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International Conference on Construction Grammar(s) : Methods, Concepts and Applications

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KEY NOTE SPEAKERS

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The multimodality issue : taking 'utterance' as a starting point

Some proponents of the theory of Construction Grammar have been investigating how it might address the nature of spoken language usage as multimodal (e.g., Andrén 2010; Schoonjans 2014; Steen & Turner 2013; Zima 2014; see also the special issue the journal *Linguistics Vanguard* on multimodality and construction grammar, edited by Zima & Bergs, 2017). Problems confronted in this endeavour have included the variability with which gesture is used with speech in terms of its (in)frequency and its (non)obligatoriness: for some expressions, a certain kind of gesture is basically obligatory (witness the speech-linked gestures accompanying deictic expressions [McNeill 1992]), but for many others, gesture is a variably optional component, the use of which depends upon contextual (top-down) and cognitive (bottom-up) factors (the "gesture threshold" discussed in Hostetter & Alibali 2008).

Following Kendon (2004), "utterance" is proposed here as a level of description above that of speech and gesture for characterizing face-to-face communicative constructions. It picks up on earlier proposals to consider constructions as prototype categories with more central and more peripheral features (Gries 2003; Imo 2007; Lakoff 1987). The language community's knowledge of a given utterance construction and that of any language user are discussed as "deep structures" (in a non-Chomskian sense) that provide a set of options (some more central and others more peripheral) for expression. In this sense, any "surface structure" is a metonymic precipitation in context of the construction's features. Furthermore, these deep and surface structures can be thought of in terms of language users' knowledge of their *potential* forms, or in terms of how they are actually *used* in given communicative usage events (Langacker 2008). For example, what Fried (2015) calls a construct (a concrete utterance token that has actually been produced) is a surface structure as actually used, while a potential surface structure involves the level of all the possible allomorphs of a given utterance construction.

Taken together in terms of a more fully elaborated framework, it is hoped that the elements

of this approach may help bring Construction Grammar closer to being a truly usage-based theory (Barlow & Kemmer 2000).

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William Croft

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Force dynamic meanings of argument structure constructions: theory and application

In *Verbs* (OUP, 2012), I argue for a force dynamic analysis of argument structure construction (ASC) meanings, and represent such meanings in a "three-dimensional" event structure involving, time, qualitative states, and force-dynamic relations among participants (the "causal chain"). In the verbal semantics/argument structure construction literature, many categories of ASC meanings have been discussed, such as application, (caused) motion, change of state (COS), creation and so on. However, neither in that literature nor in *Verbs* are these different force dynamic meanings analyzed. I describe here an analysis of these ASC meanings developed in connection with a verbal semantics project at the University of New Mexico. The analysis draws on the structure of the causal chain, types of force-dynamic interaction, and types of incremental/scalar change on the qualitative dimension. As an application, we are developing an online resource linked to VerbNet with force-dynamic analyses of the verb semantic classes of VerbNet, the current version of which will be presented here.

Martin Hilpert

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Intersubjectification in constructional change: From confrontation to solidarity in the "sarcastic much?" construction

It is a basic tenet of usage-based construction grammar that long-term linguistic changes originate from processes that are at work in actual communicative situations. So far, however, relatively little work on constructional change addresses either the dialogical nature of language or the social context in which a particular construction is used. In this talk, I will focus on these issues by discussing the development of a pattern that I will call the *sarcastic much?* construction:

(1) A: And, Zython, I don't care what you fucking think – when you do think, that is. Shove off, punk.

B: Geeze, angry much? All I did was demonstrate why your points were wrong.

(2) As a woman who loves baseball, I'm a little insulted by the suggestion that women

won't read a book just because it has something to do with sports! Stereotype much?

The *sarcastic much?* construction conveys a critical or sarcastic meaning, often in response to an utterance by someone else (Adams 2014). This critical meaning is non-compositional, i.e. not fully derivable from the meaning of the parts of the construction. Its pivotal and obligatory component is the adverb *much*, which marks the right edge of the construction. Functionally, *sarcastic much?* is not a request for information, but rather an interactional challenge: A previous statement or behavior is called out as being open to criticism or ridicule. In example (1), writer B's use of *angry much?* conveys the point that writer A's abrasive comments were inappropriate in the context of that online discussion. In example

(2), the writer explicitly critiques a previous comment as drawing on a stereotype. The construction thus exemplifies what Brône and Zima (2014) call a dialogical unit.

The *sarcastic much?* construction is a relatively recent phenomenon that is nonetheless well-documented in web-based corpora such as the GLOWBE corpus (Davies 2013) and that thus affords a rare look at constructional change in real time. Using data from corpora and YouTube videos, it will be shown that *sarcastic much?* is currently on a trajectory across a widening set of communicative contexts and dialogical functions.

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Expressions of motion events in German: an integrative constructionist approach for FLT

Expressions of motion have attracted the interest of linguists and psychologists as they reflect the conceptualization of events central to human beings (Bylund & Athanasopoulos 2015). Most studies have focused on one facet of motion (e.g. typological differences, speaker's perspective, location/motion prepositions) or on one specific construction like the caused motion construction or the intransitive locative construction. This means that they have dealt with isolated, scattered constructions, while ignoring overall conceptual and linguistic specificities as well as interconnections between constructions.

In my presentation I adopt an alternative approach which starts from the construal (Achard 2008) of the MOTION concept, the semantics of constructions and the lexicalization preferences in a specific language. The talk focuses on German motion events and the corresponding constructions, as the conceptualization of motion underlies a broad array of phenomena in this language. This is illustrated by three domains of application in German in the first part of the talk: (1) causative constructions with placement verbs and intransitive locative constructions with posture verbs; (2) verbless directive constructions (Jacobs 2008); and (3) expressions of fictive/metaphorical motion. The presentation shows that the various concrete or abstract motion constructions all share the same specific typological properties (e.g. salience of manner of motion, satellites for the expression of the motion path) and morphosyntactic cases (accusative vs. dative) grounded in the basic conceptual difference between static vs. dynamic motion events in German. This leads us to assume that German motion constructions build a network or family of closely linked constructions (compare Goldberg & Jackendoff (2004) and Ruiz de Mendoza et al. (2017)).

The second part of the presentation deals with the learning of the motion constructions in the three domains of application. The idea of a network of motion constructions can be exploited for a more efficient and encompassing learning of specific constructions. Being aware of the long list of motion constructions in German and recognizing the links between them, however, does not automatically lead to successful learning (Weideman 2016). Teaching strategies which foster the learning of the foreign constructions are needed. One way to achieve this is by grouping and teaching together constructions that are semantically and conceptually related (Ellis et al. 2016: 300; Ruiz de Mendoza & Agustin Lach 2016) and at the same time emphasizing their relevant typological and syntactic characteristics. The talk reports on studies for the above domains of application with French-speaking learners of German inspired by this claim. For the design of exercises, these studies further elaborate on

the concept of embodiment (Johansson Falck 2017; Küppers et al. 2011; Lapaire & Etcheto 2010) and on the principle of structural priming (Gries 2006; Hartsuiker & Bernolet 2017; Hartsuiker et al. 2004; Loebell & Bock 2003).

The recommended teaching methodology is more integrative as it takes into consideration not only syntactic and semantic aspects of constructions, but also conceptual and typological differences between the mother tongue and the foreign language. In this sense it is a "time-saving enterprise" (Littlemore 2009: 175) which is a precious asset for the teaching of foreign languages.

