what's this family doing in the German Constructicon? Based on frame-semantic descriptions, we identify semantic clusters motivated by family resemblances between their members. With the help of this analysis, we can establish the constructional network from the maximally idiosyncratic to the maximally schematic level. We will also discuss the way this network can be integrated into the existing German Constructicon, where it can insightfully complement the syntactic constructions already represented.

ID: 216 / **TS6.2: 3**

Theme Session: Non-finite causal constructions in English and beyond

Topics: Theme session: Non-finite causal constructions in English and beyond

Keywords: because, internet language use, register variation, language change

A snapshot of the emerging 'because-X' construction

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In this talk, we provide a description of the emerging construction known as *because*-X (*We have to collect data because science*). This construction has received attention in the sociolinguistics, corpus and pragmatics literatures (Kanetani 2015; Rehn 2015; Bland et al. 2016; Bohmann 2016; Bergs 2018; Konvička 2020). Here, we describe some syntactic characteristics of *because*-X using a Twitter corpus and an acceptability rating study with a large sample of medium- to high-frequency internet users.

Following an exploratory survey, we presented 949 participants with an online acceptability rating study where the element X in *because*-X was one of five syntactic categories (bare noun, interjection, determiner phrase, bare verb, prepositional phrase), determined from the exploratory study and predictions in the literature. The results showed that *because*-X is sensitive to syntactic category (interjections and bare nouns are favoured, while prepositional phrases and verbs are rarely permitted). Additionally, we found an effect of frequency of internet usage as well as variety of English for some categories: high internet usage increased acceptability of the more accepted categories, and being a native English speaker sharpened ungrammaticality judgements for the less accepted categories.

A 'fill in the blank' study confirmed the sensitivity of the construction to syntactic category, and also suggested that *because*-X is not elliptical (as has previously been suggested by e.g. Bergs 2018). We characterise canonical cases of *because*-X as semantically conveying the same causal meaning as standard forms of *because*. However, as demonstrated by the lack of negative scope ambiguity and main clause phenomena and the possibility of non-linguistic elements in the X slot, it is itself syntactically inflexible, unlike the clause or phrasal complement of the standard forms *because*-clause and *because-of*.

As suggested by previous work, the use of non-standard *because*-X rather than a standard form conveys pragmatic meaning. Comments on our 'fill in the blank' study (as well as our own intuitions) confirmed this. Additionally, a Twitter corpus allowed us to compare usage of the construction to prior studies (especially Schnoebelen 2014) and identify that emojis and fixed expressions of attitude were frequently X. Based on these studies, we show that there are two subtypes of *because*-X, one with a deictic function indicating a state of affairs, and one with an expressive function conveying an emotional state. Both rely heavily on the addressee's contextual knowledge or salient properties of X, leading to a high degree of flexibility of the interpretation of X and restricted contexts of use in terms of audience (in-groups) and register (informal, especially online communities).

ID: 133 / **CB2.1: 2**
Poster
Topics: cognitive grammar, construction grammar, discourse analysis
Keywords: usage-based perspective, modality, interactional linguistics, construction grammar, written discourse

Modelling Modality Context Based: A Usage-Based Approach on German Modal Verbs wollen (want) and sollen (shall)

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Since their meanings spread in an unbalanced relationship across their formal inventory, modal verbs are particularly related to context in order to unleash semantically completely. Following a usage-based perspective and considering that meaning emerges through use, the question arises, whether and how aspects of the context can be incorporated into a systematic description of modal verbs. While usage-based research on modal verbs elaborates the interrelationship of form, meaning and context in detail, it remains in descriptions of context-specific case groups (Mostovaia 2019; Gubina 2022). Systematic descriptions on the contrary merely recruit authentic data deductively (Baumann 2017). However, a research unit on English modal verbs (Depreatere et al. 2023) has shown that it is indeed possible to consider contexts systematically. They conclude that the form side of modal verbs should not be restricted to the modal verb itself, but rather be extended to some of its surrounding lexical elements and syntactic categories. I will extend this perspective even further by asking, if and how interactional factors are involved in the activation of the meaning-potentials of modal verbs. To this end, I combine Interactional Linguistic methods (Couper-Kuhlen/Selting 2018) with Construction Grammar premises (Cruise 2001; Goldberg 2006). By modelling the results against the background of Langacker's (2001) Current Discourse Model, I will show, how contextual features are related to the conceptualisation of the linguistic structure.

Drawing on a corpus of German WhatsApp interactions, I focus on 1st person plural interrogative structures such as „Wollen wir uns diese Woche mal wieder alle treffen?“ (“Do we all want to meet again this week?”) or “Hey sollen wir uns dann morgen 30min vor der debatte treffen?” (“Hey shall we then meet tomorrow 30 min before the debate?”). By means of the interactional analysis, I will first show how the context converges the two distinct forms. Since both structures are used with high and almost equal frequency to perform proposals for future joint activities, I will argue that they can be seen as allostructions: Occurring in the same higher-level structure, both modal verbs align their meanings as they derive their modality from the same source, namely an intersubjective one. However, as parts of the modal’s core semantics interact with elements of their formally, lexically, and interactionally defined surroundings, each structure operates in a different way. *Wollen*-proposals tend to weaken the preference-organisation for the acceptance of a proposal, whereas proposals with *sollen* enforce acceptance. This contextually induced combination of equivalence in meaning on the one hand and delicate distinction on the other will be modelled conceptually on the basis of Langacker (2001). Thus the poster demonstrates a reflexive relation of context and conceptualisation that is both, empirically based and theoretically grounded. The case study presented provides the basis for some future research within my doctoral project. Since I am interested in how contextual information can be represented in the *construct-i-con*, the poster shall address the question of how modal verbs are distributed and interlinked with respect to their formal, semantical and interactional features.

ID: 184 / **TS5.1: 3**
Theme Session: Chunking phenomena and phonological reorganization in spoken interaction
Topics: Theme session: Chunking phenomena and phonological reorganization in spoken interaction
Keywords: reference, frequency, morpho-phonology, focal adjustment, stance taking

Referential sound patterns in spoken German

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Combining Cognitive Grammar (Langacker 1987) with social ontological considerations from Conversation Analysis (Schegloff/Sacks 1973; Sidnell/Stivers 2012), we propose grammar to be a socio-cognitive architecture that organizes the intersubjectively coordinated mapping of sound patterns onto conceptual structures in an arbitrary but socially accountable (Garfinkel 1967; Robinson 2016) manner. Within this theoretical framework, we ask how non-nominal reference instructions (Lanwer 2017; 2023) are morpho-phonologically encoded in German talk-in-interaction and what kind of frequency effects we can identify in the phonological structuring of these patterns. By referential sound patterns we mean recurrent segmental configurations that are involved in doing referring (Schegloff 2007) in situated talk. In our talk, we will report on initial observations from a network analysis (Lanwer 2020) of referential sound patterns in dinner conversations from Northern Germany. We start our analysis by a systematic inspection of all usage tokens that qua transcription are potential instances of the pronominals *ich*, *du* and *man*. After systematizing the observable sound patterns in the data, we will then turn to the sequential analysis of usage contexts to unravel the pragmatic specifics of the different patterns concerning focal adjustment (Langacker 1987: 116–137) and stance taking (Du Bois 2007).

ID: 146 / **TS5.2: 3**

Theme session proposal

Topics: construction grammar, discourse analysis, language change and grammaticalization

Keywords: chunking, phonological reorganization, social interaction, Interactional Construction Grammar

Chunking phenomena and phonological reorganization in spoken interaction

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One of the core ideas of Construction Grammar (CxG) is that linguistic structure is abstracted from what Langacker (1987: 376) calls usage events. The abstracted patterns can be of any degree of complexity and specificity. The object of traditional linguistic inquiry are structures that combine minimal complexity with a maximum of specificity or the other way round. However, there is growing empirical evidence that the cognitive architecture of grammar favors the entrenchment of structures in between (Bybee 2010: 33-56; Schmid 2020: 24). Complex but (semi-)specific linguistic units become entrenched in a usage history of redundant patterning of utterances. Simultaneously, it is well known that those chunks or "prefabricated unit[s]" (Bybee 2001: 60) are an important structural resource for handling the temporal pressure coming along with the intricate contingencies and the inherent progressivity of spoken interaction (Auer 2009; Hopper 2011; Deppermann/Günthner 2015; Stivers/Robinson 2006; Bauer/Lanwer in prep.). Therefore, studies, especially from the field of Interactional Linguistics (IL), support the view already coined by Pawley/Sider (1983) that structures of spoken utterances are very likely of a high degree of redundancy in grammatical patterning, which leads to the routinization of very specific grammatical constructions (Bauer/Lanwer in prep.; Bücker 2014; Deppermann 2011a; Günthner 2011; Imo 2007). Furthermore, fragments of spoken utterances seem to consist vastly of recycled material – as Hopper (2011: 23) puts it –, i.e. they show a recurring phonological form. Bybee (2001: 137-166) in particular discusses patterns of phonological reorganization on the one hand as a significant effect of chunking in language and on the other hand as empirical evidence for the entrenchment of complex but specific units. Despite the evidence for prefabricated chunks in spoken interaction, within CxG still little is known about the effects of chunking phenomena on the phonological patterning of the form side of grammatical constructions. One reason might be that phonological form features are largely ignored within CxG, especially with respect to everyday language use. Within IL, one field of inquiry where aspects of chunking sometimes come into focus are discourse functional units, such as discourse or pragmatic markers. But here, too, dedicated descriptions of the phonological form are still rare (but see Bergmann 2014, forthcoming; Pekarek Doehler 2016; Maschler 2017; Zeschel/Brackhane/Knöbl 2019). Additionally, studying only chunks bearing specific discourse functions falls short of providing a complete picture of the cognitive and interactional mechanisms that control chunking processes in spoken interaction in general, especially regarding frequency-driven effects of phonological reorganization. Empirical observations suggest that (a) we find phenomena of chunking and phonological reorganization in all areas of structural patterning and (b) that structural reorganization of phonological form often paves the way for the assignment of new functions to these new forms (Bybee/Schreiber 1999). In our session the forementioned desiderata will be addressed in an empirically informed way, combining approaches from Cognitive Linguistics with IL methodology. The session thus attempts to broaden the scope of Interactional CxG (Deppermann 2006; 2011b; Fischer 2017; Günthner 2009; Imo 2007; 2015; 2018; Lanwer 2020) to the field of (lexical) phonology.

ID: 137 / **GS_F1.1: 4**
Presentation
Topics: construction grammar, language change and grammaticalization
Keywords: grammaticalization, pragmaticalization, discourse pragmatics, pragmatic markers, EC-Model

The usualization of the pragmatic marker "not gonna lie"

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This study is situated within the broader area of Diachronic Construction Grammar and specifically wants to trace the emergence and the development of the pragmatic marker *not gonna lie* from the compositional clause *NP BE not going to lie to NP.*

Thus far, the development of pragmatic markers has often been analyzed from the point of view of grammaticalization (e.g., Traugott, 1995: 15; Brinton, 2017: 27), which has not been uncontroversial. While some of the changes that affect pragmatic markers, e.g., decreased weight and variability, are usually associated with grammaticalization (Lehmann, [1995] 2015), other changes, such as positional variability and scope expansion (Brinton, 2017: 29), are not typical results of grammaticalization processes. Because of this, the development of the pragmatic marker *not gonna lie* will be regarded from the point of view of the Entrenchment-and-Conventionalization Model (EC-Model, Schmid, 2020), specifically the process of usualization. The EC-Model aims to explain grammaticalization and similar linguistic changes through examination of how form maps onto meaning and meaning onto form, the linear order of the components of a construction, the cotext and context of constructions and the functional and formal oppositions within the linguistic network of constructions. A detailed investigation of the usualization process along these lines promises to answer the main research question of this study: How the does the pragmatic marker *not gonna lie* develop from the compositional clause *NP BE not going to lie to NP*?

The present study comprises both a qualitative and quantitative investigation of data from the *Corpus of Contemporary American English* (COCA, Davies 2008–), which features material from a variety of genres and covers the time from 1990 to 2019. I will show that *not gonna lie* develops from the clause *NP BE not going to lie to NP*, specifically the form *I am not going to lie to you*, with the forms *I'm not gonna lie* (which is the most common form in COCA) and *not gonna lie to you* forming intermediate steps. From their earliest attestations onward, these forms occur in similar contexts. Unlike what the semantics of its elements suggest, *not gonna lie* is not mainly used to emphasize the truth of what is said in the cotext but rather to mitigate it, for example in confessions carrying face threats. This discourse function can only be observed for variants with first person subjects and *you* in the prepositional phrase (if present), which shows strengthening of symbolic associations between this function and the entire linguistic string. The later omission elements through the course of the development shows a decrease in external syntagmatic conformity. The remaining chunk *not gonna lie* is largely formulaic, leaves little room for variability and is dominated by discursive conformity.

ID: 210 / **TS3.1: 3**
Theme Session: Cognitive approaches to written language
Topics: corpus linguistics, writing systems
Keywords: writing, morphological boundaries, spelling errors

Morphographemics: How morphological boundaries affect spelling variation

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The relation between morphology and spelling is an important source of evidence for theories of linguistic processing (see e.g. Kuperman et al. 2009). In particular, spelling errors can help us assess the role of morphological structure in language users' mental representations of words in authentic texts (see e.g. Schmitz et al. 2018; Bar-On & Kuperman 2019; Surkyn et al. 2020). For instance, Gahl & Plag (2019) show that the strength of morphological boundaries affects misspellings of derivationally complex words in English. In a corpus study on non-edited Hebrew texts, Bar-On & Kuperman (2019) show that the occurrence of spelling errors is much less likely if it would disrupt a morphological unit.

These results suggest that some morphological units are more prone to spelling errors than others, partly depending on the degree to which they are perceived as separate units (rather than as parts of the words in which they occur). In this paper, we test this hypothesis using German data by exploring graphemic variation in a collection of 1,667 school-exit exams (Berg et al. 2021). Specifically, we annotate the data for different types of spelling errors, and we code the spelling errors for their morphological structure. Taken together, these data allow for a multifactorial analysis of morphological factors that determine spelling errors.

Take, for example, the following spelling errors that are usually viewed as "slips of the pen", i.e., errors that depend on general cognitive factors like concentration, attention etc. In other words, the writer knows the correct graphemic form of a word, but is – for some reason or other – not able to produce it.

(1) a. <Lebewese> (instead of Lebewesen 'living being')

b. <Gesellschaf> (instead of Gesellschaft 'society')

c. <ermöglich> (instead of ermöglicht 'enabled')

These misspellings are instances of what may be called graphemic erosion: The attested form contains less material than what is expected. In all cases, it is the word ending that is affected (this is what we would expect, see e.g. Wing & Baddely 1980, 2009). All three forms are attested in the corpus, and we would expect the respective writers to be able to rectify them with enough time and concentration.

However, the forms differ regarding one crucial aspect: In (1a), it is the stem that suffers the erosion; in (1b), it is a derivational suffix; in (1c), it is an inflectional suffix. Preliminary analyses show that inflectional suffixes are more prone to graphemic erosion as compared to derivational suffixes and stems. We propose a thorough analysis to test this hypothesis. In particular, confounding factors like word frequency, length etc., but also the frequency distribution of word-final stems, inflectional and derivational suffixes in general have to be taken into account. This calls for the multifactorial analysis mentioned above, which can reveal factors that influence the degree to which different units are prone to erosion, and can as such shed light on the complex relationship between phonology, morphology, and spelling.

ID: 224 / **TS5.1: 2**
Theme Session: Chunking phenomena and phonological reorganization in spoken interaction
Topics: Theme session: Chunking phenomena and phonological reorganization in spoken interaction
Keywords: Discourse markers, interactional approach, boundary marking

Phonetic reductions and chunking. Methodological considerations on the basis of discourse markers

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Since Bybee & Scheibman's (1999) findings on the formal and functional aspects of English 'dunno' as compared to 'I don't know', discourse markers have been at the center of discussions about strong phonetic reductions in spontaneous speech. Adopting a broad notion of discourse markers, many of these studies focus on high-frequency items such as Engl. 'like' (Schleef & Turton 2016) or Dutch and German ‚eigenlijk' / ‚eigentlich' (Ernestus & Smith 2018; Kohler & Niebuhr 2011). Indeed, the systematic effect of frequency on phonetic reductions is now well established, underscoring a usage-based approach to language. Less well studied are the effects of interactional structure on phonetic reductions which can prevail even for elements of moderate frequency, whether or not they are discourse markers (Bergmann 2014; Szczepek Reed 2015). Another crucial question on whichl more research is needed concerns the actual nature of phonetic reduction. Following Kohler & Niebuhr (2011) and based on their acoustic-phonetic analysis of 'eigenlijk', Ernestus & Smith (2018: 156) ask whether it might be worthwhile to consider phonetic reductions in terms of "articulatory prosodies" rather than in terms of linear, segmentally based reduction phenomena (e.g. segment deletions, assimilations). Similarly, Local (2003: 328–333) argues for the relevance of "non-local exponency" of phonetic properties as compared to "local and punctual" phonemic contrasts. Considering different interactional functions of 'I think' he proposes a 'gestalt'-approach to capture the idea of 'I think' and other elements as grammaticalized chunks. This view contrasts with approaches that focus on variations in local "boundary marking" between morphologcial or prosodic constituents (e.g. Bergmann 2018). The present paper discusses whether and how these approaches can be reconciled, and what the methodological consequences would be. It does so on the basis of German discourse markers such as' keine Ahnung' from the FOLK-corpus and the CallHome-corpus (Canavan, Graff & Zipperlen 1997).

ID: 232 / **TS6.2: 1**

Theme Session: Non-finite causal constructions in English and beyond

Topics: construction grammar, Theme session: Non-finite causal constructions in English and beyond

Keywords: because-N construction

Because math: Intersubjectivity and verbal aggression in because N constructions

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The *because N* construction (1) has attracted a lot of attention.

(1) You're doing it wrong, because MATH. (COCA 2012, feministe.us)

Bohmann (2016), for example, suggests that the construction may be specific for digital social media like Twitter, Bergs (2021) shows that the construction may actually be a lot older than is commonly assumed, while Bergs (2018) and Kanetani (2015) point out that the construction may actually be motivated by additional subjective functions – in contrast to the canonical *because* construction.

The present talk will show that early occurrences of the construction in Early and Late Modern English may be motivated not so much by subjectivity, but by poetic effects. In present-day English, however, these poetic effects hardly play a role. Rather, the *because N* construction conveys greater subjectivity than the corresponding canonical *because* constructions as in (2) versus (3).

(2) He went home because headache.

(3) He went home because of a headache.

However, in addition to increased subjectivity, the *because N* construction in present-day English may sometimes also carry an aggressive undertone as in (4).

(4) […] said it last night and for the first time after the big win here in New York because MATH. (2016 Fox News, Shepard Smith)

Because MATH in (4) is pronounced with a particular stress and intonation and is also accompanied by a particular facial expression (raised eyebrows) so that it conveys not only simple subjectivity but also a form of verbal aggression ("This is so obvious, you should have known, but I am going to tell you, again"). A paraphrase could be something like "because…duh!".

This talk traces this (new? additional?) function of *because N* and determines its linguistic, co- and contextual constraints as well as its communicative clues. In doing so, it explicitly also discusses methodological issues in researching spoken language phenomena like the one in (4).

ID: 114 / GS_W1.1: 3
Presentation
Topics: construction grammar, constructicography, frame semantics
Keywords: constructicography, construction grammar, frame semantics, constructional similarity, construction-to-frame relations

Determining Semantic Similarities Between Constructions Using Frames

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Constructions are form-meaning pairs of different schematicity and idiomaticity (Goldberg 2006); a Constructicon contains a large number of different constructions, of which some seem more similar than others. It is common to organize combinations of formally and/or semantically similar constructions into construction families (Endresen/Janda 2020; Ziem/Willich 2023). This categorization is often done by analyzing, for example, whether constructions share certain functions or grammatical properties. This in turn means that the extent or degree of semantic similarity between constructions is hard to determine, especially as the criteria used are soft and difficult to quantify.

In this talk, we present both a frame-based method for identifying semantic similarity between constructions and its computational implementation in a Constructicon. Based on the assumption that frames evoked by constructions shape constructional meanings (Willich 2022), we assume that constructional meaning is determined to a large extent by the frame it evokes in such a way that some (or all) of its construction elements map to functionally equivalent elements of the frame. Hence, following this approach, constructions that evoke the same or related frames are considered functionally more similar than constructions that evoke different, non-related frames.

How can frames determine degrees of constructional similarity in a Constructicon? And to what extent is it possible to visualize and quantify functional similarity? The data basis for our representation is provided by the *German FrameNet-Constructicon* (www.german-constructicon.de) and includes relations between constructions and frames as well as semantic mappings between construction elements and frame elements. For each selected construction, an algorithm computes to what extent the predefined criteria for semantic similarity are fulfilled. The criteria encompass various aspects, with a particular emphasis on the similarity of frames or relations between them, including those across multiple nodes, complete or partial conformity of mappings of construction elements, and the presence of (mis)matches among evoked frames and their relation types. As a result, the tool generates a ranked list of similar constructions, assigning scores ranging from 0 to 60 for each criterion met, where a higher score indicates a greater degree of similarity.

The talk starts with a brief recap of the constructions-and-frames approach underlying the German Constructicon. We continue with introducing the 'scoring system' developed to quantify and illustrate functional similarities based on construction-to-frame and frame-to-frame relations. To illustrate, we pick out a range of constructions: (a) a prototype construction (*Muster-N* 'model-N') that has a very high semantic similarity with some constructions and a very low similarity with others; (b) the average cost construction (*Kosten pro X* 'cost per X') that shows a medium similarity to some other constructions (reflected by evenly distributed scores), and (c) a comparison construction (*so ADJ wie XP* 'as ADJ as XP'), which is closely related not only to other comparison constructions but also to constructions such as parenthesis, genitive or part-whole. We conclude with highlighting the methodological benefits for modern constructicography as well as possible shortcomings related to quantifying constructional similarity.

ID: 223 / **TS6.2: 2**

Theme Session: Non-finite causal constructions in English and beyond

Topics: Theme session: Non-finite causal constructions in English and beyond
Keywords: because X, causal constructions, constructional sub-types, hierarchical configural analysis

Because XYZ: How many non-canonical because-constructions are there?

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Among non-finite causal constructions (NFC; Konvička 2024), so-called *because* X as in (1a) has received by far the most attention to date. Variably termed, "*because* NOUN" (Liberman 2012) or the "new *because*" (McCulloch 2014), this phenomenon comprises all non-canonical uses of *because*, i.e. those involving a complement other than a finite clause (1b) or a prepositional phrase with of (1c).

1 a) I cannot come because homework.

b) I cannot come because I have homework to do.

c) I cannot come because of my homework

Research has tended to focus either on the diachronic emergence of *because* X (Bergs 2021; Okada 2020), on factors motivating and constraining its synchronic occurrence (Bohmann 2016; Schnoebelen 2014) or on modeling its formal properties (Kanetani 2021). In a book-length treatment covering NFCs in multiple languages, Konvička (2024) productively combines all three perspectives.

While acknowledging formal variability, all of the extant accounts describe *because* X as one coherent construction. Given the range of material that can be found in the complement slot, the possibility of reconstructing *because* X to an underlying clausal or *of*-prepositional complement, and the several discourse-pragmatic motivations hypothesized to be in play (Bohmann 2016), it is worth investigating to what extent formally and functionally distinct constructional sub-types should be postulated.

The present talk addresses this question empirically, on the basis of 1000 instances of non-canonical *because* sampled from the web forum Reddit. Each of these tokens is coded for the following variables, drawing on and expanding the catalog of descriptive criteria in Konvička (2024):

- Subject of matrix clause (first-person, second-person, third-person animate, inanimate)
- Material in the complement (clausal ellipsis, noun phrase, other)
- Indicators of quotation (in matrix, in complement, in both, absent)
- Adjacency of complement (adjacent, intervening punctuation, intervening lexical material)
- Relation between matrix clause and complement (real-world causality, epistemic causality, speech act justification)
- Elision of material elsewhere in the surrounding discourse
- Indicators of non/anti-standardness elsewhere in the surrounding discourse
- Indicators of persuasive devices (suasive words, stance adverbials) elsewhere in the surrounding discourse

Based on these variables, the study attempts to establish patterns of co-occurrence of specific values, employing the statistical tool of configural frequency analysis (Lienert 1969). This method detects specific combinations of values that occur significantly above or below chance frequencies. While coding and analysis is ongoing, preliminary results suggest that several distinct configural (and thus constructional) types can be identified. These tentatively labeled as follows (note that not some of the above variables may be unspecified in each): a) a subjective-immediacy type (first-person subjects, noun phrase/other, no quotation, adjacent complement, speech act justification, non-standard texts), a distancing type (third-person animate subject, noun phrase/other, explicit encoding of quotation, intervening material before the complement, persuasive texts), and an economy type (clausal ellipsis/noun phrase, adjacent complement, no indication of quotation, elision in surrounding discourse). The paper will present the results of

the full configural frequency analysis in synchronic terms, but also interpret synchronic variation in relation to the history of *because* X.

ID: 132 / **TS4.1: 1**
Theme session proposal
Topics: cognitive grammar, construction grammar, frame semantics
Keywords: word formation, construction grammar, cognitive semantics, construction semantics, construction morphology

Die Bedeutungsebene von Wortbildungskonstruktionen

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Die Wortbildung ist in den letzten Jahren vermehrt in den Fokus konstruktionsgrammatischer Untersuchungen gerückt (vgl. Booij 2018; Hein/Michel 2023). Wie Konstruktionen auf anderen sprachanalytischen Ebenen können auch Wortbildungskonstruktionen als Schemata rekonstruiert werden, die eine Form- und eine Inhaltsseite umfassen (Booij 2010). Ungeklärt ist jedoch, was genau zur Inhaltsseite von Wortbildungskonstruktionen zu zählen ist und wie sie sich im Rahmen einer gebrauchsbasierten kognitionslinguistischen Theorie angemessen rekonstruieren und modellieren lässt. Während etwa Croft (2001) der Inhaltsseite von Konstruktionen ausdrücklich nicht nur semantische, sondern auch pragmatische und diskursive Merkmale bzw. Spezifikationen zuordnet (vgl. auch Östman 2005), haben sich viele Ansätze in der konstruktionsgrammatisch orientierten Wortbildungsforschung lange Zeit vor allem auf die semantische Ebene konzentriert. Pragmatische, diskursive und interaktionale Bedeutungsdimensionen von Wortbildungskonstruktionen sind demgegenüber erst in jüngerer Zeit in den Mittelpunkt der Forschung gerückt (vgl. Wolfer/Hein 2022; Finkbeiner 2023; Michel 2023; Stumpf 2023; Stumpf/Merten 2023). Ein weiteres aktuelles Problemfeld der Untersuchung der Bedeutung von Wortbildungskonstruktionen betrifft die Frage, wie mit der Unterscheidung und dem Wechselspiel zwischen lexikalischer Bedeutung (Bedeutung der beteiligten Morpheme) einerseits und konstruktioneller Bedeutung andererseits methodologisch und theoretisch angemessen umgegangen werden kann (vgl. Willich 2022).

Die Sektion möchte sich vor diesem Hintergrund mit der Inhaltsebene von Wortbildungskonstruktionen beschäftigen, wobei die die folgenden Themenblöcke und Fragestellungen im Mittelpunkt stehen sollen:

1. Umfang und Komplexität der Inhaltsseite von Wortbildungskonstruktionen

- Lässt sich die Inhaltsseite von Wortbildungskonstruktionen auf kontextunabhängige abstrakte Bedeutungsaspekte beschränken, oder ist die Bedeutung von Wortbildungskonstruktionen so eng mit kontextabhängigen diskursiven Dimensionen ihres Gebrauchs verknüpft, dass diese in der Inhaltsseite berücksichtigt werden müssen? Welche Rolle spielen dabei pragmatische Prozesse wie Implikaturen oder Inferenzen (vgl. Finkbeiner 2019) und kognitiv-funktionale Phänomene wie Metaphern (Lakoff/Johnson 1980)?
- Zu welchen interaktionalen und diskursiven Praktiken können Wortbildungskonstruktionen beitragen, und welche diskursmorphologischen Eigenschaften lassen sich ihnen vor diesem Hintergrund ggf. zuschreiben?
- Wie ist im Rahmen eines konstruktionsgrammatischen Zugangs zur Wortbildung der Beitrag interaktionaler und diskursiver Praktiken zur diachronen Herausbildung und Entwicklung der Bedeutung von Wortbildungskonstruktionen zu denken (vgl. Bücker eing.; s. zu einem diachron-konstruktionsgrammatischen Zugang zur Wortbildung auch Hartmann 2016)?
- Kann die Inhaltsseite von Wortbildungskonstruktionen auch diasystematisch differenziert sein (vgl. dazu u.a. Höder 2019)?

2. Erfassung und Modellierung der Inhaltsseite von Wortbildungskonstruktionen

- Was sind die Vor- und Nachteile unterschiedlicher semantischer Zugänge zur Inhaltsseite von Wortbildungskonstruktionen (z.B. Merkmalssemantik, Framesemantik, Prototypensemantik, Ereignissemantik? (Wie) Lassen sich die unterschiedlichen Ansätze miteinander kombinieren?

- Wie lassen sich kompositionelle und holistische Bedeutungsaspekte der Inhaltsseite von Wortbildungskonstruktionen datenbasiert identifizieren und in der Theoriebildung angemessen modellieren?
- Sind semantische, pragmatische und diskursive Merkmale, die auf der Inhaltsseite von Wortbildungskonstruktionen eine Rolle spielen, sprachsystematisch voneinander getrennt und durch Schnittstellen aufeinander bezogen (zum Beispiel im Sinne einer „Parallel Architecture“, vgl. Jackendoff 2002; Jackendoff/Audring 2019), oder ist ihre Separierung auf der Inhaltsseite von Wortbildungskonstruktionen aus gebrauchsbasierter kognitionslinguistischer Perspektive nicht notwendig?

3. Inhaltsbasierte Netzwerke von Wortbildungskonstruktionen

- Lassen sich Wortbildungskonstruktionen über semantische Relationen als Teile gebrauchsbasierter sprachlicher Netzwerke rekonstruieren (vgl. Bücker 2012; Diessel 2019; Hein 2023)?
- Welche besonderen empirischen und theoretischen Anforderungen sind mit einer konstruktikographischen Perspektive auf die Inhaltsseite von Wortbildungskonstruktionen verbunden (vgl. Lyngfelt et al. 2018; Ziem/Flick 2019)?

ID: 111 / GS_T2.1: 3
Presentation
Topics: construction grammar, first language acquisition
Keywords: language acquisition, construction grammar, corpus linguistics

Constructions in child-directed speech

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In a seminal study, Cameron-Faulkner et al. (2003) made two important observations about utterance-level constructions in child-directed speech (CDS): First, they observed that canonical SV(O) sentences are surprisingly infrequent in speech directed to young English-speaking children (given that SVO word order is often thought to play a key role in the acquisition of English syntax). Second, they found that the vast majority of CDS constructions are introduced by a lexical frame consisting of one, two, or three frequent words (e.g., *Look ..., There is ..., What do you ....*). The research by Cameron-Faulkner and colleagues sheds new light on the acquisition of utterance-level constructions, but their study is based on a relatively small dataset and raises several new questions (see also Stoll et al 2009).

Using a much larger database (with more than 2 million CDS utterances) than Cameron-Faulkner and colleagues, the present study addresses two questions: First, how general are the results reported in the study by Cameron-Faulkner and colleagues? Second, what exactly is the structure of the lexical frames that introduce CDS constructions addressed to young English-speaking children?

Consistent with the study by Cameron-Faulkner and colleagues, we found that child-directed speech includes a large number of questions, imperatives, and copular clauses, which are very often introduced by a lexical frame. However, our data also show that the relative frequency of the different CDS constructions varies with the social situation and the age of the children. While canonical SV(O) constructions are relatively infrequent during play sessions with young children, they are more common during mealtime and book-reading sessions and they increase in frequency as children get older: Five-year-olds use a much larger proportion of SVO sentences than two-year-olds. Furthermore, our data show that the majority of CDS constructions are introduced by one-word and two-word frames. Long lexical frames consisting of three or more words are only common in questions (both yes-no questions and WH questions). It is often argued (in formal linguistics) that children must learn particular word-order rules to master the syntax of questions. However, given that CDS questions are often introduced by high-frequency frames, we propose (in line with previous research) that English-speaking children acquire the word-order patterns of questions through distributional analysis rather than through the acquisition of particular word-order rules (Dąbrowska 2000; Rowland 2007). Finally, we argue that, although child-directed speech contains many non-canonical sentence types, there is no reason to question the importance of SVO word order for the acquisition of English syntax. Since subject-auxiliary inversion does not affect the order of lexical constituents, questions occur with the same order of subject, verb, and object (or agent, action, patient) as basic in/transitive sentences and topicalization constructions, which is why word order is such an important cue for the acquisition of English grammar (Diessel 2023).

ID: 208 / **TS2.2: 1**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions
Keywords: Boundary-crossing constraint, motion verb constructions, Spanish varieties, Czech learners of Spanish

Manner beyond boundaries: How native and L2 Spanish speakers encode boundary crossing events

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Verb-framed languages (Talmy 1985; 1991; 2000) have been proposed to disallow the use of a main manner verb for describing motion events involving the crossing of a boundary ("boundary crossing constraint", henceforth BCC, Slobin & Hoiting 1994). For example, in Spanish a Figure supposedly cannot *roll into a room*, instead it *enters a room rolling*. However, several authors have reported anecdotal exceptions to the BCC for verb-framed languages such as Arab, Turkish, and Spanish (Naigles et al. 1998; Özçalışkan 2015; Alghamdi et al. 2019), suggesting that manner verbs can in fact be used to describe boundary-crossing events when the crossing is (i) vertical rather than horizontal, (ii) unintentional, and (iii) quick.

Our first goal (Calle Bocanegra 2023) was to explore the factors that may modulate the acceptability of main manner verbs to refer to boundary crossing events (movement direction, directional/pure manner verb, entering/exiting, Ground size, the preposition used) for native speakers of different Spanish varieties ($n = 180$). The results showed that Spanish native speakers do frequently link manner verbs with boundary crossing events, both in comprehension (half of the time) and production (quarter of the time), especially when referring to the act of entering, and that this depends on the preposition used (more often with *a* than with *en*). These results motivate revisiting Talmy's typology and have implications for second language acquisition, instruction and translation.

Although we show that the BCC is not an inviolable requirement for verb-framed languages, it has stimulated research in how boundary-crossing encoding is learned and translated cross-linguistically. The findings include: (i) transfer of the boundary-crossing description patterns cross-linguistically by translators (Alonso 2013; Cifuentes-Férez & Molés-Cases 2020) and by L2 learners (Muñoz & Cadierno 2019); (ii) gradual approximation to target-language patterns with increasing L2 proficiency (Alghamdi et al. 2019; but cf. Treffers-Daller & Calude 2015); (iii) positive evidence from the input may not be enough for acquiring the BCC in the L2 (Treffers-Daller & Calude 2015; Alghamdi et al. 2019); and (iv) explicit instruction helps (un)learn the restriction (Laws et al. 2022).

Our second goal was to explore the way learners of Spanish as an L2, whose L1 lacks the BCC, describe boundary-crossing events, and interpret descriptions thereof, and whether this depends on L2 proficiency. Our participants, Czech learners of Spanish ($n = 28$), completed the same tasks as the native participants in Calle Bocanegra (2023). We found that the more advanced learners approximated well the L2 patterns in terms of the constructions that do not exist in their L1 (i.e. path main verb along with a separate Manner constituent, such as *entrar corriendo en la casa*), but they did not reduce the usage of main manner verbs for describing the boundary crossings enough.

This suggests it is easier to learn brand new L2 constructions than to adjust the use of constructions used similarly in the L1 and L2 (cf. Flege 1995), and that learners acquire the Thinking-for-Speaking patterns (Slobin 1996) gradually with growing L2 proficiency (Alcaraz Mármol 2013; Calle Bocanegra 2019).

ID: 168 / **CB2.1: 3**
Poster
Topics: cognitive grammar, construction grammar, language processing
Keywords: construction cognitive grammar, corpus annotation, constructional pairing, usage-based, morph constructions

Re-evaluating building blocks in view of corpus design – a constructionist annotation model

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The usage-based approaches like Construction Grammar (CG) Cognitive Linguistics (CL) posit the constructional pairing of form/content as the basic building block encasing all cumulative linguistic information (Goldberg 1995, Croft & Cruse 2004, Diessel 2019) – this is multi-modal too. However, this is hardly projected in the existing corpus designs. Fluid Construction Grammar (FCG – see Steels, 2011) is an uncommon case, as a corpora platform for CG-based models, but certain solutions developed in the FCG may be questioned as not compatible with the main CG tenets.