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The Idiomaticity Continuum: A Lexicalist Approach

The construction grammarians sees a language as presenting a continuum of idiomaticity, or generality, of expressions; a construction grammar must therefore be capable of modeling any grammatical pattern, at whatever point it falls on the gradient from frozen idiom to patently productive rule (Fillmore et al. 1988, Goldberg 1995, 2006, Culicover & Jackendoff 2005, Croft 2001, Hilpert 2014, Kay & Michaelis 2012). The problem is that we construction grammarians do not agree on the appropriate model of such patterns, and this in turn has affected our ability to deliver on the promise of uniform analysis.

The constructional literature has encouraged us to see words as constructions (both constructions and words combine syntactic, phonological and pragmatic conventions) and constructions as words (constructions license phrasal signs that need special explanations for at least some of their properties—morpho-lexical, semantic, pragmatic, or distributional—beyond what can be known about their component parts). But these analogies obscure some fundamental differences: (a) many (if not most) idiomatic expressions are like *sing a different tune*, in having syntactically manipulable subparts (as in, e.g., *Now a different tune is being sung because the administration's spying […] has come to light*), and are thus not realistically treated as 'words with spaces' (Kay et al. 2012); and (b) it strains credulity to assert that single signs (words and lexemes) are the same thing as combinations of signs (phrases). How can we strike a balance between 'meaning by convention' and 'meaning by composition' when we are analyzing complex expressions with idiomatic properties? In this talk, I will address this question by outlining a lexicalist implementation of the idiomaticity continuum, based on Sign-Based Construction Grammar (Sag 2012, Sag et al. 2012, Michaelis 2012).

All proponents of CxG "emphasize the importance of 'starting big', i.e. allowing units larger than the word as the building blocks of syntactic analysis" (Sag et al. 2012: 19). But this doesn't mean that all signs are constructionally licensed or that all multi-word expressions are listed as phrases. As Sag et al. put it, "There are different ways to start big" (ibid). While it seems reasonable to equate highly productive syntactic patterns with combinatory constructions (constructions that license mother-daughter configurations with signs at the nodes) and fixed expressions (like *water under the bridge*) with lexical entries, the picture is

not that simple. Some patterns that are intuitively describable as sentence types, like Nominal Extraposition (e.g., *It's amazing the difference*), are appropriately modeled instead as lexical classes, e.g., a class of exclamatory predicators (Michaelis 2015). And most multiword expressions, e.g., *spill the beans*, are best represented not as 'words with spaces' but rather through combinatoric restrictions on individual idiom words, e.g., idiomatic *spill* (Kay et al. 2015). The meanings of the phrases and sentences in which idiomatic multiword expressions occur are built up by the same procedure that composes the meanings of phrases and sentences that contain no idiom words: recursive licensing by phrasal constructions. As a consequence, most multiword expressions need not contain information about the phrasal configurations in which they occur.

Meanings are assembled in various ways in a construction-based grammar, and this array is here represented as a gradient of lexical fixity. At the leftmost, or 'fixed', extreme of this continuum are frozen idioms, both syntactically regular (*the salt of the earth*) and syntactically irregular (*in the know*). At the rightmost, or 'open' end of this continuum are fully productive patterns, like the Subject-Predicate construction. Between these two poles are (a) lexically fixed idiomatic expressions, verb-headed and otherwise, with regular inflection, e.g., *chew/chews/chewed the fat*; (b) flexible expressions with invariant lexical fillers, including phrasal idioms like *spill the beans* and the Correlative Conditional (Cappelle 2011); and (c) specialized syntactic patterns without lexical fillers, e.g., the Conjunctive Conditional (*One more remark like that and you're out of here*). SBCG represents this range of complex expressions in a uniform way: whether phrasal or lexical, all are modeled as feature structures that specify phonological and morphological structure, meaning, use conditions and relevant syntactic information (including syntactic category and combinatoric potential). Constructional meanings are the meanings to be discovered at every point along the idiomaticity continuum.

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WORKSHOPS

Constructional approaches to language contact and multilingualism

Hans Boas (University of Texas, Austin) and Steffen Höder (University of Kiel, Germany)

Over the past decades, Construction Grammar (CxG) has gained a reputation for being able to integrate linguistic aspects that have traditionally been treated as lying on the fringe of the language system, far beyond the synchronic syntax-lexicon continuum that was the original focus of construction grammar, including, for example, diachronic change (Diewald 2007; Noël 2007; Bergs & Diewald 2008; Hilpert 2011, 2013; Barðdal et al. 2015), intralingual variation (Leino & Östman 2005), and first language acquisition (Tomasello 2005). In more recent years, this has included a slowly, but steadily increasing interest in language contact, and it has been argued that particularly usage-based approaches in CxG are better fitted to model multilingual phenomena than, for instance, most formalist grammatical theories.

This development has resulted in a small, but growing body of literature (e.g. the contributions in Hilpert & Östman 2016, Höder 2012, 2014ab, 2016, Wasserscheidt 2014, Ziegler 2015, Boas & Höder forthc.) as well as workshops in related fields, such as the workshop on *Constructions across Grammars* (Freiburg 2012), organised by Martin Hilpert and Jan-Ola Östman, and the workshop on *Construction Grammar and Language Contact* at the *8th International Conference on Construction Grammar* (ICCG-8, Osnabrück 2014), organised by Hans Boas and Steffen Höder. Furthermore, CxG approaches to language contact have sparked interest among researchers working on second language acquisition as well (e.g. Hendrikx, van Goethem & Meunier 2015).

This special session brings together scholars approaching contact-related topics from a constructionist perspective in contributions that deal with various methodological, empirical, and theoretical aspects. The goal is to discuss how contact linguistics and CxG can benefit from each other, with particular emphasis on the following main questions: (a) What are major challenges and advantages in using a constructionist framework in research on

language contact? (b) How can CxG approaches to language contact – in particular Diasystematic Construction Grammar (Höder 2012, 2014ab, forthc.) – be combined with various empirical methods, such as corpus analysis or experimental studies?

(c) What can CxG approaches to language contact contribute to related fields, such as second language acquisition or contrastive linguistics?

Workshop Constructional approaches to language contact and multilingualism

Kevin Rottet

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Sitting, standing, and making one's way: Language contact and constructional change in Welsh

It is claimed that words in one language do not have exact equivalents in another. This is less so with concrete nouns--a *hammer* is mostly a *marteau* in French and a *morthwyl* in Welsh--than with abstract and polysemous nouns such as *way,* whose equivalents may be varied and context-dependent. But in situations of prolonged language contact, even abstract words like *way* may come to have one-on-one equivalents. Indeed, the Welsh word *ffordd* has come to map fairly consistently onto the English word *way* to the point that these can be viewed as interlingual equivalents. A particularly interesting example is afforded by the English *way*-construction *(make) one's way (to) (a place)* and its most direct Welsh equivalent (*gwneud) ei ffordd (i) (rywle*). This is different from the cases referred to earlier in being an abstract schema [verb + possessive + *way/ffordd* + path] where most of the elements are left unspecified; it can take forms like *elbow one's way through the crowd, dig one's way out of prison*, *giggle one's way up the stairs*, etc. As such, it is a particularly good example of a *construction* in the terms of Construction Grammar (CxG) and similar models. Thus, *dig* and *giggle* are only construed as verbs of motion by virtue of appearing in the Way Construction.