This presentation will show a constructionist model with several specific differences. Unlike FCG, Croft & Cruse (2004), Booij (2010), the nominal/verbal/other morphs are considered constructions with a form/content pairing. The nominal/verbal/other morph constructions and the noun/verb/other lemmas have each their specific information packaged in themselves, whereas the information of their idiosyncratic agreement is structured within a larger construction – higher syntagmatic level that frames a noun/verb/other fulfilled in their stored morph slots. The fully constituted nouns/verbs/other phrases host the components and the agreement pattern. Hence, there is specific constructional information at different levels. This design anticipates numerous issues, ambiguities occurring in the existing UD-model or structure-based corpora of Albanian (to be demonstrated).

The annotation does not follow the standard morphological POS tagger pattern and syntactic parser. Instead, it is an overarching morphosyntactic format, staged at 3 levels: i) the basic lemmas, ii) the complex nouns, verbs, etc. constituted with their proper morphological slots, and iii) the larger noun/verb/adj or other phrases until the constitution of the verb phrase that covers the whole clause. Smaller levels are nested within larger ones, but the latter contain linguistic information beyond the sum of their components. Agreement is developed within this framework. Actually, placement and agreement is far from straight: gender slot for nouns is placed within noun lemmas (first level), number, definiteness is placed the fully constituted nouns, whereas case slot is within the NP. The existing corpora put it flat – even FCG puts these morphs as the form side, linked to the content of the noun. The presentation will show the processing for Albanian. Other languages may have different (idiosyncratic) patterns. Constructions of different levels contain schematic knowledge that must be acquired by learners.

Constructions are identified based on the overt marking, following Haspelmath (2006). Author (2021, 2023) by developing morph slots with usually binary (or more) constructional frames: one default/unmarked and one or more marked constructions. The default morphs such as singular (number), indefiniteness and nominative (case) have null form. The content is interlinked and enframed within the slot, i.e., within a paradigm.

The model has been developed on GitHub, only as annotation schema. So far, it can 'read' the text and annotate the 3 levels referred above at adequacy above 90%. The data in the input are basically drawn from dictionary, but it is feasible to develop (to code) interlinking the annotation output to some input files that serve as python dictionary resource to identify and validate uncommon lemmas and morphs.

ID: 172 / **GS_F1.1: 3**
Presentation
Topics: cognitive typology, language evolution
Keywords: cognitive framework, historical linguistics, basic color terms, usage-based, entrenchment

The historical linguistics in the cognitivist framework

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Cognitive Linguistics (CL) provides advantages for linguistic investigation beyond the traditional sound change and laws: the usage-based framework, content as conceptualization, the constructional change along both sides of the linguistic unit (form & content). In a recent paper, Author (2023) provided evidence that the basic color terms (BCT) in Albanian fit in with the Berlin & Kay Hypothesis (Berlin & Kay 1969, etc.) about the constrained universal order of the emergence of the BCT in human languages. In line with the B&K Hypothesis, the data shows the early deep entrenchment of the two main BCTs (white, black). On the one hand, there are facts of usage: the early lexical and semantic extension patterns, the type and token frequency, which are related to the other side, structuring and the cognitive priming as affected by the facts and environment of usage. There are turbulences in the aspects of structuring, affected by facts of usage (language contact, time, place and other circumstances). This paper will examine the relationship between usage and structuring through the 'lenses' of Vygotsky's ZPD (Zone of Proximal Development – Vygotsky, 1978), to see the evidence for chances (in the usage) taken or not taken, and how this is witnessed in the present entrenchment of the BCTs.

In certain cases, the evidence shows a certain life cycle of linguistic schemas. The first four BCTs have their own lexical patterns, which cease to exist for the later BCT's. However, the latter benefit the availability of later stage lexical patterns, with some showing more entrenchment and some less. We also noticed that some schemas have a vanishing but still working effect. This evaluation serves to reconstruct the evolutionary path of the BCTs, their wide/limited extension and networking such as: lexical affixation, semantic extension in fixed collocations, etc. Different facts and factors explain the retention of certain BCTs and their networking, or their loss to the pressure of loans from very strong language contact.

Entrenchment data reveal certain aspects of the time and environment of emergence and development. There is retention of local terms for the first two main BCTs (white, black), the early (Latin) loan for red and yellow, undisturbed by the later very long and intensive (post-Latin) contacts, and a lot of variation and idiosyncratic development for green, blue, with 2 or 3 competing terms. The more recent terms reveal deep entrenchment but limited extension, which differentiates loans from local term that has survived.

In line with the cognitivist and usage-based framework (Langacker 1987, Bybee 2010, Diessel 2017), we evaluate entrenchment, linking usage (and storage) to structuring and the cognitive-linguistic behavior of the speakers (cognitive priming for instance), and the consequent levels of usage. Data has been taken from 2 Albanian corpora (Morozova et al 2012, Opus 2 on Sketch Engine).

This pattern of investigation was replicated in another interesting area – the Albanian interrogative and indefinite pronouns. The CL-based tools produced the same level efficiency and insight. Details of the second investigation will be presented and compared in the presentation.

ID: 235 / **P4: 1**
Keynote abstract
Topics: construction grammar
Keywords: construction grammar

Construction grammar: A foundation inspection

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Construction grammar was erected as a humble abode to give shelter to researchers fleeing transformational grammar about four decades ago (Fillmore, Kay and O'Connor 1983; Kay 1984; Lakoff 1984). Presently, the constructionist approach to grammar is the single most popular alternative to Chomskyan linguistics, in Müller's (2018: 1) assessment, possibly having overshadowed that former towering edifice. But how stable is construction grammar as a theory? How sound are its foundations? Do the original tenets bear the weight of what construction grammarians have been building in the course of the last forty years?

In this talk, I will inspect some of the theory's foundational principles. Like a sprawling architectural complex, construction grammar encompasses various wings and annexes, each with its own specific design and function. My focus will be on 'cognitive' construction grammar (Goldberg 2003; Boas 2013), the part of the overall structure that is most visible from the outside and provides easiest access.

The basic assumptions of (cognitive) construction grammar are not easy to identify. More or less from its outset, the framework was described, with a different metaphor, as "a moving target; in fact, […] one of a set of several moving targets with the same name" (Fillmore 1988: 35). Several pillars stand out, though; some are central, while others are more 'esthetic'. Starting with the latter, the oft-heard credo that words and 'rules' form a continuum (e.g., Hoffmann 2013: 307) is perhaps just a nice selling point. In practice, construction grammarians do make a distinction between fully substantive lexemes and grammatical structures with at least one open slot; besides, the brain responds differently to words and word-like items compared to syntactic assemblies. Similarly, construction grammarians – and cognitive linguists more generally – assert that linguistic cognition is inextricably linked with general cognition (Langacker 2008: 8). However, this assumption is neither essential to the theory nor clearly supported by findings from the neurosciences (Diachek et al. 2020).

In contrast, absolutely fundamental is the claim that syntactic configurations are not mere artifacts but should be the primary units of description, imbued as they are with semantic and pragmatic properties (Fillmore 1988: 36). This essentially constructionist outlook on language is sometimes given a strengthened formulation (apparently not intended by the theory's architects; see, e.g., Fillmore and Kay 1993: Ch. 9.3–15), such that *everything* a speaker knows about language can be captured as form-meaning units, with nothing else besides. This bold claim has the advantage that it renders construction grammar eminently falsifiable. The downside is that construction grammar, on this strong assumption, can arguably be proven wrong (Cappelle 2024). If that is the case, a weaker tenet – "many grammatical patterns carry meaning" – still sets the theory apart from other theoretical approaches, but whether this is still a falsifiable claim depends on how we define "many". Of course, looking for the function of forms remains a useful heuristic.

ID: 180 / **TS2.4: 3**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions

Keywords: second language learning

Thinking-for-speaking in audio descriptions across English and Spanish

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Languages vary as to how they convey the concept of motion. The thinking-for-speaking hypothesis (Slobin, 1996) addresses distinctions in stylistic features among languages. Recent studies have started to develop the analysis of motion events in audio description (e.g. Molés, 2022). This type of mode provides explanations about the stage, costumes, facial expressions, body language, and actions, which are typically inserted during the silent intervals of a film. The present study aims to contribute to this new trend in research by analyzing motion events across English and Spanish in the audio descriptions of the film "Harry Potter and the Goblet of Fire." Path and Manner verbs have been coded and classified following Talmy's typology. Findings have shown differences in the use of lexicalization patterns across the Spanish and English audio descriptions and a wider degree of granularity in the English version. Finally, the use of audio descriptions as pedagogical tools to teach motion events for the L2 classroom is considered. This paper shows that the description of motion events in this type of audiovisual product requires further attention so as to provide a more nuanced tool for people with audiovisual impairments to access cinema, television, and other visual arts. Furthermore, it can be a useful pedagogical instrument to instruct learners on motion events across languages.

ID: 166 / **GS_T2.2: 2**
Presentation
Topics: language processing
Keywords: Spanish, productivity, nonce word inflection task, individual differences

How productive are speakers with the morphological patterns of their language really?

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Native speakers reliably supply inflectional endings where required in production. They are also able to inflect unfamiliar words from quite a young age, as demonstrated by numerous nonce word inflection experiments conducted with preschool children. These observations have led to the assumption that regular inflections apply "across the board" (cf. Marcus et al. 1995) and that speakers are fully productive with them. In this paper I argue that this is often not the case. Focusing on Spanish verbal inflections, I examine data from three earlier studies which examined adult native speakers' productivity using a nonce word inflection task: Schnitzer 1996, Brovetto 2002 and Dabrowska et al. 2023.
The average accuracy rates in all three studies were very low: 66% in Brovetto's study, 52% in Schnitzer's, 50% in Dabrowska et al.'s typical adults and 25% in semi-literate adults. Importantly, when speakers were asked to inflect familiar verbs, the proportion of target responses was much higher (98% in Brovetto's study). Furthermore, a qualitative analysis of the data collected by Dabrowska et al. indicates that that the participants understood what was required of them but often simply did not know what the inflected form should be. This is evident from the fact that they often hesitated, "sounded out" several different responses, or explicitly commented that they did not know how to produce the form required by the linguistic context. Further evidence to this effect can be gleaned from participants' errors. Most non-target responses involved substitutions of a legal form for the target (e.g. the use of the present tense or preterite form in a context calling for the past imperfect) or the use of an ending belonging to the incorrect conjugation (most often, a first conjugation ending with a second conjugation verb). However, participants also produced forms which suggests that they struggled to apply the productive patterns of the language correctly. These included segmentation errors, where the correct ending was added to the infinitive rather than the stem and responses which appear to be blends of two different forms (for example e.g. tarreaba instead of tarría for the 3rd person imperfective form of the nonce verb tarrer, where the first conjugation ending was added after a second conjugation thematic vowel -e-).
These findings challenge the assumption that adult native speakers are fully productive with regular inflectional endings, and raise an interesting question, namely, how is it that they are apparently able to supply the correct form in ordinary language use. I argue that this is partly because many regular forms are simply retrieved from memory. In addition, speakers also use a variety of avoidance strategies such as substituting a higher frequency synonym or using a different past tense form (e.g. the imperfect or perfect for the preterite).

ID: 159 / GS_W2.2: 2
Presentation
Topics: multimodality, cognitive semiotics
Keywords: Internet memes, fictive interaction, quotation, simulation, multimodality

Simulated interactions in Internet memes and tweets

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[PLEASE SEE PDF FOR VERSION WITH IMAGES]

Internet memes and other forms of social media discourse enjoy scholarly attention from various disciplines. Within cognitive linguistics, a particular focus has been on interpreting Internet memes as multimodal constructions (e.g. Authors 1&2 2017, Lou 2017, Zenner & Geeraerts 2018) whose meanings are centred on viewpoints – intersubjectively shared and/or challenged, and often stacked (Author 1 2012) in complex ways but blended into an overal discourse viewpoint (Authors 1&2 2016).

Drawing on an extensive collection of examples, this paper focuses on memes and tweet patterns which revolve around so-called 'simulated interactions'. We propose this notion as an extension of Pascual's concept of 'fictive interaction', referring to how the frame of conversation is "used in language to structure mental, discursive and linguistic processes" (Pascual 2014: 9). Pascual's examples concern essentially 'short bursts' of fictive interaction, as in "a very 'don't ask, don't tell' life", "Call me old-fashioned, but…" or "Do you have any questions? Call us" (all examples Pascual 2014). In our data, we find usage featuring more extended 'faux' interactions, as in Figures 1–3, which we suggest result in a more sustained immersion in the pretence of a conversation (cf. Mittelberg 2017 on simulated artefact immersion). In addition, the inclusion of image alongside text, as in Figures 2–3, further distinguishes much of the usage we survey from 'traditional' fictive interaction.

Among the elements highlighted in our analysis are the following. (i) Our examples rely on dialogue formats and often involve apparent quotations, illustrating the idea that quotations are used as demonstrations (Clark & Gerrig 1990) or depictions (Clark 2016) even where no factual speech act is being represented. (ii) They also show known features of typification and generalisation across 'speakers' (e.g. Fludernik 1993), as in the examples involving 'iNfLuEnCeR' in Figure 1 (the spelling reflecting negative affective stance towards a category of social media users) or 'person' in Figure 2. (iii) They treat silence (Hoey 2020), as in the empty lines in Figure 1, and mere (silent) existence ("*Sits next to me*" in Figure 2) as valid conversational moves. (iv) Images, too, can depict or demonstrate a conversational move, as in Figure 2 (illustrating the "me" pattern, also known from examples involving the structure "me… also me…", used to point up failures to live up to self-imposed standards), or Figure 3, where the image shows the disastrous outcome of the preceding exchanges around a romantic visit.

Across a broad range of examples, we propose to flesh out the notion of simulated interactions. Theoretically, this analysis connects to questions of viewpoint and multimodality (e.g. Authors 1 2 eds. 2017, Zima & Bergs 2017), stance-taking (e.g. Andries et al. 2023), humour (e.g. Brône et al. 2015) and linguistic creativity (e.g. Hoffmann 2020).

ID: 139 / **GS_T1.1: 2**
Presentation
Topics: neurolinguistics, multimodality, cognitive semiotics
Keywords: abstract concepts, grounding, concept formation, neurocomputational modelling, deep neural networks

Verbal symbols support concrete but enable abstract concept formation: Evidence from brain-constrained deep neural networks

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Sensorimotor grounding has become a convincing explanation for the acquisition of concrete concepts. However, learning abstract concepts provides a challenge to an associative learning framework. It has been claimed that abstract concepts like DEMOCRACY cannot be grounded in experiences, but must be grounded indirectly. To identify potential putative brain mechanisms of experiential abstract concept grounding, we used a brain-constrained neural network model mimicking the function of cortical areas important for semantic and linguistic sensorimotor processes.

Concepts were learned from sensorimotor grounding patterns, in which each neuron represents a sensorimotor feature. A concrete concept was modeled by a triplet of patterns with an overlapping kernel of neurons, whereas an abstract concept consisted of patterns that partially overlapped, with no feature neuron shared across all category instances. Likewise, word forms were implemented as patterns of neural acitvity in auditory and articulatory cortices. In a separate set of simulations, additionally to the previous concept learning procedure, an invariant word form pattern was co-presented with all instances of a concept.

The learning of instances of concrete concepts outside language context led to robust neural circuits generating substantial and prolonged activations. In contrast, the learning of instances of abstract concepts yielded much reduced and short-lived activity. Crucially, when conceptual instances were learned in the context of word forms, circuit activations become robust and long-lasting for both concrete and abstract meanings.

These results indicate that, although the neural correlates of concrete conceptual representations can be built from grounding experiences alone, abstract concept formation at the neurobiological level is enabled by and requires the correlated presence of linguistic forms.

ID: 144 / GS_W3.3: 3
Presentation
Topics: construction grammar, prototypes and categorization, corpus linguistics
Keywords: Construction Morphology, productivity, acceptability judgment task, usage-based theory

My upenergy brother: Constructional productivity and acceptability ratings of neologisms

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This paper examines how speakers' acceptability judgments about neologisms relate to corpus-based measures of the productivity of the constructions they instantiate. This case study is concerned with morphological constructions with locative prefixoids, in particular the *up-x* schema.

Usage-based approaches assume that constructional experience is the basis for selectional restrictions and the productivity of open slots in constructions (see, e.g., Bybee & Eddington 2006 for an account of syntactic constructions). Barðdal (2008: 28) argues that the productivity of a construction is determined by the inverse correlation between type frequency and semantic coherence: Schemas with a higher type frequency and lower coherence are relatively open, whereas schemas with a relatively low type frequency and high semantic coherence are predominantly extensible through analogy. A similar approach is described by Goldberg (2019: 65–66) under the name of coverage: The higher the variability of attested types and the higher the type frequency, the higher the coverage in hyper-dimensional conceptual space, and the more productive a construction. Consequently, novel coinages that are similar to attested types are judged as more acceptable.

First, these criteria are examined using corpus data. All types of the *up-x* construction were extracted from the BNC (2001). Following Marchand's (1969: 109) classification, these types were assigned to three categories: Prepositional combinations (*upstairs*), prefix verbs (*uphold*), and nouns resembling AN compounds (*uplight*). Collostructional analysis (Stefanowitsch & Gries 2003; Flach 2021) was conducted to identify selectional restrictions of the subschemas. Besides estimating the semantic coherence of these schemas, their productivity was calculated by various quantitative measures (Baayen 2009; Goldberg 2019).

All hapaxes of the *up-x* construction from the ELEXIS English Web 2020 corpus (Jakubíček et al. 2022), which are taken as operationalizing neologisms, were assigned to the three subschemas mentioned above. A selection of these items was added to an acceptability judgment task, which was conducted as an online survey. Items were embedded in their original sentence context to facilitate the interpretation of the word. For sentences like the following, participants were asked to rate how natural the word seems to them on a 5-point Likert scale:

(1) Those seeking transportation upbay may apply for a boater permit or contact authorized charter boat operators. (ELEXIS, modified)

(2) He has always been more of the upenergy and probably less mature brother. (ELEXIS, modified)

Hapaxes that are part of subschemas with higher measures of productivity are found to not be judged as more acceptable. The results are shown to be in line with Barðdal's (2008) model: The hapaxes of the schema with low type frequency and low semantic coherence are judged to be less acceptable than those of the schemas with high type frequency and low semantic coherence and vice versa. In addition, hapaxes that are more similar to attested types in the BNC are judged as more acceptable than dissimilar hapaxes. To illustrate, *upbay* is judged more acceptable due to its similarity to the frequent types *upriver* and *upstream*, whereas *upenergy* is less acceptable as it departs from previous constructional experience.

ID: 215 / **TS2.4: 2**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions
Keywords: usage-based approach, multiply-specified trajectories, L2 Hungarian learners, Japanese native speakers

A usage-based approach to teaching Japanese native speaking L2 Hungarian learners: Examining encoding patterns of multiply-specified trajectories

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This study examines how native Japanese speaking B1-level L2 Hungarian learners (H-L2(j)) describe motion events. It analyzes from video-based elicitation experiments for application in L2 teaching. The current teaching materials for Hungarian as L2 lack authenticity in language use (Jones 2022), a principle emphasized by research data. Despite the evolution of communicative language teaching (CLT) over nearly fifty years (Widdowson 1978), grammar- and structure-oriented teaching methods still dominate Hungarian as a foreign language teaching. This traditional approach often hinders communicative language use, especially concerning complex grammatical phenomena (Pérez-Paredes et al. 2020). The study focuses on a specific motion event involving complex trajectories, comparing how it is addressed in existing textbooks with data from native speakers and learners. It identifies shortcomings, highlights the importance of authentic language use in L2 teaching by integrating insights from cognitive studies, and proposes a usage-based, contrastive approach for curriculum planning.

Talmy (1991) proposed a typology of motion event descriptions (V-languages like Japanese vs. S-languages like Hungarian), leading to numerous cognitive studies exploring coding patterns across languages. However, limited attention has been given to how complex trajectories involving different elements are coded (see Ibarretxe-Antuñano 2009, Bohnemeyer et al. 2007). The encoding patterns of these trajectories may be influenced by language-specific lexicalization and universal constraints, reflecting the influence of learners' native language representations in their L2 expressions. The experiment included four different jumping events involving vertical complex trajectories. The data were also compared to data collected using the same experimental set reported in previous studies to investigate differences from the expressions of native speakers of Hungarian and Japanese (H-L1, J-L1). Results indicate both commonalities and differences among the three language groups, highlighting the influence of the learner's native language on their expressions in the target language. Specifically, two tendencies were also observed where H-L2(j) diverged from H-L1: 1) the influence of J-L1 (e.g., use of case affixes) and 2) lack of influence from J-L1 (e.g., combination of preverbs and verbs).

Analyzing Hungarian textbooks, these grammatical items are often introduced as 'sets' (e.g., the pre-verb be- and the illative affix -ba), which largely differs from the usage of patterns based on the experiment. Furthermore, speakers of V languages tend to have difficulty using such satellite elements in verb combinations, often being introduced in combination with deictic verbs (i.e., megy, jön) and then rarely learning to combine them with other motion verbs. Based on these findings, a frequency-based, authentic teaching approach is proposed, taking into account the sources of interference between L1 and L2 (e.g., universal principles, transfer effects) as well as the preferred patterns of L1 speakers in describing specific scenes. The results serve a pattern of usage: it suggests connecting the different coding strategies with different motion events in the teaching process, too, which urge a different methodological approach with emphasis on these observations in the designing curriculum as well.

ID: 236

Keynote abstract

Topics: multimodality

Keywords: multimodality

Grammar for Instructing Embodied Knowledge

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The presentation will examine a network of grammatical structures within a specific interactional context, namely the transmission of embodied knowledge in dance classes.

The term 'embodied knowledge' encompasses a range of different types of knowledge, with 'procedural knowledge' representing a particularly prominent example, which captures the ability to perform patterned movement sequences, such as riding a bicycle, writing on a typewriter, or dancing the tango (Fuchs, 2012). This type of knowledge is characterized by several key features, including its implicit, holistic, intermodal, and non-declarative nature. It is therefore evident that verbal transmission is an inadequate means of conveying this type of knowledge in its entirety, and that the acquisition process typically necessitates repeated bodily practice on behalf of the learners. In turn, the instructors modify their instructions in a highly sensitive manner, adapting them to the student's bodily actions and their progress in learning (Stevanovic, 2017)

The presentation will focus on the diverse morphosyntactic manifestations of directives, including declarative clauses (e.g., *now you go forward*), noun phrases (e.g., *forward step*), numbers (e.g., *one, two*), and non-lexical vocalizations (e.g., *chack*). Furthermore, the presentation will address morphological realizations (e.g., *you go forward* vs. *I go forward*) and multipartite patterns (e.g., *chack-chack-I cross*) will be addressed. The paper posits that each grammatical resource offers a unique functional profile within the specific context of instruction. These profiles can be distinguished along pragmatic dimensions, including the expected immediacy of an embodied response (Mondada, 2017), the skill level ascribed to the learner (Deppermann, 2018), and the degree of bodily synchronization among the participants (Ehmer, 2021).

This study employs multimodal interaction analysis (Keevallik, 2018; Stukenbrock, 2021) to examine instructions in dancing Argentine Tango given in Spanish. The findings pertaining to the distinctive functional profiles will be discussed with reference to recent discussions on modelling a 'construction' in construction grammar (Diessel, 2023; Lyngfelt et al., 2018). In particular, the proposition of an emerging domain-specific constructional network will be scrutinized.

ID: 231 / **P1: 1**
Keynote abstract
Topics: other
Keywords: plenary

The language system in the broader landscape of the human brain

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I seek to understand how our brains understand and produce language. I will discuss three things that my lab has discovered about the "language network", a set of frontal and temporal brain areas that store thousands of words and constructions and use these representations to extract meaning from word sequences (to understand or *decode* linguistic messages) and to convert abstract ideas into word sequences (to produce or *encode* messages). First, the language network is **highly selective for language processing**. Language areas show little neural activity when individuals solve math problems, listen to music, or reason about others' minds. Further, some individuals with severe aphasia lose the ability to understand and produce language but can still do math, play chess, and reason about the world. Thus, language does not appear to be necessary for thinking and reasoning. Second, processing the meanings of individual words and putting words together into phrases and sentences are not spatially segregated in the language network: every region within the language network is robustly **sensitive to both word meanings and linguistic structure**. This finding overturns the popular idea of an abstract syntactic module but aligns with evidence from behavioral psycholinguistic work, language development, and computational modeling. And third, **representations from large language models like GPT-2 predict neural responses** during language processing in humans, which suggests that these language models capture something about how the human language system represents linguistic inputs.

Time permitting, I will discuss more recent and emergent research directions. These include: a) investigations of how the language system emerges during *development*, how it changes with *experience*, in aging and in populations who use language to a greater extent (like polyglots), and how it *recovers from damage*; b) work that aims to understand the *constraints on the functional architecture of the brain*, including modularity and lateralization of function, through the study of individuals with atypical brains (e.g., individuals growing up without a temporal lobe due to early stroke); c) studies of the relationship between language and *social cognition*; and d) work that builds on the discovery of neural-network-to-brain alignment to determine which model features produce this alignment as a route toward an eventual *mechanistic-level understanding* of how we interpret and produce language.

ID: 118 / GS_F4.1: 2
Presentation
Topics: language processing
Keywords: Psycholinguistics, Cognitive Linguistics, Sentence Processing, Predictive Processing, Spanish

Cue timing trumps syntactic transparency in sentence processing

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Ambiguity is ubiquitous in natural language [1]. Research using physiological measures has shown that syntactically ambiguous sentences are easier to process than disambiguated sentences, hence supporting models of syntactic reanalysis [2]. Thus, in the absence of linguistic or contextual evidence to disambiguate syntactic analysis, an initial parse can be constructed in basis of 'good-enough' shallow processing heuristics which in some cases (e.g., noncanonical structures) requires a re-interpretation following disambiguating cues [3]. NP-initial structures have a preferential interpretation as subject-initial, especially when this initial NP is animate. In relative clauses in several languages, this generates a prediction that should be disconfirmed when the NP corresponds to the object in object relatives (ORs) [4, 5].

In Spanish, ORs can appear with a direct object marker (DOM) composed of the preposition 'a' and a determiner ('la niña a la que la abuela dibuja' 'the girl that the grandma is painting'; henceforth a-variant), or without it ('la niña que la abuela dibuja'; henceforth plain-variant). There are also two possible word orders (OSV, OVS) for both variants. When both NPs of a Spanish relative are animate and specific, subject relatives require DOM in the last NP. The absence of DOM can thus be considered a weak cue to an OR interpretation, and this cue appears earlier in OSV than OVS word orders. In addition, the a-variant could be considered more transparent, since it presents another, relatively early and arguably more salient cue: direct object marking of the preceding NP.

In the present study, we explore the relative role of timing and transparency of disambiguating cues in the processing of temporal syntactic ambiguity, a topic that remains relatively understudied within the framework of cognitive linguistics. We compared native adult's comprehension of a- and plain-variant ORs with OSV and OVS word orders via a picture selection task (PST) in which participants were presented with picture pairs depicting transitive actions and had to choose between subject or object relative interpretations of a spoken relative sentence. Advantages were predicted for the a-variant because of the additional disambiguation cue, and for the OSV word order because of the earlier presentation of the second NP.

The results showed similar accuracies and reaction times (RTs) for the two variants in the OSV order and the a-variant in the OVS order, whereas lower accuracies and longer RTs were observed for OVS-plain sentences. Given the phonetic resemblance of this variant with its corresponding subject relative (e.g., 'la niña que dibuja (a) la abuela'), a follow-up perceptual identification task was conducted, which showed that participants largely perceived acoustic differences between the two. This suggests that perceptual information during the PST could have been overridden by canonical word order (i.e., subject relative) predictions. Overall, our results highlight the role of cue timing over syntactic transparency.

ID: 117 / **GS_F3.1: 1**
Presentation
Topics: frame semantics
Keywords: Framing, green technology, conceptual metaphor, discourse

Reframing Green Technologies to Facilitate Creative Product Innovation Processes

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Much work in cognitive linguistics has demonstrated significant effects of framing, i.e. evoking a conceptual structure that serves as an interpretative framework for the concept in question (e.g. Lakoff 2006). While much work on framing focuses on political debate (e.g. Lakoff 1996, 2006, 2008), framing and reframing have also revealed themselves relevant in sustainable consumption. For instance, positive reframing has been shown to have significant effects on the consumption of vegetarian meals in university canteens (Turnwald et al. 2019). That is, researchers relabeled vegetarian meals based on their taste (instead of based on their health benefits or lack of meat), which led to up to 38% higher adoption. Similarly, in a consumer study on cell-cultured meat, Bryant & Bartnett (2019) found much more positive attitudes towards the product when it was called 'clean meat' or 'animal-free meat', compared to 'lab-grown meat'.

With many green technologies, similar issues exist: For instance, a challenge for 'organic solar cells' is that they are not cells, and the fact that they involve organic material is not very informative to adopters or innovators. Instead, they consist of nano particles printed on foil, with the function to convert light into electrical energy, and unlike traditional solar cells, they also work very well indoors. Given their flexibility, low-cost production, easy recycling etc. (cf. Riede et al. 2021), organic solar cells could in principle be used ubiquitously in our social spaces, but in fact they have not entered the market on a broad basis yet. Part of the problem could be the fact that due to their name, they are being compared in efficiency to traditional, silicon-based solar cells – while these cells are more efficient, organic solar cells could have a much wider range of application, and thus the comparison is slightly misleading. Another potential issue is that the name prevents creative innovation processes, because our knowledge application areas of traditional solar cells may influence idea generation for application areas of organic solar cells. Our hypothesis is thus that the frame evoked by the name 'solar cell' hinders creative innovation around the new green technology.

To test this hypothesis, we carried out an experimental study with a 3x3 between-subject design, in which we first asked about people's (N=293) associations with the respective terms chosen and then about their ideas for potential products. The terms presented were combinations of either 'organic', 'solar power' or 'light' on the one hand and 'cell', 'foil' and 'sticker' on the other. Participants were asked to ideate as many potential products as possible within a timeframe of two minutes. The results show that participants who invented novel products for 'organic solar cells' remained much more conservative and mimicked more applications of silicon-based solar cells, compared with participants who invented novel products, for instance, for 'solar power foil' or 'light harvester sticker'. Thus, our study confirms that the current name frames the novel technology in ways that hinder its widespread adoption.

ID: 158 / **GS_W1.3: 2**
Presentation
Topics: cognitive grammar, construction grammar, metaphor and metonymy
Keywords: Cross-linguistic prepositional research, cognitive linguistics, spatial vs. abstract meanings

Exploring cross-linguistic prepositional patterns: A cognitive linguistic study of prepositions governed by nouns in German, and their equivalents in English, Polish, and Ukrainian

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In the field of cross-linguistic prepositional research, most studies concentrate on the spatial meanings of prepositions (e.g. Cienki 1989, Orklenko 2014, Almuoseb 2016, Mkhitaryan 2019, Boieblan 2022, Oczko 2023). Alternatively, when the focus shifts to the more abstract meanings, it tends to revolve around prepositions governed by verbs (Golonka 2002, Faulhaber 2011, Seilhamer 2011, Zeschel 2019, Dixon 2021) with most of these studies being limited to individual languages.

However, there is little typological research on the abstract meaning of prepositions when governed by nouns. This is what the current analysis contributes to the field, by exploring the German prepositions *auf* and *an* governed by nouns (e.g. *Heißhunger auf etwas, Kritik an jemandem/etwas*) and their equivalent expressions in English (*craving for something, criticism of someone/something*), Polish (*ochota na coś, krytyka kogoś/czegoś*) and Ukrainian (*жага до чогось, критика когось/чогось*), through the lens of cognitive linguistic theories, specifically focusing on image-schemas, conceptual metaphors, metaphorical extensions and embodiment. The main research question explores whether there is any cross-linguistic parallelism in the NP_1+P+NP_2 pattern and, if there is, what motivates it.

The methodology involves a qualitative analysis of 120 instances of the NP_1+P(*auf*/*an*)+NP_2 patterns from LGDaF (2019, 3rd edn.), supplemented with corpus data for examples with context. Equivalent expressions in the target languages were sourced from monolingual learner's dictionaries and explored within the respective corpora for the usage in context.[1]

To proceed with the results, a significant divergence has been observed in the translation of German *auf/an* in spatial versus abstract contexts across English, Polish, Ukrainian. While conveying spatial relations in German using the prepositions *auf/an*, English, Polish, Ukrainian frequently opt for 'on'. For example, *Flasche auf einem Tisch*, *Fisch an dem Haken*, *Schuhe auf dem Boden*, *Bild an der Wand* typically correspond to using 'on'. However, the translation into English is more nuanced, as English can employ *at* as a closer match for *an*, a distinction not observed in Polish and Ukrainian.

Nevertheless, this similarity in translating spatial concepts with *auf/an* to ‘on’ does not extend to abstract meanings. In these contexts, the consistency in how these prepositions are used disappears, revealing a notable divergence in their semantic networks.

Specifically, while *auf* is still rendered as 'on' in the other three languages (e.g. *Einfluss auf, Konzentration auf, Satire auf*), *an* follows a different route. In cases where German employs *an*, English often uses *of*, whereas Polish and Ukrainian tend to omit the preposition and conjugate the second NP in the genitive case (e.g. *Übermaß an etwas*, *excess of something*, *nadmiar czegoś* (Gen), *надлишок чогось* (Gen)). The presentation aims to explore the potential reasons behind these distinctions.

[1] Dictionaries: The Oxford Advanced Learner's Dictionary (2020, 10th ed.) was used for the analysis of English, Inny słownik języka polskiego (2000) was referred to for Polish, and Універсальний словник української мови (2007) was consulted for Ukrainian. Corpora: DWDS (62 billion words) and DeReKo (55 billion) for German, COCA (1 billion) and BNC (100 million) for English, NKJP (1 billion) for Polish, and MOVA.info (100 million) for Ukrainian

ID: 193 / **TS5.1: 1**

Theme Session: Chunking phenomena and phonological reorganization in spoken interaction

Topics: Theme session: Chunking phenomena and phonological reorganization in spoken interaction

Keywords: phonetic chunks, phonetic reductions, morphology, construction grammar, minimal phonetic information

A constructional perspective on the relationship between sound and morphosyntax: evidence from phonetic reductions

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The multimodal nature of spontaneously produced communication raises questions about the properties of the auditory channel vis-à-vis the lexico-grammatical layer; cf. also the notion of "composite utterances" (Enfield 2015). We ponder this broad concern from the perspective of phonetically reduced speech, focusing particularly on recurrent reduction patterns ('phonetic chunks' in the sense of Bybee 2010, Bybee et al. 2016), in which the resulting segmental shape is in conflict with the relevant morphosyntactic structure. The effect may be both phonological and morphosyntactic reorganization, and calls thus for analytic tools that allow us to capture the layered nature of interpretive cues interlocutors can rely on in the course of spontaneous interaction. On the basis of Czech conversational language attested in Ortofon (a corpus of spontaneously produced conversations among friends/family/acquaintances) and working with the hypothesis that spoken interaction rests on a successful transfer of contextually adequate phonetic information, we aim at identifying factors that can be observed in the processes of chunking and the resulting entrenched patterns.

We start from the attested distribution of phonetically reduced forms, using Zíková & Machač's (2014) methodology for measuring the 'word reduction rate' based on the realization of phonetic features, aiming to identify candidates for phonetic 'chunk-hood'. There appear to be several different sources for such status, of which we will briefly present chunks crossing syntactic boundaries between main and dependent clause (e.g. *nevím jestli/jak* 'I don't know if/how') and then concentrate primarily on chunks arising in the morphological system, particularly concerning the verb of speech *povídat* 'to say/narrate'), which exemplify the confluence of several factors: morphological contrasts, presence vs. absence of explicitly expressed subject, and propositional vs. non-propositional semantics.

The analysis rests on assessing the inherent phonetic properties of the words/strings in question vis-à-vis the non-phonetic factors contributing to the particular chunking effects. We find that morphology may inhibit reductions of otherwise highly unstable segments; morphology and phonetics may reinforce each other in (non-)reductions; reductions may occur quite freely regardless of morphology or syntax. We also show that the environment conducive to chunking is sensitive to additional conditions inherent in the continuous speech, such as double marking of certain categories; anticipatory effect of auxiliaries in analytic forms or of argument structure of verbs; particular discourse contexts; position in a clause or utterance; or prosodic interference (e.g. tempo).

Any of these may lead to phonetic reductions, and our goal is to find a principled way of capturing any recurrent patterning that may lead to forming distinct linguistic units, given their high frequency and listeners' ready acceptance. To that end, we test the concept of 'minimal phonetic information' (e.g. Machač & Zíková 2013; Machač & Skatnitzl 2020; cf. also Niebuhr & Kohler's (2011) 'phonetic essence' of words) as part of the layered constructional representations of phonetic chunks. We explore the representational potential of Construction Grammar as a tool for integrating speakers' phonetic knowledge in more realistic 'grammatical' generalizations, including units that show a mismatch between the phonetic and lexico-grammatical structure.

ID: 199 / **TS4.2: 3**
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: cognitive grammar, construction grammar, motion and space, other, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: Aktionsart, Präfix-/Partikelverben, Konstruktionsgrammatik

Aktionsarten und Konstruktionsgrammatik. Möglichkeiten einer Modellierung anhand Präfix- und Partikelverben des Deutschen.

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Aktionsarten gehören zu den wohl umstrittensten Bereichen der Linguistik. Dies liegt nicht unbedingt an der Komplexität des Gegenstands, sondern vielmehr am Wissenschaftsdiskurs über Aktionsarten, der in seiner Vielzahl zu einer allgemeinen Verwirrung beiträgt (vgl. z.B. Schwenk 2019: 9–19): Ein und dieselben Konzepte können – von Autor/-in zu Autor/-in und Sprachraum zu Sprachraum – mit unterschiedlichen Termini bezeichnet und ein und dieselben Termini können auf unterschiedliche Konzepte bezogen werden. Der methodische Zugang der grammatischen Modellierung von Aktionsarten ist jedoch genauso interessant. Möchte man Aktionsarten z.B. konstruktionsgrammatisch modellieren, so stellt sich die Frage danach, wie Aktionsarten in einem konstruktionsgrammatischen System zu verorten wären. Handelt es sich dabei um ein verbales Kategoriensystem zur Eingruppierung verschiedener Verben und/oder Prädikate, d.h. um metasprachliches Wissen, handelt es sich um eigene Aktionsartkonstruktionen oder sind sie als semantische Werte der Inhaltsseite von Konstruktionen anzusetzen?

Im Rahmen dieses Vortrags soll diesen Fragestellungen anhand von Präfix- und Partikelverben mit *durch* nachgegangen werden. Einleitend geht es um verschiedene kognitive Konzeptionalisierungsmöglichkeiten (vgl. z.B. Dewell 2011, aber auch Kjellman 1945; Rich 2003) von *durch* einschließlich ihrer metaphorischen Übertragungen, die anhand gegenwartssprachlicher und historischer Belege vorgestellt werden. Hierdurch soll deutlich werden, dass besonders für *durch*-Präfix-/Partikelverben eine grenzbezogene Handlungsrahmensetzung von Relevanz ist. Geht man davon aus, dass Aktionsarten unter das Dach der Aspektualität fallen, muss man eben jene grenzbezogene Handlungsrahmensetzung seit Sasse (2002: 201) als zentrales Element von Aktionsarten annehmen.

Sodann erfolgt ein genereller Blick auf Aktionsarten unter der Fragestellung, wie sie im Rahmen der Konstruktionsgrammatik modelliert werden sollten. Die Aktionsarten werden nach den semantischen Ansätzen der Merkmalssemantik, Prototypensemantik (vgl. z.B. Kleiber 1998) und Framesemantik (vgl. z.B. Ziem 2008) diskutiert: Was sind Aktionsarten und wo sind sie in einem konstruktionsgrammatischen Modell anzusiedeln? Welche semantische Herangehensweise ist besonders geeignet und aus welchem Grund? Mögliche Antworten auf diese Fragen sollen im Vortrag erörtert werden und die erarbeitete Klassifikation der Aktionsarten in beispielhaften Beschreibungen von *durch*-Präfix- und Partikelverbkonstruktionen dargelegt werden.

ID: 211 / TS3.3: 1

Theme Session: Cognitive approaches to written language

Topics: language processing, first language acquisition

Keywords: good-enough production, literacy effects, relative clauses, communication

When good-enough production is not good enough

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Previous research has shown that adult native speakers with low levels of print exposure show deficits in comprehension of a variety of complex grammatical constructions including object relatives, while performing at ceiling on simpler structures (see Dabrowska 2012). Even more pronounced differences have been observed when comparing illiterate or late-literate speakers (i.e., those who learned to read in late adulthood) and speakers who have a lifetime of reading experience behind them (Dabrowska et al., 2022, 2023; Gedik, in preparation). It is unclear, however, what impact (if any) such gaps in grammatical knowledge might have on illiterate speakers' ability to convey complex messages: after all, they may be able to communicate effectively using simpler constructions.

To investigate this, we examine production data collected from illiterate Turkish-speaking adults and literate controls using a task which had previously been employed to elicit relative clauses from young children (Özge et al., 2010). Relative clauses, and especially object relatives (OR), are acquired fairly late, and are considerably more frequent in written texts than in spoken language: they are thus a prime candidate for structures which may be acquired primarily through exposure to written language. In the task, we present 6 pictures for each condition showing two participants engaged in different actions. The experimenter then describes the pictures and prompts the target structure (e.g., A woman is kissing a girl. Another woman is kissing the trophy. Which woman would you rather be?). Crucially, the experimenter cannot see the picture, so the optimal response is a relative clause (e.g. kızı öpen kadın 'the woman that is kissing the girl' in the subject relative (SR) condition and kraliçenin öptüğü gelin 'the bride that the queen is kissing' in the OR condition).

An earlier study (Gedik in prep) showed that illiterate speakers supplied the target construction in 27% of the trials in the SR condition and 11% of the OR trials. In this paper, we focus on the structures that participants produced instead of the target, and whether they were informative enough to convey the message to an interlocutor who does not share the speaker's knowledge. We classified these alternatives as either "good enough" (Goldberg & Ferreira, 2022) or "not good enough". For example, a passivized SR (e.g. öpülen gelin 'the bride that is being kissed') instead of an object relative was classified as "good enough", since it is both grammatical and informative enough. In contrast, the use of demonstratives (e.g., this one) or locative modifiers (the one on the right) were classified as "not good enough" since they are not informative when the picture is not visible to others.

We found that illiterate participants provided responses which were classified as "not good enough" 73% of the time in the SR condition and 89% of the time in the OR condition. For literates, the corresponding figures were 7% and 43% respectively. Thus, gaps in grammatical knowledge have tangible consequences for communication, especially in situations demanding precise and explicit descriptions such as reporting a crime or visiting the doctor.

ID: 237 / **P5: 1**
Keynote abstract
Topics: language change and grammaticalization
Keywords: grammatical category innovation

Parallel evolution and emergent category structure

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In this talk, I explore grammatical category innovation as an emergent property of a dynamic network, using the diachrony of relative clauses as my empirical case study.

The Standard Average European relative clause type formed around interrogative pronouns, such as *who painted that portrait* in *the person [who painted that portrait] was gifted*, has the Indo-European interrogative-indefinite pronouns **k^{w}i/ k^{w}o* as its source. Headed relative clauses based on interrogative pronouns are found in several Indo-European daughter languages, including varieties of Romance, Slavic, Germanic and Western Iranian, but **k^{w}i/ k^{w}o* did not head relative clauses in Proto-Indo-European, which probably did not have hypotactic relative clauses at all (Clackson 2007). Although the SAE relative clause type is found in a tiny handful of non-Indo-European languages in contact with Indo-European varieties, such as Hungarian and Georgian (which is why it's treated as a European areal phenomenon), it is by and large confined to Indo-European languages. This means that the presence of *wh*-words in the relative clauses of the daughter languages is the result of a recurring process of historical change, in different IE subfamilies at significantly different times. In each case, the context of reanalysis is the same construction: the conditional correlative. This is parallel evolution: recurring changes of the same kind, in the same linguistic environment, leading to the same result: the innovation of a new (inter-generationally stable) category of relative *wh*-word from the source **k^{w}i / k^{w}o*.

The innovation of the category of relative *wh*-words is a directed change that's not amenable to the usual explanations for directed change, because it's not grammaticalization. Relative *wh*-words are not more grammatical than interrogative ones, nor do relative pronouns move along the cline to become clitics or affixes. Furthermore, there isn't an obvious explanation in terms of functional pressure: there is no communicative need driving the creation of relative *wh*-words, and most languages do without. So why and how do speaker/hearers innovate them? Having explained the typological constraints and categorial reanalyses involved in the creation of relative *wh*-words, I explore the emergence of the new category in terms of acquisition and usage in a dynamic cognitive network.

There is a convergence between a latent ambiguity in the source construction, the dynamics of cognitive networks, and theories of acquisition and usage couched in terms of network theory (such as Ibbotson, Salnikov & Walker 2019) and in the broader usage-based assumptions of cognitive theories. Although mind and brain are different, because changes in activation levels in the brain occur slowly while learning can be instantaneous, the principles of Hebbian learning ('neurons wire together if they fire together') also apply to the symbolic network of the mind, giving rise to the 'community structure' of the network in which categories are induced. The theory of dynamic networks allows for a fine-grained approach to the question of how categories emerge in their environmental niches, and so it affords a constrained way to construct a model of how innovations occur (and recur in parallel evolution). It also offers an account of why linguistic structure is stable across the generations, despite the acquisition bottleneck, and despite the fact that children do not so much 'acquire' a grammar as make one anew on the basis of the utterances they hear.

ID: 105 / **GS_T3.3: 3**
Presentation
Topics: pragmatics and cognition, language processing
Keywords: Expressive Adjectives, Valence, Emotional Agreement

Emotional Agreement: Interplay of Negativity and Referent Valence in Interpreting Expressive Adjectives

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Expressive Adjectives (EAs) (e.g., *damn*) express a negative speaker attitude. Unlike descriptive attributive adjectives (e.g., *blue*), the interpretation of EAs is not strictly tied to their syntactic position, allowing them to target (be interpreted relative to) any discourse referent within an utterance.

(1) The waiter shattered the damn glass.

😡 (The waiter) object-reading

😡 (The glass) subject-reading

😡 (The waiter shattering the glass) event-reading

EAs are typically treated as a homogeneous class in semantic and pragmatic literature. This perspective is prevalent in both theoretical (e.g., Potts, 2007; Guercio & Orlando, 2022) and experimental research (e.g., Frazier et al., 2015; Gutzmann, 2019), mainly focusing on *damn* as the prototypical EA. The presumed behavior of *damn* is then generalized to all other EAs, neglecting the potential impact of meaning variations among EAs on their processing and interpretation. This talk addresses this gap by examining how the negativity expressed by different EAs influences their interpretation.

In Study 1, we conducted a valence rating study using a 1x6 within-subject design to assess the negativity expressed by different EAs. Participants (n=80) rated the valence of EA-Noun combinations "*The EA noun*" on a scale from 1 (negative) to 9 (positive). A linear mixed-effects model was fitted to the data. Figure 1 presents the predicted distributions for the modified valence as a function of the inherent referent valence and the EA. The findings establish a clear negativity hierarchy for EAs: *darn* conveys the weakest degree of negativity, followed by *blasted*, *frigging*, *damn*, *goddamn* and *fucking*, which expresses the most negative speaker attitude.

In Study 2, we explored whether EAs with varying degrees of negativity have distinct interpretational preferences and differentially interact with referent valence. Using a 2x3 within-subject design, we conducted a three-option forced-choice study. The manipulated variables were *EA* (*darn* vs. *fucking*) and *Subject-Valence* (positive, neutral, negative). Participants (n=80) read sentences structured as "*The [positive|neutral|negative]-noun verbs the [fucking|darn] noun*" and chose the most likely EA-target among the subject-referent, object-referent, or event-referent. Figure 2 visualizes the proportion of subject-interpretations as an interaction plot. The error bars indicate the 95% CI.

A generalized linear mixed-effects model fitted to the data reveals an interaction between EA and Subject-Valence, indicating a significantly higher probability of subject-readings for negatively valenced referents compared to neutral and positive ones when *fucking* is used.

We suggest that EAs tend to favor discourse referents agreeing in emotional valence. *Fucking*, expressing an extremely negative speaker attitude, is more aligned with negative referents (e.g., *jerk*) that match its negativity. In contrast, with neutral or positive referents (e.g., *helper*), *fucking*'s negativity appears excessive, reducing compatibility. Conversely, *darn*, expressing more moderate negativity, agrees with referents in a broader valence range, leading to a consistent interpretation across different levels of subject-valence.

In conclusion, the distinct interpretational preferences exhibited by various EAs suggest that the homogeneous treatment of EAs in prior literature is inadequate. The findings cast doubt on the validity of earlier generalizations and highlight the necessity for future research on EA processing to take these distinctions into account.

ID: 147 / GS_F3.1: 2
Presentation
Topics: construction grammar, corpus linguistics, language change and grammaticalization
Keywords: Contrastive Linguistics, Contact-Specification-Construction, collo-profile, case alternation, Argument Structure Construction

CONTACT-SPECIFICATION CONSTRUCTIONS in English and German

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This paper is concerned with sentences such as those under (1):

(1) a. She kissed him on the cheek. COCA-2018-FIC

b. She shot up from her chair and struck him in the face. COCA-1993-FIC

Firstly, we will present arguments for treating such sentences as representing a construction in its own right in English and describe its formal and semantic properties. Although formally sentences such as (1) – subject-NP V object-NP PP – correspond to the English CAUSED MOTION CONSTRUCTION (e.g. Goldberg 2006), semantically they do not since the object NP is not a THEME that is being moved to a GOAL indicated by the PP. Rather, the object NP is the GOAL of the action expressed by the verb, and the PP a specification of this GOAL, which is why we will refer to the construction as the English CONTACT SPECIFICATION CONSTRUCTION.

Having established the construction status of such sequences, we will carry out a cross linguistic comparison between English and German, where there seem to be two corresponding constructions: one with an accusative, and one with a dative object:

(2) a. Sie küsste ihn [acc] auf die Wange … DWDS-2013-ZEIT

b. Sie schlugen ihm [dat] ins Gesicht. DWDS-1999-ZEIT

This will involve discussing possible differences in semantic function between the two cases, arguing that the dative lends itself to a BENEFICIARY-interpretation absent from the pattern with an accusative object. An important element of the comparison between the two cases will be establishing the collo-profiles of the verbs occurring in the two patterns. On top of this, a survey will be conducted asking native speakers of German to assess pairs of sentences with respect to acceptability and similarity of or difference in meaning.

Since, in the terminology of structuralist contrastive analysis (Burgschmidt & Götz 1974), one could describe the relationship between the two German constructions and the English construction as one of convergence, we will finally attempt to open up a diachronic perspective and show that one can also make out a case for claiming that constructions with a dative-object and an accusative-object existed in earlier stages of the English language:

(3) a. þa het Quintianus hi [acc] mid handum slean gelome on þæt hleor… YCOE-996-coaelive.o3

'then ordered Quintianus to strike her with the hands repeatedly on her face.

b. ond sette his þa swiðran hond him [dat] on þæt heafod. YCOE-731-cobede.o2

'and laid his right hand on his head'

ID: 102 / **GS_W1.2: 2**
Presentation
Topics: construction grammar, metaphor and metonymy, corpus linguistics
Keywords: Metaphor, Word Grammar, Conceptual Networks, Metaphor in Politics

Conceptualizing Metaphor Use in The Brookings Institution's Foreign Policy Guidance

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Metaphor in political discussion has long been heralded in Cognitive Linguistics as a means to understanding partisanship and ideological argumentation. However much of this work has not moved beyond early methodologies using selective data and simplified models of metaphor domains in the mind. In this dissertation, I assemble a corpus of foreign policy briefs by the Brookings Institution think tank. I then implement quantitative methods to annotate it using metaphor detection and part-of-speech and grammatical dependency tagging to investigate the most common metaphors and their grammatical context. I then report a statistical mapping of words across metaphor. Finally, informed by Gisborne (2010), I draw a Word Grammar concept network of how grammatical and semantic information forms a conceptual mental map of the most frequent metaphor lexeme from the data. By accounting for a wide range of real metaphor use and its conceptual complexity, I propose that Brookings associates and likely entrenches for readers political conceptual connections through repeated use of the metaphor 'support'.

ID: 229 / **TS4.4: 3**

Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen

Topics: construction grammar, corpus linguistics, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen

Keywords: Morphological productivity, distributional semantics, individual differences

The role of meaning in assessing morphological productivity: What can distributional semantics tell us?

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The productivity of linguistic constructions is a recurrent topic in morphology and beyond (see e.g. Barðdal 2008; Baayen 2009; Säily 2011; Zeschel 2012; Zeldes 2012; Hartmann 2018; Berg 2020; Goldberg 2019, among many others). But the discussion around productivity has arguably shifted from the question of how the propensity of a pattern to yield new instances can best be operationalized, drawing on concepts like "potential" and "actual" words (see e.g. Rainer 1987 for an overview) to the question of the different dimensions that the concept of productivity captures. Crucially, this also raises the question to what extent semantic factors play a role in assessing the productivity of a pattern. Also, the question arises to what extent the productivity of a pattern can differ on various levels from individuals to smaller groups of language users to entire populations. In this talk, I try to bring these perspectives together, addressing the following questions:

Q1. What can semantic profile gauged via a distributional semantics approach (Levshina & Heylen 2014; Perek 2016; Hilpert & Perek 2015) contribute to our understanding of constructional productivity?

Q2. How can we use the semantic profiles of morphological constructions to assess individual differences in constructional productivity, keeping in mind that many of the observed differences between semantic profiles may be due to confounding factors such as text type differences and the different topics of individual texts?

To address these questions, I revisit data from Hartmann (2016; 2018) on the diachronic development of German *ung*-nominalization (e.g. *Landung* 'landing', *Tagung* 'conference') over the New High German period (1650 until today). The data, taking from the German Text Archiv (*Deutsches Textarchiv*, DTA, Geyken & Gloning (2015)) are subjected to a semantic vector-space analysis using word2vec (Mikolov et al. 2013). The results show clear text-specific differences in the parts of the available semantic space that the instances of *ung*-nominalization occupy, but also raise open questions as to how the results can be interpreted and whether and how they can be meaningfully combined with well-established methods of measuring morphological productivity.

ID: 103 / **TS3.1: 1**
Theme session proposal
Topics: multimodality, writing systems
Keywords: Written language, literacy, cognitive approaches to writing

Cognitive approaches to written language

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Current approaches to cognitive linguistics emphasize that language is an inherently multimodal phenomenon. For example, spoken language is usually accompanied by co-speech gesture, which has given rise to extensive research from a cognitive-linguistic point of view. Another aspect of multimodality has arguably been neglected so far: writing. Linguistics in general has, for a long time, suffered from what Berg (2016) calls a "spoken language bias", and only recently has written language received more attention in the emerging field of grapholinguistics (see Meletis & Dürscheid 2022). This theme session sets out to demonstrate that cognitive linguistics and the study of written language can cross-fertilize each other. In particular, we invite papers that discuss how the study of writing can inform our understanding of the relationship between language and cognition. There are numerous good reasons for assuming that written language offers an excellent window to the mental representation of language. For one thing, it has been shown that learning to write entails a "rewiring" of the brain (Dehaene 2009) that is so significant that it has been linked to major cultural developments (Henrich 2021). For another, written language gives valuable clues about how language users segment linguistic items into words and larger units (especially so in alphabetic writing systems that have over time developed segmentation markers for words and sentences; see e.g. Hartmann & Szczepaniak 2023).

Bringing together cognitive linguistics and grapholinguistics, this theme session invites papers addressing relevant questions relating to the implications of written language for understanding the cognitive organization and the cognitive underpinnings of language, including, but not limited to, the following:

- What exactly can written language tell us about the mental representation of language(s), and what are potential limitations?
- How does literacy change the way we learn and think about language(s)?
- To what extent do writing tools affect the way we think and write?
- How does written language reflect linguistic change, and what does this in turn tell us about the cognitive processes underlying language change? What does the change of written language over the centuries tell us about cognitive processes involved in reading and writing?
- How does the knowledge of multiple writing systems affect multilingual language users' linguistic knowledge?

ID: 196 / TS4.3: 2

Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen

Topics: construction grammar, corpus linguistics, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen

Keywords: word-formation, derivation, German

ratlos, vergangenheitslos, faltenfrei – how to deal with the affective content of German affixes of negation within a construction-grammatical approach

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In my talk, I will focus on German affixes of negation – namely on *-los* ('-less') and *-frei* ('-free') – which exhibit a privative meaning and mainly serve to derive adjectives (from a nominal base word), e.g. *ratlos* ('helpless') or *faltenfrei* ('wrinkle-free'). Besides their privative meaning ('absence of what is denoted by the first element'), such adjectives seem to go along with a specific connotation which in turn is crucial to understand their specific quality (cf. Fandrych 1993; Reckenthäler 2020).

As connotation cannot be derived compositionally from the parts of the complex word, the question arises how such aspects of meaning can be adequately modelled within grammatical frameworks. As Construction Grammar resp. Construction Morphology (Booij 2010) is based on language use and takes a broad view on meaning that also allows for the integration of pragmatic and discourse-related properties (cf. Hein/Bubenhofer 2015: 180-183; Fischer/Stefanowitsch 2008: 9), I will argue in my talk that it provides a fruitful framework to deal with the specific quality of the phenomena in focus. Up to now, in the literature there are not many studies which try to explicitly apply construction morphology to phenomena of derivation (but cf. Hartmann 2016; Finkbeiner 2023; Michel 2023) resp. to word-formation in general (cf. Hein/Michel 2023 for an overview).

The main focus of the talk will be on formations with *-los*: In the literature one can find long and diverging discussions about the connotation of *los*-derivations, reaching from a neutral to a positive or a negative connotation (cf. Fandrych 1993; Eichinger 2000; Reckenthäler 2020). In a recent study (cf. Wolfer/Hein 2022), we tried to lighten this debate with the help of a novel empirical basis: a list of affective-emotional ratings of base nouns and associated *los*-derivations (cf. Võ et al. 2009). Connotation in this case was operationalized via the concept of 'emotional valence', which captures the degree of pleasantness/attractiveness associated with (the concept of) a word. We found that, when a base word is derived with *-los*, the evaluation of the base word is simply reversed: In case of base words with a positive emotional valence (e.g. *Liebe* 'love'), the corresponding *los*-derivation (*lieblos* 'loveless') has a negative connotation. On the contrary, los-derivations from base words with a negative emotional valence go along with a positive connotation (e.g. *Makel* 'flaw'- *makellos* 'flawless') (cf. Wolfer/Hein 2022).

On the basis of these empirical findings, I will stipulate a construction for the prototypical cases of *los*-derivation in a first step. In a second step – as an outlook – it is sketched-out how formations with *-frei* relate to formations with *-los* and to what extent the former require a separate constructional representation.

All in all, the case of privative affixes shows that also non-classical semantic properties have to be considered when describing the meaning side of constructions. At the same time, our study underlines the importance of basing constructions on empirical findings.

ID: 170 / **GS_T1.3: 3**
Presentation
Topics: construction grammar
Keywords: constructions frame-evoking elements pre-planning syntax CASA

The role of construction evoking elements

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A lot of the work in Construction Grammar has focussed on the description of individual constructions, their relationship to other constructions, their historical development as well as their learnability. This talk will address the issue of how constructions combine to form constructs and present a short outline of the Constructionist Approach to Syntactic Analysis (CASA) developed by Herbst and Hoffmann (forthc. 2024). The CASA model represents constructs (sentences) in the form of so-called construction grids and builds on overlap and conceptual blending (Langacker 2008, Dąbrowska and Lieven 2005, Dąbrowska 2014, Fauconnier and Turner 1996). In this talk, I would like to illustrate how we need to conceive of the different types of constructions (sentence type constructions, argument structure constructions, tense and aspect constructions, idioms and collocations) for such a model to work.

The main focus of the talk, however, will lie on the role that a constructionist model can play with respect to aspects of pre-planning and prediction of utterances, which are relevant in human language processing, brain science, and AI applications such as Large Language Models. It will be argued here that in addition to work on transitional probabilities from one word to the next (Jurafsky 2003), identifying construction evoking elements – in parallel to frame evoking elements in FrameNet (Ziem 2008) – can provide an important cue for explaining how such expectations come about. It will also be shown how German and English make use of the same and different construction evoking elements for corresponding constructions.

The power of constructional knowledge in predicting how an utterance is being continued becomes particularly apparent in the case of premodifier constructions. The words *the* or *a*, for instance, raise a very high expectation of a noun to follow (expect in cases such as *the sooner the better*). This expectation does not have to be met immediately with the next word, however, if you look at phrases such as *the European capital* or *an extraordinarily difficult position*. In such cases, processing can be imagined to take a detour with *extraordinarily* making the hearer expect an adjective which in turn raises an expectation of a noun, which corresponds to the noun of the original expectation created by *a* (Herbst & Hoffmann forthc. 2024).It thus seems reasonable to assume that the expectation created by construction-evoking elements will be maintained until the element actually appears.

The talk will thus explore to what extent the constructionist assumption that speakers' constructicons contain units that are considerably larger than individual words can provide an explanation of how speakers' expectations about the continuation of an utterance come about in addition to, e.g., factors such as collocation, multi-word units, other frequency-related effects (Divjak 2012) and frame-based and general world knowledge (in the sense of utterances such as *Would you like a glass of wine* or *Good night*not being expected at 9 a.m.) and how the various constructions making up a construct can be imagined to create such expectations.

see PDF for illustration

ID: 123 / **GS_T2.2: 1**
Presentation
Topics: cognitive grammar, construction grammar
Keywords: creativity, 5C model, constructional network

The 5C Model of Constructional Creativity

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Humans are an incredibly creative species – our minds have evolved to a degree that has enabled us to think original thoughts and come up with novel solutions to a great number of problems. One domain of human cognition that has recently received considerable attention in cognitive linguistics is linguistic creativity. Over the past couple of years, several publications have contributed new and interesting cognitive linguistic findings on the topic (e.g., Bergs 2018, 2019; Bergs and Kompa 2020; Hartmann and Ungerer 2023; Herbst 2018; Hoffmann 2018, 2019, 2020a; Trousdale 2018; Turner 2018; Uhrig 2018, 2020).

This talk will give an overview of creativity research from the fields of linguistics and psychology and then show how these findings are relevant for cognitive approaches to linguistic creativity (including definitions of creativity as well as the role of personality traits that explain inter-individual differences with respect to the potential for creativity). A particular focus will be on Glăveanu's (2013) 5A framework of creativity, which offers the most comprehensive model of creativity and takes into account the various aspects that interact in any creative act (actors, audience, artefacts, actions and affordances). After summarizing the results from constructionist research on verbal creativity, a constructionist model of Glăveanu's (2013) framework will be presented – the '5C model' of constructional creativity (constructors, co-constructors, constructs, constructional blending and the constructional network). This model will detail the role of constructional networks (Diessel 2019) in creative acts and it will be argued that Conceptual Blending (Hampe and Schönefeld 2003; Hoffmann 2019; 2022; Turner 2018, 2020) is the domain-general cognitive process that creates creative (as well as non-creative) constructs.

ID: 138 / **GS_W3.3: 1**
Presentation
Topics: cognitive grammar, construction grammar, prototypes and categorization
Keywords: Construction Grammar, constructional networks, NPNs, usage-based, clustering

Step by step – Exploring the constructional network(s) of NPNs

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NPN (noun-preposition-noun) patterns like *arm in arm*, *face to face* and *wave after wave* are widespread in everyday language use and occur across many languages and in a variety of syntactic functions (Sommerer 2022: 369; Jackendoff 2008: 15). Apart from agreeing on a plural interpretation of NPNs despite the singular nouns (Postma 1995: 178; Matsuyama 2004: 57; Müller 2021: 1531; Kinn 2022: 7; Sommerer & Baumann 2021: 102), linguistic studies have struggled with getting a firm grasp of the phenomenon, often focusing on their non-canonical internal structure and unclear phrasal category (Jackendoff 2008: 19). Constructional approaches have predominantly studied NPNs from a preposition-specific perspective, assuming preposition-specific constructions, and have addressed the question as to what extent it is possible to assume a fully abstract NPN construction (Jackendoff 2008; Sommerer & Baumann 2021; Sommerer 2022). Besides the uncertain status of the abstract construction, there has been only little research from a quantitative perspective, namely with a focus on temporal nouns presented by Sommerer & Baumann (2021) and Sommerer (2022).

The talk presents a quantitative analysis of NPN patterns and models a network of NPN patterns using a token-based approach to the phenomenon. By operationalizing cognitive processes such as categorization, the approach uncovers patterns of similarity between individual instances of NPNs that shed new light on the constructional nature of NPNs. More specifically, a random sample containing about 3,000 tokens of NPNs was extracted from the BNC (The British National Corpus 2001) and annotated for syntactic and semantic variables as well as cooccurrence patterns. The model of the constructional network is created in a four-step clustering and visualization procedure that includes 1. the calculation of a distance matrix based on similarities between individual data points (Gower 1971), 2. visualization and dimension reduction via UMAP (McInnes et al. 2018), 3. clustering (Hahsler & Piekenbrock 2022) and 4. visual reconstruction of the global structure. Results show that NPN patterns, despite their formal commonalities, are considerably more complex than previously assumed.

ID: 109 / GS_F1.1: 2
Presentation
Topics: metaphor and metonymy
Keywords: Cognitive metaphor theory, Discrete mathematics, Directed hypergraphs

Metaphorical meaning dynamics: Identifying patterns in the metaphorical evolution of English words using mathematical modeling techniques

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Authors such as Kövecses (2008) and Gibbs (2009) have raised significant criticisms of cognitive metaphor theory (CMT), particularly in relation to "the methodology with which metaphor is studied (emphasizing concepts instead of words)" and "the direction of analysis (emphasizing a top-down instead of a bottom-up approach)" (Kövecses 2008).

In response to these criticisms, this paper employs a new strategy, utilizing established mathematical modeling methods to allow a systematic, quantitative analysis of expansive networks of metaphorical word-meanings. One explicit aim of this work is to avoid an approach which postulates theories of metaphor and then seeks specific examples to justify them. Rather, the intention here is to identify patterns as they emerge from the data on metaphorical word meanings, thereby taking the word-based, bottom-up approach requested by Kövecses.

Where the data comes from

This paper utilizes the data produced by the Mapping Metaphor project (MMP) (Anderson 2016) undertaken by the University of Glasgow. The analysis is applied to the entirety of the MMP dataset, which consists of 9609 words performing 18916 metaphorical mappings between 414 domains.

The methods presented here could be applied to any set of categorizations providing the same types of information and the authors do not argue that the MMP provides a definitive or uncontestable method for categorizing metaphorical vocabulary. Rather, this paper treats that dataset as a plausible basis for the application of its new form of analysis.

Research aims

Any pattern predicted by CMT consistently emerging from a systematic mathematical analysis of the data, or indeed consistently failing to do so, may serve as substantial evidence for or against the validity of that theory. Through the utilization of data produced independently by a different group of researchers at another institution and the application of a mathematical analysis to the entirety of that dataset, the authors aim to identify patterns of meanings as unbiased by their own selections and assumptions as possible.

Methods

The MMP data lends itself to representation as a network consisting of 414 nodes, the domains, connected by shared words. For the purpose of examining word-meaning dynamics, we do not only represent individual metaphorical mappings, but rather represent words by groups of directed mappings between all domains in which they appear. This is made possible by the use of directed hypergraphs, a tool commonly used in discrete mathematics and various areas of computer science (Dai & Gao 2023, Leal & Restrepo 2019).

Although the mathematical models featured in this paper are well-established in other fields of enquiry, the authors are unaware of any existing work taking the same approach to the metaphorical meanings of words. As such, there are no pre-existing methods specifically for research of this kind and all methods reported in this paper are new in the context of CMT.

Results

Outcomes of the analysis relating to the distributions of source and target domains within the network, the growth mechanisms at work in the spread of metaphorical meanings and how these relate to existing concepts in CMT will be discussed.

ID: 220 / **TS4.3: 3**
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: word formation, construction morphology, semantic niche, stancetaking

"Die Instagrammisierung der Welt": Semantik und Pragmatik der produktiven Verwendung von -isierung

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Im Mittelpunkt meines Vortrags steht die pragmatische und diskursive Bedeutung einer bestimmten Gruppe von Nomina mit *-isierung*. Insbesondere auf Basis von Namen hat sich nämlich eine formal-semantische Nische herausgebildet, in der das Muster $[X_N$ *-isierung*$]_N$ als 'Stance-Ressource' (Stumpf & Merten 2023) produktiv genutzt werden kann, um Prozesse zu bennen und zu kommentieren. Diese Nomina dienen in der Regel als Mittel der Selbstpositionierung und zur kritischen Abgrenzung von den beschriebenen Prozessen und Entwicklungen. Es geht unter anderem um Ableitungen von Eigennamen (*die Kardashianisisierung des Pop*, *die Merkelisierung Europas*), von Toponymen (*die Luxemburgisierung des Landes*, *die Dresdenisierung Leipzigs*) oder von Firmen- bzw. Produktnamen (*die Teslaisierung der Autobranche*, *die McDonaldisierung der Gesellschaft*). Die Verwendung solcher Ableitungen erfordert sehr viel geteiltes Weltwissen, das essenziell für die Bildung und das Verständnis der Deonomastika ist (vgl. hierzu Wengler 2010).

Die Wörter können als Wortbildungskonstruktionen analysiert werden, die strukturell durch einen Prozess der 'schema unification' (vgl. Booij 2010; Hüning 2018) charakterisiert sind. Sie sind paradigmatisch mit einem verbalen Korrelat auf *-isieren* verbunden, dessen Realisierung aber keine Voraussetzung für die Bildung des Nomens ist (vgl. hierzu schon Wilss 1992, der *-isierung* als Suffix analysiert).

In meinem Beitrag werde ich die Eigenschaften und die Verwendung dieser Wortbildungskonstruktion anhand von Korpusmaterial (insbesondere aus den *TenTen*-Korpora auf sketchengine.eu) und von *Twitter/X*-Belegen als Mittel des 'Stancetaking' (Du Bois) untersuchen.

Dabei werde ich auch eine sprachvergleichende Perspektive thematisieren. Das Muster ist nämlich in vielen Sprachen produktiv, wobei das Englische vor allem auf *-ization* setzt und im Niederländischen *-isatie* und *-isering* miteinander konkurrieren. Auf Deutsch hat sich *-isierung* weitgehend durchgesetzt. Semantik und Pragmatik sind aber in diesen drei Sprachen (und auch darüber hinaus) sehr vergleichbar, so dass man sich fragen kann, ob das zugrunde liegende Muster vielleicht als 'Diakonstruktion' im Sinne der Diasystematischen Konstruktionsgrammatik von Höder (2018) gefasst werden kann.

Mein Vortrag versteht sich als Beitrag zur Weiterentwicklung der Konstruktionsmorphologie, für die eine stärkere Berücksichtigung soziopragmatischer Aspekte meines Erachtens ein wichtiges Desiderat ist.

ID: 122 / **GS_W1.2: 1**
Presentation
Topics: metaphor and metonymy, discourse analysis
Keywords: purposeful metaphor, deliberate metaphor, conceptual metaphor, critical discourse analysis

The Use of Metaphors in Politics: Deliberate, Purposeful, or Rhetorical? How to Analyse the Language of Presidential Elections in the USA

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The point of this paper is to investigate which approach to the analysis of political metaphor is better suited for a critical discourse analysis: Steen's (2008, 2011) concept of *deliberate metaphor* on the one hand, or Charteris-Black's (2012) *purposeful metaphor* on the other hand, which both adhere to the conceptual theory of metaphor in the wake of Lakoff & Johnson (1980, cf. Lakoff 1993). This will be discussed on the basis of authentic discourse data from the most recent US-presidential campaign of 2023/24. How do campaigning candidates such as Joe Biden and Donald Trump use metaphor? How does the media coverage reflect this?

"We will put America first and today, especially in honor of our great veterans on Veterans Day, we pledge to you that we will *root out* the communists, Marxists, fascists and the radical left *thugs* that *live like vermin* within the confines of our country." (Trump in a Speech at a Veterans Day rally in Stevens High School auditorium in Claremont, New Hampshire, on Saturday, 11/11/2023)

The most recent findings will be compared to results of an investigation into the 2016 presidential campaign (cf. Jäkel 2023), which analysed evidence of well-known conceptual metaphors like THE ELECTION AS A WAR, other less common ones such as THE ELECTION AS A PENDULUM, THE ELECTION AS A LOTTERY, or THE ELECTION AS PAINTING, and finally novel alternative conceptualisations such as THE ELECTION AS A LAWSUIT versus THE ELECTION AS A JOB INTERVIEW.