The fact that Welsh has come to share this construction with English lends support to the claims of scholars such as Pietsch (2010) and Höder (2014) for whom the construction has been seen as the primary cognitive unit involved in contact-induced language change. The case of the *way*-construction being taken over from English into Welsh can be seen as an instance of convergent change via what amounts to the wholesale borrowing of a construction. We will also consider a slightly different case, one in which a traditional Welsh construction is now undergoing competition from a contact-inspired alternative. This is the case with expressions of bodily posture such as ‘stand up', ‘sit up', ‘sit down', ‘lie down', ‘crouch', etc.

In the traditional Welsh pattern for these expressions (as confirmed by the fact that Breton, Welsh's closely related sister, uses the same pattern), these expressions use a body-part construction taking the form [path verb + preposition + possessive + posture noun], e.g.

mynd ar ei eistedd ‘to sit down (lit. go on his sitting)', *mynd yn ei sefyll*, ‘to stand up (lit. go in his standing)', *codi ar ei eistedd* ‘to sit up (lit. to rise on his sitting'), *mynd yn ei gwman* ‘to crouch down (lit. to go in his crouching).' This construction undergoes competition today with a contact-induced pattern formed on an English model, e.g. *eistedd i lawr* ‘to sit down', *eistedd i fyny* ‘to sit up', etc., making use of the directional particles *i lawr* ‘down', *i fyny* ‘up' etc. (Previous work by Rottet 2005 and in press has explored the influence of English phrasal verbs and directional metaphors on the use of the Welsh verb-particle construction).

Thus we have in the case of the *way*-construction and the bodily posture expressions clear cases of convergent change in a setting of intense language contact, in which abstract constructions come to be shared across the language boundaries within the bilingual community. With data primarily drawn from a translation corpus and a Welsh Internet corpus, it will be seen that the older Welsh patterns are still available in literary and more formal styles, while the English-inspired patterns are the predominant pattern in colloquial Welsh today.

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Workshop Constructional approaches to language contact and multilingualism

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Language contact, L2 acquisition and reorganization in the multilingual constructicon

We live in a world where increasing mobility, migration and requirements for multilingual competence call for in-depth and better understanding of subjects like language competence, language acquisition, language contact, multilingualism and the relationships between them. We believe that a constructionist approach is a suitable framework to combine the research areas of language contact and L2 acquisition in order to explain these relationships.

Höder (2012, 2014ab, forthc.) has introduced Diasystematic Construction Grammar (DCxG) as a construction grammar approach to language contact research. From a DCxG perspective, it seems natural to model L2 acquisition in terms of emerging individual multilingualism in a bi- or multilingual setting (of some sort), including (a) an increasing exposure of a speaker to a target-like variety of the L2, (b) the cognitive processing of the L2 input, ultimately leading to the gradual accumulation of L2 knowledge, and (c) the acquisition of knowledge about the social conventions of language use in a (bi-/multilingual) community. In constructional terms, the learner's L2 knowledge forms part of his/her dynamic constructicon, which includes constructions from all of his/her languages. In line with DCxG, L2 structures can be represented by both idioconstructions (exclusively L2) and diaconstructions (shared by a number of languages).

More precisely, what L2 learners acquire is knowledge representing an interlanguage variety of L2. Even if all views connected with the theory of interlanguage, introduced by Selinker (1972) have not survived, some parts of the theory are still viable, e.g. the interest in learner language as a system worth describing, not as an inaccurate or erratic version of a target language (TL), but rather as a system in development. The cognitive grounds on which interlanguage was understood from the very beginning also offers a point of departure for our suggestion to describe interlanguage in terms of an expanding mental constructicon. If we assume that the interlanguage system (ILS) of the L2 (Ln) Learner (a) is part of one multilingual construction and (b) mirrors the learner's hypotheses about the nature of cxns in the target language, based on both the learner's L1 and other Lns (i.e. crosslinguistic influence) and competence in the L2 (e.g. overgeneralization), then the notion of entrenchment as the interface between language contact in a mulitingual community and multilingual individuals becomes important. Entrenchment can be described as the process during which interlanguage hypotheses, i.e. innovative (new or modified) constructions in the L2, are first formed, and then confirmed through repeated input and more and more entrenched through repeated processing (cf.

Schmid, 2015, 2017). In other words, entrenchment can be viewed as a process of gradual routinization of constructions in the developing interlanguage of language learners. This also entails a continual internal restructuring of individual constructions as well as interconstructional links in the multilingual constructicon.

The talk aims at discussing a DCxG-based model of L2 acquisition in terms of an emerging multilingual constructicon, focusing on the entrenchment processes that lead to the reorganization and stabilization of relevant constructions. The model is going to be illustrated and re-contextualized by examples from Swedish L2 data.

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Workshop Constructional approaches to language contact and multilingualism

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Idioconstructions in conflict: Codeswitching as ad hoc generalization

Recent findings from psycholinguistic research on multilingualism suggest that multilingual speakers process their languages interactively instead of processing them separately (cf. e.g. Grosjean 2008; Bialystok et al. 2009; Kroll, Bobb and Hoshino 2014, and Kroll et al. 2015), a fact that is accounted for from a constructional perspective in Diasystematic Construction Grammar (DCxG; Höder 2012, 2014a, and 2014b).

DCxG has been successfully applied to different types of contact phenomena, mostly as part of contact-induced diachronic change. When it comes to spontaneous multilingual language processing including phenomena such as codeswitching (CS), however, a (D)CxG model faces additional problems that cannot wholly be solved within existing approaches. If, on the other hand, constructions are assumed to capture individual speakers' grammatical knowledge in toto (Goldberg 2006: 18), this is unsatisfactory. Therefore, my work aims to develop a DCxG-based model that includes CS phenomena.

In my presentation I will explore the role of potentially conflicting information in constructs that are considered as CS phenomena in classic approaches such as Myers-Scotton's (e.g 2002) Matrix Language Frame model or Muysken's (2000) Code-Mixing model, based on corpus data from Scandinavian languages in different contact scenarios. In line with DCxG assumptions I differentiate between elements that the involved languages have in common, language-unspecific elements (diaconstructions), and elements that distinguish them, language-specific elements (idioconstructions), which jointly form a common constructional network.

From this perspective, typical CS phenomena can be analysed as constructs reflecting the combination of idioconstructions that carry conflicting pragmatic information. This conflict in turn either (a) reflects spontaneous generalization, i. e. pragmatic bleaching, of one of the

idioconstructions, or (b) is functional in itself, e. g. by (iconically) referring to complex communicative settings or (metaphorically) marking pragmatic complexity.

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Workshop Constructional approaches to language contact and multilingualism

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Romance-Germanic contact and constructions

In this contribution, we will present findings from an ongoing study on V + *para atrás*, based on web-accessible corpora of second-generation Spanish-English bilinguals in the USA:

(1) tenemos que **venir para atrás** antes de cierta hora (*Corpus del Español en Texas*, recording 24)

'tenemos que volver antes de cierta hora/we have to come back by a certain time'

(2) luego **regresó para atrás** (*Corpus del Español en Texas*, recording 39)

'luego regresó/later he went back'

(3) estoy esperando que ya **comience para atrás** (*Corpus del Español en Texas*, recording 2)

'estoy esperando (a) que [la escuela] ya vuelva a comenzar/I am waiting for it [school] to restart soon'

This commonly cited phenomenon which also occurs in other Spanish-English bilingual communities (such as for example in Gibraltar) has generally been labeled as *loan translation* or *calque* of English V + *back* (Lipski 1987; Silva-Corvalán 1994; Ortigosa 2008), and, recently, also as *borrowed construction* "directly translating an existing English construction" (Lewis 2016:22). Villa (2010), however, refutes the idea of a language contact phenomenon, arguing instead for an internal development of the Spanish language.