Another comparison can be drawn with former US-president Barack Obama's metaphorical language in a corpus of eight of his major speeches held between 2008 and 2012 (cf. Jäkel 2012). This comparison with Obama's use of metaphor is intended to help in getting a firmer grip on the issue of deliberateness or purpose of fully contextualised metaphorical language in a larger corpus (~ 44,000 words) of authentic language. The investigation of Obama's speeches resulted in a general metaphor frequency of 4.36% (2.44 – 6.00%). The share of deliberate metaphors however remains debatable: Similes are extremely rare (totalling two in the whole corpus), as other 'direct metaphors', there is one single case of parable. What could be detected as other potentially deliberate or purposeful metaphors were many reoccurring metaphors; several local clusters of metaphors, sometimes including creative extensions; and some poetic and novel metaphors.

In conclusion, it will be argued how all of these rhetorical devices (cf. Charteris-Black 2011) have mainly persuasive functions: e.g., convincing the audience, pathos, creating consensus and confidence, avoiding precision.

ID: 185 / **TS3.2: 2**

Theme Session: Cognitive approaches to written language

Topics: cognitive phonology, writing systems

Keywords: orthography, writing system, grapho-phonemic systematicity, letter-sound systematicity

The secret of letter shapes: exploring grapho-phonemic systematicity in human writing system.

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We quantitatively demonstrated, for the first time, that human letter shapes are not entirely arbitrary with respect to their sounds (e.g., Jee, Tamariz, & Shillcock, 2022a). Conventional writing systems such as Arabic, Chinese, Cyrillic, English, Finnish, Greek, Hebrew, and Korean all exhibit 'grapho-phonemic systematicity,' defined as the correlation between letter shapes and their corresponding phonemes. Three distinct evolutionary developments emerge: in Semitic languages, spatial occupation correlates with phonemic similarity (Jee et al., 2020; 2021; 2022a); in artificial languages like Korean, topologically similar letter shapes yield similar sounds (Jee et al., 2021; 2022a; Jee, 2023); and in Chinese, character complexity predicts phonemic elaborateness (Jee, 2022b; Du et al., 2022).

A behavioral experiment was conducted to validate these findings. We hypothesized that individuals would prefer symbols that exhibit the grapho-phonemic systematicity of their first language. Participants from three countries—the UK, South Korea, and China—were asked to choose one of the three symbol-pairs, each pair representing Semitic-type, Korean-type, and Chinese-type grapho-phonemic systematicity, according to the given sound pair. The results will indicate whether human writing systems have evolved over time to develop such distinct systematicities. The implications of these findings and future research directions will be discussed.

ID: 128 / **GS_F4.1: 3**
Presentation
Topics: construction grammar, corpus linguistics
Keywords: internal and external constructional properties, usage-based construction grammar, collostructions, multivariate analysis, feature interaction

Multvariate collostructional analysis via association rules

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In usage-based construction grammar (henceforth, UBCG), constructions are considered entrenched routines in a speech community that pair form and meaning (Croft 2005: 274). In usage-based language models, context plays a crucial role in the operation of the language system Kemmer & Balow (2000). A theoretical consequence is that several contextual features may not only be stored in speakers as constructional information but may even in some cases be what determines constructionhood. Therefore, within UBCG framework, empirical methods of constructional analysis and description should ideally be able to account for multiple contextual features and patterns of interaction among such features.

This paper presents an exploratory corpus-based study of 2 English constructions: the *go (a)round Ving* construction, and the *go (a)round and V* construction (Stefanowitsch 2000):

(1) I got news for you, you little psycho, you can't go around slaughtering everyone who pisses you off. (COCA 2019 TV The Gifted)

(2) What you do is, you go around and arrest people for petty crimes. (COCA 2015 SPOK PBS_Newshour)

Methodologically, this paper goes much beyond previous work by proposing a multivariate approach that, in a sense, combines distinctive and co-varying collexeme analysis by incorporating not just information about 2+ constructions and one slot in them, but by utilizing 8 different features and how they differentiate between two constructions using the method of association rules (Hahsler et al. 2005), a simple but effective way to exploratorily identify intercorrelations between constructions and many of its characteristics at the same time.

Our study draws on data from the *Corpus of Contemporary American English*, or COCA and addresses collexemes, VP-colligations, modality types, polarity types, semantic and discourse prosodies, registers, and speech acts, and identifies patterns of interaction among. Results reveal interesting preferential patterns. For instance, in *go (a)round Ving*, verbs of violence prefer directive speech acts while verbs expressing verbiage (such as *say* and *tell*) prefer commissive speech acts. Modalized instances of the same construction in the TV, movies and fiction registers prefer negative discourse prosodies and prefer neutral ones in the magazine register. The *go (a)round and V* construction displays colligational variation but prefers the spoken register.

This study contributes to UBCG, emphasizing the significance of contextual features and intricate patterns of feature interaction within constructions, and the application of association rules in collostructional analysis is a first step to a much more multidimensional understanding of co-occurrence patterns in/and constructions.

ID: 143 / GS_W1.3: 3
Presentation
Topics: metaphor and metonymy, first language acquisition
Keywords: metaphor, conceptual metaphor, primary metaphor, first language acquisition, bilingual language acquisition, construction grammar

I see what you are trying to do. Siehst du, der kann schon Englisch. Investigating metaphor use in German-English bilingual children

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How do children acquire metaphorical meaning? One assumption is that children learn the literal sense of an expression first and later on extend it metaphorically. Alternatively, children may learn metaphorical senses from contexts in which both a literal and a metaphorical meaning applies and only later learn to differentiate the two. In (1), for example, a father literally *sees* what his child is doing but he also metaphorically sees, i.e. *understands*, the purpose of the child's activity.

(1) *I see what you are trying to do but I won't let you*.

The metaphorical sense of *see* in terms of 'to understand' reflects the knowing is seeing conceptual metaphor which is motivated by a correlation in experience – seeing is a means of understanding (Lakoff & Johnson, 1980, Grady, 1997). In this project, we aim to investigate a) when do children start to use *see* to mean *know* (or *understand, realise*), and b) which role does the input from their caregivers play? Research has shown that conflated uses like (1) are very frequent in adult speech directed at children, and that children start to produce conflated uses themselves before they first use purely metaphorical uses of *see* (Johnson, 1999). While previous research has mainly focused on monolingual children, we are also interested in whether, in bilingual contexts, (metaphorical) input from one language may influence the (metaphorical) output in the other language.

We explore these questions using data from two highly dense corpora of 2 German-English bilingual children (corpus of child 1: age = 2;3 to 3;11, 47,812 child utterances, 180,293 caregiver utterances; corpus of child 2: age = 2;3 to 3;9, 37,995 child utterances, and 193,993 caregiver utterances). For the analysis, we coded every instance of the verb *see* (and German *sehen*) for whether it was used in a literal, metaphorical, or conflated sense. We also annotated the grammatical construction in which the instance occurred assuming that different uses are tied to different constructional patterns in the two languages. We annotated the children's output as well as the input from their caregivers.

Our research is in progress but preliminary results show that caregivers use *see*/*sehen* figuratively in 50% of their utterances, most of which also allow for a visual interpretation as in (1). The children, however, exclusively use *see/sehen* literally. In the input (i.e. caregivers), the literal instances of *see/sehen* are primarily realized by a *see + NP* pattern, where NP is a visible entity, while most conflated and metaphorical instances are realized by a *see + clause* pattern, as in (1). Thus, a potential reason for the absence of figurative uses in the children's output, apart from their increased abstractness, may also be the fact that figurative uses of *see*/*sehen*tend to occur in syntactically more complex constructions, as in (1), which are harder to master for the child.

ID: 186 / TS6.1: 2
Theme Session: Non-finite causal constructions in English and beyond
Topics: Theme session: Non-finite causal constructions in English and beyond
Keywords: English, Because X construction, Phrase-as-Lemma construction, Information compression, familiarity

Two strategies for compressing and familiarizing information: It-sounds-familiar-because-compressed constructions

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Comparing the *because* X construction (e.g. (1a)) with the Phrase-as-Lemma+Noun (PAL-N) construction (e.g., (1b)), this talk claims that while they may be generalized as "information compressing" constructions, they employ different strategies for compressing information and for making the addressee find the conveyed information familiar.

(1) a. I cannot go out with you today because homework.

b. We've reached the 'Don't take showers anymore for Zoom calls' month of the pandemic. (Shirtz and Goldberg 2023)

In (1a, b), semantic contents canonically expressed by a clause are compressed into syntactically smaller categories; the constructions both make the addressee find the compressed information familiar (see Kanetani (2022) and Shirtz and Goldberg (2023), respectively, for the *because* X and PAL-N construction). Compressing and familiarizing information are closely related, because the addressee needs to be somewhat familiar with the information content to reconstruct full-fledged information from compressed messages. This talk argues (i) that information is compressed and made familiar to the hearer differently in the two constructions, (ii) but that the strategy for familiarizing information in each construction is naturally explained by how the information is compressed.

In (1a), the information canonically conveyed by a clause like *I have a lot of homework* is compressed into the word *homework* so that the single word can bear the amount of information equivalent to the clause (cf. Bohmann's (2016) "information densification"). The word serves as a "keyword" to understand the full-fledged information (Kanetani 2022; cf. Okada 2021). According to Kanetani (2022), while the *because* X construction is used publicly with communicative purposes, the X-element is characterized as the speaker's *private expression*, which corresponds to "the non-communicative, thought-expressing function of language" (Hirose 2000:1624): [$_{PUB}$ *because* <$_{PRIV}$ X>]. Embedding private expression within public expression indicates that the speaker reveals their bare thoughts (cf. Hasegawa 2010). As a result, the addressee hearing the embedded private expression is pulled closer to the speaker and is forced to take the same perspective as the speaker from the inside of a situation, and accordingly a joint attention effect is brought about (Kanetani 2022).

In (1b), the imperative sentence is realized as a word root. According to Shirtz and Goldberg (2023), the truth-conditional meaning of (1b) is the same as that of a sentence like *we've reached the month of the pandemic when you don't take showers anymore for Zoom calls*. That is, the information content remains packaged in a clause, while the package needs to fit itself to a syntactically smaller slot, viz., word root. By squeezing a clause into a word root, the PAL-N construction makes the pre-nominal clause sound like a quotation, a sentence that might be heard frequently—even if it really is not. The construction turns a clause to (pseudo-)quotation, with which the addressee should (pretend to) be familiar. Thus, with the marked form of the construction, the speaker attracts the addressee's attention to the (pseudo-)quotation while intending their addressee to find the clause familiar in some way (cf. Clark and Gerrig 1990).

ID: 131 / GS_W2.3: 1
Presentation
Topics: pragmatics and cognition
Keywords: Numbers, approximation, truth value judgments, task effects, round numbers

Default Precision: A Different Perspective on the Interpretation of Round Numbers

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Unlike the precise sharp numbers, round numbers are assumed to be approximate (Krifka 2002). We present two experiments examining whether addressees exhibit distinct response patterns to sharp versus round numbers. Our findings indicate that (i) round and sharp numbers are quite similar, (ii) round numbers convey approximation only marginally, and (iii) only in a truth-evaluation task.

Experiment 1 utilized a truth-evaluation task. Participants (n = 420) read English utterances containing either round or sharp numerals, and judged them as true or false in light of a state-of-affairs in one of four conditions: matching (same number as the sentence), within-range (InR, 3-unit difference), out-of-range (OutR, 7-unit difference), or false (14-unit difference).

If round numbers are approximate, they should be judged true in both matching and within-range conditions. However, if round numbers are precise by default, they should manifest a large gap between the matching and the within-range conditions.

Fig 1 shows that within-range values received high rejection rates across both number types, with no significant interaction between number type and condition. Upon analyzing data exclusively from non-matching conditions, we observed an interaction between the type of number and the position of the target number relative to the stimulus. Targets under the stimulus were accepted less often in the sharp condition than in the round condition condition ($\beta = 1.23$, $p < .05$).

Experiment 2 probed the speaker-intended interpretation of the numerals directly. Participants (n = 240) read English utterances containing round or sharp numbers in three conditions – two control conditions, modified by *exactly* or *about,* and one critical condition, *bare N*. They then accepted or rejected a statement about what happened *according to what the speaker said*. The statement included either the same number as the stimulus sentence, or a 3-unit difference range (e.g., 27-33 for the stimulus 30). If round numbers are approximate by default, they should pattern with the *about* control condition. If they are precise by default, they should pattern with the *exactly* control.

The results are displayed in Fig 2. A significant interaction was observed between the modifiers and the targets, but no significant interaction was observed between the type of number and any other predictor. No significant difference between the bare and exact conditions was observed for both number types.

Conclusions

Our results challenge the assumption that round numbers are inherently approximate. Experiment 2, which tested speakers' intended messages, showed a similar interpretation for both number types. Crucially, responses to bare round numbers were identical to those modified by *exactly* (rather than by *about*). Only Experiment 1 found a significant response difference between round and sharp numbers. This experiment forced participants to judge the target sentence in light of a predetermined state-of-affairs. Such judgments may involve Truth-compatible inferences (Ariel 2004), which are external to the utterance meaning or the speaker's intended message. Moreover, even here the acceptance rate of non-matching conditions was only marginal. We therefore suggest that the interpretation of round numbers is precise by default.

ID: 106 / **GS_T1.3: 2**
Presentation
Topics: pragmatics and cognition
Keywords: tag-question, prosody, stance, e-implicature

(Post)Nuclear tag-questions beyond linguistic markers of powerlessness: an evidence of male communication. Reinforceability of implicatures and stances.

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Although *tag questions* in Gender Linguistics have been extensively and intensively studied semantically and grammatically (Algeo 1990, Krug 1998, Kay 2002, Pichler 2013), the intonational structure of tags in male communication based on Austrian authentic data about indicated e-implicatures and stances have not become a topic in cognitive linguistic research. Other studies took discourse-functional and gender factors into consideration (Lakoff 1975, Cheshire 1981, Holmes 1995, Cameron et.al. 2006, Moore/Podesva 2009, Pichler 2013, Lange/Leukert 2021), but the specific prosodic realisation of tags as an instrument that plays a crucial role in transmitting meaning was not focused on.

In my presentation, I will look into intonational patterns of 381 tag questions (oder? wie? na? nit? eh? etc.), multi-word invariant tags (wasch, was I moan? oder was? etc.) and reinforced e-implicatures and stances connected with "utterances consisting of a (declarative, imperative, or exclamative) clause, called the prejacent, supplemented with an (inflected or uninflected) short interrogative form or 'tag'" (Romero 2018:245).

The database for analysis makes an Austrian corpus of audio-recorded conversations in all-male groups, which contains 29 hours of male – male interactions. The spoken data were collected in 2018-2019 by the author of the paper. The speakers featured in the corpus belong to two separate groups: students and craftsmen. The data are authentic, which means that they are not selective and were "not affected by researchers' or subjects' limitations of imagination, attention, memory and expressive power" (Deppermann & Schütte 2008:179). The study is rooted in an empirical form of analysis, "relying on real-word instances of language use in order […] to explore trends about the ways in which people actually produce language" (Baker 2018:168) and will integrate quantitative and qualitative methods of corpus analysis. The research is based on corpus-driven approach that "use a corpus in an inductive way in order to form hypotheses about language" (Baker 2018:169).

Presented talk will address the following questions:

1. What contribution makes an intonation contour on tag and nucleus in anchor to "possibility of making inferences explicit without creating an effect of redundancy" (Panther 2022:90). Is there a strong connection between the phonological design of tag/ anchor and conveyed epistemic/ affective stances?
2. What is the possible difference in the frequency of used tags and their function in the groups of Austrian students and craftsmen?
3. To what extent does the *tag*-related phenomenon and its underlying prosodic features highlight the role of gender in male interactions?

ID: 198 / TS4.4: 1
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: construction grammar, metaphor and metonymy, corpus linguistics, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: proper name construction, Germanic-Romance, comparative linguistics, meaning

Integrating discourse-based knowledge into the meaning of name-based word formation. The case of proper name conversion

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Starting from the definition of word formation construction as form-meaning pairs, this contribution investigates how their meaning can be modelled within the construction grammar approach to word formation (cf. Booij 2010; Sag et al. 2012).
In contrast to concrete nouns with a fully developed lexical semantics, proper names pose a challenge for word formation theory because they are semantically empty and therefore comprise different aspects of extralinguistic knowledge instead of lexical meaning (Hansack 2004). As contextual referents or unique identifiers, they strongly relate to the speaker's positive or negative attitude toward name bearers and also culture-specific knowledge about him/her (Nübling et al. 2015: 34). However, it is an open question how these evaluative and discourse-based aspects can be integrated into less productive name-based word formation patterns and how they interact in different proper names.
In this contribution, we use conversion of proper names in German and Spanish as a testbed to explore how discourse-specific aspects result in interpretations similar to adjectival readings in specific word formation constructions – in particular the construction [X + copula verb + intensifier + proper name].[Examples are listed under References]
As in (1) and (2), names whose prototypical function is reference, function as adjectives (Watanabe 2016: 40, Lauwers 2014: 218, 2020) by being placed in the adverbial degree construction (Frazer-McKee 2020), a position they should never occupy. Importantly, the conversion of proper names goes hand in hand with their metonymic use specified by the relation GENERIC FOR SPECIFIC (see Gonzálvez-García 2014: 282, Gonzálvez-García 2020: 159). Thus, only some parts of extralinguistic knowledge are relevant for the meaning of converted names. In this contribution, we argue that this is discourse specific and refers to context and culture specific knowledge as well as to attitudes toward the name bearers (Frazer-McKee 2020: 232). However, it remains unclear whether and how discourse-based knowledge varies across languages and how this variation affects the evaluation of name bearers.
Similar interpretations can be achieved via a combination with a bare noun. [Examples are listed under References]
However, the conversion of the noun as in (3) and (4) introduces a scale of comparison to a behaviour deviating from average expectations, including the speaker's attitude towards the situation. Still, the noun frame contains a subset of semantic features that evoke the intended meaning. Proper names differ from common nouns in that they lack a lexical frame (cf. Agolli 2023, Allan 2024, Soames 2002). Therefore, contextual information about the referent is necessary to provide features for a proper interpretation of the construction.
Based on a dataset of 400 occurrences for German and Spanish from social media (X/Twitter) and blogs (DWDS) we hypothesize that the conversion of proper names in both languages bear similar pragmatic functions (e.g. evaluation) but that types differ depending on extralinguistic properties. We provide a corpus-based taxonomy of evaluation types and argue that this kind of pragmatic knowledge should be integrated into the semantic properties of converted names.

ID: 197 / **GS_F2.1: 3**
Presentation
Topics: prototypes and categorization, pragmatics and cognition
Keywords: reference game, context, basic-level effect

Studying superordinate referring expressions with a concept-level reference game

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Introduction: We study referential communication about concepts at different levels of abstraction. Previous work identified two main factors that influence speakers' choice of referring expressions (REs) for concepts: the immediate context (Hawkins et al. 2018, Hawkins, Frank & Goodman 2020, Konopka & Brown-Schmidt 2014, Sedivy 2005) and a preference for basic-level terms, e.g. *dog* (Rosch et al. 1976). We use an interactive reference game to study the trade-off between these two factors in comprehension and production (see also Graf et al. 2016). Our novel concept-level reference game allows us to elicit superordinate REs experimentally and to investigate whether the basic-level effect occurs in production and/or comprehension.
Methods: We pair 120 participants on the web and assign each participant the speaker or listener role. Speakers need to find a label for two targets and listeners need to identify the targets based on this. We use two targets to ensure that speakers and listeners communicate about concepts and not about single objects (see Mu & Goodman 2021: for a similar game with artificial agents). We manipulate the conceptual context (CC) defined by targets and distractors within-subjects: In a fine CC, targets share the subordinate category and the closest distractor shares their basic-level category (dalmatian vs. other kinds of dogs). In the basic CC, targets share the basic-level category and the closest distractor shares their superordinate category (dog vs. other animals). In the coarse CC, targets share the superordinate category and the closest distractor is unrelated (animal vs. non-animals). We collect the produced REs and response times of both interlocutors.
Hypotheses:
1. Speakers tailor their utterances to the CC, i.e. to the combination of target and distractor objects (Gricean maxim of quantity, Grice 1975).
2. Speakers respond more quickly when they produce a basic-level term than terms at other levels (basic-level advantage in production).
3. a) Listeners are faster in responding to a basic-level term than terms at other levels (basic-level advantage in comprehension).
or b) Listeners are faster in responding to superordinate level terms than terms at other levels (Macé et al. 2009, Poncet & Fabre-Thorpe 2014).
Results: First, speakers are more likely to produce REs on the appropriate level compared to other levels of abstraction. We fit a series of Bayesian models using brms (Bürkner 2017). We find substantial evidence for differences between the basic and fine CC (M=1.39, CrI=[0.34, 2.34], pd=99.08%, 0% in ROPE) and between the coarse and fine CC (M=2.3, CrI=[0.33, 4.35], pd=99.11%, 0% in ROPE).
Second, we find that speakers are faster when producing a basic-level term than terms at other levels (M=-0.22, CrI=[-0.36, -0.10], pd=99.86%, 0% in ROPE). However, we find no substantial differences in response times for the listener.
Conclusions: Speakers tailor their utterances to the CC and usually use REs on the appropriate level. Importantly, we show that superordinate expressions become relevant when groups of objects need to be communicated. We reproduce the basic-level effect in production but not in comprehension. In conclusion, even though basic-level terms are most readily accessible, speakers tailor their expressions to the context, allowing listeners to identify the target concept.

ID: 145 / TS6.1: 1
Theme session proposal
Topics: construction grammar, corpus linguistics, language change and grammaticalization
Keywords: because X, because, causality

Non-finite causal constructions in English and beyond

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In order to express cause or reason, speakers of English have several constructions at their disposal: subordinate clauses such as (1), prepositional constructions such as (2), but also non-finite constructions known as *because* X (3) (Bergs 2018a) which will be the focus of attention of this thematic session.

(1) I can't come out tonight because I'll be playing Skyrim.

(2) I can't come out tonight because of Skyrim.

(3) I can't come out tonight because Skyrim. (Bailey 2012)

What formally distinguishes *because* X constructions (3) from canonical causal subordinate clauses with *because* (1), is primarily the absence of a finite verb form in the complement slot. While prepositional constructions (2) only allow nominal complements, *because* X constructions are characterised by a wider range of potential complements such as adjectives, adverbs, nouns, emojis or interjections (Bohmann 2016: 160). This distinct complementation pattern also raises the question of the category membership of the connector in these constructions and whether it is best analysed as a conjunction, as a preposition or as something else completely (Konvička 2018; 2023).

Although constructions of the type (3) can be found both in spoken and written contexts, social media seem to offer a particularly fruitful ground for their use. The context of conceptually spoken language is more tolerant towards deviations from standard norms (Bohmann 2016: 170) and more open to creative language use (Bergs 2018b: 286). For this reason, research on *because* X has so far focused on social media such as Twitter and more generally on computer-mediated communication.

Moreover, constructions formally and functionally equivalent to (3) are not only found in English, but also exist in other languages such as German (Wolfer, Müller-Spitzer & Ribeiro Silveira 2020; Konvička & Stöcker 2022), Dutch (Konvička 2018; 2019; Konvička & Stöcker 2022), Czech (Konvička 2020) or Finnish (Wessman 2017).

Against this backdrop, this thematic session aims at bringing together scholars interested in the study of non-finite causal constructions of the *because* X type from various methodological, empirical, theoretical, and comparative perspectives.

Research questions potentially addressed in this session might include, but are not limited to the following:

- How are *because* X constructions related to other ways of expressing causality and to other non-finite constructions?
- What role does context and register play for the use (and the spread) of *because* X?
- What mechanisms (e.g. ellipses, creativity, extravagance) can best account for the emergence of non-finite *because* X constructions?
- Given the existence of similar constructions in various languages, how can we tease apart the influence of language contact and independent, yet parallel developments in the languages other than English that also have constructional equivalents of *because* X?
- What methodological approaches are best suited to study these questions?

ID: 129 / **GS_W2.1: 2**
Presentation
Topics: construction grammar, constructicography, multimodality
Keywords: multimodal construction grammar, network approach, usage-based, qualitative

Oh multimodality, where art thou? On 'raised eyebrows' as a construction and its place in the constructicon.

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From a usage-based perspective, constructions can be defined as "emergent clusters of lossy memory traces that are aligned within our high- (hyper!) dimensional conceptual space on the basis of shared form, function, and contextual dimensions" (Goldberg 2019: 7). What is particularly notable of this definition is its avoidance of the term *linguistic*, which was used in an earlier version of Goldberg's definition of construction (see Goldberg 2006: 5). If the usage-based approach is taken seriously, Construction Grammar needs to account for "emergent clusters" other than syntactic ones, since spoken interactions are inherently multimodal (e.g. Feyaerts et al. 2017).

The present contribution aims at modelling one kind of non-syntactic, emergent cluster in English, i.e. raised eyebrows, within the constructicon based on the network approach outlined in Diessel (2023). Past research has shown that there is a symbolic relation between the 'hold' variant of raised eyebrows and meanings such as "I want to know more", surprise and displaying empathy (see e.g. Wierzbicka 2000). In addition to that, based on findings reported in Lehmann (2023), the present contribution will expand our knowledge on the network of associations existing between the raised eyebrow construction and the stance-related use of *Tell me about it*. A qualitative analysis of naturally occurring instances of requesting and stance-related *Tell me about it* reveals context-dependent subfunctions of stance-related *Tell me about it*, depending on whether the speaker raises their eyebrows. While stance-related *Tell me about it* with raised eyebrows seems to fulfil bonding purposes regarding serious matters, other uses of stance-related *Tell me about it* without raised eyebrows seem to fulfil other functions, like e.g. disaffiliation (when used with a head tilt) or emphasizing its humorous potential (when used with a smile). It will be argued that these qualitative observations provide evidence for the following: On a high abstraction level, stance-related *Tell me about it* is a schematic multimodal construction. This schematic construction has several daughter constructions, one of which is stance-related *Tell me about it* with raised eyebrows, which stands in a slot-filler relation with the raised eyebrows construction and is linked to the other daughter constructions of *Tell me about it* via horizontal relations. A snapshot of this part of the constructicon is visualized in Figure 1.

Figure 1: The network of associations between Tell me about it and raised eyebrows: (1) taxonomic relations, (2) horizontal relation, (3) slot-filler relation.

By exploring the relations between raised eyebrows and stance-related *Tell me about it*, the present contribution provides a showcase of how multimodal and non-syntactic constructions can be modelled within the network of constructions.

ID: 120 / **GS_W2.2: 1**
Presentation
Topics: pragmatics and cognition, multimodality, cognitive semiotics
Keywords: digitales Selbst, Identitätsarbeit, Metapragmatik, Multimodalität, Positionierung, Stance Taking

Digitales Stance Taking als Metasprachliche Identitätsarbeit in Sozialen Medien

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Die stetige Digitalisierung und die wachsende Bedeutung von sozialen Medien haben neue Dimensionen für die Positionierung und Identitätskonstruktion hervorgebracht, da das technische Interface verschiedene semiotische Ressourcen zur Verfügung stellt. Dies spiegelt sich in der Art und Weise wider, wie persönliche Meinungen online vermittelt und konstruiert werden. Diese Erkenntnisse werfen die Frage auf, wie der Positionierungsprozess bzw. das Stance Taking (Du Bois 2007; Spitzmüller 2013) von den Akteuren in einer digitalen Umgebung gestaltet wird.

In diesem Vortrag werden verschiedene theoretische Ansätze, darunter Metapragmatik (Silverstein 1993; Spitzmüller 2013), Multimodalität (Leeuwen 2005), narrative Identität (Lucius-Hoene & Deppermann 2000), digitales Selbst (Zhao 2005), Patchwork-Identität und moderne Kohärenz (Keupp 1997; 2003; 2005) näher betrachtet, um das digitale Stance Taking aus der konstruktivistischen Perspektive zu analysieren. Diese Forschung zielt darauf ab, ein tieferes Verständnis für die praktische Umsetzung des digitalen Stance Takings und dessen Auswirkungen auf die metasprachliche Identitätsarbeit zu entwickeln. Die Forschungsfrage konzentriert sich darauf, wie digitales Stance Taking in sozialen Medien umgesetzt wird. Dabei wird nicht nur der verbale, sondern auch der metasprachliche Aspekt von technischen Reaktionsmöglichkeiten wie Likes, Kommentaren und Shares beleuchtet.

Bei der präsentierten Untersuchung handelt es sich um ein Mixed-Methods-Studiendesign. Die in diesem Kontext relevanten Daten wurden mit einer Online-Umfrage erhoben und mittels einer deskriptiven Analyse und eines inferenzstatistischen Verfahrens ausgewertet. Eine solche Vorgehensweise ermöglichte einen empirischen Zugriff auf das digitale Stance Taking und die damit verbundene Identitätsarbeit, die in den sozialen Medien auf der metasprachlichen Ebene angesiedelt ist. Die Ergebnisse des Friedman-Tests haben darauf hingewiesen, dass signifikante Unterschiede in der subjektiven Wahrnehmung der metasprachlichen Reaktionsmöglichkeiten vorhanden sind, die sich auf die Art der ausgewählten Positionierung stützen und durch systematische Variationen innerhalb der gebildeten Cluster erkannt werden können (Lepka 2023).

Schließlich beschränkt sich der Vortrag nicht auf die statistischen Ergebnisse der Studie, sondern präsentiert auch das darauf basierende theoretisch konzeptionelle Modell, um einen umfassenden Einblick in die komplexen Prozesse des digitalen Stance Takings und der metasprachlichen Identitätsarbeit zu bieten (Lepka 2023). Die Grundannahme des Modells besteht darin, dass eine Online-Positionierung nicht nur in Bezug auf die Stances von anderen Akteuren stattfindet, sondern auch eine Ausrichtung in Relation zu den unterschiedlichen technischen Reaktionen (Like-, Kommentar- oder Share-Angaben) voraussetzt. Dies bedeutet, digitale Positionierung nicht nur auf der verbalen Ebene zu betrachten, sondern auch dahingehend, wie es mittels metasprachlicher Instrumente gestaltet wird. Dabei wird jeder technischen Reaktion eine Art der Positionierung (Zustimmung oder Ablehnung) aufgrund der subjektiven Wahrnehmung zugeschrieben.

ID: 206 / TS4.1: 3
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: construction grammar, prototypes and categorization, corpus linguistics, language change and grammaticalization, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: Construction Morphology, participles, adjectives, derivation, lexicalization

Ergebnisse von Derivation? Partizipiale Adjektive konstruktionsgrammatisch betrachtet

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Im Vergleich zu anderen Hauptwortarten wie den Verben und Substantiven ist der Kernbestand des Adjektivwortschatzes im Deutschen relativ klein. Um diesen Mangel auszugleichen, nutzen Adjektive hochproduktive Wortbildungsmittel wie Derivation, Konversion und Komposition (vgl. Selmani 2020: 10). Darüber hinaus erfolgt ein umfangreicher Rückgriff auf die Gruppe der Partizipien (z.B. *schreibend*, *geschrieben*).

In Bezug auf die Lexikalisierung (Lehmann 1989) von Partizipien zu Adjektiven wurden bisher zwei Wortbildungsprozesse angeboten: Derivation und Konversion. Da das Partizip I (PI) nicht an der Bildung periphrastischer Verbformen beteiligt ist, klassifizieren Zifonun et al. (1997: 2205-2206) PI als deverbale Adjektive. Partizipien II (PII) sind dagegen Bestandteil des verbalen Paradigmas, können jedoch mittels syntaktischer Konversion in den Wortschatz der Adjektive übergehen (vgl. Zifonun et al. 1997: 2211, Eisenberg 2013: 280-284).

Kontrastiv zu Zifonun et al. (1997) und Eisenberg (2013) wird in dem vorgestellten Dissertationsprojekt die These vertreten, dass nicht nur partizipiale Adjektive der Form PI, sondern auch PII das Ergebnis von Derivationsprozessen sind. Die prototypischen Wortbildungselemente *-(en)d* (PI) sowie *ge-* und *-t/-en* (PII) verkörpern folglich Derivationsaffixe. Der Terminus technicus ‚partizipiales Adjektiv' wird daher als reiner Formbegriff interpretiert und impliziert sämtliche Partizipien, die unabhängig von ihrem Lexikalisierungsgrad auf syntaktischer Ebene wie Adjektive agieren.

Um diese These zu erläutern, bedient sich der Vortrag eines konstruktionsgrammatischen Ansatzes nach Booij (2010). Im Sinne der Construction Morphology kann die Formseite prototypisch gebildeter partizipialer Adjektive nach folgendem Schema dargestellt werden:

(1) PI $[[V]_{Stamm}$ [*-en-*] [*-d*]$]_{ADJ}$

(2) PII $[[$*ge-*] $[V]_{Stamm}$ [*-t*]$]_{ADJ}$ bzw. $[[$*ge-*] $[V]_{Stamm}$ [*-en*]$]_{ADJ}$

Dagegen evoziert die Modellierung der Bedeutungsseite dieser Wortbildungskonstruktionen zahlreiche Fragen: Während prototypische Adjektive aufgrund ihrer Position zwischen Substantiven und Verben innerhalb des Wortartenkontinuums als Eigenschaftswörter mittlerer Zeitstabilität charakterisiert werden (vgl. Eichinger 2007: 163, Eisenberg 2013: 35), scheint partizipialen Adjektiven aufgrund ihrer Nähe zu den Verben eine geringere Zeitstabilität innezuwohnen. Es ist somit davon auszugehen, dass partizipiale Adjektive über eine andere abstrakte, kontextunabhängige Bedeutung verfügen als prototypische Adjektive.

Zur Überprüfung dieser Vermutung bedient sich das vorgestellte Dissertationsprojekt eines korpuslinguistischen Ansatzes. Es wird das Ziel verfolgt, die Bedeutungsseite prototypischer und partizipialer Adjektive in attributiver Position unter Anwendung einer semantischen Merkmalsanalyse zu erfassen und zu kontrastieren. Für die feature-basierte Analyse wird ein Datensatz von 5000 Belegen aus dem Kernkorpus (1900-1999) des Digitalen Wörterbuchs der Deutschen Sprache (DWDS, Geyken 2007) verwendet.

Erste Annotationsergebnisse zeigen, dass lediglich die Gruppe nicht-lexikalisierter partizipialer Adjektive deutliche bedeutungsseitige Diskrepanzen zu prototypischen Adjektiven aufweist. Lexikalisierte partizipiale Adjektive besitzen hingegen Merkmale, die eine mittlere und damit adjektivähnliche Zeitstabilität induzieren. Als wesentlicher Einflussfaktor konnte die Geschehensart (Leiss 1992) des dem partizipialen Adjektiv zugrundeliegenden Verbs identifiziert werden: Ein hohes Lexikalisierungspotenzial besitzen PI, die auf Zustandsverben zurückgehen, und PII, die auf Vorgangsverben basieren. Zudem lassen sich PII leichter zu Adjektiven lexikalisieren, da sie Abgeschlossenheit markieren (vgl. Eichinger 2007: 166-167).

Auf diesen Erkenntnissen aufbauend sollen im Rahmen des Vortrags folgende weiterführende Fragestellungen diskutiert werden: (1) Welche Vor- und Nachteile bietet die semantische Merkmalsanalyse zur Erfassung der Bedeutungsseite von Wortbildungskonstruktionen partizipialer Adjektive? (2) Wie können die Ergebnisse der semantischen Merkmalsanalyse genutzt werden, um partizipiale Adjektive auf einer Prototypikalitätsskala zwischen den Wortarten Adjektiv und Verb anzuordnen?

ID: 225 / **TS2.3: 2**

Theme Session: Second language learning and teaching of motion event constructions

Topics: motion and space, Theme session: Second language learning and teaching of motion event constructions

Keywords: motion events, path encoding, L2 German

Different L1s, similar paths? Motion event encoding by L1 Spanish and L1 Danish L2 users of German

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The present paper analyzes how L2 German users with different levels of proficiency and a V-language (Spanish) and an S-language (Danish) as L1 express the path component in the S-language German. Building on previous research on the encoding of motion events in an L2 (e.g. Cadierno 2004 & 2010, Filipović & Vidaković 2010, Jessen 2014, Treffers-Daller & Tidball 2016), this study sheds light on how the typological affiliation of the L1 and the level of proficiency in the L2 influence the characteristics of path encoding in L2 German. Additionally, it seeks to identify developmental patterns in both groups of L2 users.

To this aim, we analyzed written descriptions of 42 video clips depicting 14 different types of paths. Data were collected from 50 L1 Spanish and 43 L1 Danish users of L2 German (from A2 to C2 level), as well as from 33 native speakers of German, Spanish, and Danish. Our analysis extends beyond the traditional aspect of information locus and encompasses three additional key aspects of path encoding in German: the constructions for encoding path, the semantic, formal, and functional differentiation of path encoding devices, and case marking in prepositional phrases. The effect of the L1, the users' group (L1 vs. L2), and the proficiency in the L2 were statistically tested using GLMM models. The quantitative analysis was complemented by an in-depth qualitative analysis.

The results show that the typological classification of the L1 alone does not fully explain the characteristics of path encoding in L2 German and the challenges associated with it. Both L2 groups show similar locus and constructional preferences for path encoding. Furthermore, they do not differ significantly in terms of errors related to the formal and/or functional distinction of path encoding devices and to case marking in PPs. Although the influence of V-language Spanish is suggested by a more frequent use of path-encoding verbs and errors in the semantics of path devices, the differences between the two L2 groups are not statistically significant at all levels of proficiency. Similarly, the typological proximity between Danish and German is no guarantee that the encoding of the path component will proceed without obstacles, since intratypological differences, e.g. regarding the construction inventory, also pose challenges for L1 Danish L2 users of German. L2 German proficiency proves to be more influential than L1 typological classification, with both L2 groups improving their alignment with the German system in all aspects of path encoding analyzed as the proficiency increases. The data analysis also provides evidence for common features of learner varieties already observed in users of other L2s, including a preference for prepositional phrases and the frequent use of the verb *gehen* ('to go') (e.g. Bernini et al. 2006, Goschler 2019, Jessen 2014, Park 2008, Yılmaz, 2018).

Based on the results presented, the paper concludes with a discussion on the implications for teaching motion event constructions in L2 German, offering options that extend beyond the traditional focus on the semantics of prepositions and case marking.

ID: 110 / **GS_W2.3: 3**
Presentation
Topics: cognitive grammar, corpus linguistics, language processing
Keywords: probabilistic grammar, phonetics, acoustic analysis, mental lexicon

The effect of occurrence profile on the phonetic realization of English adjectives

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In usage-based approaches to linguistics it is a fairly established finding that (co-)occurrence probabilities of units on different linguistic levels are an important part of the linguistic knowledge of speakers, a notion sometimes referred to as "probabilistic grammar". Recently, phonetic analysis has shown that pronunciation variation may serve as a window on the effects of these probabilities and how they interact with lexical representation. It is this line of research that the present study contributes to.

One way in which occurrence probability may affect phonetic realization of words is via the likelihood to occur in a particular construction. For example, it has been shown that an increase of the probability of a certain syntactic construction may lead to a reduced articulation of words occurring in that construction (e.g. Gahl & Garnsey 2004; Tily et al. 2008), indicating that these probabilities are part of the knowledge of the speaker.

A second observation is that the occurrence of words in certain prosodic environments may "leak into" the representation of words, in the sense that phonetic effects of these environments are observable even outside of the contexts triggering them. For example, Tang & Shaw (2021) show that spoken words in Mandarin that frequently occur in prosodically prominent positions exhibit acoustic correlates of prosodic prominence beyond the specific context, suggesting that the lexeme-specific probability to occur in a given prosodic context may affect representation.

The present paper aims to test both of these possibilities in a case study on the phonetic realization of English adjectives, taking research by Bybee & da Souza (2019) as a point of departure. English adjectives offer an interesting testbed for studying these effects, as adjectives can occur in two syntactically and prosodically fairly distinct environments. One is as a modifier in attributive position, e.g. *the smart student,* the other post-verbally in predicative position, e.g. *the student is smart*. Interestingly, these two positions differ quite markedly in prosodic prominence and consequently phonetic realization. While most adjectives may occur in both of these positions, many exhibit markedly different biases. For example, the adjective *glad* has a strong bias toward predicative position, while adjectives such as *black*, or *big*, exhibit a strong bias toward attributive position.

It is investigated whether this lexeme-specific 'occurrence profile' of an adjective affects its pronunciation, drawing on data (3,350 tokens) extracted from the Buckeye Corpus of Spontaneous Speech (Pitt et al. 2007). The two aforementioned mechanisms give rise to two different hypotheses regarding the effects of occurrence profile. The first hypothesis is that adjectives occurring in their preferred position should be pronounced in a reduced fashion. The second hypothesis is that the typical environment of the adjective (predicative or attributive) should affect its pronunciation beyond the particular environment it occurs in. The results obtained yield evidence for the first but not the second hypothesis. This suggests that speakers store lexeme-specific probabilistic information about the occurrence in particular positions, yet no evidence is obtained for a "leakage" effect of the typical prosodic environment on lexical representation.

ID: 121 / **TS2.1: 1**

Theme session proposal

Topics: construction grammar, motion and space, applied linguistics and pedagogy

Keywords: motion event constructions, lexicalization patterns, thinking for speaking, second language acquisition, second language teaching

Second language learning and teaching of motion event constructions

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Cross-linguistic variation is well documented in the spatial language domain (Slobin 2004). Language-specific encoding preferences have been described in terms of lexicalization or conceptualization patterns (Talmy 1985; Treffers-Daller/Tidball 2016) and degrees of manner/path salience (Slobin 2004). For spontaneous motion, a major distinction is typically made between verb-framed (V) and satellite-framed (S) languages (Talmy 1985).

In V-languages, path is typically expressed in the main verb (e.g., *sortir* 'exit'), whereas manner is only expressed if highly salient; V-languages have smaller lexicons of manner-of-motion verbs (Slobin, 2004) and V-language speakers encode manner of motion less frequently than users of S-languages (Treffers-Daller/Tidball 2016). In S-languages, the root of the finite verb typically encodes manner of motion (e.g., *jump, swim, march*), while path is expressed in satellites, e.g., directional adverbs, verbal prefixes/ particles, prepositional phrases (Madlener-Charpentier/Liste Lamas 2022); more than one satellite can be attached to one motion verb, resulting in complex/dense path descriptions (Zlatev et al. 2021).

The language(s) speakers grow up with shape(s) these speakers' information processing routines and their attention to specific components of event construal (*Thinking for Speaking,* Slobin 1996, or *learned attention,* Ellis 2006). Children respect and apply the main lexicalization patterns of their first language (L1) from early on (cf. Harr/Hickmann 2016). Processing routines established and strongly entrenched in the L1 may be difficult to restructure when learning additional languages (L2) later in life (so-called *Re-Thinking for Speaking,* Ellis & Cadierno 2009), if L1 and L2 categories or constructions diverge.

Speakers of V-languages learning an S-framed L2 may particularly struggle with adapting to higher degrees of manner salience (e.g., De Knop/Gallez 2013); yet, what is challenging for them is not to learn the large repertoire of manner verbs typical of S-languages, but to use these manner verbs together with path adverbials in compact, information-dense utterances (Yilmaz 2017). In contrast, speakers of S-languages learning a V-framed L2 may particularly struggle with the so-called boundary crossing constraint (Özçalışkan 2015), which excludes the use of manner verbs in translational bounded motion constructions (e.g., Muñoz & Cadierno 2019).

This panel brings together experts in second language acquisition research and second language pedagogy in order to discuss (1) cognitive linguistic and usage-based research in the domain of motion event encoding in L2 acquisition and use (e.g., constructional preferences, challenges, intra-individual variation, L2 gesture), and (2) corresponding implications and options for the L2 teaching of motion event constructions in different settings and for different target languages.

Potential contributors to this theme session, some of whom already participated in a prior panel at ICLC16, 2023, include (but are not limited to) Sabine de Knop (emerita, Brussels, BE), Françoise Gallez (Louvain, BE), Teresa Cadierno (Odense, DK), Luna Filipovic (Davis, US), Jacqueline Laws (Reading, UK), Jeanine Treffers-Daller (Reading, UK), Gale Stam, (emerita, Chicago, US) Alberto Hijazo-Gascón (Norwich, UK), Rosa Alonso (Vigo, ES), Elsa Liste Lamas (Winterthur, CH), Alexandra Zepter (Köln, DE), Christina Piot (Liège, BE/Lille, FR), Laura Peiró Márquez (Zaragoza, ES), Wojciech Lewandowski (Potsdam, DE), Nataliia Vesnina (Aarhus, DK).

ID: 171 / GS_W1.3: 1
Presentation
Topics: construction grammar, metaphor and metonymy, corpus linguistics
Keywords: Construction grammar, corpus linguistics, cognitive linguistics, German, Spanish

"Das kannst du einem erzählen, der sich die Hosen mit der Kneifzange anzieht", "No me vengas con milongas". Eine konstruktionsbasierte Studie aus kontrastiver Sicht (deutsch-spanisch)

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Der vorliegende Beitrag behandelt die Sprechakte KRITISIEREN, ABLEHNEN/ZURÜCKWEISEN UND TADELN in der deutsch-spanischen Phraseologie anhand einer Korpusanalyse von Phrasem-Konstruktionen. Dieser Beitrag verfolgt im Rahmen des Forschungsprojekts CONSTRIDIOMS das Ziel, Gesetzmäßigkeiten der Konzeptualisierung der obengenannten Sprechakte in beiden Sprachen zu erschließen und zu vergleichen. Das empirische Material für die kontrastive Analyse von Phrasem-Konstruktionen wird aus den Textkorpora Sketch Engine, *PaGeS* sowie Printwörterbuchern der letzten zwei Jahrzehnte entnommen.

Die Analyse beschränkt sich auf Phraseologismen wie dt. *Das kannst du deiner Großmutter erzählen, Das kannst du einem erzählen, der sich die Hosen mit der Kneifzange anzieht, Du kannst mir (mal) im Mondschein begegnen/mich am Abend besuchen;* esp*. Cuéntaselo a tu abuela/a tu padre/a tu madre/a tu tía/a un guardia/al nuncio; No me vengas con cuentos/historias; Que te vayan dando; Que te den*, *que te zurzan*, etc. Diesen Beispielen unterliegen unterschiedliche Konstruktionen [*das kannst du* X *erzählen*], [*no me vengas con* X], deren Slots gefüllt werden müssen, wobei ihre Besetzung bestimmten semantischen und kognitiven Restriktionen Rechnung trägt. Dabei ist der Hinweis aufschlussreich, dass diese Phrasem-Konstruktionen als Ganzes eine lexikalische Bedeutung aufweisen (Dobrovol'skij 2011).

Diese Beispiele werden im Sprachbewusstsein durch zahlreiche Bilder aktiviert. Oft werden Sachverhalte kritisiert, welche als unglaubwürdig erscheinen, so dass häufig Ausdrücke mit dem Verb *erzählen* metaphorisch zur Sprache gebracht werden (*das kannst du deiner Großmutter erzählen*). Manche Ausdrücke werden in vielen Fällen im Spanischen mit Bewegungsverben in Verbindung gebracht (WEG-Metapher, Baldauf 1996: 471; Gläser 1986: 142), um zu einem bestimmten Zweck zu gelangen*,* (*no me vengas con milongas*). Darüber hinaus verweist die CONDUIT- Metapher auf die Tatsache, dass Wörter (Ideen, Gedanken, Bedeutungen, Gefühle) als Behälter fungieren, in denen Information deponiert wird, mit dem Ziel, sie dem Gesprächspartner zu senden (Reddy 1979: 287). Um die Abwertung und Erniedriegung des Adressaten zu erreichen, werden oftmals pejorative Lexeme als Metaphern verwendet, welche aus dem Bereich der Religion, der Fäkalien oder aus dem sexuellen Bereich stammen (*Geh zum Teufel/zur Hölle/zum Kuckuck; vete al cuerno, al diablo, a la porra*).

ID: 152 / **GS_T3.3: 1**
Presentation
Topics: pragmatics and cognition, language evolution
Keywords: speech pauses, cognitive state attribution, cooperation, cooperativeness, experiment

Cooperation, Cognition and the Sound of Silence: The Role of Inter-Turn Speech Pauses in Assessing Cooperativeness

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Language and cooperation are closely intertwined aspects of human social interaction, with language serving as an important tool in the assessment of the cognitive state of potential cooperation partners (Fox Tree, 2002; Brennan & Williams, 1995). Since pauses between turns of a conversation perform important social-communicative functions, we argue that one of these functions is that they aid in this assessment.

We support this with data from an experiment testing how listeners use the duration of inter-turn speech pauses to assess others' knowledge, confidence and willingness to grant requests – all of which are highly relevant when evaluating others as potential cooperation partners (Authors, 2023; Authors, in prep). We hypothesized that, in general, speakers making long pauses would be regarded as less apt and willing (Roberts & Francis, 2013) but that listeners would be more tolerant towards long pauses in non-native speakers. This is because in non-native speakers, long pauses may result from prolonged cognitive processing when answering in a non-native language (Cenoz, 2000; Guyer et al., 2019) rather than from a lack of knowledge or willingness. Crucially, since evaluating others' cooperativeness is important across cultures, and pause production and perception are similar cross-linguistically (Matzinger & Fitch, 2021), we predicted similar effects across languages.

In our experiment, 100 native Polish-speaking raters listened to short staged conversations, during which a speaker asked questions or made requests that were answered or granted by either native speakers of Polish or native Chinese-speaking non-native speakers of Polish. The pauses before the answers were manipulated to be either short (200 ms) or long (1200 ms; Roberts & Francis, 2013; Dingemanse & Liesenfeld, 2022). After listening, the raters judged each respondent on their knowledge, confidence and willingness. To test for cross-linguistic similarities, we replicated the experiment with Chinese raters and the two languages reversed.

Our results suggest similarities across languages and cultures: as predicted, Polish and Chinese raters perceived native speakers making long pauses as less knowledgeable, confident and willing. Also, for both rater groups, linear mixed effects models revealed a mediating effect of non-native accent on perceived willingness (interaction: pause duration * accent: $p < 0.001$ each), but not on knowledge and confidence. A potential reason for the difference between the findings on willingness versus knowledge and confidence is that requests may be more socially engaging and more directly relevant for interpersonal cooperative interactions than knowledge that reflects on partners' competence but not cooperativeness. The raters may therefore have evaluated willingness more carefully.

To further support the point that pauses may serve a general function of allowing for the assessment of cooperativeness, we will also show results from a follow-up study testing whether similar relationships hold if participants don't know the language spoken in the conversations. We predict that, since short pauses are honest and hard-to-fake signals, they will be more reliable indicators of others' cooperativeness compared to the semantic content of utterances that can easily be manipulated (Wacewicz & Żywiczyński 2012). Thus, understanding the content of the answers should not play a pivotal role.

ID: 187 / **TS3.2: 3**

Theme Session: Cognitive approaches to written language

Topics: language processing, multimodality, writing systems, cognitive semiotics

Keywords: grapholinguistics, writing systems, pictography, graphematic transparency, semiotics of writing

'Every language gets the writing system its users can process': Exploring the relation between the linguistic and processing fits

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It is a trivial observation that ideally, writing systems should not only structurally and typologically suit the respective languages they provide with a written form (this is their 'linguistic fit') but that they also be physiologically, psycholinguistically, and cognitively manageable for readers and writers ('processing fit'). While the cognitive reality and significance of certain isolated features of writing systems has been the subject of psycholinguistic research (an example being their phonographic [in]transparency or 'depth', cf. Katz/Frost 1992; for more features, cf. Daniels/Share 2018), the interaction between the structural and cognitive perspectives calls for more comprehensive – and systematic – research. In this talk, which is situated in a functionalist, usage-based grapholinguistic framework rooted in semiotics (Meletis 2020), it is argued that studying the intricate relations between the linguistic and processing fits can potentially explain why writing systems are structured the way they are by shedding light on the following questions:

- Diachronically, how has human processing pressure influenced the structures found in writing systems (cf. Dehaene 2009), and how have different structural features affected each other (such as *type of writing system > inventory size > graphic complexity*, cf. Miton & Morin 2021)? And, as a result, how predictable is grapholinguistic change?
- Synchronically, how does the structure of writing systems influence users' processing of them – and how is this affected by language-specific features (cf. Pae & Wang 2022, Winskel 2022)? As a result, are some systems cognitively more demanding or 'difficult' than others – if so, why and how? How do these systems or how do their users compensate for this? Does every language get the writing system it 'deserves' and/or that its users can process?
- Are there cognitive universals of (processing) writing, and what could they be (cf. Handel 2019)? How do they fit into the tension between formal and functional universality vs. diversity/variation across the world's many writing systems?
- What role do sociolinguistic factors play (the so-called 'sociocultural fit'), and how do they interact with or even override the linguistic and processing fits?

To explicate these questions (and preliminary answers to them) with specific examples, this talk focuses on three cross-grapholinguistically recurring semiotic principles: (1) iconicity (especially pictography, but also diagrammaticity), (2) transparency, and (3) figure–ground (which includes, for example, the varying sizes or spatial positions of graphic units in relation to their function in a given system and its use).

At a metalevel, and at the end of this talk, it is discussed how the aspects mentioned and examples provided concern also the very core of the question of how emerging cognitive approaches to grapholinguistics can (and should) effectively operate as well as what they can achieve. This invokes the 'deadly sins' of cognitive linguistics that should be avoided (Dąbrowska 2016) such as downplaying the variation found in the world's writing systems (Kim & Tjuka 2024).

ID: 195 / **TS2.1: 3**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions

Keywords: motion events, L2 acquisition, production, boundary-crossing constraint, Italian, German

The acquisition of motion events construal by German learners of L2 Italian: Do learners adapt to new lexicalization patterns and semantic constraints?

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In this study, we investigate the acquisition of motion event construal by speakers of a satellite-framed language (German) who learn a verb-framed language (Italian), based on Talmy´s typology (1983). We investigate whether German learners of Italian show differences in their lexicalization preferences compared to native speakers of Italian, and whether learners adhere to the boundary-crossing constraint (Slobin & Hoiting 1994). To answer these questions, we conducted a video-description task eliciting 16 boundary-crossing and 16 non-boundary-crossing motion constructions. A total of 37 participants took part in the task (20 native speakers of Italian — mean age: 22.5; and 17 upper-intermediate German learners of Italian — mean age: 36.1).

The results of a GLMM show that L2 learners overproduce satellite-framed constructions compared to native speakers (β=-2.54, SE(β)= 0.51, z=-4.95, p<.001), but that they adhere to the boundary-crossing constraint, by producing more satellite-framed constructions when describing non-boundary-crossing than boundary crossing events (β=-1.48, SE(β)= 0.54, z=-2.76, p = .006). Follow-up analyses revealed that with higher exposure to other VF languages – including Italian – the use of SF constructions by L2ers decreased (β=-0.66, SE(β)= 0.31, z= 2.12 p = .034).

These results suggest that learners rely on their L1 when encoding motion events in the L2, but that they are also sensitive to frequency distributions in the L2 input, as their productions suggest a sensitivity to the boundary-crossing constraint. The findings also indicate that exposure not only to the target language, but also to typologically related L2s might play a role in the acquisition of motion event construal.

ID: 228 / **TS1.1: 3**

Theme Session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Topics: Theme session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Keywords: English language teaching, cognitive corpus linguistics, multi-word verbs, phrasal verbs, prepositional verbs

Applying cognitive corpus linguistics to multi-word verb pedagogy

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Following Gilquin (2022a, 2022b), applied cognitive corpus linguistics (ACCL) can be defined as the integration of theoretical principles, methodologies, and datasets from cognitive linguistics and corpus linguistics to enhance foreign language pedagogy. The appeal of this framework lies in the unique and complementary affordances that each discipline can bring to language education. Cognitive linguistics, for instance, offers a perspective of language as semantically motivated, which in turn creates opportunities for teachers and learners to consider connections between form and meaning. Corpus linguistics provides access to authentic and contextualised input that can be exploited in various ways to draw learners' attention to behaviours and patterns in particular language features, be they grammatical, lexical, or discourse-related. However, there are questions surrounding the feasibility of ACCL. In particular, researchers have expressed concerns about the complexity of applying the framework within 'real-world' language teaching contexts (see Gilquin 2022b). This paper aims to address some of these concerns and present an ACCL proposal for teaching multi-word verbs in a general English language course for adults.

As Gilquin (2022b: 2) has pointed out, "there is no magic recipe for learning languages", and ACCL is no exception. Application of the framework requires expertise from the teacher, can be time-consuming to develop and integrate into classroom practice, and may also be considered somewhat niche in the sense that it is not suitable for addressing every language aspect. Nevertheless, ACCL is appealing for multi-word verb pedagogy. As will be observed in this teaching proposal, both cognitive and corpus linguistics offer a good amount of multi-word verb related research that is relevant to English language teaching (Biber et al., 1999; Liu, 2011; Llopis-García, 2024; Luo, 2019; Martin-Gilete, 2022; Tyler & Evans, 2003; Tyler, Mahpeykar & Tullock, 2020). In the proposal's preparation stage, these research insights help to establish which aspects of the phenomenon would be the focus of instruction; this includes factors related to frequency in language use, the relationships between the multi-word verb components (i.e. lexical verbs, particles, prepositions), their degree of polysemy, and semantic transparency-opacity. Later, in the implementation stage, a cognitive linguistic perspective is integrated into data-driven learning activities (Boulton & Pérez-Paredes, 2024). Each activity addresses a selection of target multi-word verbs associated with a high-frequency particle. The lessons aim to increase learners' awareness of motivated polysemy via concentrated exposure to the target language and semantic-structural elaboration (Barcroft, 2002). The primary contribution of this paper lies in its comprehensive detailing of the key concepts and practical aspects for integrating ACCL into multi-word verb pedagogy. This proposal is currently under development and will be implemented with students in the coming academic year.

ID: 217 / **TS2.2: 3**

Theme Session: Second language learning and teaching of motion event constructions

Topics: cognitive grammar, language processing, cognitive typology, motion and space, applied linguistics and pedagogy, cognitive sociolinguistics, Theme session: Second language learning and teaching of motion event constructions

Keywords: cognitive linguistic, italian, L2 learning, motion event constructions, perfective auxiliary

The encoding of motion events in the Italian of Czech, Slovak, and American English users

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Research on the application of cognitive linguistic to L2 pedagogy has thrived in the past twenty years, yielding important results (e.g., Achard & Niemeier 2004; Masuda, Arnett, & Labarca 2015; Tyler 2012). The encoding of motion events is a central theme in this research since it addresses important linguistic features (e.g., deixis, manner of motion, auxiliary selection) which call into question key aspects of the way we conceptualize and encode experience. Our study contributes to the rich current research on L2 learning and teaching of motion event constructions with an analysis of the selection of the perfective auxiliary with Italian motion verbs, a topic that remains under-investigated.

Italian motion verbs are divided into two sub-category: *unaccusative* (e.g., *arrivare* 'to arrive', *uscire* 'to go out') which select the auxiliary *essere* 'to be', and *unergative* (e.g., *camminare* 'to walk', *passeggiare* 'to stroll') which, on the other hand, select the auxiliary *avere* 'to have'. The selection of the auxiliary also reflects the semantic characteristics of the different motion verbs involved (e.g., agentivity, telicity; cf. Sorace 2000) and the image schemas they reflect (Russi 2023). In particular, telicity concerns the presence or absence of a boundary (or *telos*) delimiting the represented event, which is part of the lexical semantics of unaccusatives (e.g. 'going out') whereas it is missing in that of unergatives expressing manner of motion (e.g. 'strolling').

Our study constitutes the first investigation of the modalities of the acquisition of Italian motion events by Czech and Slovak native-speaker students vis-à-vis American English native-speaker students. Our analysis is based on data collected in undergraduate lower division courses of Italian language at the University of Texas at Austin (USA) and Masaryk University (Czech Republic). Data collection was cross-sectional and based on a well-established elicitation technique in acquisitional research, namely a descriptive-narrative task developed around Mayer's (1969) 'Frog story' (Berman & Slobin 1994; Slobin 2004; among many others). This text consists of 29 black-and-white drawings showing the adventures of a child and his dog searching for a frog that has run away from them. The visualizations of the plot provide the reader ample space for a detailed description of what is happening (Slobin 2004). Concerning the phenomenon under analysis (i.e., verbs denoting motion events), we selected 20 images which clearly illustrate a change in movement. During class, students were first given five minutes to independently reconstruct the story; then, while they continued to observe the selected images, students were asked by the interviewers questions about the images using verbs in the past tense only; the basic starting question was "Describe what you think happened and why". The students' answers were audio recorded, subject to informed consent, then transcribed into text for analysis. Preliminary analysis of the data shows, for both English-speaking and Czech/Slovak-speaking learners, cases of correct auxiliary selection, cases of overgeneralisation of one at the expense of the other, and cases of omission, according to a distribution that partly reflects the characteristics of the learners' respective L1s, and partly could be explained by the characteristics of the motion event involved.

ID: 213 / **TS3.3: 3**
Theme Session: Cognitive approaches to written language
Topics: language processing
Keywords: Cross-modal comparison, Written language production, Typing, Orthographic processing, Morphology

Typing morphology – A keyhole into processing?

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In recent years, evidence has accumulated that the timing, dynamics, and accuracy of typing are influenced by lexical and sub-lexical variables. In other words, typing timing and accuracy appear not to be determined solely by random variation or by non-linguistic factors such as typing experience or the location of keys on the keyboard. Instead, existing evidence suggests that typing as a peripheral process might be comparable to articulation in being a window into the processing architecture and the linguistic units involved in language production. Comparable to acoustic duration in speech, interkey intervals (IKIs) appear to be susceptible to manipulations of, for example, word, constituent, bi- and trigram frequencies, semantic transparency, prosodic boundaries, or syllable structure (e.g., Baus et al. 2013; Fuchs & Krivokapić 2016; Gagné & Spalding 2016; Will et al. 2006). Studies that focus explicitly on the influence of morphological structure in the writing process, on the other hand, are still rather scarce (Hess et al. 2022: 900). In a direct comparison between articulation and typing — the first of its kind — Muschalik et al. (forthcoming) fail to find a morphological effect in pseudoword typing. A significant difference emerges, however, for the typing of auxiliary clitics, suggesting that processing units other than morphemes might be dominant in typing. Alternatively, morphemes could be activated as processing units at an earlier stage, rendering their processing largely complete before writing begins (e.g., Breadmore & Deacon 2019; Quémart & Lambert 2019).

The present follow-up study probes the validity of these results and tests whether a comparable null effect of morphological structure can also be found for English real word items. We use a reading-and-retyping paradigm, in which participants type single morphologically complex and simplex words, employing derivational affixes that trigger resyllabification in the derivative. This is done to disentangle effects of syllabic versus morphological structure, which were previously often confounded (Gagné et al. 2023: 101 ff). Following Hess et al. (2022)'s line of argumentation for handwriting, we assume that the timeline of the typed production of our stimuli reveals some of the underlying processing. In other words, typing delays at different linguistic boundaries can give us more insight into the units involved in processing. In order to gain additional insight into the exact locus of potential effects, we investigate the temporal structure of our responses across several measuring points, including the typing onset and interkey intervals in three conditions: pure letter transitions (non-morphemic boundaries), morphemic boundaries, and syllable boundaries. We analyze our data using multifactorial statistical modeling, which is appropriate for handling the large number of complex covariates and potentially noisy data. Our results are then discussed in relation to existing results and current theories of (written) language production, such as Kandel (2023).

ID: 160 / **GS_T1.2: 1**
Presentation
Topics: corpus linguistics, language change and grammaticalization
Keywords: World Englishes, grammaticalisation, statistical modelling, habitual aspect, salience

Modelling grammaticalisation trends in World Englishes: Macro-level or micro-level explanations

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In recent usage-based research on World Englishes, a gap has become apparent between major theoretical models, such as those by Kachru (1985) and Schneider (2007), and the increasingly sophisticated statistical models that seek to verify these theories but often fail to do so (see Hundt 2021 for a survey). The present investigation carries this issue to the intersection of World Englishes and grammaticalisation research, with a case study in the domain of habitual aspect. Based on the probabilistic usage profiles of the habitual auxiliary [*used to* V] (1) and its non-standard variants (2) in 13 varieties that are part of the International Corpus of English (ICE; Greenbaum and Nelson 1996), we conducted a hierarchical agglomerative cluster analysis (Levshina 2015).

(1) *All those civil servants who used to speak in an impeccable monetarist dialect suddenly changed.* (ICE-GB: written)

(2) *Will you use to be more authoritative than than Martin and I … [?]* (ICE-HK: broadcastDISCS)

This quantitative analysis yields inconclusive, "mixed" results. On the one hand, the generated variety clusters are partly compatible with Kachru's typology (Inner Circle vs. Outer Circle varieties). On the other hand, they do not consistently align with any of the following three macro-level trends that have been postulated in the literature and that may shape expectations about grammaticalisation patterns in World Englishes: the colonial-lag hypothesis (e.g. Schreier 2019), the hypothesis of contact-induced innovation (e.g. Onysko 2016) and the epicentre hypothesis (e.g. Peters & Bernaisch 2022).

In line with Hundt's (2021) argument that the discrepancy between theoretical and statistical models derives partly from the fact that they target language structure at different levels of granularity, we qualitatively search for micro-level explanations of the behaviour profiles attested in the individual English varieties. Specifically, we consider properties of habitual aspect in the major contact languages of each L2 English, as they provide concrete potential for structural transfer (e.g. the "tense"-flexible habitual marker 開 in Cantonese as a likely motivation behind the structure given in Example 2 from Hong Kong English). Categorically unique structures such as future-time *will use to* in Hong Kong English or contracted *usen't* in Irish English may be considered indicators of structural nativisation. In the present case study, these unique and non-standard features, however, occur with very low token frequencies, which makes them prone to have little impact on statistical clusters, despite potentially being salient shibboleths for speech-community membership. In other words, such structural features may well be the linguistic reflexes of identity constructions shaping newer Englishes, but they can easily escape probabilistic modelling.

Finally, what the present case study highlights as well is that, although grammaticalisation processes tend to be fairly predictable in the sense of their strong inherent directionality of change, purely synchronic reconstructions of how conservative or innovative a grammatical marker of a given variety is are easily error-prone (e.g. is present-tense *use to* in Nigerian English a conservative relic and or a reinvention?). This underscores the methodological need for more diachronic/historical corpora for researching post-colonial Englishes (e.g. Brato 2019).

ID: 113 / **GS_W1.1: 2**
Presentation
Topics: frame semantics, discourse analysis, pragmatics and cognition
Keywords: pragmatic frames, context, discourse analysis, stancetaking, punk

Elaborating pragmatic frames: how they can be used to model stancetaking in punk discourse

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One of the major challenges of current Cognitive Linguistics is the role of social, pragmatic, and contextual factors (cf. Desagulier & Monneret 2023). In recent years, cognitive linguists approached this issue firmly, both in theoretical (e.g. Schmid 2020) and practical (e.g. Panther 2022) terms. Being a major theory within Cognitive Linguistics, Frame Semantics (cf. Fillmore 2014) is at the heart of this talk. I will address the issue of how pragmatic frames which have been dwelled upon in Frame Semantics only recently (Czulo, Ziem & Torrent 2020) can be used to account for the communicative function of utterances made by actors in punk discourse. By doing so, insights into the powerful contextual constraints that pragmatic frames are subject to are provided.

Frames are conceptual units structured by frame-specific semantic roles, i.e. frame-elements (FE). They are evoked by both linguistic and non-linguistic units (e.g. lexical units, pragmatic expressions, and image schemas). Focusing on the present debate on sexism in the punk scene of Germany (cf. AUTHOR 2023) this talk exploits an empirically driven offspring of Frame Semantics, the German FrameNet-Constructicon (Ziem et al. 2019, Ziem 2020), for the study of discourse in the vein of German discourse linguistics following Michel Foucault (cf. Spitzmüller & Warnke 2011). The case study presented here is based on a corpus comprising 152 units of written and spoken text published by members of the punk scene between January 2020 and December 2022.

First, I will show that actors first and foremost address the concepts Punk and Feminism, making recourse to mainly three types of linguistic patterns: *x is y, x means y*, and *x is about y*. For instance:[1]

(1) *Punk – to me – is solidarity, equality in every way, no rivalry.*

(2) *Feminism does not only mean fighting.*

(3) *Feminism is not equivalent with hate for men, it's about equality and self-determination.*

Second, drawing on adequate theories from social psychology and sociolinguistics I will show that the communicative function of many of these instances can be described as stancetaking and positioning (cf. Bamberg 2005, Du Bois 2007, Jaffe 2009). Third, I will address the question of how these practices can be captured drawing on frame-semantic methodology. For instance, the prepositional phrase *to me* in (1) arguably functions as a positioning cue and evokes the pragmatic frame Self-positioning[2]. The PP incorporates the FE Self-positioned, with the other FEs being Issue (instantiated by *punk*) and Position (*is solidarity, equality in every way, no rivalry*). However, given that examples like (2) and (3) do not contain such a clear positioning cue and since frame-semantic annotation always requires identifying a frame-evoking element, it will be argued that the evocation of a pragmatic frame in examples like (2) and (3) is governed by a wide range of contextual factors, like situational, (sub)cultural and discursive context. Thus, the presented analysis bears important implications for future in-depth research on pragmatic frames, among others the necessity to go beyond the boundaries of sentences and texts.

[1] Utterances are translated from German.

[2] Cf. german-construticon.de [retrieved 05/01/24].

ID: 116 / GS_T3.3: 2
Presentation
Topics: cognitive grammar, cognitive phonology, writing systems
Keywords: temporal cognition, performance structures, emotivity

WOW!!!, Hä!?! and Hallo :):) – temporal cognition, German interjections, and emotively encoded performance structures

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The psycholinguistic concept of performance structure refers to the temporal organisation of sentences. It focusses on predictive schemes for the temporal structure of speech and involves the degree of cohesion between words in an utterance (Zellner 1994). Performance structures thus form an important part of temporal cognition. They are correlated with prosodic structures (Abney 1992), such as functional pauses (1), syllable prolongations (2) and overall timing structure (3a vs. 3b). This paper deals with the intuitive marking of interjections as emotively encoded performance structures in texts which are conceptually oral (Koch/Österreicher 1986).

(1) **WOW!!!** das kapitel hat es wirklich in sich, wie ich finde. (www.fanfiktion.de)
'INT!!! the chapter is not to be underrated, I think.'

(2) und dann kommt auch noch Hedwig/Hicksy... Ich meine, **hallooo?** Hicksy? Wer braucht die denn?

'and then Hedwig/Hicksy comes too.... I mean, INTJ? Hicksy? Who needs her?' (fieselschweif.de)

(3a) Na so richtig kann er es mir nicht erklären **(!!Hä??!!)**, aber er denkt (!), das der Entkalker kaputt sei (forum.electronicwerkstatt.de)

He can not explain it to me (!!INT??!!), but he thinks (!) that the descaler is broken

(3b) **hä,** aber wieso? ich hab den doch schon gestern runtergeladen!!! (prinzalbert.de)

'INTJ, but why? but I have the already downloaded yesterday!!! '

The use of interjections is investigated in combination with the placement of multiple punctuation marks on the basis of two corpora of German, i.e. German Web 2020 (17.5 billion words) and German Web 2013 (16.5 billion words). The placement of multiple punctuation marks is independent of orthographic standards. Functionally, it encodes temporal structure, marking interjections as particularly emotive at the same time. The statistics of interjections marked up as single word plus multiple punctuation will be presented in order to demonstrate the routinised usage of interjections as both performance structures and emotive signs (Marty 1908). Figure 1 shows the four most frequently used combinations for initial German *hallo* 'hello', which account for about a quarter of the concordance (31,338 total frequency):

THE DIAGRAM COULD NOT BE PASTED IN THIS WINDOW

Figure 1. Marking of German *hallo* as a performance structure

Special markings in combination with interjections encode routinely produced and perceived functional pauses, which surface in writing. The data fit well with Martin's idea of subjective phrase structure, according to which language users cluster words subjectively; they may sort all but one of the words into a single cluster, leaving only one in isolation" (1970: 154). Interjections thus marked by multiple punctuation are extraordinarily prominent – a single punctuation mark would suffice to indicate a pause. The use of multiple punctuation marks instances of interjection usage like *Hallo :) :),* as emotive. This will be discussed as a temporally encoded clustering decision, dividing and marking up emotively highlighted interjections from the adjacent clause.

The results of the corpus analysis suggest a sensitivity on the part of language users to the connection between temporal cognition and emotive function. They also demonstrate that the intuitive use of interpunctuation is more than a reading aid.

ID: 190 / **TS3.2: 1**
Theme Session: Cognitive approaches to written language
Topics: writing systems
Keywords: grammaticalization, capitalization, writing, graphematics, German

Can (elements of) writing grammaticalize? The development of sentence-internal capitalization in German as a test case.

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The talk addresses the idea, repeatedly postulated in research literature, that capitalization in German has been grammaticalized (cf. Maas 2007: 388; Eisenberg 1996: 1451; Hübl/Steinbach 2011: 284-288; Weingarten 2013: 113; Nübling et al. 2017: 265-266). This postulate is based on the fact that the use of majuscules is clearly governed by grammatical-syntactic rules in the core area, requiring capitalization of every word at the beginning of a sentence and additionally of every noun or nominalization within a sentence functioning as the head of a noun phrase (e.g. Maas 1992: 156-172). While this synchronic evidence suggests that the use of capitalization underwent grammaticalization, this has not yet been tested against specific grammaticalization models (e.g., Lehmann [1982]/2015; Hopper 1991, Heine 2003, Narrog/Heine 2021).