Our study shows that a CxG oriented approach to V + *para atrás* as abstract form-meaning-pairing allows us to go beyond these opposing views, especially if we adopt a pan-Romance comparative perspective (Boas 2010). Firstly, V + *para atrás* can only carry the meaning of a physical backward movement in Standard Spanish and verb-adverb-like combinations are generally rare in most modern Romance Standard varieties, which rather rely on synthetic verbs and prefixes. However, instances of this type can already be found in spoken Latin (*exire foras* 'to go out') or Old French (*cil vont arriere* 'those get back') (Kramer 1981; Tremblay 2005). Moreover, our corpus data on US Spanish interestingly also reveals cases which have not been described in the extant research literature: In example 3, V + *para atrás* does not replicate V+ *back* and it may show what looks like semantic

doubling (example 2). Verb-adverb-like combinations often increase in Romance varieties in contact with Germanic languages, though (see Kramer 1981 or Treffers-Daller 2012 for Europe and Perrot 2003 for Acadian French). V + *para atrás*, coding physical or abstract returning or iteration in US Spanish, has therefore to be studied as a potential result of constructional change (Traugott/Trousdale 2013) promoting a formally more analytic and semantically more transparent construction type which seems to admit a wide range of verbs. At the same time, this process may also lead to the emergence of a diaconstruction (Höder 2014) in certain bilingual communities. CxG now allows us to analyze the synchronic and diachronic inheritance links between the formal, semantic and collocational profile of the constructional subtypes as well as a potential general drift (Koch 2012) to this kind of verb-adverb-like construction in certain Romance varieties via parallel inheritance links.

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Workshop Constructional approaches to language contact and multilingualism

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Intensifying constructions in the diasystem of Belgian French-speaking learners of Dutch and English

Intensification can be expressed cross-linguistically by several morphological and syntactic constructions (among others, Hoeksema 2011, 2012; Rainer 2015). We focus on adjectival intensification and represent an intensifying construction as follows: $[[X]_{INT}\ [Y]_{ADJ}]_{ADJ/AP} \leftrightarrow$ 'very Y' (e.g. *very proud*). The diversity of constructions (with degree adverbs, intensifying prefixes, compounds, etc.) and the language-specific preferences for particular types of intensification complicate the acquisition of intensifying constructions for second language learners (Lorenz 1999). Within the context of a research project on Content and Language Integrated Learning (CLIL) in French-speaking Belgium (cf. Hiligsmann et al. *forth.*), we explore the longitudinal impact of CLIL input on the acquisition of intensifying constructions in an L2 (Dutch or English).

Our research is situated within the theoretical framework of usage-based Construction Grammar (cf. Tomasello 2003; Ellis & Cadierno 2009 among others). More specifically we interpret our data taking the approach of *Diasystematic Construction Grammar* (DCxG) (Höder 2012, 2014) which conceptualizes the linguistic competence of multilingual speakers as an 'interlingual network of constructions with different degrees of schematicity' (Höder 2012: 255). Analyzing the interlanguage of French-speaking learners of Dutch and English through the lens of DCxG allows us to identify the diasystematic links between intensifying constructions in French (L1) and the target languages of these learners. In our talk we address the following research questions: (i) Which intensifying constructions are shared by the native language and target language of the learners, and which ones are not represented in their diasystem? (ii) Does more input provided through a CLIL approach lead to a deeper entrenchment of (more) diasystematic constructions? (iii) From a longitudinal point of view (over the course of two academic years) can we observe a reorganization of the learners' diasystem of intensifying constructions?

The data for this study come from a corpus of written productions in the form of fictional e-mails on the subject of a party or holidays. We compare texts written in 2015 and in 2017 by the same French-speaking secondary school pupils (aged 16-18), in CLIL and non-CLIL settings learning Dutch (CLIL

n=132; non-CLIL n=100) or English (CLIL n=90; non-CLIL n=90) as a foreign language, and control groups of 63 native speakers of Dutch and 68 native speakers of English of about the same age. To answer the research questions we use a collostructional analysis (viz. covarying collexeme analysis), which expresses the degree of attraction/repulsion between the intensifier and the adjective in the form of *p*bin-values (Stefanowitsch & Gries 2003; Gries 2007).

Preliminary results indicate three levels of linkage between the L1 and the target language. First, cross-linguistic similarities lead to entrenched diasystematic constructions, for instance [$ADV_{booster}$+ADJ_{scalar}] (instantiated by e.g. *heel leuk* / *very nice*). Secondly, despite different degrees of productivity between particular native and target language constructions, input can favor the formation of diasytematic links. Indeed we observed that French-speaking CLIL learners of Dutch used more intensifying compounds [N/A/V+Adj]$_{ADJ}$ (e.g. *doodmoe* 'lit. dead tired') than non-CLIL learners thanks to more input in Dutch. Thirdly, some constructions cannot lead to shared representations because they only exist either in the L1, e.g. [ADJ + *comme tout*] (e.g. *sympa comme tout* 'very pleasant'), or in the target language, e.g. [$ADJ_{superlative}$+ *ever*] (e.g. *the coolest ever*).

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Workshop Constructional approaches to language contact and multilingualism

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Constructional change and bidirectional contact: Complementiser omission in Afrikaans and South African English

The omission of the complementiser *dat* ('that') from declarative complement clauses is a recent innovation in Afrikaans that is not shared by its close sibling Dutch, but has become the dominant pattern, even in written Afrikaans (Van Rooy & Kruger 2016). It developed in South Africa only after the onset of contact between Afrikaans and English, which already had the possibility of the omission of *that*. Kruger and Van Rooy (in review) report that the rate of increase in frequency of complementiser omission is faster in some registers in native South African English than British English. This parallel quantitative development raises the question of possible mutual influence between Afrikaans and English.

Beyond the quantitative change, a further question relates to the possible association of the two forms with two distinct, if related, meanings, which we term the interpersonal and propositional meanings, drawing on Boye and Harder (2007) and Van Bogaert (2011). They argue that complementiser omission marks the emergence of a separate grammatical construction, where the "main clause" (or complement-taking predicate, CTP) becomes semantically subordinate to the "complement clause", and takes on an adverbial function. These possibilities can be understood in terms of constructionalisation (Traugott & Trousdale 2013), where there is provisional evidence of the emergence of a new form-meaning pair.

A number of linguistic variables predict the likelihood of the formal split in both Afrikaans and English, such as the choice of lexical verb, the syntactic subject of the CTP, tense, modality and negation in the CTP and a number of indices of syntactic complexity. These variables may potentially also predict the likelihood of the interpersonal or propositional meaning of the constructional variants. In this paper we analyse comparable corpora of 19th and 20th century British English, South African English and Afrikaans/Cape Dutch fiction, letters and newswriting. The formal and functional properties of a sample of declarative complement clauses are annotated and submitted to mixed-effects binary logistic regression to determine if and how text-internal factors and text-external factors like register and time period interact in predicting the interpersonal or propositional meaning of the two formal options in the three varieties. This analysis also allows us to assess the

directionality of the influence between Afrikaans and English over time, and evaluate the proposal of mutual influence between the two languages.