The talk takes up the notion of grammaticalization and examines, using the example of the historical development of capitalization in German, particularly sentence-internal capitalization, whether and to what extent this theoretical model can be applied to (elements of) writing. It is demonstrated that the spread of capitalization follows the typical path of grammaticalization from discourse to grammar, evolving from an initially optional discourse-pragmatic marker for emphasizing textually important words to an obligatory grammatical-syntactic marker for sentence beginnings and especially heads of nominal phrases. The expansion of capitalization follows the grammaticalization stages described by Narrog/Heine (2021), from extension through desemanticization to decategorization: As capitalization gains new usage contexts (extension), an increasing desemanticization can be observed, as more abstract usage contexts are involved (e.g., text level: beginnings of texts, paragraphs > sentence level: beginnings of clauses > word level: heads of nominal phrases). This ultimately leads to a reduction in the syntactic scope of capitalization (i.e. its structural scope according to Lehmann 2015). In decategorization, further processes of grammaticalization can also be observed, including (a) obligatorization (capitalization evolving from a facultative means of emphasis to an obligatory grammatical marker), (b) fixation of capitalization on the word-initial position, and (c) paradigmaticization through the development of a functional opposition between capital and lowercase letters (cf. Heine 2003: 588, based on Lehmann [1982]/2015).

ID: 125 / GS_F4.1: 1
Presentation
Topics: cognitive grammar, construction grammar, corpus linguistics
Keywords: constructions, semantics, counterfactuals, corpus data, collostructional analysis, hierarchical configural frequency analysis

Counterfactual conditionals in American English: Beyond collostructional analysis

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While collostructional methods have always been based on the Distributional Hypothesis – the notion that distributional similarity/patterns reflect functional similarity/patterns – and have yielded an enormous amount of insightful results regarding constructions' functions, it is probably also accurate to state that these methods have underutilized the rich distributional information corpora have to offer. This is because collostructional methods as they have been used for 20 years are mostly univariate e.g., collexeme analyses looked at one variable slot (words, often verbs) in one construction (Stefanowitsch & Gries 2005: 5).

Here we propose a new multivariate extension that combines distinctive and (co-varying) collexeme analysis via a configural frequency analysis (considerably extending both Hoffmann et al. 2019 and Stefanowitsch & Flach 2020). This allows the analyst to identify associations not just of one slot to a construction or one slot to one other slot in one construction, but to include other features to identify (i) which constructions are preferred by which fillers in, now, one or more slots of one construction and (ii) which constructions are preferred by which (combinations) of one or more fillers.

We exemplify the method and its potential with an exploration of one counterfactual conditional construction traditionally neglected in the literature: privative counterfactuals. We take into account >2.1K privative counterfactuals [*if not for* $\_\_\__1$, *NP would* $\_\_\__2$], *[if it wasn't for* $\_\_\__1$, *NP would* $\_\_\__2$*]*, and *[if it weren't for* $\_\_\__1$, *NP would* $\_\_\__2$*]* from COCA. All instances of the three constructions were annotated for their semantics (e.g., whether the construction indicates a benefactive or malefactive meaning), the animacy of $\_\_\__1$ and the verb lemma and the polarity (positive vs. negative) of $\_\_\__2$ and submitted it to our new method.

The method identifies a variety of preferential patterns. For instance,

– *if not for …* is significantly attracted to the cluster {benefactives, noun phrases with any sort of animacy, detriment verbs (e.g., *die, kill, hurt*), positive polarity apodoses}, as in: *if not for him, I would have died*, but also significantly attracted to the cluster {malefactives, human noun phrases, state verb (e.g., *be*), negative polarity apodoses}, as in: *if not for you, I wouldn't be in this cold place*.

– *if it weren't for* … is significantly attracted to the cluster {malefactives, the verb lemma *know*, positive polarity apodoses}, as in: *if it weren't for you, I would have known how to become a good father*.

– *if it wasn't for …* is significantly to the cluster {benefactive, human noun phrase, the verb lemmas *be*, *have*, and *know*, negative polarity apodoses}, as in: *if it wasn't for Jackson, I wouldn't be the writer I am today.*

The above already indicates how the new method can identify preference patterns that none of the less 'high-dimensional' traditional approaches can see. We propose that the preference patterns characterizing *if not for*, *if it weren't for*, and *if it wasn't for* constructions can be explained by the semantic coherence principle (Goldberg 1995: 50).

ID: 136 / **GS_T2.2: 3**
Presentation
Topics: construction grammar, constructicography, corpus linguistics
Keywords: distributional semantics, cluster analysis, constructional network, V-ing

Identifying sub-constructions with distributional semantics: the case of V -ing

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The V-ing pattern described in *Grammar Patterns 1: Verbs* (Francis, Hunston & Manning 1996) consists of a Verb followed by another Verb in the "-ing" form. The *Grammar Patterns* entry presents several semantic groups for the pattern, such as the "start" and "stop" group, the "avoid" group, and the "try" group. Such semantic groupings can be used to split a given formal pattern into semantically distinct constructions in a constructionist framework.

While distributional semantic methods have been more commonly used in diachronic studies, several synchronic studies have used distributional semantics to analyse the semantics of constructional slots and cluster slot fillers (e.g. Gries & Stefanowitsch, 2010; Levshina & Heylen, 2014). This talk presents a case study which uses distributional semantics to identify semantically defined constructions belonging to the V-ing pattern. The study explores to which extent distributional semantic methods can support manual analyses by providing visual and quantitative evidence for the identification of semantic sub-constructions. In addition, it is examined how the analysis of several slots of the pattern can be combined to further explore the constructional sub-network.

After extracting instances of the V-ing pattern from the BNC, collexeme analysis (Stefanowitsch & Gries 2003) is used to identify the most strongly attracted fillers of the first and second slot. Intransitive and transitive uses are separated, and an additional object slot is included for the transitive uses. For each of the relevant target words identified through collexeme analysis, co-occurrence counts of nouns, verbs, adjectives, and adverbs within a context window are extracted from the WaCkypedia corpus. Distributional semantic models are created based on this context to map the target lemmas onto semantic vector spaces. In addition, models that take the syntactic context of the V-ing pattern into account are created: a model for target words of the first slot based on fillers of the second slot, and a model for target words of the second slot of the transitive pattern based on the fillers of the object slot.

Hierarchical cluster analysis and t-SNE visualisations are used to identify relevant semantic groups for each of the slots of the pattern. Covarying collexeme analysis (Gries & Stefanowitsch 2004; Stefanowitsch & Gries 2005) is used to identify associations between the slots and identify potential constructions of varying levels of semantic restrictedness and lexicalisation.

Preliminary results show that the model creates intuitive groupings of slot fillers, such as groups of verbs describing an emotional attitude (like, love, hate, …), and verbs describing the start, continuation, or end of an action (begin, start, cease, …). It is expected that combining clustered semantic groups and single fillers of different slots will yield semantically restricted as well as partially lexicalised construction candidates, such as a "posture + looking" sub-pattern (stand/sit/lie + gazing/looking/staring/watching) and a "come + chaotic/noisy movement" sub-pattern (come crashing/clattering/blundering).

ID: 142 / **GS_T2.1: 2**
Presentation
Topics: construction grammar, corpus linguistics, first language acquisition
Keywords: Construction Grammar, First Language Acquisition, Corpus Linguistics

Becoming flexible: Lexical flexibility in the acquisition of the ditransitive construction

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The ditransitive construction (example 1: *I give you an apple*) is one of the most cited constructions in construction grammar literature (Diessel 2019; Goldberg 1955, 2006, 2019; Hilpert 2014). There are several corpus studies on the acquisition of this construction (Campbell & Tomasello 2001; Ellis & Ferreira-Junior 2009; Ellis, Römer & O'Donnell 2016; Goldberg, Casenhiser & Sethuraman 2004). However, most studies focus on the acquisition of the English ditransitive while the construction's development in other languages is less thoroughly examined. Additionally, a host of studies in the usage-based framework show that complex constructions often develop from lexically specific, low-level generalizations and become more flexible over time (Dąbrowska 2000; Diessel 2004; McClure, Pine & Lieven 2006; Theakston, Maslen, Lieven & Tomasello 2012; Tomasello 1992).

But what does it mean for a construction to become more flexible? My study investigates the development of flexibility of the German ditransitive construction with regard to a range of factors, including word order, semantic content, and lexical flexibility (use of different lexical items) in the verb and argument slots of the construction. Analyses are based on the language data of Leo, a German-speaking child (available on CHILDES), who was recorded at home regularly between 1;11 and 4;11.

During this time, Leo produced over 400 ditransitive constructions. Regarding filler-slot flexibility, the number of different verb types used in the ditransitive construction increases over development, with the three most frequent verbs accounting for a larger proportion in the child's early constructions compared to his later constructions. At the same time, the argument slots become less flexible over time as the construction becomes more routinized. In particular, there is one highly frequent pronoun frame, the *I VERB you ACC.OBJ.* frame (see example 1 above), which accounts for a large proportion of all ditransitive constructions after the child's third birthday. There is evidence of a trade-off effect between the flexibility of the verb slot and the argument slots, with the frequency of the verb *geben* 'give' decreasing at the same time as the *I-you* pronoun frame becomes more frequent.

There is no clear increase in the flexibility of word order and the child seems to use the construction with almost adult-like word order flexibility from early on. A qualitative analysis of the first and last 50 ditransitive constructions by the child indicates that the semantic flexibility of the construction increases with development. Early ditransitive constructions are predominantly centered around prototypical verbs of transfer such as *geben* 'give', while later constructions are more often used with verbs that do not denote transfer in the narrow sense.

Overall, the usage-based notion that constructional flexibility emerges only gradually over development is not contested, but the mixed results of this study indicate that the development of constructional flexibility is a complex process and not all measures of flexibility develop along the same lines.

ID: 191 / **TS2.3: 3**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions

Keywords: motion events; multimodality; co-speech gesture; thinking-for-speaking

Is Sylvester running away or is he leaving quickly? Onomasiological study of the multimodal expression of motion events in French and Dutch as L1 and L2

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The typological differences between verb-framed (V-framed) and satellite-framed (S-framed) languages observed by Talmy (2000) have been shown to be reflected in co-speech gestures as well (e.g., (Kita & Özyürek 2003; McNeill & Duncan 2000; Ünal, Mamus & Özyürek 2023)). More specifically, these studies have found that the speakers of V-framed and S-framed languages do not encode the same semantic components in gestures (i.e., manner and path). Co-speech gestures should therefore be taken into account when studying the speakers' thinking for speaking patterns (Stam 2018). Against this background, our study aims at determining how motion events are expressed in speech and co-speech gestures by L1 French speakers, L1 Dutch speakers and CLIL[1] French-speaking learners of Dutch.

We conducted an elicitation experiment in which fifteen L1 French speakers, fourteen L1 Dutch speakers and fifteen L2 Dutch speakers recounted scenes from *Tweet Zoo* (1957). Using different taxonomies (Cadierno & Ruiz 2006; Kopecka 2006; Özçakalistan & Slobin 1999), we identify the semantic components (manner and path) encoded in the verbs and satellites. Gestures are classified as iconic, beat, metaphoric, deictic, or pragmatic ((Kendon 2004; McNeill 1992)). Iconic and deictic gestures are further analyzed regarding the semantic components of motion they convey (e.g., manner, path, ground) and their viewpoint (character vs. observer, (McNeill 1992)). Finally, we look at the combinations of semantic components in speech and gestures and at the synchronization between gestures and speech units following (Stam 2006).

In the present study, we opted for a qualitative approach by focusing on the descriptions of one specific fragment (hereby taking an onomasiological perspective on our data). The presentation will address the different multimodal constructions used to describe the following motion events :

Sylvester is rowing on a pond.

Sylvester jumps up.

Sylvester runs away.

The lion and the boat sink into the pond.

It will respectively highlight the inter- and intralanguage differences. For example, Figure 1 shows the Manner gesture that co-occurs with "*die zit zo te roeien met een stok*", and more specifically with the Manner verb *roeien* [row]. The handshape of the participant shows how Sylvester holds the stick and rows. By contrast, Figure 2 shows the Path gesture that co-occurs with "*avancer*" [to go forward] from the sentence "*on le voit avancer*." The participant draws the path with a pointing finger. In the French description, we only have Path elements whereas the L1 Dutch speaker only conveys Manner elements. This first comparative example already gives some clues on the interlanguage differences. By discussing similar examples, our talk thus aims to (i) map the variation in the expression of these motion events in French and Dutch and show how they can also differ from the expected patterns, (ii) show the different multimodal patterns typical of verb-framed and satellite-framed languages, and (iii) show the learners' interlanguage specificities.

[1] Content and Language Integrated Learning

Figures: Piot_Is Sylvester running away or is he leaving quicky_Onomasiological study of the multimodal expression of motion events in French and Dutch as L1 and L2.pdf

ID: 154 / **GS_F1.1: 1**
Presentation
Topics: metaphor and metonymy, language change and grammaticalization, language evolution
Keywords: experimental semiotics, metaphor, polysemy, interaction

An Experimental-Semiotic Approach to the Emergence of Metaphor and Polysemy in Interaction

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Where does the unlimited expressive potential of human language come from? Previous research has focussed on the important contributions of the massive size of the lexicon (Hurford 2012) and compositionality, which allows for the combination of lexical items to yield new meanings (Author 1 et al. 2022). However, another important factor in extending the range of expressible meanings is the process of meaning extension, by which lexical items become polysemous (Vicente & Falkum 2017). Polysemy is pervasive in modern language (Floyd & Goldberg 2021). The emergence of polysemy, extended meanings and the factors involved in it have been documented in historical linguistics, especially historical semantics (e.g. Allan & Robinson 2012). In such work, metaphorical extension has been shown to be a key factor in licensing semantic change (e.g. Sweetser 1990; Anderson 2017).

Here, we follow a novel methodology to investigate the processes involved in metaphorical meaning extension from the field of cultural evolution: The paradigm of experimental semiotics (e.g. Galantucci et al. 2012; Nölle & Galantucci 2023). In this paradigm, communicators have to create a shared communication system in the absence of a shared language. Given the task to communicate with each other in an interactive scenario, participants quickly negotiate meaningful symbols to communicate about referents. What is more, these symbols become increasingly structured over the course of continuing interactions via processes of interactive cultural evolution.

In this talk, we will present the results of a experimental-semiotic study in which participants first have to find ways to jointly refer to items by converging on a shared novel lexicon of meaningful symbols. In a second step, once an initial shared lexicon has been developed, participants will then be presented with a new meaning space for which they can only use the symbols for which they have created shared meanings in the first round of the experiment. Importantly, novel items will offer affordances for metaphorical association, thereby offering prompts for participants to spontaneously develop a polysemous shared communication system. That is, it will be possible to link novel referents from the second round to acquired meanings from the first round via metaphorical extension. We predict that participants will make use of the metaphorical extension potential inherent in the meaning space presented to them. For instance, in the first round one referent is the sun, for which participants have to converge on a shared symbol. In the second round, a novel referent is an image of a happy person. If, as we predict, participants are sensitive to the conceptual metaphorical foundations of abstract symbols (Lakoff & Johnson 1980), they will quickly converge on their symbol for sun to also refer to a happy person, based on the entrenched conceptual metaphorical mapping HAPPINESS IS LIGHT, thereby creating a polysemous symbol.

Our expected results will shed light on the cognitive factors in metaphorical meaning extension. In addition, they will demonstrate that metaphorical extension has the potential to explain the polysemous extension of meaning in the evolutionary and cultural emergence of language.

ID: 149 / GS_W1.2: 3
Presentation
Topics: metaphor and metonymy, discourse analysis
Keywords: dementia, depression, metaphor, construal, perspectivation

Living with depression and dementia – a critical conceptual metaphor analysis of two virtual health communities

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Discourses about dementia and depression are a central concern of wider (media) discourses around ageing and mental health. In this context, it is of special interest how these conditions are discursively constructed using conceptual metaphors (see Lakoff & Johnson 1980; Kövecses 2010) as these can "reveal [the person's] own specific and sometimes conflicting perceptions, views, attitudes and challenges" (Semino et al. 2018: 2) on depression and dementia.

Current research shows a strong focus on dehumanising dementia discourses in the mass media (e.g., Van Gorp & Vercruysse 2012) that exclude the lived perspective of persons living with dementia. In a similar vein, persons living with depression have only recently become part of media narratives surrounding the condition (Iakushevich 2021). As both conditions are stigmatised in public discourse (Aldrich & Quintero Johnson 2022; Behuniak 2011), persons living with a condition (PWC) seek out virtual health communities to seek advice and gain support.

However, it is still relatively unexplored territory how exactly PWC use these virtual discourse spaces to construe dementia and depression and offer their unique perspective on the condition. Forums are especially relevant as they allow (anonymous) access to other affected persons (e.g., Kleinke 2020) when the locus of (social) movement is restricted by the condition.

The data for this talk stem from 300 posts each from pertinent threads in three health communities directed at PWC, specifically from *Dementia Support Forum* (hosted by the Alzheimer's Society UK), *Dealing with Depression*, as well as the 'Depression' section on *Patient*.

In a qualitative data-driven bottom-up approach, established illness metaphors were identified with Wordsmith concordance searches, and then analysed with a modified Metaphor Identification Procedure (MIP; see Semino et al. 2018); a close reading of each post was further conducted to identify novel, creative metaphors.

The results show that major metaphorical conceptualisations of illness more generally (journey and war) are shared across PWC groups, albeit with a difference in focus. PWC with depression predominantly conceptualise the condition as a place one seeks to leave (see 1), while those with dementia mainly perspectivise the condition as a difficult road one must traverse (see 2).

(1) "I really wish I could find **a way out** of this mess" (IWIWD#100)

(2) "so sorry to hear your dad has to **travel this pathway** as well..." (ROTR#26)

Further differences show downward motion, darkness, and container as key metaphors in the depression corpus, conceptualising feelings of hopelessness and containment. Construals of loss and personifications of the condition as a negative agent are central to the dementia corpus, and encode the PWC's struggles with a decrease in mental capacities. PWC with dementia also use slightly fewer source domains overall to conceptualise their condition (16 vs. 22 for depression), which may indicate preferred ways of communication in the two virtual communities, or hint at dementia-related changes in metaphor production (see, e.g., Amanzio et al. 2008).

These findings give a voice to PWC and might point to specific symptoms triggering specific metaphorical conceptualisations, which may have implications for healthcare settings.

ID: 112 / GS_F2.1: 1
Presentation
Topics: prototypes and categorization, pragmatics and cognition, language change and grammaticalization
Keywords: intensifiers, German, pragmaticalization

"Jetzt habe ich voll die Panik" – Prototype effects and pragmaticalization of NP-external intensifiers in German

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Colloquial German features degree modifiers that occur outside of their typical syntactic contexts. A typical degree modifier such as sehr ('very') usually stands inside a predicative AdjP (sehr süß 'very cute') or inside a NP (sehr süßer Hund 'very cute dog') (Duden 2022: 837-842).

The degree modifiers discussed here, total (lit. 'totally') and voll (lit. 'full, completely'), occur in "external degree modification constructions" (Gutzmann & Turgay 2015; Gutzmann 2019), as in (1).

1. Jetzt habe ich voll die Panik und denke es ist eine Brown Recluse.
   'Now I am having INT the panic and think it is a Brown Recluse'

Degree modifiers outside of an NP pose a challenge for grammatical and semantic theory, since their word-class category, syntactic behavior and function are ambiguous. Syntactically, they behave like focus particles such as nur or einzig ('just, only'). Semantically, however, they behave like expressive intensifiers.

We address two questions from a usage-based perspective: First, what is the semantic effect of the NP-external intensifier? Second, how can this new use be described as a case of pragmaticalization (Diewald 2011)? Based on data from the deCow16B (Schäfer & Bildhauer 2013, 2018), we analyzed 1,860 occurrences of total and 2,836 occurrences of voll in regard to features of the NP (head, adjective, definiteness), their scope, and the main verb of the clause.

Regarding the first question, we note that NP-external intensifiers occur with (2) and without adjectives (3) inside the NP.

1. Ich hab letztens im Internet total den süßen Hund gefunden.
   'I have recently found INT the cute dog on the internet'
2. Der jüngere ist da ganz anders und hat auch total das feeling für Tiere.
   'The younger one is completely different here and has got DM the feeling for animals.'

The absence of an adjective in 77.26% of the occurrences of total and 72.98% of voll points to a prototype effect. The adjective usually denotes a criterion on which the category membership of the NP referent is based on, while in cases without an adjective, such a criterion remains implicit. Here, the category membership itself is what the expressive meaning of NP-external intensifiers emphasizes.

Regarding the second question, we argue that NP-external identifiers have a wider scope than typical degree modifiers. Contrary to previous studies (Gutzmann & Turgay 2015), they do not intensify the adjective alone, but the whole NP. This is especially obvious in occurrences that do not feature an adjective.

We propose that this widened scope develops through occurring with phrasemes as critical contexts (Diewald 2002), where the scope of the intensifier ranges over the phraseme as a whole (4).

1. In der Nacht geht da voll die Post ab!

'A lot is happening there at night.'

From this, total and voll start occurring outside of definite NPs without adjectives that are not part of phrasemes.

ID: 156 / **GS_T2.3: 2**
Presentation
Topics: construction grammar, pragmatics and cognition, language processing
Keywords: Autism, Presupposition, Psycholinguistics, Intersubjectivity

Pragmatics and Autism: how do autistic adults interpret presuppositional sentences?

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Even though the literature about language and autism comprises several studies concerning the comprehension of figurative language by people diagnosed with Autism Spectrum Disorder (ASD), the number of research studies that focus on the interpretation of presuppositional sentences and intersubjective constructions by these individuals is still scarce (important exceptions are Cheung et al. (2017; 2020) and An (2020)). Given this scenario, this study intends to investigate, from a functional-cognitive perspective, the way in which people with ASD deal with structures containing presuppositional triggers.

Our first hypothesis, based on what the literature has already verified (Surian et al., 1996; Sirota, 2004; Colle et al., 2007; Pijnacker et al., 2008; Hobson et al., 2009; Oakley; Vidanović, 2014; Engberg-Pedersen; Thomsen, 2016; Schaeken et al., 2018; Pastor-Cerezuela et al., 2018), is that autistic people have more difficulties than neurotypical individuals to interpret these sentences.

Besides that, a second hypothesis arises from the semantic-pragmatic analysis proposed to the Counter-expectation Construction with Bem 'Well' (CCB) by Author et al. (forthcoming). The construction is marked by the idiomatic use of the item "bem" 'well', found in some varieties of Brazilian Portuguese (BP), as in "Meu nariz bem sangrou hoje" (lit. "My nose well bled today"; "Believe it or not, my nose bled today") and "Lucas bem tirou 10 em matemática" (lit. "Lucas well got an A in math"; "Believe it or not, Lucas got an A in math"). The authors, based on the theoretical principles of the Usage Based Construction Grammar, describe the construction as a counter-expectation marker, suggesting the existence of a type of presupposition that differs from the ones described in Lambrecht's (1994) typology, named expectation presupposition. In light of this, our second hypothesis is that the expectation presupposition leads to greater difficulties in interpretation than the knowledge presupposition (previously recognized by Lambrecht (1994)). This study, therefore, seeks to empirically validate this proposal.

In order to test both these hypotheses simultaneously, we carried out a forced-choice experiment, in which 32 autistic people (from 18 to 59 years of age) and 32 neurotypical people (from 18 to 25 years of age) participated, involving two kinds of presuppositional triggers: CCB (example of expectation presupposition) and change of state verbs (CSVs; example of knowledge presupposition).

A multinomial logistic regression confirmed our first prediction and refuted the second one by showing that (i) the likelihood of obtaining an incorrect response is 1.7 times higher for individuals with ASD than for neurotypical individuals, (ii) the odds of choosing the opt-out alternative are 3.9 times higher for individuals with ASD compared to neurotypical individuals,

and (iiii) the likelihood of obtaining an incorrect response is 1.8 times higher for the CSV trigger compared to the CCB trigger.

ID: 130 / **GS_T2.3: 3**
Presentation
Topics: cognitive grammar, applied linguistics and pedagogy
Keywords: Grammatikanimationen, Interaktivität, Deutsch als Fremdsprache, Quasi-Experiment

Mit Interaktiven Grammatikanimationen Konzeptualisierungen begreifbar machen. Ein quasi-experimentelles Forschungsdesign zur Testung grammatischer Kompetenzentwicklung

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Davon ausgehend, dass das Erlernen von Grammatik sich nicht auf das Beherrschen morpho-syntaktischer Regeln beschränkt, sondern grammatische Kompetenz auch semantische und funktionale Aspekte miteinschließt (Purpura 2004), betonen kognitionsdidaktische Unterrichtsansätze die Sichtbarmachung von Konzeptualisierungsvorgängen als Triebfeder bei der Grammatikvermittlung (Achard 2008). Vor diesem Hintergrund stellen Grammatikanimationen (GA) ein adäquates Lehr-Lernmedium dar, um Sprachlernenden die Bedeutung und die konzeptuelle Motiviertheit syntaktischer Strukturen zu veranschaulichen (Scheller 2009; Roche & Suñer Muñoz 2014). Problematisch an den Animationen in ihrer aktuellen Form ist allerdings, dass deren Anwendungsmöglichkeiten im Sprachunterricht die kognitionslinguistische Grundannahme der Gebrauchsbasiertheit von Sprache (Evans 2012) in zweierlei Hinsicht vernachlässigt: 1) In einzelnen, isolierten Szenen fokussieren die GA bislang nur die Semantik grammatischer Strukturen, ohne dabei zu berücksichtigen, dass für den Spracherwerb die Sprachverwendung in kommunikativen Kontexten besonders wichtig ist. 2) Ebenfalls im Widerspruch zur Grundannahme der Gebrauchsbasiertheit steht die Tatsache, dass die Darstellung der GA ein lehrerzentriertes Setting vorsieht. Ein gebrauchsbasierter Sprachvermittlungsansatz würde dagegen eine handlungs- und lernerorientierte Didaktik verfolgen.

Um die mit diesen spezifischen Problemen angesprochene Forschungslücke zu schließen, richtet sich das Interesse dieses Forschungsprojekts auf die Weiterentwicklung von GA, und zwar in zweifacher Hinsicht: In einem ersten Schritt wurden die GA interaktiv gestaltet, um den Sprachlernenden in die Lage zu versetzen, diese selbst zu steuern und die darin dargestellten Inhalte zu manipulieren. Dieses Eingreifen in die szenische Ausgestaltung der Animationen ermöglicht ihm, die sprachlichen Realisationen verschiedener Konzeptualisierungsmöglichkeiten zu erkunden und dadurch sowohl Bedeutung als auch konzeptuelle Motiviertheit syntaktischer Strukturen nachzuvollziehen. In einem zweiten Schritt wurden die interaktiven GA um einen situierten Sprachhandlungsrahmen erweitert, damit dem Sprachlernenden zusätzlich zur Bedeutung auch die Funktion von syntaktischen Strukturen erfahrbar wird. Um die Zweckmäßigkeit dieser Erweiterungen der GA zu überprüfen, zielt das Forschungsprojekt nun darauf ab, zu testen, inwieweit die Interaktivierung der GA und deren Einbettung in einen situierten Sprachhandlungsrahmen einen positiven Effekt auf L2-Lernprozesse und -ergebnisse hat.

Innerhalb eines quasi-experimentellen Forschungsdesigns untersucht eine Interventionsstudie am Fallbeispiel des deutschen Vorgangspassivs, ob Interaktivität und Situiertheit den Erwerb grammatischer Kompetenz befördern, und zwar in einem höheren Maße als bei GA ohne diese Eigenschaften. Auf Experiment- und Vergleichsgruppe verteilt erfahren ca. 60 Studierende mit Deutsch als Fremdsprache je eine 90-minütige Behandlung, die von einem Prä- und einem Posttest gerahmt ist, um einerseits Veränderungen innerhalb der Gruppen als auch Differenzen zwischen ihnen zu bestimmen. Für die Auswertung der im Frühjahr erhobenen Testdaten werden Verfahren der deskriptiven und der inferenziellen Statistik angewandt. In Ergänzung zu den quantitativen Daten soll mittels einer qualitativen Herangehensweise untersucht werden, inwiefern InGA die Entwicklung mentaler Modelle fördert. Lautes Erinnern soll Aufschluss über Assoziationen, Erfahrungen und Gedanken geben, die Rückschlüsse darauf zulassen, welche subjektiven Theorien die Lernenden in Bezug auf Passivkonstruktionen entwickelten. Die aus der multimethodischen Analyse gewonnenen Erkenntnisse sollen auf Konferenz vorgestellt werden.

ID: 107 / GS_T2.1: 1
Presentation
Topics: corpus linguistics, first language acquisition
Keywords: Bilingual Language Acquisition, Patterns, Dynamic Network

A Dynamic Network Approach to bilingual child data

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Languages allow us to construct an astronomic variety of utterances by relying on a rather limited number of words. Usage-based paradigms have shown that children's early language is remarkably restricted and constructed around lexically specific frames with productivity gradually emerging in a piecemeal way showing an intimate relationship between linguistic knowledge and input (e.g. Tomasello 2003).

Most work on language acquisition has concentrated mainly on monolingual settings. However, most children actually grow up in a multilingual environment and often produce code-mixed utterances, cf. e.g. German-English utterances like *was ist dein picture* 'What is your picture' (Fion, 03;02.12). To systematically detect patterns in bilingual children and to relate them to the input they receive, we need to have a reliable data-driven approach. A number of such pattern detection approaches have already been proposed in the literature, e.g. traceback (Dąbrowska & Lieven 2005, Hartmann et al. 2021). A fairly recent addition to the repertoire of exploratory data-driven methods is Ibbotson et al.'s (2019) dynamic network model (DNM), which uses simple frequency measures to detect networks of co-occurring words (and part-of-speech tags) from the data. In particular, the DNM combines two measures: word frequencies and transition probabilities, gradually building up a network of patterns of use based on distributional information. This allows for identifying what Ibbotson et al. (2019) call "communities" in the data, showing that the emerging patterns cluster together to form clear "hubs", which in turn can be assumed to facilitate language acquisition.

As such, the aim of this paper is to model the "building blocks" of Fion's and Silvie's early language, two German-English bilingual children aged 2–3 years (n = 47,812 and n = 65,473 utterances). We want to detect patterns in their language use based on transitional probabilities and additionally, we want to relate those patterns to the child-directed speech they hear from their caregivers (n = 228,221 and n = 140,387 utterances). In order to do this, we followed Ibbotson et al.'s (2019) approach, breaking down the data into bigrams and identifying "hubs" in the data drawing on off-the-shelf community detection algorithms using the well-established Louvain method (Blondel et al. 2008).

In the results we can cleary see that there are some hubs in the network (Figure 1), from where different clusters branch out – these are typical examples of what Tomasello calls pivots, items around which early language is organized. These hubs are also visible in the code-mixed data and show how the code-mixing patterns change over time.

Taken together, the DNM can provide a detailed and nuanced, data-driven picture of the complex relationship between the linguistic input children receive, the patterns they rely on in the use of their language(s), and the ways they combine these patterns in code-mixed utterances.

ID: 151 / **GS_T1.1: 3**
Presentation
Topics: corpus linguistics, language processing, neurolinguistics
Keywords: compounding, morphological structure, spelling, processing

Does spelling (need to) reflect the morphological structure of compounds?

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The morphological structure of compounds comprising more than two lexemes (e.g. *credit card company*, *newspaper headline*, *ice-cream van*) is hierarchical, as based on the principle of binarity two immediate constituents are combined at a time (Olsen 2000: 904). For tri-constituent compounds, this gives way to two different internal structures, namely [[X X] X], referred to as "left-branching" (e.g. *football game*), and [X [X X]], referred to as "right-branching" (e.g. *college sweatshirt*) (Warren 1978: 12). As English compound spelling makes use of hyphens, spaces and orthographic unification (cf. Sanchez-Stockhammer 2018), the spelling of tri-constituent compounds bears the potential to mirror their internal hierarchical structure. There are nine potential formats in the orthographic realization of tri-constituent compounds, which differ in their suitability for reflecting the internal structure. The formats X X X, X-X-X and XXX are neutral with regard to internal structure, while XX X, X-X X and XX-X would represent a left-branching structure, and X XX, X X-X and X-XX would match right-branching compounds. The spelling of the compound *credit card company*, for example, is neutral with regard to internal structure, while the spelling of *ice-cream van* suggests a stronger bond between the first two constituents, mirroring its morphological structure [[X X] X]. There are, however, instances, whose spelling is incongruent with their internal structure. A *children bookstore*, for example, is usually a 'store with children's books' rather than a 'bookstore for children', i.e. its internal structure is [[X X] X], contradictory to what its surface form might suggest. Does this incongruity influence cognitive processing? More precisely, does a compound whose spelling does not match its morphological structure pose challenges or alterations in processing?

My investigation will employ a combination of corpus linguistic analyses and a psycholinguistic experiment to address the outlined research questions for tri-constituent noun-compounds. For a sample of 400 items taken from the COCA corpus, I will investigate whether their spelling mirrors their internal structure, in order to answer the question to what degree polylexemic compounds exhibit spelling patterns reflective of their hierarchical structure. Building on the insights gained from the corpus analysis, I will design an experiment to assess the cognitive impact of spelling incongruities. Participants will engage in lexical decision and sentence reading tasks, where they encounter polylexemic compounds with either congruent or incongruent spelling and structure (e.g. *ice cream van* vs. *ice cream-van*). Eye-tracking and reaction time measures will be employed to gauge the participants' processing of these compounds.

I anticipate that spelling incongruities will have a cognitive impact, eliciting longer processing times or increased fixation durations compared to compounds with congruent spelling and structure. This would indicate potential challenges in integrating and processing information and contribute valuable insights to the understanding of the intricate interplay between spelling, morphology, and cognitive processing in the realm of polylexemic compounds. These findings may have implications for both theoretical models of linguistic structure and practical applications in fields such as computational linguistics and language education.

ID: 226 / **TS1.2: 2**

Theme Session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Topics: cognitive grammar, applied linguistics and pedagogy, Theme session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Keywords: Applied Cognitive Linguistics, research-teaching interface, teacher cognition, pedagogical grammar, usability

Applying Cognitive Grammar to the Count/Mass Distinction: Towards an Ecological Approach Involving Practitioners

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Cognitive linguists are devoting much time and effort to the exploration of SLA, and the potential of a more figurative / embodied approach to pedagogical grammar has by now been documented (Roche & Suñer, 2016). Despite the increasing theoretical as well as empirical evidence, little is percolating to the actual classroom. We concur with Wirag et al. (2022) to point to the top-down way in which Applied Cognitive Linguistics has been approached so far. This research project hypothesizes that a more ecological approach to Cognitive Linguistics is needed to popularize the CL framework in language teaching. By ecological approach, we mean to consider the classroom as a complex system that is best approached holistically and dynamically (Hill et al., 2004; Meunier, 2022), with a special focus on teachers which remain "a blind spot in applied linguistics" (Whong, 2022). To test this hypothesis, elements of a Cognitive Grammar approach to the Count/Mass Distinction were incorporated into L2 learning materials and then presented to teachers. The idea was to see how participants assess the usability of a cognitive-pedagogical approach and how such usability correlates with their reported beliefs about pedagogical grammar. Usability refers to "the appropriateness to a purpose of any artifact" (Brooke, 1996, p. 4), which, in the case of cognitive-pedagogical teaching materials, refers to their perceived facilitative potential. The data was gathered through focus group discussions with pre-service teachers (n=11) of English and Dutch as foreign languages in lower secondary education and an online survey involving a broader array of language teachers (n=203). All the participants were from the French-speaking community of Belgium. While reinforcing the potential of Cognitive Linguistics for language teaching, our data also points to the necessity of adopting a more ecological approach to the implementation in Applied Cognitive Linguistics research. Honest engagement with contextual variables such as teacher beliefs and existing teaching practices is likely to facilitate adoption as insights from ACL can supplement, but not supplant, existing practices. Implications for future research in ACL are discussed.

ID: 181 / **TS3.3: 2**
Theme Session: Cognitive approaches to written language
Topics: cognitive grammar, corpus linguistics, writing systems
Keywords: punctuation, graphematics, handwritten texts

Commas & Cognition – An on-line approach to individual variation in comma forms in handwritten language

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The subject of graphematics and grapholinguistics is written language. When *written language* is mentioned in this context, a product perspective is usually implied: Most linguistic analyses and descriptive models focus on writing as a *static* manifestation of language. At the same time, however, written language cannot be understood independently of the process in which it is read and/or written.

If the latter perspective is placed in the focus of investigation, this can be referred to as online graphemics (cf. Szczepaniak & Barteld 2016: 45).

In this paper, we want to show how cognitive-psychological, graphetic and graphematic methods of investigation can be profitably combined in this context. We will do this using the example of the comma, a graphically relatively inconspicuous sign. The reception processes of written commas have already been investigated in psycholinguistic studies (cf. Steinhauer & Friederici 2001, Bertuccelli 2022, Paape & Vasishth 2022 and others). Those are contextualized here in a larger theoretical-methodological framework. At the same time, we will combine them with insights concerning the production processes of commas. To this end, we examined handwritten exams to determine whether the commas vary graphically in their form and –if they do– which cognitive processes this allows conclusions to be drawn about (cf. Romstadt & Reinken 2023).

An examination of (hand*written*) texts does not initially seem particularly process-related. However, we will show that the form of certain commas differs systematically from that of others. We understand this variation as 'fossilizations' of the writing process. In this context, we then argue not only for a generally increased consideration of online studies within graphemics and grapholinguistic research, but also specifically for handwritten manuscripts to be taken (more) seriously as 'fossils of writing processes' (cf. also Reinken 2023).

ID: 201 / **TS4.1: 2**

Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen

Topics: Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen

Keywords: Semantics, Morphology, Derivation, Distributional semantics

What is the meaning of a derivational affix? What distributional semantics can and cannot tell us

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Distributional semantics approaches to morphology offer a very easy, straight-forward way to explore the meaning contribution of an affix: subtract the vector of the base from the vector of the complex form, and the resulting vector, often called the offset-vector, captures the meaning contribution of the affix (Bonami and Paperno, 2018). The aim of this paper is to explore in more detail the extent to which offset vectors can help us understanding derivation by looking at a well-studied pair of rival nominalization suffixes in English, -ity and -ness. For these suffixes, Schäfer (2024) shows that Linear Discriminant Analysis (LDA) can successfully classify the vectors of the bases with regard to whether they form -ity or -ness derivatives, and the vectors of the derivatives whether they are -ity or -ness derivatives. Starting from these results, this study looks at the offset vectors of the same base-derivative pairs (1343 -ity and 1671 -ness pairs.), exactly replicating the methodology of Schäfer (2024) in also using t-SNE for visualization and Linear Discriminant Analysis for classification (see also Shafaei-Bajestan et al. 2022).

Figures (1) shows the t-SNE visualizations. Blue circles represent the projections of the offset vectors of the -ness base-derivates pairs, red crosses represent the corresponding -ity offset vectors.

Figure 1 shows that the difference vectors for -ity and -ness offset vectors clearly occupy different places in the distributional vector space. This is supported by the very good LDA classification result (weighted F1 score = 0.84). But we also see that the majority of -ity bases forms a tighter cluster, and that there are two smaller cluster of -ity offset vectors in the left and right upper part of the figure.

This result is at the same time puzzling and intriguing. It is puzzling, because the visualization and the classification result is quite similar to the results reported in Schäfer (2024) for the bases and the derivatives.

All three vector sets show the same overall pattern but also the same degree of variation. This is unexpected on the standard view of either affix making a constant meaning contribution across derivatives. The intriguing part are the subpatterns, which show that at least for some pairs of derivatives, the offset vectors for -ity and -ness are indistinguishable. In my presentation, I will further dig into this dataset by (a) considering the role of frequency of both bases and derivatives in the observed patterns and (b) by exploring the nearest neighbors of synthetic word vectors created by adding average -ity and -ness vectors, calculated either across the whole frequency range or over subsets from different frequency bands. The idea here is to explore whether average vectors calculated on pairs from the low to mid-frequency range show a more interpretable patterning because both bases as well as derivatives are less likely to show effects of lexicalization. Further, looking at nearest neighbors also allows to check for potential effects of register that might differentiate between -ity and -ness derivatives over and above any semantic differences (cf. Cowie 1999).

ID: 150 / **GS_T1.3: 1**
Presentation
Topics: construction grammar, corpus linguistics, cognitive sociolinguistics
Keywords: question tags; construction grammar; entrenchment-and-conventionalization model

Enhancing Construction Grammar through Multidimensional Regularity Analysis. The case of question tags.

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As shown in previous research (e.g. Tottie and Hoffmann 2006), question tags are variable in many dimensions. Their form varies regarding the choice of verbs (e.g. *be, do,* modal verbs) and personal pronouns, as well as regarding polarity (*did she* vs. *didn't she*). The construction serves various functions, such as confirmative, facilitating, or aggressive. Studies have shown that also contextual, social and situational variation come into play, since questions tags are sensitive to text type, region, age and gender (Tottie and Hoffmann 2006; Westphal 2021). The question is how these different dimensions of variation interact: Are, for example, certain formal and functional variants used more frequently with increasing age? Can gender-specific differences be attributed to specific social or communicative contexts?

We investigate data from the spoken component of BNC2014. The data are cleaned and annotated automatically, followed by manual refinement, aiming to identify patterns of conventionality on multiple dimensions of regularity. The method used to analyze the data – Multidimensional Regularity Analysis (MRA, Schmid in print) – operationalizes the basic assumption of the Entrenchment-and-Conventionalization Model (Schmid 2020) that constructions are peaks of regularity in multidimensional regularity space. Such peaks can be observed in the pairings of forms with meanings and functions which are enshrined in the term *construction* in Construction Grammar. However, regularity is often more dynamic and fluid than envisaged by this notion and tends to include further dimensions of regularity in addition to forms-meaning mappings, i.e. wider syntagmatic regularity as well as the pragmatic, situational and social dimensions (Schmid 2020). This dynamic and multi-dimensional conception of constructions promises to provide a handle for understanding the multivariate nature of the use of questions tags.

Based on initial proposals made in Schmid (in print), MRA is applied in the following way. Categorical data from all annotated variables is encoded in numerical vectors, enabling the investigation of the individual characteristics of the corpus attestations within a shared multidimensional vector space. To determine regular patterns of use among the question tags, the data is clustered using the k-Means algorithm (MacQueen 1967), with the optimal number of clusters determined in a bottom-up fashion. Principal Component Analysis (PCA) is utilized to decrease the dimensionality of the transformed data, and the PCA-reduced data are visualized in two dimensions using t-SNE (Maaten and Hinton 2008). The clusters identified by the algorithm are interpreted with recourse to the original data.

Our preliminary results indicate that MRA captures clusters of regular usage-types of question tags as well as transition zones that reflect the ambiguity inherent in their use. Our findings portray the regularities and diversity of question tags and highlight the advantage of integrating situational and social variables on a par with formal, semantic and functional ones in the analysis of linguistic constructions.

ID: 115 / **GS_W3.3: 2**
Presentation
Topics: construction grammar, corpus linguistics, other
Keywords: German, IAW-phrases, phraseological modification, productivity

Expansion of IAW phrases in German: Comparing [zu X] and [bei X]

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IAW phrases are expressions such as *in aller Welt* 'in all world', *zur Hölle* 'the hell', *beim heiligen Josef* 'by Saint Joseph', and *um Himmels willen* 'for heaven's sake', that are used as a kind of intensifiers in wh-questions, expressing "the speaker's incomprehension with regard to the sentence's proposition" (Stefanowitsch 2011:190, my translation), as in (1)–(2):

(1) Was *zur Hölle* treiben Sie da?

'What *the hell* are you doing there?'

(2) Aber was *beim heiligen Josef* sind «Beiriedschnitten mit überbackenen Kornlaibchen»?

'But what by Saint Joseph are 'sirloin slices with scalloped grain burgers'?'

While it is often assumed that "such phrases are idiomatic and cannot be changed *ad libitum*" (Bayer & Trotzke 2015:21), examples of typical mechanisms of phraseological modification, such as substitution and expansion, can actually be found on a regular basis.

In this contribution, we take a closer look at the process of expansion in German IAW phrases, focusing on phrases of the type [*zu* X] (*zur Hölle* 'the hell', *zum Teufel* 'the devil' etc.) and [*bei* X] (*beim heiligen Josef* 'by Saint Joseph', *bei Gott* 'by God' etc.). By expansion, we mean the addition of other linguistic elements, typically adjectives (*zum verdammten Teufel* 'the damn devil'), prepositional phrases (*zum Teufel in der Hölle* 'the devil in hell'), or genitives (*zur Hölle des toten Gottes* 'the hell of the dead God'). The patterns [*zu* X] and [*bei* X] were selected because they are the most productive IAW patterns in German and because of their structural similarity as prepositional phrases, other IAW patterns being less open to expansion for syntactic reasons. The analysis is based on a series of corpora (DeReKo, DGD, GeRedE, CodE Alltag 2.0, and a self-compiled Harry Potter and SpongeBob corpus) and results from targeted Google searches.

The analysis reveals that, while the structural possibilities of expansion are largely the same for both patterns, their distribution is different. Expansion by means of genitives, for instance, is significantly more frequent with [*bei* X], and while adjectives are found to a similar extent with both patterns, adjectives in the [*bei* X] pattern tend to have a positive connotation (*heilig* 'holy', *lieb* 'dear', etc.) whereas adjectives in the [*zu* X] pattern tend to have a negative connotation (*verdammt* 'damn', *verflucht* 'cursed', etc.). It will be shown that these differences can be traced back to the different origins of the two patterns, cursing in the case of [*zu* X] and vowing in the case of [*bei* X].

ID: 222 / **TS5.2: 2**
Theme Session: Chunking phenomena and phonological reorganization in spoken interaction
Topics: cognitive grammar, cognitive phonology, Theme session: Chunking phenomena and phonological reorganization in spoken interaction
Keywords: Dialect; standard, cognitive grammar, chunking, interactional linguistics

High frequency chunks as a challenge for the analysis of dialect standard continua

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The presentation focuses on frequent multi-word units around the lexeme *das* (engl. *that*) in Northern German dialects and colloquial language. Common methods in dialectology such as variable analysis use the orthographic word as a basic unit of analysis. As frequency is a well-known factor for cognitive reorganisation of units (Bybee 2001: 157; Diessel 2019: 35), however, it is questionable if using orthographic words as reference points for variable definition is appropriate.

The lexeme *das* is prominently featured in dialectology and studies in linguistic variation concerning Northern Germany – the potential shift in units of perception and production pose challenges to these linguistic disciplines. These challenges affect the traditional assumption of variants as "identical in referential or truth value" (Labov 1972: 271) in two ways: 1. the equivalence of meaning is more difficult to grasp (Geeraerts & Kristiansen 2019: 144), and 2. there are always limitations to the analyses because word sequences exhibit deviating variation behavior (e.g. Lanwer 2015: 185f.). The observed socio-symbolic indexicality of the phonetic variation of *das* and *dat* (e.g. Elmentaler & Rosenberg 2015: 197) increases the urgency of the question as to whether these are functionally equivalent alternatives. Many previous analyses treat them as exceptions, or rule out certain sequences in advance (e.g. Lanwer 2015: 185f.). Conversely, interactional analyses of frequent patterns or collocations often exclude regional variants or subsume them pre-analytically as instances of an abstractly defined pattern (e.g. Deppermann 2006; Imo 2006). The presentation will first focus on the phonetic form and analyze the extent to which there is formal evidence for chunking, e.g. resyllabification, absence of final devoicing and glottalisation (Bergmann 2018: 20ff.).

Subsequently, the question of functional equivalence will be tackled with functional-interactional analyses (e.g. Selting & Couper-Kuhlen 2001; Imo & Lanwer 2019) . This qualitative analysis is chosen to check whether the phonetic variants are treated differently or the same by speakers and whether the variants differ in their functional profiles. To find patterns in form and function, a cluster algorithm based on the method used by Lanwer (2018) is applied. The analysis uses recordings of conversations in Northern Germany which were recorded as part of the Emsland project (Spiekermann & Schürmann i.E.) and by Weber (2020). The dataset comprises a total of ten hours of material in colloquial standard and Low German.

On the basis of these results, the consequences of cognitive reorganization for the analytical practice of variational linguistics are discussed. The talk advocates a stronger emphasis on local-interactional methods for the description of dialect-standard continua.

ID: 234 / **P3: 1**
Keynote abstract
Topics: construction grammar, corpus linguistics, language change and grammaticalization
Keywords: DCxG, CCxG, NPs, non-canonical constructions

Of outlaws and oddballs: non-canonical constructions in language change

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Construction grammarians have a reputation for being particularly fascinated by idiosyncratic, quirky, constructions on the lower and fully-specified level of the constructional network (e.g. Diessel 2019; Cappelle 2022; Ungerer & Hartmann 2023). We have even been called 'butterfly collectors' who love to chase exotic constructions which deviate from the canonical, default structures of the language (Hilferty 2003; Hilpert 2014; Desagulier 2017).

This begs the question what – in a cognitive-functional, usage-based approach – is meant by 'canonical' vs. 'non-canonical' and if we want to keep up this dichotomy at all. The answer clearly depends on how these notions are defined in the first place. To decide on a construction's quirkiness we can take into account its frequency, transparency, compositionality, idiomaticity, regularity, prototypicality, paradigmatic relations, or its extravagance. These questions, viz. what exactly defines a constructional 'outlaw', become even more interesting through a diachronic lens. After all, language is constantly changing and diachronic research has long been aware that what looks like an outlaw (i.e. an exception to a regularity/a deviation from the majority pattern) is often an 'early adopter' of a new linguistic trend or a 'laggard' in the sense of being a remnant of an older language stage where the specific linguistic code was more motivated and more regular (e.g. Lass 1997; Traugott & Trousdale 2013).

In this talk, I will then zoom in on these issues by discussing non-canonical, odd constructions in the history of English. Most of my examples will come from my own work on nominals and NPs. In particular, I will report on a study on PPs with bare location nouns (*go to church*; *die in prison*; *stay in bed*), but will also briefly revisit BIG MESS constructions (*how big of a mess*; *that great a guy*), NPNs (*day after day; brick upon brick)* and Pleonastic Conditionals *(If I have to, I have to; When duty calls duty calls)*. Next to pragmatically enriched idiomatic meanings, these constructions are famous for their deviant word order, their lack of overt definiteness marking, or their reduplication pattern (Sommerer & Zehentner forthc; Sommerer & Baumann 2021; Sommerer 2022, 2023, in prep).

Among other things, I will argue that being wrongfully perceived as an outlaw often happens if the researcher exclusively focuses on one constructional family or one language only, not looking for functionally similar behavior in other constructional families or languages. Ultimately, I will argue that not everything that looks like an exotic butterfly really is one. For instance, leaving out an overt determiner to background referentiality of a nominal is a frequent functional technique – not only in some PPs but also in many Light Verb Constructions (LVC) and nominal incorporations. Similarly, BIG MESS constructions apply a fronting technique which we also find elsewhere. Finally, the reduplication observable in NPNs and PCs is used in many constructions and languages to express quantification, annoyance/indifference, or prototypicality (e.g. *bla bla bla*; also see Gomeshi et al.'s 2004 *salad salad* paper).

At the same time, I will argue that true outlaws can be identified and deserve independent constructional status as independent nodes in the network. I will discuss the cognitive and functional motivations and mechanisms (e.g. analogical thinking, frequency effects, lexical bootstrapping, extravagance, creativity) which make them develop their idiosyncrasies and even make them resist regularization or analogical levelling later.

ID: 141 / **GS_F2.1: 2**
Presentation
Topics: construction grammar, prototypes and categorization, language change and grammaticalization
Keywords: paradigm, paradigmatization, categorization, usage-based, morphology

Identifying the cognitive processes behind paradigms: A domain-general approach

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The notion of paradigm has played an important role in society for centuries. Perhaps its most familiar use is in language education where teachers often approach the teaching of inflectional forms in languages with rich morphology by having their students learn inflectional paradigms by heart. It is therefore quite surprising that they have mostly been disregarded when it comes to usage-based approaches like Construction Grammar. Recently however, more and more researchers have started to advocate for the (re-)introduction of paradigms into usage-based frameworks to be able to account for certain phenomena in language that would be hard to explain otherwise (Diewald 2020; Politt 2022; Audring 2022). But whilst there is agreement on which phenomena could best be explained with the notion of a paradigm (e.g. paradigm levelling, suppletion, or implicational relations), there is a lot of disagreement regarding the way in which paradigms would be mentally represented, and how they would relate to the rest of the mental lexicon.

For example, Blevins (2016: 64) defines the paradigm as a "set of grammatical words" that are related by a common morphological base or lexeme, which means that members of a paradigm are first and foremost defined by their shared morphological features and thereby excluding synonyms or otherwise grammatically related constructions with a different morphological base. Diewald & Politt (2022: 2) refer to this conception of paradigms as "morphological paradigms" and contrast this idea with the concept of "grammatical paradigms": These are to be understood as "hyper-construction[s] highlighting the categorical, non-gradient specifics of grammatical categories", which thereby excludes constructions that are related morphologically but not grammatically (Diewald 2020: 277–278). Therefore, the question may be asked: Is there a way that we could account for both morphological and grammatical paradigms in a constructivist framework?

In this talk, I aim at unifying both approaches by proposing that the process of paradigmatization, i.e. the formation of paradigms, is based on the domain-general human capacity for categorization, meaning that paradigms are linguistic categories whose members are constructions. I further claim that, as categories, paradigms are dynamic, meaning that they are able to dynamically adapt their membership criteria to improve their "Cognitive Economy" (Rosch 1978: 28). This talk will further explore how the proposed theory could be tested empirically with methods already established for other forms of cognitive categorization. One example would be to investigate whether priming effects—as they have already been observed for non-linguistic categories (Ray 2008)—can also be observed for constructions that are related either by grammatical features or a common morphological basis. If the assumption that paradigms are categories is correct, we would expect a) that priming effects can be observed in general, and b) that priming effects between morphological and grammatical paradigms do not differ significantly.

ID: 157 / **GS_T2.3: 1**
Presentation
Topics: cognitive grammar, construction grammar, pragmatics and cognition
Keywords: intersubjectivity, pragmatics, counter-expectation, construction grammar, cognitive grammar

Inferred vs. actual knowledge presuppositions: two different categories of intersubjective constructions

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Lambrecht (1994) suggests that presupposed information can be divided into three categories: knowledge presuppositions, topicality presuppositions, and awareness presuppositions. Despite being relevant for information structure analysis, this distinction does not seem sufficient to adequately describe a set of intersubjective constructions identified in Brazilian Portuguese:

(1) Eu bem vi João no shopping hoje.

lit. I well saw you John at the mall today.

“Believe it or not, I saw John at the mall today.”

(2) Pior que a minha mãe me proibiu de usar o celular.

lit. Worst that my mom forbidded me to use my cell phone.

“The thing is that my mom forbidded me to use my cell phone.”

(3) João arrumou uma namorada mesmo.

“John really got himself a girlfriend.”

In these examples, some grammatical constructions are highlighted: the “bem” construction, the "pior que X" construction, and the "mesmo" construction, which share a common pragmatic function. These constructions indicate that the speaker believes the proposition about to be uttered may surprise the listener. Speakers of (1-3) seem to presuppose, respectively, that the listener did not expect that the speaker would meet John that day, that the speaker's mother had prohibited them from using the cell phone, or that John had found a girlfriend.

These propositions are implicitly evoked by the constructions, as speakers do not explicitly convey their content as assertions. Also, they have to do with the state of mind the speakers assume the listeners to have. Hence, they are presuppositions. However, in (1-3), speakers do not presume that the listener recognizes an element of discourse as the topic or that they have active information in their mind. That is, these constructions are definitely not topic or consciousness presupposition triggers. Aditionally, it is not assumed that the listener possesses specific knowledge. In (1-3), speakers do not convey that the interlocutors didn’t know, respectively, about the meeting, the prohibition or the dating. Rather, the speaker is making a calculation about the listener's mental state regarding what is expected to have occurred. Therefore, we are dealing with a type of presupposition related to expectation, that is, to inferred, not actual knowledge.

In light of this, the aim of this study is to propose the category of inferred knowledge presupposition, based on the analysis of intersubjective constructions such as the ones in (1-3). Here we distinguish inferred knowledge from actual knowledge drawing on Langackers Epistemic Model (1991, p. 277). Specifically, we argue that this difference lies in the opposition between known reality and projected reality, which is relevant for us to adequately describe different types of presupposition constructions. That way we propose a refinement of Lambrecht's typology while demonstrating that Langacker's model can be useful for analyzing phenomena distinct from its original scope.

ID: 108 / GS_W1.1: 1
Presentation
Topics: frame semantics, discourse analysis, pragmatics and cognition
Keywords: semantic frames, argumentation analysis, interaction, predication analysis

Frames-in-Interaction: Synergies between Argumentation Analysis and Frame Semantics

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The call for usage-based analyses that focus on language in its primary environment – social interaction – was already made decades ago in cognitive linguistics (Langacker 2001:143). Some cognitive-semantic phenomena seem to have gained at least some attention in analyses of conversational talk, namely: *mental space*s (e.g., Ehmer 2011), *interactional blending* (e.g., Hougaard 2005), or *metaphor performance* (e.g., Gibbs & Cameron 2008). But research on how relatively stable, entrenched knowledge, i.e., *semantic frames* (Fillmore 1982), is reconstructed and recruited in *turns-at-talk* is still scarce. Many discourse-analytic studies have been conducted to show how the discursive meaning potential of specific semantic frames can be examined by extrapolating their constituents, i.e., *slots*, *fillers*, and *default values*, through *predication analysis* (e.g., Ziem 2008). However, the analytical potential of analyzing how and to which concepts interactants orientate themselves in conversational talk has so far been largely ignored. This paper uses a mixed-method approach to explore the synergies between interactional argumentation analysis and frame semantics by asking the following questions: how can sequential argumentation analysis contribute to the identification of frame-semantic predications in conversation? And what contribution do the results of the frame-semantic predication analysis in turn make to the reconstruction of interactional argumentation schemes?

The pilot study is based on a corpus of 180 argumentative conversations among schoolchildren. It is argued that argumentation analysis is particularly suitable for reconstructing frame configurations that emerge in interaction, as argumentative talk involves an explicit management of knowledge and epistemics. This is achieved by interactional displays of what is taken for granted or put up for discussion by the interactants themselves (see Morek 2020). The current paper shows that a cyclical analysis procedure is beneficial for both argumentation analysis and frame analysis. In the study presented, a four-step analysis procedure is applied to one predicator class of a semantic frame that is frequently evoked in the conversations of the present corpus. The semantic frame in question here is that of SIGNAL_ROCKETS, the predicator class under investigation comprises the structural slots whose fillers characterize the role of signal rockets in human actions.

In a first step, the explicit fillers of the respective slots are extracted from the corpus. In a second step, this list of predications is extended through a sequential analysis that helps to identify more implicit predications by focusing on the interactional negotiation of meaning. Third, a quantitative analysis of the predications is carried out to predict the potential default values of the slots under investigation. In a fourth step, these results are fed into a second round of qualitative analysis. They are used to make further assumptions about the implicit premises used by interactants to create argumentative coherence. The results of this pilot study show that the methods of the interactional approach and the frame-semantic approach complement each other by helping to reconstruct implicit structures that can be made fruitful for analysis by the other approach.

ID: 124 / **GS_T1.2: 3**
Presentation
Topics: construction grammar, corpus linguistics, language change and grammaticalization
Keywords: Diachronic Construction Grammar, Constructional Relations, Allostructions, Evaluative Attribution Construction, Argument Structure Construtction

The Development of the Evaluative-Attribution-Construction in Modern English

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This study explores constructs such as the following:

(1) He still regards himself as a working farmer.ARCHER-1979-NEW

(2) We consider it almost one of the necessaries of life.ARCHER-1875-ADV

(3) He finds the bromide to be most suitable.ARCHER-1864-MED

(4) We no longer think of your form of worship as idolatrous.ARCHER-1966-SER

These examples share a common underlying Argument-Structure-Construction wherein an Attributer (*he* in examples 1 and 3, *we* in 2 and 4) attributes an Attribute (*a working farmer* in 1, *one of the necessaries of life* in 2, *most suitable* in 3, *idolatrous* in 4) to an Attributee (*himself* in 1, *it* in 2, *the bromide* in 3, *your form of worship* in 4). In contrast to other linguistic structures that include what Quirk et al. (1985) call "Object Complement", this attribution does not alter the state of the Attributee like the "Resultative-Construction" but is a subjective evaluation which may not be factual (Halliday 1967, 63. Compare: *He considers the couple husband and wife* doesn't mean the couple is actually married, whereas *He pronounced the couple husband and wife* does confer marital status.) This is why the construction, also known as "AGENT–ÆFFECTED–JUDGEMENT"-Construction (Herbst & Uhrig 2009), will be termed Evaluative-Attribution-Construction in this study.

Despite semantic similarities, there is considerable formal variation. Aside from the verb, the construction differs in the Attribute-slot which can, e.g., be a Noun-Phrase as in (1) and (2) or an Adjective-Phrase (3 and 4). Moreover, the construction connects the Attributee with Attribute-slot with either the preposition *as* (1 and 4), without any filler as in (2) or with *to be* as in (3).

The goal of this study is, first, to determine how to most appropriately structure this construction, e.g., if it best represented as one construction or several allostructions of a constructeme (cf. Cappelle 2006, Colleman 2011, Herbst & Huber 2022, Perek 2015). Second, an overview of its variation and development will be delineated by using the Construtction Grammar approach (cf. Barðdal, Smirnova, Sommerer & Gildea 2015, Bergs & Diewald 2008, Fried 2009). This involves analyzing the fillers of these constructions and creating collo-profiles for certain periods of time to trace the developments of the contexts and the combination of variables.

Using the ARCHER corpus, the study traces the development of the construction(s) from 1600 to 1990, examining variations between the verbs *regard*, *consider*, *find*, and *think*, as well as the variants of other slots. The findings may reveal factors contributing to the decline in the frequency of *think* in this construction, once being one of the most prototypical verbs to express this meaning in Old English. On top of that, this may shed light on the ascent of *consider* and *regard* following their introduction from French during the Middle English period.

ID: 207 / **TS4.2: 1**
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: Construction Morphology, discourse analysis, conspiracy theories

Wortbildung in Verschwörungstheorien: Zur Verschränkung von Konstruktionsmorphologie und Diskurssemantik

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Durch die Fokussierung auf Verwendungs- und Funktionsweisen von Wortbildungskonstruktionen in verschwörungstheoretischen Diskursen verknüpft der Vortrag das Framework der Konstruktionsmorphologie (Booij 2010; Michel 2014; Hein/Michel 2023) mit Ansätzen der Diskurssemantik im Allgemeinen (Busse/Teubert 1994; Busse 2000; Spitzmüller/Warnke 2011) sowie der Diskursmorphologie im Besonderen (Gredel 2018; Ganslmayer/Müller 2021; Leonhard/Röhrs 2023; Gautier/Michel im Druck). Anhand von Daten aus dem Verschwörungstheorienreferenzkorpus (VerReKo) (654.787 Tokens) des laufenden DFG-Projekts „Sprache in Verschwörungstheorien" (Römer 2022; Stumpf/Römer 2024) wird danach gefragt, wie der wiederkehrende Gebrauch bestimmter Wortbildungen an der sprachlichen Konstruktion verschwörungstheoretischen Wissens beteiligt ist. Die im VerReKo versammelten Texte zu Verschwörungstheorien über Corona, Klimawandel, Ukraine-Krieg, „Umvolkung", den Anschlag auf den Berliner Breitscheidplatz sowie Gender und Diversität stammen aus Beiträgen in sozialen Medien sowie verschwörungstheoretischen Medienformaten. Die Analyse besteht zum einen aus quantitativen Zugängen (mittels AntConc), um in einem ersten Schritt wiederkehrende Konstrukte aufzudecken, die auf schematischere Muster zurückzuführen sind. Zum anderen werden die diskursiven Funktionen der aufgedeckten Wortbildungskonstruktionen qualitativ und kontextsensitiv sowie stets in Bezug auf die thematischen Diskurse, in die sie eingebettet sind, herausgearbeitet. Im Sinne der thematischen Sektion werden dabei vor allem pragmatische und diskursfunktionale Charakteristika der untersuchten Form-Bedeutungspaare beleuchtet (Croft 2001: 18; Stumpf 2023; Stumpf/Merten 2023). So stehen solche Wortbildungskonstruktionen im Zentrum des Interesses, die in Verschwörungstheorien dazu eingesetzt werden, um einerseits Zweifel am gesellschaftlichen Konsens zu säen und andererseits verschwörungstheoretischem Wissen Plausibilität zu verleihen. Hierzu zählen unter anderem das nominale Kompositum [*Fake*-X] (Beleg 1) sowie das adverbiale Derivat [X-*(er)weise*] (Beleg 2).

1. Um die Bekämpfung des Virus geht es nicht. Während Deutschland wirklich höchst fragwürdige Studien heranzieht, wonach Genesene ansteckend sein sollen, um sie einsperren zu können, verdoppelt die Schweiz die Dauer der vermuteten Zeit der Nicht-Ansteckung, Schottland hebt Beschränkungen auf. Ehrlich: nach den Pannen der letzten beiden Jahre ist mein Vertrauen in die Schweizer Behörden höher als das in die deutschen Pannen-Minister und **Fake-Statistiker** in Bund und Ländern. (Auszug aus dem Artikel „Die Corona-Politik der Wahrheitsleugner zerstört das Staatsvertrauen" auf www.tichyseinblick.de)
2. Ein führender Klimawissenschaftler warnt, dass der Klimawandel die gesamte Menschheit auslöschen wird, wenn wir nicht innerhalb der nächsten fünf Jahre aufhören, fossile Brennstoffe zu nutzen. **Komischerweise** verschwand genau dieser Beitrag nun fünf Jahre später von Twitter. Kommentarlos. (Auszug aus dem YouTube-Video „Mit Hitze-Hysterie zum Profit: Fürs Klima sterilisiert, weggesperrt, enteignet – Video")

Darüber hinaus wird diskutiert, ob neben Wortbildungskonstruktionen, die spezifische pragmatische und diskursive Funktionen in Verschwörungstheorien ausüben, auch Wortbildungsmuster mit genuin „verschwörungstheoretischer Semantik" (Schwarz-Friesel/Reinharz 2013: 175) existieren. Zu denken ist hierbei an Bildungen, die die Lexeme *Jude* (z.B. *Weltjudentum*, *Verjudung*, *Finanzjudentum*) oder *Finanz* (z.B. *Finanzelite*, *Hochfinanz*) enthalten, und die demnach als antisemitische Versatzstücke und Codes (Jaecker 2004) – gemäß der für Verschwörungstheorien essenziellen Frage „Cui bono? / Wem nützt es?" (Butter 2018: 59) – dazu dienen, die vermeintlichen Verschwörer zu benennen.

Die korpusbasierten Fallanalysen verdeutlichen, dass Wortbildungskonstruktionen ihr Bedeutungspotenzial im Diskurszusammenhang entfalten (können) und ihr Gebrauch mit (intendierten) Wirkungen im Diskurs verbunden ist. Der Vortrag plädiert daher für eine stärkere Verzahnung von Konstruktionsmorphologie und linguistischer Diskursanalyse.

ID: 230 / **TS1.1: 2**

Theme Session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Topics: Theme session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Keywords: Usage-based approaches, data-driven learning, constructionist approaches, cognitive grammar

A critical evaluation of Usage-Based Approaches in Language Education: A Systematic Literature Review

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Usage-based approaches to language development have contributed to major advances in language teaching research (Ellis & Wulff, 2020). However, the heterogeneity of their practical operationalization and, in some cases, the lack of experimental realism in empirical studies conducted so far have hindered the ability to make strong claims regarding the usefulness of usage-based approaches to language teaching and learning. Based on the increasingly large body of empirical studies, the present paper reports on the results of a systematic literature review of studies published between 2013 and 2023 as research articles in scientific journals and chapters in specialised handbook series. To this end, we used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology. We included empirical studies that dealt with the application of usage-based approaches to language teaching and learning, and provided sufficient data to identify the usage-based approach employed, the context of the study, and the theoretical framework.

The analysis focused on the diverging theoretical foundations of the usage-based approaches used, their impact on the learning and teaching of foreign languages, and the methodological approaches employed in this specific research field (research designs, data collection procedures, samples, etc). The results from the review are discussed with the aim of suggesting a research agenda that addresses current gaps in knowledge and proposes directions for future research.

ID: 127

Theme session proposal

Topics: cognitive grammar, applied linguistics and pedagogy, other

Keywords: Applied Cognitive Linguistics, Language Teaching Research, Usage-based Approach

Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

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The cognitive linguistic view suggests that our linguistic knowledge is predominantly shaped by our bodily interaction with the physical world, rather than being predetermined by fixed rules. It is constructed ad hoc based on situational constraints, allowing for different perspectives. This knowledge is acquired, stored, and retrieved through distributional processing (Ellis & Larsen-Freeman, 2006). In this context, the usage-based perspective has not only demonstrated its usefulness in better describing the dynamics of language development but has also inspired a substantial body of pedagogical proposals for language learning and teaching, including their empirical evaluation in authentic classroom settings.

The usage-based perspective on language development underscores the significance of considering the socio-communicative functions of constructions, aligning well with recent competence-oriented frameworks of reference. Research in this context has primarily focused on the emergence, entrenchment, and frequency of use of form-meaning pairs from a linguistic standpoint. However, insufficient attention has been given to the socio-cultural situatedness and pragmatic dimensions of language (Eskildsen & Kasper, 2019) as well as to the inquiry of the multiple complex causes underlying language development, particularly in the context of language learning and teaching (Larsen-Freeman, 2019). In order to broaden the horizon of applications of language teaching and learning, it is essential to adopt an integrated research approach combining theoretical, methodological, and empirical insights from cognitive linguistics, language acquisition, and educational research (Hiver et al. 2021).

The proposed thematic session, therefore, aims to explore and discuss new directions in Applied Cognitive Linguistics that enhance our understanding of the potential contribution of the usage-based perspective to language learning as a dynamic system with interacting and co-adapting sub-components (Hiver et al. 2021). We welcome empirical studies that deal with the implementation of the usage-based approach to language teaching and learning in various contexts of situated practice addressing (but not limited to) the following aspects:

1. Studies on the contribution of the usage-based approach to implementing concept-based instruction (prototype extensions, image schemas, force dynamics, etc.), and task-, action-or scenario-based language teaching.
2. Studies examining the usefulness of embodied learning and teaching practices in different modalities, including the use of serious games and virtual and augmented realities in language learning and teaching contexts.
3. Studies addressing methodological issues of data elicitation and analysis, emphasizing the importance of gathering authentic linguistic data in culturally rich and meaningful environments, such as authentic job application procedures, realistic communication settings involving professional tasks, or interactive serious game environments.
4. Studies employing methodologically innovative research designs to increase ecological validity and/or a more comprehensive understanding of the language learning complexity. This might include mixed-methods studies combining process-oriented and outcome-oriented measures, idiodynamic research techniques, and micro-longitudinal designs capturing intra- and interindividual variation, design-based research aimed at fostering teacher-researcher collaboration and fine-tuning pedagogical interventions, etc.
5. Studies exploring the relationship between a usage-based approach to language learning and teaching and the diversity of manifestations of agency at different levels: learners' attitudes, teachers' beliefs, and engagement during activities.

ID: 179 / **TS1.1: 1**

Theme Session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Topics: Theme session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues

Keywords: usage-based approach

Focus on Usage-Based Approaches to Language Learning and Teaching.

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The cognitive linguistic view suggests that our linguistic knowledge is predominantly shaped by our bodily interaction with the physical world, rather than being predetermined by fixed rules. It is constructed ad hoc based on situational constraints, allowing for different perspectives. This knowledge is acquired, stored, and retrieved through distributional processing (Ellis & Larsen-Freeman, 2006). In this context, the usage-based perspective has not only demonstrated its usefulness in better describing the dynamics of language development but has also inspired a substantial body of pedagogical proposals for language learning and teaching, including their empirical evaluation in authentic classroom settings. The usage-based perspective on language development underscores the significance of considering the socio-communicative functions of constructions, aligning well with recent competence-oriented frameworks of reference. Research in this context has primarily focused on the emergence, entrenchment, and frequency of use of formmeaning pairs from a linguistic standpoint. However, insufficient attention has been given to the socio-cultural situatedness and pragmatic dimensions of language (Eskildsen & Kasper, 2019) as well as to the inquiry of the multiple complex causes underlying language development, particularly in the context of language learning and teaching (Larsen-Freeman, 2019). In order to broaden the horizon of applications of language teaching and learning, it is essential to adopt an integrated research approach combining theoretical, methodological, and empirical insights from cognitive linguistics, language acquisition, and educational research (Hiver et al. 2021). The proposed thematic session, therefore, aims to explore and discuss new directions in Applied Cognitive Linguistics that enhance our understanding of the potential contribution of the usage-based perspective to language learning as a dynamic system with interacting and co-adapting sub-components (Hiver et al. 2021). The present paper gives an overview of the main research trends in the field and discusses new avenues.