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Workshop Constructional approaches to language contact and multilingualism

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Constructions in contact: Two studies of English-influenced language change

Across theoretical frameworks, the effects of language contact have typically been considered ‘marginal' or ‘peripheral', and are mainly discussed in contexts where language contact is the specific object of study. Here, we present data from two languages which are morphologically complex in very different ways -- American Sign Language (ASL) and Malayalam (Dravidian) -- and are both in considerable, prolonged contact with English. Adopting a Radical Construction Grammar approach (RCxG, Croft 2001), where constructions are identified on a language-by-language basis, we compare and taxonomize a number of language-specific constructions resulting from contact with English. We also demonstrate that the theoretical apparati from construction-theoretic approaches to linguistic analysis (CxG, e.g., Fillmore 1988, Croft and Cruse 2004, Booij 2010, Goldberg 2013) can be extended to explain contact phenomena more generally. This is achieved through the (motivated) assumption that contact effects result from correspondences across constructions from any language in which a speaker has (even limited) competency.

Language contact is heterogenous: the degree of exposure and use of the languages in contact varies greatly in contact situations. For example, whether speakers identify a construction as a loan relies on their experience with each language: In contexts where borrowing is proscribed, identifiably English-origin constructions are avoided, whether or not they are of English origin historically (c.f., Walter 2017 for Bosnian/Serbian/Croatian). In ASL, the practice of “de-initialization”, by which vocabulary items are altered to reduce their phonological resemblance to English words, affects the form of the lexical constructions LANGUAGE, FAMILY, and CULTURE, among others (c.f., Padden 1998). The relative frequency of constructions also varies by speech community, which can result in different borrowing patterns. The translation equivalent of the “play the [musical instrument]” construction in English is conventionally expressed using the verb ‘read', as “[musical instrument] ʋaːjikːuka (‘read')”, in Malayalam. However, the relative frequency of the English construction relative to the conventional Malayalam construction for many speakers has led to innovation of a construction using the verb ‘play': “[musical instrument] kaɭikːuka (‘play')”. We also observe similarities across contact contexts: in both Malayalam and ASL, we observe grammaticalization of English constructions along with re-structuring based on contrasts (e.g., gender) which only exist in one or the other language, based on re-analysis of borrowed constructions as belonging to a family of constructions in the borrowing language.

We conclude that systematic description of languages on their own, as well as the careful comparison of similarities across constructions and across languages, provides a helpful approach to language diversity. In this approach to language contact, two usage-based assumptions provide descriptive power beyond more traditional accounts: i) changes are driven by an individual's language experience (i.e., frequency of exposure and use across the lifespan) and ii) linguistic constructs can be used productively without necessarily being compositional. The result of this exploration of borrowing patterns in two quite different languages which have in common their extensive contact with English is an inventory of contact outcomes that can be further tested in additional languages, but moreover provide a unique view of the networks that constructions participate in, within and across speaker's languages.

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Transfer of verbs and their constructional properties in German-American varieties

Traditional accounts of language contact (e.g. Clyne 2003) often seek to isolate specific modules of language and categorize specific transfer phenomena accordingly, e.g. code-switching vs. loan translation vs. structural interference (Backus and Dorleijn 2009). A constructional view of language structure, however, suggests that many instances of transfer involve complex constructions in which phonology, semantics, syntax, and the lexicon cannot clearly be isolated. This talk draws on data from verb (phrase) code-switches and loan translations in Wisconsin (Low) German and Texas German to demonstrate the inseparability of such transfers according to traditional classifications and embed these findings within (Diasystematic) Construction Grammar (Höder 2014). To demonstrate, while the Texas German data in (1) shows a simple insertion of an English lexical item into German structures, data such as that in (2) involve the transfer of a (phonologically similar) English verb along with its collocational, semantic, and structural properties.

(1) Der wollt nich nach die Stadt **move**.

he wanted not to the city move

‘He didn't want to move to the city.'
Standard German: ‘Er wollte nicht in die Stadt ziehen.'

(2) Junge Leute kennen kein Leben **machen** auf 'ne kleine Ranch.

young people can no living make on a small ranch

‘Young people can't make a living on a small ranch.'

Standard German: ‘Junge Leute können hier auf einer kleinen Farm kein Auskommen haben.'

After briefly introducing the Texas German and Wisconsin Low German speech communities, I review both traditional language contact research and recent developments in Construction Grammar, focusing on Höder's (2014) notion of constructional diasystems. I then present data from both German-American varieties and attempt to classify these according to the language-affiliation of lexical items (e.g. code-switching vs. loan translation) and the number and types of items influenced by the transfer. For instance, examples may include a simple verb code-switched or loan-translated from English, a verb-object collocation that is conventionalized in English but not German, or a complex verbal construction with structural features and morphemes adopted from English, among others.

From a theoretical viewpoint, I first assess the degree to which Höder's notion of "diaconstructions" – form-meaning pairings that are similar across languages in a multilingual community – can account for each type of data. Specifically, I identify which aspects of the transferred verbs and their constructional properties can be viewed as equivalent "diaconstructions" across German and English. I also test hypotheses put forward by Backus and Dorleijn (2009) and Dux (fc.) that loan-translated items have more general and bleached semantics than code-switches, are typically transferred as parts of larger idioms/collocations, and are more likely to give rise to structural interference. Finally, I briefly discuss some transfers that are found in both Texas and Wisconsin German and speculate what (structural, communicative, or cultural) factors lead these independent communities to use the same English expressions.

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Workshop Constructional approaches to language contact and multilingualism

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Mechanisms of constructional borrowing in complex prepositions: the case of French and its closest Germanic neighbors

Converging developments within the European linguistic landscape have recently attracted much attention (Van der Horst 2013), but determining the driving forces leading to such convergences is anything but trivial. Some authors, like Hüning (2014), decided to focus on complex prepositions to illustrate the intriguing parallelism between European languages. Among the explaining factors for the introduction and spread of complex prepositions, the genetic linguistic relationship of the languages, (conjectural) correlations between linguistic and cultural developments, the emergence of communicative needs and new text types, but also language contact are put forward (Hüning 2014). The last-mentioned parameter offers an interesting ground for the study of complex prepositions since it has been suggested, for instance, that French had exerted influence on English in the use of the complex forms under scrutiny (Schwenter & Traugott 1995), and the hypothesis was confirmed in a small-scale study within the framework of Grammaticalization (Lebendstedt 2015). It should be noted, however, that new coinages do not always emerge through grammaticalization, be it induced by contact or by internal mechanisms of language change, and loan translation has hardly been explained as a mechanism in this particular case.

It is argued in this paper that language contact is best integrated in a constructionist approach as regards complex prepositions, since any aspect of their form, meaning an/or distribution is worthy of consideration in Construction Grammar, and the effect of language contact in language change is likely to intervene in any of these domains in isolation as well as in interaction with the others. In a contrastive study on English and Dutch, which are known to have been in intimate contact with French, I set out to illustrate the different mechanisms of constructional borrowing which have potentially triggered the emergence and development of complex prepositions in the two West Germanic languages. In the light of a corpus-based descriptive analysis on a small set of constructions representative of the

semantic classes of concession, condition, detriment and replacement (Klégr 1997), it will be shown, among other things, that cross-linguistic generalizations occurred sporadically at low levels of schematicity in Dutch and that the productivity of the pattern is likely to be a reflex of pro-diasystematic change (Höder 2012, 2014a, 2014b), whereas the English constructions can be claimed to result from contact-induced constructionalization (Hilpert 2015: 205).

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Constructionist approaches to language teaching

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Recent research in foreign language teaching (FLT) and learning (FLL) has widely recognized the need to focus not only on *what* should be learned but also on *how* learning processes can be fostered (Boers et al. 2010; Herbst 2016). In learning a foreign language the use of both authentic language data and larger linguistic sequences seem to play a central role (see among others Boers 2011, Nattinger & DeCarrico 1992, Wong-Fillmore 1976, or Wray 2002) next to the communicative competence both in general and more specialized settings (Boers 2011; De Knop et al. 2015). A Construction Grammar (CxG) based approach can contribute in a substantial way to optimizing the process of learning a foreign language (compare Ellis & Cadierno 2009, Ellis et al. 2016, and Robinson & Ellis 2008). In this framework, most studies are based on Goldberg's (1995 and 2006) model, which defines constructions as conventional form-meaning mappings with different degrees of abstractness and open slots to be filled. Having a meaning of their own, such abstract constructions enable learners to infer the meaning of new constructional instantiations from previous knowledge associated with these constructions. This assumption is highly relevant for both teaching and learning foreign language structures. But CxG has more to offer to FLT and FLL, e.g. the definition of semantic links between constructions or the description of a constructicon. Still, except for the volume edited by De Knop & Gilquin (2016), up to now little research has been done on the usefulness of the construction-based approach in the context of FLT and FLL. The thematic session wants to make up for this deficit and to deal among others with the following questions: What does the mental representation of the L1 and L2 constructions look like and to what extent do they interact with each other? In how far can insights from research into embodiment and metaphors contribute to optimizing construction-based teaching approaches? How can form-meaning mismatches between L1 and L2 constructions be presented to learners in order to facilitate L2 language learning? How can the most relevant constructions of a language (both L1 and L2) be defined and how useful is a constructicon of the foreign language? What is the role of a construction-based approach in teaching and learning specialized languages? Against this backdrop, the present introductory talk to the theme session will examine the contribution of the most advanced research in the field of applied cognitive linguistics to answering some of these questions. Furthermore, it

will explore some learning and teaching pathways in creating synergies between different methodological approaches in order to leverage and open up new perspectives for construction-based foreign language teaching.

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Do constructions make a difference? Exploring benefits and problems of a constructionist approach in language teaching

This talk will address a number of issues with respect to the implementation of Pedagogical Construction Grammar in the teaching of English as a foreign language (Herbst 2016). Special emphasis will be put on improving the textbooks used for the teaching of English (in Germany).

Despite neurolinguistic suggestions to the contrary (Pulvermüller, Cappelle & Shtyrov 2013), it will be argued in this paper that pedagogically it makes a lot of sense to follow the mainstream constructionist view that there is no sharp dividing line between lexical knowledge and grammatical knowledge (e.g. Langacker 2008: 14-24) and get rid of the distinction in teaching materials, too. Several reasons will be given for this:

(1) Gradience: Why should *some* and *any* be seen and taught as vocabulary items and the distinction between count and noncount nouns as grammar?

(2) The fact that the same type of meaning can sometimes be expressed “lexically” and/or “grammatically”: Are adverbs such as *probably* “lexis” and modal verbs ”grammar” and does it have a positive effect on the teaching if we cover these in different parts of a textbook?

(3) Many “grammatical” constructions are characterized by “lexical” material anyway: cf. present perfect (*have*), passive (*be*), ‘reference to the future' (*will*-construction, *BE-going-to*-construction).

In the light of this, it is argued that students should come to understand the nature of constructions as form-meaning pairings. Two rather radical suggestions concerning the presentation of information about constructions will be made:

Suggestion 1: Merging the vocabulary section and the grammar section, which in many textbooks (used at German schools) constitute separate sections.

Suggestion 2: Presenting the information on constructions as a communicative means to express (a particular) meaning.

It will be argued here that the presentation of lexical material in textbooks of English may be a relic of the time when learners of English as a foreign language pursued the now long-gone philological aim of learning English to be able to read Shakespeare: the English words are given on the left, sometimes followed by an example, and the German translation equivalent is given in the right-hand column.

We might be able to increase the communicative orientation by switching the two columns: the left-hand column then provides an indication of the meaning that the learner might want to express (e.g. in the form of a paraphrase in the L1), the right hand column (with examples) provides the solution to how this meaning is expressed in English. The paper will give a number of examples for presenting constructions in such a way and illustrate (a) in what way this contributes to solving the problems of teaching polysemous words, and (b) how information about grammatical constructions can be provided following more or less the same pattern.

Finally, it will be shown that a constructionist approach to foreign language teaching could also involve teaching learners about the nature of language as a network of constructions rather than as a system made up of rules and words.

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Deconstructing an L1: why and how should we help learners unlearn L1 overgeneralized constructions.

Research in cognitive science has demonstrated that we retrieve and organize new information from the world by relying on previously-structured cognitive schemata, and that the more useful in the individual's experience these schemata have been, the more likely they are to be re-employed to analyze new incoming sensory information (Seligman et al. 2013, Hohwy 2013, Ellis et al. 2012, Kruschke 2001). Nevertheless, these schemata and the knowledge they contributed to build need, at times, to be discarded as they can be conflictual and not aligned with the constantly upcoming environmental changes. The term "unlearning" refers to a cognitive process that enables the individual to hinder past knowledge and behavioral routines that have become obsolete and may undermine new knowledge acquisition, therefore biasing the adaptation to environmental change (Grisold & Kaiser 2017, Hafner 2015). Recent research has demonstrated that unlearning past knowledge and behaviors does not mean to forget them, but, rather, to reduce their influence in order to create new and less biased behavior and/or thinking patterns (see, e.g., Howells & Scholderer, 2016). A key-role in this process is played by inhibitory control, a core executive function of the human mind that allows the suppression of internal stimuli (such as habits or thoughts) once they are recognized by the individual as obsolete or dysfunctional (Diamond 2013).

In SLA studies, the preemption of superfluous and erroneous addition of L1 grammar rules and features to the L2 has been described as a process that proceeds in parallel to the learning, i.e. the addition to the interlanguage, of new L2 rules and features (Robenhalt & Goldberg 2016, Author 2016, Nossalik, 2014, Ambridge & Brandt, 2013). Unlearning an L1 property or structure means inhibiting its activation in L2 contexts potentially (but wrongly) triggering it; this mental operation is a significant problem for learners as they must notice an *indirect negative evidence*, i.e., the non-appearance of an L1 form or property in the L2 and the ensuing impossibility of mapping L1 functions or meanings onto it (DeKeyser 2016). From a philosophical and cognitive point of view, the difficulty of unlearning an L1 feature depends on a classical logical fallacy, i.e. the *argumentum ad ignorantiam*, according to

which an individual tends to consider valid a behavior unless he/she finds in the surrounding environment an evidence strong enough to discard that behavioral pattern (Crossley et al. 2012, Hahn & Oaksford 2008). A language pedagogy that aims at helping students unlearn L1 overgeneralized constructions should find ways to 1) promote the noticing of the indirect negative evidence to at least ease the *argumentum ad ignorantiam* fallacy, and 2) encourage the replacement of L1 wrongly transferred constructions with correct L2 form-meaning pairings. This paper is devoted to these pedagogical problems: building on previous data and on the results of a study on the unlearning of progressive past gerundial constructions by L1 Spanish learners of L2 Italian (such as *esta mañana Pedro ha estado estudiando durante cinco horas*, which is an ungrammatical syntactic template in Italian, but it is frequently transferred by Spanish-speaker learners, see Bertinetto 2000 and Author & Secondauthor, in progress), teaching interventions will be critically proposed and discussed.