ID: 203 / **TS6.1: 3**
Theme Session: Non-finite causal constructions in English and beyond
Topics: Theme session: Non-finite causal constructions in English and beyond
Keywords: Interjections, discourse markers, emotions, speaker's mental attitudes

Interjections in the because X construction: What do they refer to?

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As the literature has illustrated, the X slot in the *because* X construction is occupied by words of various syntactic categories such as nouns, adjectives, interjections, or agreement words (e.g., Bohmann 2016, Bergs 2018, Kanetani 2022). Nevertheless, these words themselves can indirectly denote propositional contents. In this regard, Okada (2021) argues that the linguistic materials in the X-slot serve as a "reference point" (Langacker 1993) for relevant propositions in contexts. However, just because the X-elements can evoke propositional contents does not mean that they are evoked in exactly the same way.

(1) I cannot go out with you today because homework/sick. (Kanetani 2022: 3)

(2) Admittedly, not in the UK yet, because aargh. (Carey 2013)

The noun and adjective in (1) are semantically related to propositions like *I do my homework* and *I am sick* easily, since the words function as a reference point, as Okada (2021) claims. However, it is difficult to say that the interjection *aargh* in (2) is part of the proposition, although Kanetani (2022: 13) says that it is also construed propositionally. What then do interjections in the X-slot express?

To answer the question, we adopt the hierarchical semantic structure of a sentence proposed by Nakau (1994: 15), as simplistically shown in (3), where the two types of the speaker's mental attitudes, S[entence]-Mod[ality] and D[iscourse]-Mod[ality], take a proposition (PROP) as their semantic scope.

(3) [D-MOD [S-MOD [PROP]]]

By definition, S-Mod refers to an attitude involving the truth value of a proposition, whereas D-Mod restricts a manner or mode of communication. Crucially, in Nakau's model, interjections function as D-Mod, which takes scope over a complex of S-Mod and PROP. That is, even without an explicit propositional content, one must exist behind an interjection, and the interjection simply expresses the speaker's positive/negative emotional attitude to the implicit proposition.

(4) My good friend made her daughter a bouquet with Trader Joe's flowers and I am at loss for words because wow. (Twitter)

The simple word *wow* in (4) represents the full proposition that the bouquet is so beautiful (beyond description). Note that the modality use of interjections is also found in sentential *because* constructions, as in (5).

(5) I often joke that I became a pasta-terrian when I stopped eating meat, because wow I ate a lot of pasta! (iWeb)

However, in social media, the *because* X construction as in (4) seems preferred, probably because implicit propositions behind the interjections may be elaborated by various supplementary media including videos, pictures and emojis, as well as for economy reasons (cf. Bohmann 2016). This is partially confirmed by searching the string *because wow* in Twitter (accessed from 1 to 8 May 2024): out of a total of 107 tokens, the conjunction *because* is followed by only the interjection *wow* in 76 tokens, whereas it is followed by the interjection and a finite clause in 31 tokens.

ID: 200 / TS4.4: 2
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: compounds

Naming and the meaning of compounds

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Compounds are the result of the combination of two components that each have a meaning. However, the meaning of the resulting compound is not a straight composition of the meanings of the two component parts. Two examples are given in (1).

(1) a. city hall
b. townhouse

The compounds in (1) have a regular meaning in the sense that the meaning of both components are included in the meaning of the entire compound. For such compounds, semantic accounts have typically focused on the relationship between the two components. This raises the questions in (2).

(2) a. What is the relationship between the two components?
b. How can this relationship be determined?

In the context of construction morphology, we can consider Jackendoff's (2009) proposal as a set of mechanisms for addressing (2a). Booij (2010) proposes an inheritance hierarchy organizing constructions with different degrees of specification, which can to some extent be used to address (2b). Both ideas have been elaborated by these authors and others.

As is typical for compounds, the examples in (1) designate a specific concept. Therefore, the answer to (2a) arrived at by describing the relationship between the components is incomplete. Although the relationship in (1a) and (1b) can be characterized as 'located in', the actual meanings are much more specific. Although both compounds are more senses, we focus here on the senses in (3), with definitions from OED (2000-2024).

(3) a. the chief administrative building or offices of a municipal government
b. tall terraced house with three or more storeys, typically of large proportions ... and usually located in a city or town

In (3a), neither component of (1a) is used in the definition. It would be possible to come up with an alternative definition that uses them, but (3a) is more concise and precise. In (3b), we have a more compositional definition, including *house*, *town* and the relationship *located in*, although the last two of these are hedged and important further information is provided. This raises the question of the source of the further information and the reason why the components and their relation play such a limited role in the meaning of these compounds.

In ten Hacken & Panocová (2024), it is proposed that in order to account for the meaning of compounds, we have to take naming as a central factor. Whereas the questions in (2) take a decoding perspective, the meanings in (3) for the compounds in (1) originate from the need to name concepts. The parts of the meaning that are not expressed in the form are not the result of semantic specialization, but of onomasiological coercion. We do not form a compound and then consider what it might mean, but form the compound because it can be used as a name for a concept we want to talk about. The questions in (2) and answers of the type proposed by Jackendoff (2009) and Booij (2010) are important in the sense that they characterize the infrastructure of compounding, but onomasiological coercion is necessary to account for their meaning.

ID: 155 / **CB2.1: 1**
Poster
Topics: corpus linguistics, language processing, language change and grammaticalization
Keywords: probabilistic grammar, variation phenomena, grammaticalization

Investigating the stability of probabilistic grammar: a corpus-based analysis across fine-grained registers

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Speakers often have the choice between two different forms to say roughly the same thing. When talking about a future event, for example, they usually have the option to use either the *will*-future, as in *It will rain* or the *be going to*-future, as in *It is going to rain.* Research on this and other variation phenomena is manifold, and the fact that speakers have probabilistic knowledge that they utilize when being confronted with such alternations has been firmly established (e.g., Bresnan 2007). Where research lacks, though, is in the question of how stable this system of probabilistic grammar is: while claims have been made that this system is stable regardless of extralinguistic factors (Labov 2010: 265; Rickford 2014: 596), there is preliminary evidence suggesting an instability of probabilistic grammar. Research in this area has mostly shown that (1), the probabilistic system is not immune to changes in the extralinguistic sphere, may it be variety, register, or formality, and (2), that the extent of instability differs between different variation phenomena: some are more prone to be instable, others less (Szmrecsanyi et al. 2016: 132–133, Engel & Szmrecsanyi 2022).

Beyond these preliminary results, though, there is much to uncover regarding the interaction between extralinguistic factors and probabilistic grammar. This on-going project therefore aims to go beyond previous analyses on the register-specificity of probabilistic grammar by Engel & Szmrecsanyi (2022): first of all, a more fine-grained approach to register will be implemented, beyond the spoken – written and formal – informal continua. More importantly, though, this project aims to systematize the research on register and probabilistic grammar by regarding multiple variation phenomena to discover potential patterns of stability, to see if and why the grammar of some alternations may be more stable than others' across registers. One hypothesis is that this might be an effect of on-going language change, more specifically grammaticalization: one could assume that the higher the degree of grammaticalization of the incoming variant is, the more stable is the probabilistic grammar of the alternation. Higher variation between registers could therefore be hypothesized to be an effect of rather incipient grammaticalization, and vice versa. As part of this bigger project, this poster shall present a first case study on the future temporal reference alternation as an example of a relatively recent change in progress across six fine-grained registers from the Corpus of Contemporary American English: spoken, fiction, magazines, newspapers, academic journals, and blogs. Based on 1000 concordances per register (500 per variant, n = 6,000), mixed effects logistic regression models as well as conditional random forest models will be fitted in order to compare the significance of predictors, the effect sizes, as well as the relevance rankings of predictors across the six registers to uncover potential variances between the registers (cf. Szmrecsanyi, Grafmiller & Rosseel 2019).

The presented results will only be one single, but nevertheless important puzzle piece of the entire picture of the relation between register, probabilistic grammar, and linguistic change in the form of grammaticalization.

ID: 205 / **TS2.4: 1**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions
Keywords: Priming, motion event constructions, implicit learning, second language learning, prime surprisal

"Priming-for-learning": Implicit learning of French L2 motion event constructions in adult L1 German speakers

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Priming describes the tendency to re-use structures experienced in previous discourse (Bock 1986) and has been examined in terms of implicit adaptive learning mechanisms (e.g., Bock & Griffin 2000; Messenger et al. 2022). Priming has been reported to support the L2 acquisition of target structures, such as passives (Coumel et al. 2023) or direct object dative constructions (Muylle et al. 2021). In contrast, it has so far not been explored as a potential tool facilitating the L2 acquisition of challenging form-function mappings such as motion event constructions, which have often been reported as resistant to restructuring even at advanced proficiency levels (Madlener-Charpentier & Liste Lamas 2022; Treffers & Tidball 2015). The present study investigates (i) whether priming boosts the production of L2 French (verb-framing, henceforth VF) motion event constructions in L1 speakers of German (satellite-framing, henceforth SF), (ii) to what extent dispreferred L1 patterns can be leveraged for learning, and (iii) whether learning effects are long-lasting. Participants complete two sessions of a web-based priming experiment in which they are asked to produce typewritten French descriptions of target videos of motion events after exposure to 30 prime sentences (15 VF and 15 SF) presented in written and auditory form, each coupled with a corresponding prime video. Primes are presented in French in a within-language session, and in German in a between-language session. German VF primes constitute a dispreferred albeit grammatical variant in learners' L1 (*rennend überqueren*, 'to cross running') which exhibits form-function correspondence with the typical target L2 mapping (*traverser en courant*). Conversely, French SF primes (*courir dans*, 'to run into') display correspondence with the canonical German pattern but are infelicitous in French with a boundary-crossing interpretation. To assess long-lasting effects, each session is preceded by a pre-test (representing the post-test in the second session) where participants describe 15 motion events without prior prime exposure. Regarding immediate priming, we hypothesize a higher proportion of VF constructions after VF primes than after SF primes. Priming is expected to be stronger within than across languages (Khoe et al. 2023) and to last for up to one week (Kaschak et al. 2011). Moreover, due to prime surprisal (Jaeger & Snider 2007), we hypothesize that dispreferred patterns may boost priming, potentially leading to enhanced learning. Results will be discussed with respect to implications for L2 educational strategies. Priming methods could be applied to the L2 teaching of motion event encoding in several ways. As an interactive classroom activity, meaning-focused information-exchange tasks (McDonough et al. 2015) or collaborative turn-taking games could involve learners reading out prime sentences on which a dialogue partner has to act (e.g., by making a guess or by matching it to a picture/video). Subsequent sentence fragments can act as prompts for completing a target sentence by re-using the same structure. Similar activities could be adapted to virtual classroom contexts via chat-based online interactions involving input flooding (Coumel et al. 2022) of the target structure in the written modality.

ID: 188 / **GS_T1.1: 1**
Presentation
Topics: language processing, neurolinguistics
Keywords: Color Perception: Linguistic relativity: Neural Networks: Language processing

The Impact of Language on Neural Representations of Color Perception: A brain-constrained neural model

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The way we perceive things in the outside words has been argued to be influenced by the language we speak, commonly known as the linguistic relativity hypothesis [1,2], which has gathered significant attention in linguistics, philosophy, and neuroscience. Studies on color perception have been a primary test case, demonstrating differences in perception and categorization among speakers of languages with different color-naming systems [3–5]. For instance, Russian speakers, who have separate labels for light and dark blue, have been shown to discriminate between blue shades faster than within shades of the same color category, a category effect not found in English speakers, who lack the blue color labeling distinctions [6]. However, a neuromechanistic explanation underpinning this phenomenon is still lacking, particularly regarding how the neural representation of color may change depending on linguistic experiences.

To address this, we employed a brain-constrained neural model [7–10] that mimics 12 cortical regions in the frontotemporal occipital cortices to simulate key features of color perception and the impact of acquiring different labels by simulating Russian and English color-naming systems. As revealed by Representational Similarities Analysis, the English model showed a striking similarity in the neural representation of blue and green colors compared to the Russian model, which showed a clear distinction. Specifically, when two similar shades of blue or green were attached with a singular label, their internal neural representations became very similar, resulting in coactivation during simulated color perception. Conversely, assigning separate labels to each blue clear distinction in their internal neural representations emerged, leading to the reactivation of each color separately. This effect was more pronounced in the hub regions central in the neural network and moderate in the visual system.

Overall, the results offer a novel neural explanation for the linguistic relativity hypothesis and make novel predictions on how the way colors are labelled and acquired can significantly impact their neural representations, resulting in differences in perception and behavior.

ID: 192 / **GS_W2.3: 2**
Presentation
Topics: pragmatics and cognition, corpus linguistics, first language acquisition
Keywords: language acquisition, adjectives, scalar implicature

Scale structure predicts adjective production in child language

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Most research on the acquisition and processing of scalar expressions has focused on quantifiers like *some*. Yet adults and children vary considerably in the extent to which they derive scalar implicatures (SI) for different types of scales (e.g., Barner et al. 2011; Van Tiel et al. 2016). In the domain of gradable adjectives, recent studies have indicated a role of the scale structure underlying the semantics of gradable adjectives in SI (Gotzner et al. 2018). We carried out a corpus analysis in CHILDES (MacWhinney 2014) to examine which kinds of adjectives are produced by children between 12 and 66 months of age. The goal of our study is twofold: First, we want to expand the set of scalar expressions investigated in child language and second, we explore the role of scale structure in children's expressive vocabulary. Our results demonstrate that the same factors influencing SI in adults, such as polarity, type of adjective, and extremeness, also predict the frequency of production in child language.

ID: 219 / **TS2.2: 2**

Theme Session: Second language learning and teaching of motion event constructions

Topics: Theme session: Second language learning and teaching of motion event constructions

Keywords: motion events, foreign language acquisition, French, German

Motion event descriptions by German L2 learners of French

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The work of Talmy (1985; 1991) has drawn attention to the fundamental difference between two types of languages in the expression of motion events: Verb-framed (VF) languages show a preference for expressing Path in the main verb; Manner is expressed less frequently. Satellite-framed (SF) languages usually express Path in a satellite, such as a verb particle, and typically express Manner in the main verb. Later work has shown that even in languages of the same type, there sometimes are considerable differences in patterns of verbalization of motion events (Filipović 2007; Hijazo-Gascón & Ibarretxe-Antuñano 2013; Zlatev et al. 2021).

Various strategies have been identified in studies of motion events in foreign language acquisition: a focus on Path instead of Manner, regardless of the L1 (Cadierno 2017), but also an overgeneralization of the typical L2 pattern (Hendricks & Hickmann 2011).

The foreign language acquisition of the verbalization of movement events in French has so far been investigated for learners of different first languages, such as English (Hendricks & Hickmann 2011; Treffers-Daller & Tidball 2016) or Italian (Anastasio 2023). German learners have been studied very little to date (see, however, the analysis of Frog Story data in Goldschmitt 2017). Methodologically, most studies have used picture stories.

The present study investigates the verbalization of motion events by German learners of French at three different levels in an elicitation experiment. The stimuli consist of 22 combinations of 4 Manner and 6 Path elements depicted in handmade drawings which participants are asked to describe by answering the question "What does the person do?". French L1 data already collected shows a clear preference for VF structures, but also various other structures, including SF structures. Manner was frequently verbalized overall. In contrast, German L1 data, which has also already been collected, shows little variation and a very strong preference for SF structures. L2 French data of three different levels (A2, B1 and C1) is collected during the summer term 2024 with students at Freie Universität Berlin in order to investigate similarities and differences in L2 verbalization strategies in relation to L1 data of both languages and to work out the strategies used.

It is expected that learners will use different strategies at different levels. Beginners are expected not to have grasped the difference between the two languages yet and therefore transfer German patterns to their French utterances, resulting in an overuse of SF structures. Intermediate learners are expected to have grasped the strong preference of French for VF structures but not be aware of other various structures used in this domain, resulting in an overuse of VF structures. Advanced learners are expected to be aware of the full range of structures used to express motion events in French and therefore getting closer to native like descriptions of motion event depictions. As both in the L1 French and in the L1 German data, Manner was frequently expressed, German learners of French are expected to express that component frequently as well.

ID: 214 / **TS2.3: 1**

Theme Session: Second language learning and teaching of motion event constructions

Topics: cognitive grammar, cognitive typology, motion and space, Theme session: Second language learning and teaching of motion event constructions

Keywords: motion events, French as a foreign language, SLA

Learning to Talk about Motion in a Typologically Different Language: a Holistic Spatial Semantics Analysis

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Cross-linguistic differences between Romance and Germanic languages in the domain of motion events have been investigated for decades (Talmy 1985, 2000; Slobin 2004, Zlatev 1997 etc.). The impact of L1 on the linguistic encoding preferences extends not only to the influence of language specific form-meaning mappings (Cadierno 2004, 2010) and salience of specific semantic categories (Slobin 2006; Ibarretxe-Antuñano 2009), but also to conceptualization patterns, e.g. perspective taking (Stutterheim & Nüse 2003), choice of the Frame of Reference and conceptualizing the event as translocative or non-translocative (Vesnina in press). This suggests that the difficulties in acquisition of a typologically different language go beyond learning language specific constructional constraints (e.g. the correct usage of prepositions).

The analysis presented here compares motion event descriptions elicited from 35 native speakers of French, 29 native speakers of German and 17 Swedish learners of French as a foreign language (intermediate level). The descriptions have been analyzed using Holistic Spatial Semantics (HSS) (Zlatev 1997, Zlatev et al. 2010, Zlatev et al. 2021) – a theoretical framework that, up until this point, has never been used to analyze learners' speech. The quantitative analysis of patterns of speech as well as error analysis (Corder 1982) have allowed to categorize and investigate specific areas of difficulties in the learners' trajectories (e.g.: constructional constraints, perspective taking and deixis, acquiring language specific lexical items) as well as coping strategies adopted by the users in light of these challenges. The patterns of framing a motion event differing strongly between the learners of French and L1 French speakers suggest a strong influence of the learners' L1 (Swedish) and, possibly, English, which all the participants were fluent in.

ID: 212 / **TS3.1: 2**
Theme Session: Cognitive approaches to written language
Topics: other
Keywords: Theme session: Cognitive approaches to written language

A longitudinal, corpus-based study of effects of statistical learning on spelling development

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Learning to spell is among the most important achievements children have to master in primary school. While explicit instruction is crucial for learning, many graphemic patterns are quasiregular and must be learned implicitly by coming face to face with written source material. The ability to acquire quasiregular patterns is often ascribed to *statistical learning* (Treiman, 2018). Indeed, as early as by grade 2, children use orthographic context to adjust their spelling (Hayes et al., 2006) and spelling errors pertaining to specific phenomena like consonant doubling can be predicted by contextual information (Laarmann-Quante, 2021).

The objectives of the present study were to a) to replicate such early effects of statistical learning on the spelling performance of beginning writers and b) test the hypothesis that the impact of statistical properties of quasiregular domains in orthography are stronger for proficient than for less proficient writers. To this end, we investigated spellings of *vowel-lengthening <h>* in the Litkey Corpus (Laarmann-Quante et al., 2019), a longitudinal corpus of digitized children's texts collected at ten testpoints between grades 2 and 4.

Vowel-lengthening <h> serves as an overt, orthographic marker for tense vowels, yet its usage is not always consistent (Fuhrhop, 2015). While the environment in which vowel-lengthening <h> appears has been described in great detail (Berg, 2019), the factors that predict it do not *demand* it, as can be seen in *Wal* ([vaːl], 'whale') as opposed to *Wahl* ([vaːl], 'election'). Additional phenomena like *syllable-separating <h>* – indicating that two vowels appearing in sequence pertain to separate syllables, as in *drohen* ([ˈdʁoːən], 'to threaten') – and *vowel doubling* as another vowel-lengthening sign besides <h> – *Boot* ([boːt], 'boat') – only add complexity, which might confuse early spellers and prompt errors.

In order to assess whether children with higher spelling proficiency are more affected by statistical regularities than poorer spellers, we adapted the MuPDAR approach (Multifactorial Prediction and Deviation Analysis using Regression) put forward by Gries and Deshors (2014). Using the spellings of all words in the childLex corpus (Schröder et al., 2015), we modeled a virtual reference speller to generate predictions about whether this reference speller would spell words listed in the Litkey Corpus correctly or not. We found that, overall, children already showed high proficiency levels in regards to vowel-lengthening <h> and adjacent phenomena (error rate < 2%). However, the predictions of our reference speller exceeded the children's performance (error rate < 0.5%).

By comparing the predictions of the reference speller with actual spellings from the Litkey Corpus, we assessed under which conditions and how far individual children would deviate from our reference speller. We found that less proficient spellers deviated more from the reference speller, which was expected, yet also that certain contextual cues weakened or even annihilated this difference, helping children to produce correct spellings. These findings are in line with the hypothesis that implicit statistical learning plays a central role in acquiring orthography and that differences in spelling proficiency pertain to how well spellers master even the least consistent aspects of orthography.

ID: 202 / TS4.2: 2
Theme Session: Die Bedeutungsebene von Wortbildungskonstruktionen
Topics: construction grammar, frame semantics, corpus linguistics, Theme session: Die Bedeutungsebene von Wortbildungskonstruktionen
Keywords: Frame Semantics, Word Formation, Nominal Compounds, Particle Verbs, German

Frame-Semantic Perspectives on Word Formation Constructions: Studies on German Nominal Compounds and Particle Verbs

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Word formation has not only been outside the scope of Construction Grammar for a long time (Hartmann 2023), it still is for Frame Semantics, a theory and method often used to describe the meaning poles of grammatical constructions (Willich 2022a). To this date, there are no dedicated studies on how to deal with word formation constructions within Frame Semantics. This contribution will answer two important questions to address this research gap. First, how do lexical units (that evoke semantic frames) and frame elements – the building blocks of frames – map onto the constituent parts of word formation constructions? Second, how much difference is there between compounding and derivation constructions from a frame-semantic point of view?

The theoretical and empirical basis are Construction Morphology (Booij 2010) and the frame-semantic database of FrameNet (Ruppenhofer et al. 2016). Ideas on combining Construction Grammar and Frame Semantics are drawn from the Construction Semantics approach (Willich 2022b). Two types of word formation constructions are investigated for German: nominal compounds and particle verb constructions. Examples for nominal compounds consisting of a noun head and a noun modifier (cf. (1)–(3)) are taken from the Wortwarte.org project,[1] a collection of newly attested word formation products based on the DWDS Webmonitor corpus[2] and other sources.

(1) Datenwissenschaftler
'data scientist'

(2) Algenshake
'alga shake'

(3) Bahnhöflichkeit
'train politeness'

The particle verb construction under investigation might be called 'reflexive particle verb construction' (cf. Smirnova 2018), since it consists of a particle verb combined with a reflexive pronoun and a (optional) directional PP, a context where the verb is usually not to be expected (cf. (4)). Examples are drawn from the DWDS Kernkorpus 21.[3]

(4) Über Serpentinen quält sich der Autobus einen Pass hinauf, und die Welt ist wieder verwandelt. (Die Zeit, 05.01.2000, Nr. 2)
'The bus tortures its way up a pass over serpentines, and the world is transformed again.'

As a result, there are three ways to map lexical units and frame elements onto nominal compounds: (a) the head noun is a frame-evoking lexical unit, while the modifier instantiates a frame element, (b) both the head noun and the modifier are instances of a frame element, whereas the frame depicts a relation between these constituents, or (c) both the head noun and the modifier are lexical units (evoking separate frames), where the relation between them goes beyond the scope of a single frame.

Constructs of the reflexive particle verb construction bear meanings that include the Motion frame, whereas the particle verbs alone often do not evoke frames anywhere near that frame. A difference between compounding and derivation (in the case of particle verbs) is that the meaning of the particle verb is embedded in the meaning of the syntactic construction as a whole and the role of the Motion frame cannot be traced back exclusively to the formation of the particle verb. Therefore, the construction surrounding the particle verb contributes a lot more to the meaning of the construct than the particle verb itself.

[1] https://wortwarte.org/category/woerter/

[2] https://www.dwds.de/d/korpora/webmonitor

[3] https://www.dwds.de/d/korpora/kern21

ID: 162 / GS_W2.1: 1
Presentation
Topics: construction grammar, frame semantics, multimodality
Keywords: conceptual blending, frame-blending, construction grammar, time conceptualisation, speech-gesture interaction, form-meaning relation

Multimodal Frame Blending and Construction Grammar: meaning and form in the 'speech-gesture' construction of 'we will go back' in RT's talk show

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This paper investigates how conceptual blending (Fauconnier & Turner 2002) and construction grammar (Goldberg 1995, 2006, 2019) as research approaches and methods can be interwoven to analyse and model the human computation of multimodal utterances grounded in future conceptualisation from the perspective of form-meaning relation.

More specifically the paper focuses on the analysis of frame-blending (Turner 2008) and viewpoint-blending (Nikiforidou 2010) as triggered by speech and hand gestural cues in multimodal utterances of the *we will go back*type, where conceptualisations of future, past, and present are integrated in a highly imaginative way.

We pose the research questions:

- What is special about speech-gesture interaction behind constructions of the *we will go back* type?
- Why and how can our modelling of multimodal constructions of the *we will go back* type present a challenge for constructionist approaches?

To answer these questions, we used two datasets composed of RT shows "SophieCo Visionaries" and "SophieCo" from 2013-2022 (Author3 et al. 2023). We first performed a case study of one video featuring "we will eventually go back to the way we were".

Our multimodal analysis allowed us to conclude that future, past, and present are view-pointed frames which belong to the group of interrelated and interdependent frames (cf. Minsky 1980). We examined the mechanics of how view-pointed frames of future, past, and present are blended to create the rich meaning of the multimodal utterance. We then extended our analysis to a larger corpus, where a range of complex queries was used to identify further 27 multimodal utterances of the *we will go back* type in which the view-pointed frames of future, past, and present are blended. On the speech side, these utterances are instances of a family of constructions in the sense of Goldberg & Jackendoff (2004) with some form variation. On the gestural side, we determined specific, recurrent sequences that co-occured with the speech utterances. We observed that multimodal utterances of the *we will go back* type had a change of gestural direction on the same axis, but other aspects were not recurrent.

We can capture the commonalities in the gestural sequences by positing a family of constructions. In this case, a contrast in gestural direction on the same axis constitutes the gestural schema.

The gestural sequences we observed do not carry temporal functions on their own, which suggests that they rely on the corresponding linguistic sequence to acquire meaning. Thus, not all co-speech gestures can be attributed construction status in a constructionist framework. An alternative approach, which would regard these co-speech gestures as part of the form side of multimodal constructions is also problematic in that this would lead to a proliferation of such multimodal constructions.

Our paper discusses the results in the light of the above-mentioned issues and offers possible solutions.

ID: 227 / **TS1.2: 1**
Theme Session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues
Topics: cognitive grammar, construction grammar, prototypes and categorization, language processing, applied linguistics and pedagogy, cognitive semiotics, Theme session: Revisiting the Usage-Based Approach to Language Learning and Teaching: Research Trends and New Avenues
Keywords: prototype theory, prototype semantics, grammar, L2 teaching, L2 learning, empirical study

Are All Practice Sentences Equally Helpful in L2 Learning? Exploring Prototype Effects in Grammar Teaching

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In Cognitive Linguistics, prototype effects have been found to describe a wide range of linguistic phenomena, such as nouns (*toys*, Rosch 1975), verbs (*lie*, Coleman & Kay 1981), prepositions (*at*/*on*/*in*, Rice 1996), or transitive sentences (Ibbotson et al. 2012). Prototype effects refer to the fact that item membership to a category is not definite, clear-cut, and categorical, but rather graded or ranked. In other words, items are more or less typical of a category, so that some items are highly representative (or typical) of a category (e.g. *doll* for *toys*, *I was at the library* for *at*), while others are less representative (or typical) of a category (e.g. *book* for *toys*, *I was mad at Rob* for *at*).

Prototype effects are of particular interest to second-language (L2) teaching, since they imply that some items are better representatives of a construct that L2 learners wish to acquire. Here, more typical items of a category ought to be more efficient in L2 teaching, since they represent the construct to be learnt more fully or more faithfully. Consider, for instance, that it is easier to learn Sp. *pájaro* [bird] by showing an image of *sparrow* rather than a *penguin*, although both of them are a *pájaro*. Also, Wirag (2021) showed for the EFL learner's dictionary that more typical full-sentence definitions are more effective in explaining word senses to secondary-school students (e.g. *plethora* defined as *the supermarket sells a plethora of products* rather than *she owns a plethora of books*).

This talk focuses on the unexamined question if prototype effects are also found in practice sentences for L2 grammar structures (e.g. if-clause type II). Practice sentences, which are a classroom staple, serve to introduce new or to consolidate known L2 grammar. As other linguistic items, practice sentences may also exhibit prototype effects, with more typical (*If I had known about the party, I would have come*) and less typical (*If unicorns existed, they would fly to the moon*) items. Arguably, high typicality ought to have a facilitating effect on students' L2 learning (as with *sparrow* and *penguin*).

To explore this question, we conducted an empirical study via Amazon Mechanical Turk and asked 50 L1-English participants to give typicality ratings for a) 20 practice sentences for if-clause type II and b) 20 practice sentences for the gerund. We expect to find prototype effects in these practice sentences, which may later impact EFL classroom teaching. The empirical results will be presented at the conference.

ID: 153 / GS_W2.2: 3
Presentation
Topics: corpus linguistics, language change and grammaticalization
Keywords: aspect, progressive, grammaticalization, subjectification, corpus linguistics

Persistence of subjective meaning in grammaticalisation: periphrastic progressives in German

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It is widely agreed that subjectification plays an important role especially in early stages of grammaticalisation (Traugott 2010, Narrog 2017). Our talk focuses on subjective meaning in later stages of the process. Our test case is the so-called am-progressive construction in German, an emergent aspectual periphrasis that marks an event as currently ongoing (e.g. Flick/Kuhmichel 2013).

Cross-linguistically, progressives, including the am-progressive, often also express nonaspectual and arguably more subjective notions such as surprise, irritation and intensification (Anthonissen/De Wit/Mortelmans 2016). De Wit/Petré/Brisard (2020) show that even though the English progressive's association with subjectivity has been lost in those contexts in which it has become obligatory, it continues to expand to new contexts where it still conveys subjective implications.

While the situation in German is different in the sense that the am-progressive is never obligatory, the question still arises as to whether there is a similar connection between the construction's degree of grammaticalisation and the extent to which it is used to express subjective meanings. We approach this question by investigating synchronic corpus data from the perspective of Diewald's (2006) model of successive context types in grammaticalisation as well as the four grammaticalisation parameters suggested in Heine & Kuteva (2007) with their inherent diachronic ordering (context extension, desemanticisation, decategorialisation, erosion).

The German am-progressive originates in a temporal extension of the spatial preposition an 'at' in combination with a nominalised infinitive (first stage, untypical context). The nominal status of the infinitive is unambiguous in instances such as (1), where the infinitive is followed by a genitive modifier. In a second stage, "critical contexts" amass, where the construction is ambiguous between a nominal and a verbal analysis. In (2), for example, it is not clear whether the form Schreiben is a noun or a verb:

(1) während ich am Errichten der Mauer war
while I at.the errect-INF of.the wall was
'while I was erecting the wall'
(DECOW)

(2) Ich bin schon wieder am Schreiben
I am already again at.the write-INF
'I'm already writing again'
(DECOW)

The third stage is embodied by "isolating" contexts like (3), where the argument Knöpfe ('buttons') can only be interpreted as an accusative object, thus testifying to a verbal analysis of drücken ('push'). This interpretation involves internal decategorialisation of the PP and a reanalysis of its (obligatorily contracted) head as a verbal periphrasis marker:

(3) bin aber ständig Knöpfe am drücken
am but constantly buttons at.the push-INF
'But I'm constantly pushing buttons'
(DECOW)

Both in terms of Diewald'smodel of context types and the sequentially ordered parameters of Heine and Kuteva, clearly verbal usages like (3) constitute later, more strongly grammaticalised additions to constructional usage patterns of the am-progressive than examples like (1) and (2). We evaluate whether the proportion of subjective uses of the construction decreases, remains more or less stable, or increases between the older stage II (intransitive) and the more recent stage III uses (transitive). Data come from a large corpus of informal German web forum discussions.

ID: 218 / **TS5.2: 1**
Theme Session: Chunking phenomena and phonological reorganization in spoken interaction
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Phonetic evidence for lexical chunking in pragmatic formulas

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Under the assumption that „phonological reduction is an excellent indicator of memory storage of a phrase" (Bybee 2001: 161), phonetic analyses can provide valuable cues to the cognitive status of complex expressions as autonomous constructions – provided they are lexically substantive. One such type of expression are pragmatic markers with phrasal and clausal origins such as English *I don't know* (Scheibman 2000). Starting out as compositional (and hence variable) syntagms with high usage frequency due to their indexical functions in interaction, such expressions ("pragmatic formulas") may become ever more formulaic over time through frequent repetition. In case they ultimately converge on one particular (now invariant) realisation, a new construction has emerged ("pragmatic marker"). Being lexical in form and indexical in function, such markers are products of an interplay of lexicalisation and grammaticalisation. Not all formulas develop into full-fledged markers of this kind, and there is a broad spectrum between full compositionality on the one hand and null compositionality on the other.

In this contribution, we show that phonetic analyses can shed light on the question of how far a given structure has progressed along the continuum from analytic to synthetic indexicals thus defined. We also show that phonetic reduction ("erosion") is not in fact a late stage in such changes (as argued by e.g. Narrog/Heine 2021: 51 for grammaticalisation processes in general). To the contrary, phonetic evidence for word boundary attrition in the course of internal decategorialisation and formal reanalysis can uncover such chunking effects at fairly early stages of a change, long before the univerbation process at hand has filtered through the entire speech community and the unit has lost its mutability in each and every context (in case it ever comes to this point).

Drawing on a large-scale study of 78 pragmatic formulas in German involving the verb *sagen* 'say' (Zeschel et al. in press), we compare four expressions that occupy different positions on the cline from analytic formulas to synthetic markers: *wollt grad sagen* 'I was gonna say', *sagen wir (mal)* 'let's say', *wie gesagt* 'as (I) said' and *sozusagen* 'so to speak'. By comparing the realisation of item-internal word boundaries with equivalent phonetic contexts outside these expressions, we find evidence for coalescence and lexical chunking in all four items. This means that on the one hand, a putative phonetic target form can already be identified for candidates that are still fairly variable and hence close to the syntactic pole (as in the case of [vɔ.kʁɐ.ˈdzɐ] for (*ich/das) wollt (ich/es) grad sagen*). And on the other hand, also expressions whose univerbation is already officially acknowledged in dictionaries (such as *sozusagen*) are still subject to further internal coalescence effects (here leading to a loss of the now obsolete infinitive particle *zu* in realisations such as [zoˈtsɐŋ]). We present our findings for all four items and discuss their implications for the relationship between phonetic reduction, lexicalisation and grammaticalisation within a usage-based framework.

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Rescuing grammaticalization from construction hegemony: one isolated case study.

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Recent explorations into diachronic construction grammar have often gone so far as to propose that in the face of the current popularity of the construction-based enterprise, grammaticalization is a process that no longer need exist outside of constructionist approaches (e.g. Gildea & Barðdal (2023), or that the proposal of "constructionalization" as an umbrella hypothesis subsuming grammaticalization as "grammatical constructionalization" (Traugott & Trousdale 2013) is a more likely means of accommodating the decades of research dating back to before the time that Meillet (1912) used the term 'grammaticalisation' to explain the origin of functional morphology as derived historically from lexical source concepts. In many ways, the two processes of "constructionalization" and grammaticalization can be seen as similar, in that they both propose a melding of form and meaning in a single element, with the difference that for grammaticalization, it is usually the lexicon that merges into the grammar of a language, while "constructionalization" is not always defined so perspicuously in the same way - construction semantics (in the traditional account), deriving meaning from form, were originally considered independent of the compositional detail of their input content.

The present paper reviews some of arguments for and against the maintenance of grammaticalization as a distinct theoretical application in the face of the new field of diachronic construction grammar, and suggests that it is difficult to eliminate entirely its co-existence with "constructionalization" in explaining historical change and variation. One of the reasons is often the absence, in a form-meaning definition, of a functional co-ordinate within the constructionist model. The need for such a tripartite representation was shown clearly in variational contact studies such as Author (1), in which identical forms served diverse functions across contact only via the sharing of one common element of meaning. Another reason, suggested by Noël (2007) and Hilpert (2018), is that it is often difficult to determine when a "constructionalization" has taken place. The current study uses diachronic corpus examples and secondary resources to investigate a case study of a developing English modal construction, *had better*, in order to examine whether its diachronic emergence is an example of grammatical constructionization over time or only construction-based grammaticalization of prominent Event Schemas (Heine 1997, Heine et al 2016). It will be proposed that a clear distinction should be established between these two processes.