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Generalization and Transfer in L2 Acquisition: A Collostructional Approach

The interlanguage of second-language learners is shaped by a variety of factors including transfer from the L1 to the L2 and (over-)generalization from the L2 input. Since the development of Construction Grammar, a growing number of studies have investigated how L2 construction learning is influenced by corresponding L1 constructions or the lack of them (e.g. Cabrera and Zubizarreta 2005, De Knop and Gilquin 2016, Ellis and Ferreira-Junior 2009, Gilquin 2012, 2015, Martinez-Garcia and Wulff 2012, Römer, Brook O'Donnell and Ellis 2014).

In our paper, we will report the results of two rating experiments in which intermediate and advanced German learners of English are asked to rate the acceptability of English stimuli. In the first experiment, the stimuli are instances of the ditransitive construction, a construction that is formally and semantically similar in German and English but which has slightly different semantic constraints in the two languages. The stimuli are constructed according to either the German or the English pattern, taking into account statistical associations between the construction and the verbs occurring in it (cf. Stefanowitsch and Gries 2003). In the second experiment, the stimuli are instances of the *make*-causative, a construction that has no analog in German. The stimuli were constructed according to the English pattern, including both positively and negatively associated verbs. In both experiments, the ratings of the learners are compared to baseline judgments of the stimuli by native speakers of English and of German translations (for the ditransitive) or paraphrases (for the *make*-causative) by native speakers of German.

The results enable us to take a developmental perspective on the role of transfer from the L1 and generalization from the L2 input at a very fine-grained resolution, to assess their relative importance and the precise pattern of their influence. This allows us to take a new perspective on appropriate teaching strategies.

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Construction-driven learning: Using corpora to foster L2 construction learning

Construction Grammar, following a usage-based perspective, claims that constructions emerge in the constructicon through abstraction over a large number of instances of the construction (e.g. Tomasello 2003, Goldberg 2006). Thus, children are said to generalize associations of form and function from the input they receive and to gradually build their knowledge of the language on that basis. If we consider second language (L2) acquisition (with a focus on foreign learners) rather than first language (L1) acquisition, however, the process of construction learning is expected to be slightly different. On the one hand, foreign language learners usually receive much less exposure to the target language than children acquiring their mother tongue, because they live in an environment that does not use the target language as a language of daily interactions. Their input in the target language is therefore mainly limited to the classroom. On the other hand, construction learning tends to be explicit and deductive in the case of foreign learners, as opposed to the implicit and inductive learning that characterizes first language acquisition. In the foreign language classroom, for example, a construction like the passive voice is typically taught through a set of rules, rather than (or at least in addition to) exposure to instances of the construction.

In this presentation, I will show how L2 construction learning can benefit from the corpus-based pedagogical method of data-driven learning (DDL), which consists in giving learners access to corpus material so that they can make their own discoveries about the target language (see Johns 2002). Taking a construction as a starting point, one can design DDL exercises and activities that foster the learning of this particular construction. Such a "construction-driven learning" approach has at least two advantages. First, it makes it possible for learners to get exposed to many instances of one and the same construction, thus accelerating a process that would take much longer if the learners were to receive a normal kind of classroom input. Second, the input that the learners receive is authentic, representing naturally-occurring language from corpora and displaying features whose distribution is supposed to be representative of the target language. I will report on an experiment conducted among French-speaking university students learning English as a foreign language. Through a construction-driven learning approach, the students are exposed to English constructions that do not have any equivalents in French (to avoid the possibility that the learners already have the schema of the construction stored in their L1

constructicon), such as the *into*-causative construction (e.g. *to blackmail him into marrying her* (BNC)) and the *way* construction (e.g. *to waffle his way into a gentler position* (BNC)). Illustrations will be provided of exercises done by the students, as well as instances of constructions they produced after the activities. The efficiency of this pedagogical method for L2 construction learning will be investigated, as well as learners' attitudes towards construction-driven learning, and the capacity of DDL to make L2 acquisition more similar to L1 acquisition (i.e. more implicit and inductive) will be discussed.

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An image-schematic approach to teaching light verb constructions in German

The large amount of light verb constructions as well as the wide range of their constructional variation pose a serious challenge to learners of German as a foreign language. This is particularly true for learners faced with academic language since light verbs show up more frequently in academic discourse than in other language domains (Heine 2006). In spite of the considerable amount of literature on light verb constructions (e.g. Kamber 2008), textbooks and other teaching materials have systematically adopted formalistic approaches which predominantly describe the verbs used in so called light verb constructions as semantically empty and allegedly not related to full verbs. Accordingly, learners are provided with lists of light verb constructions grouped by formal features, but semantically isolated from one another. In contrast, cognitive linguistic approaches to light verb constructions present the verbs used in light verb constructions as conceptually motivated and as directly related to the overall meaning of the respective construction (Tucker 2014, Gradečak-Erdeljić 2009). According to this view, light verbs share the core meaning of their full verb counterparts, but represent a much more image-schematic nature. Whereas full verbs typically express material and/or physical processes, light verbs often express mental processes which imply a metaphorical extension of the prototypical meaning of the full verb and, in some cases, reflect the use of specific lexico-grammatical patterns (cf. Tucker 2014). E.g., the verb *bringen* (Engl. “to bring”) often requires a prepositional object to encode the goal of the fictitious movement when used as a light verb (*Er brachte seinen Freund in Gefahr*), whereas *bringen* is prototypically used as full verb in ditransitive constructions without any prepositional object (*Er brachte seinem Freund ein Buch*).

The paper focusses on a study examining the use of an image-schematic approach to light verb constructions in learning the respective form-meaning pairings. To this end, an intervention study (effect-of-instruction) was conducted with French-speaking learners of German at the GER B2 level. The study had a single factor experimental design with a pre-test, an immediate post-test and a delayed post-test. The participants were divided into two groups: in the experimental group participants worked with an image-schematic based explanation of light verb constructions and performed tasks that set out to foster the respective conceptualization processes; a control group was presented with form-based explanations and completed tasks that aim to cluster light verb constructions into different categories according to their syntactic features. The meaning was treated only with regard to each light verb construction. Participants' language accuracy was assessed by means of language proficiency tests covering formal, semantic and functional aspects of light verb constructions in academic language. The data were triangulated with the linguistic biography of the participants, the data on the use of the teaching materials and other individual learner variables. The results show that the image-schematic approach offers an intriguing venue for making the conceptual motivation of light verb constructions more transparent and pave the way for research on further grammar areas.

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Different approaches to constructicon-based L2 teaching – experiences from Swedish

While it has long been recognized that construction grammar should be useful for (second) language education, would-be constructionist teachers are still faced with an impeding lack of supportive resources. On the one hand, there is a need for relevant, accessible and useful construction descriptions (e.g. Littlemore 2009: 173). On the other hand, it is not self-evident how construction-based language teaching should be carried out; new teaching practices take time to develop, there are few model exercises, etc.

One way (among many) to address the first problem, the descriptive gap, is the ongoing development of online constructicons for a number of languages. In the case of Swedish, we have access to a constructicon of currently around 400 construction entries, and there is work in progress to develop support material for applying the construction descriptions to language education.

As for the second problem, how to best turn insights about language acquisition into actual teaching practice, most suggestions so far have focused on so-called pattern finding exercises (Holme 2010, Wee 2007, Loenheim et al. 2016, Håkansson et al. 2016; cf. Tomasello 2003). Typically, the students are presented with a set of selected sentences, from which they are to first identify and then characterize recurring constructional patterns, and eventually construct their own utterances using the construction.

However, experiments by Casenhiser & Goldberg (2005) have suggested that learning is facilitated by a skewed input, with extra exposure to a particular instantiation of the

construction, “the most frequent member” (Bybee 2010: 88). In an attempt to adapt this to a teaching situation, Brasch (2017) had her students first learn a typical construction instantiation as a fixed phrase, and then in a second stage expand it to a more productive pattern. She also conducted pattern finding exercises with the same groups and compared the two strategies, without finding any note-worthy differences in learning outcomes.

In our talk, we will present the ongoing work to make the Swedish constructicon more useful for language education, including a couple of studies where the material has been applied to L2 teaching (e.g. Brasch 2017). We will also discuss how these constructicon-based approaches to language teaching relate to a usage-based perspective on language acquisition, previous research about construction learning, the role of the input, etc.

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Difficulties in the acquisition of German 'es'-constructions by Spanish-speaking learners: L1 influence vs. L2 frequency effects

In the field of Second Language Acquisition (SLA), there is still a lack of empirical studies that apply the theoretical assumptions of usage-based Construction Grammar (cf. Behrens 2009), although first results indicate that this approach can be very fruitful (cf. Ellis 2013 and, esp., de Knop/Gilquin 2016).

My study contributes to a reduction of this research desideratum by using a usage-based constructionist approach, as well as a contrastive point of view, to explain SLA processes. It deals with the interaction of L1 influence and frequency patterns in the L2 input, focusing on Spanish-speaking leaners of German as a foreign language. Spanish-speaking learners of German have serious difficulty using the German pronoun *es* (Engl. *it*) correctly, due to differences in both language systems: Spanish is a pro-drop language and doesn't have a neuter; thus, interference mistakes like **regnet* or **gibt* instead of *es regnet* and *es gibt* are frequent (Engl.: **is raining* instead of *it is raining*). The L1 language system – Spanish – is, in this case, an obstacle and leads to problems with the form aspect of German *es*-constructions. While it is rather easy to obtain this result when analysing the data of Spanish-speaking L2 learners of German, the more interesting question is: How do learners face – and, finally, overcome – this interference problem? My study suggests that frequency distributions in the learners' input play a crucial role here. I would like to argue that high-frequency constructions with the German pronoun *es* (e.g. *es ist schön, dass du kommst*, Engl.: *it is lovely that you are coming*) are more readily acquired than low-frequency ones – even if the latter might be easier with regard to their grammatical structure. To do so, I identified and described, as a first step, German *es*-constructions (according to Goldberg 1995 and 2006) and their frequencies in natural German, using different corpora of spoken and written German. As a second step, I collected the data of advanced Spanish-speaking learners of German (in a qualitative and quantitative way) and analysed this data regarding the use of German *es*-constructions.

In my talk, I will present the learner data in detail, focusing on a qualitative analysis. I will show usage patterns which strongly suggest that learners do have L2 constructions; and, what is more, that learners are sensitive to frequency distributions in the input. Finally, I will conclude by offering a brief insight into how these results might be fruitful to a different way of teaching the German pronoun *es* to learners of German as a foreign language.

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Constructing futurity: a contrastive approach to L1 and L2 Dutch and French

Context – Traditional grammar (Fleishman 1982) and constructional analyses of the future in other languages, largely concentrate on verbal predications (Berghs 2010, Hilpert 2008) as locus of futurity. Furthermore, previous research in L1 (Dabrowska 2012) and L2 (Deknop et al. fc./2016) has shown individual productive variance in constructional profiles and lexical knowledge in adult speakers.

Objective –This talk proposes a contrastive approach to describing constructional profiles and a conceptual network for futurity in L1 and advanced learners L2 Dutch and French (B1-C1 in CEFR).

Corpus and procedure – The corpus is composed of elicited spoken Dutch and French, based on a questionnaire imposed on 20 L1/L2 speakers, who are asked questions about their future professional future in their mothertongue and thereafter in L2 Dutch or French (40 interactions). The questions combine different verb and nominal constructions for future time reference and are based on a usage-based construction network of futurity (AUTHOR 2009, 2012) inspired by Langacker's (2008) extended epistemic model. This conceptual CxG network future time includes variation in tense and epistemic modality.

(Expected) results – We describe and measure the constructional L1 and L2 profiles, comparing/correlating them as to their productivity for futurity in L1/L2. There are two important extensions of previous studies on future constructions. (1) The future is conceived at the interface between different predication types. (2) Future talk is taken at the level of larger-than-clause interaction (Nikiforidou 2011; Östman 2004). (3) Non-epistemic modality and complex clauses encode future time. (4) The descriptive approach leads to guidelines for teaching more authentic L2 constructions for futurity based on L1 constructions beyond the traditional scope of verbs and/or modes in a coherent conceptual framework.

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Modality and Diachronic Construction Grammar

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This workshop will explore how Construction Grammar can be used to shed new light on diachronic changes in a central domain of grammar, namely modality.

Diachronic Construction Grammar has established itself as a fruitful research enterprise that has been applied to a wide range of historical changes (Bergs & Diewald 2008, De Smet 2013, Hilpert 2013, Traugott & Trousdale 2013, BarÃ°dal et al. 2015). The growing appeal of Construction Grammar in historical linguistics can be partly motivated by the fact that it provides an analytical framework for phenomena that fall outside the purview of established research traditions. Diachronic Construction Grammar is also attractive because it invites a re-conceptualization of linguistic changes that have already been the subject of intensive study. Modality is such a case: Grammatical expressions of modality have received considerable attention in linguistic work that is broadly compatible with a constructional perspective (Plank 1984, Traugott 1989, Bybee and Fleischman 1995, Fischer 2007, Bybee 2010). At the same time, an explicitly constructional perspective on modal expressions raises a number of questions:

1) Constructions and paradigmatization

Modal auxiliaries in languages such as English or German are prime examples of constructions that are organized in a paradigmatic structure (NÃ¸rgÃ¥rd-SÃ¸rensen et al. 2011, Diewald & Smirnova 2012). How are such structures adequately modeled in a constructionist framework? Do speakers form generalizations across constructions, and if so, how are these meta-constructions represented in their knowledge of language? With regard to diachrony, how can we model the emergence or disintegration of paradigms?

2) The development of modal meanings

Work in typology and grammaticalization has produced far-reaching insights into the historical change of modal meanings and possible paths of development (Traugott 1989, Van der Auwera and Plungian 1998). How can a constructional perspective accommodate predictions such as the unidirectionality of semantic change? Does Construction Grammar lend itself to the formulation of strong hypotheses, or is it a mere descriptive framework?

3) Constructionalization and constructional change

Traugott and Trousdale (2013) present a thorough re-conceptualization of language change in terms of developments that can happen in a network of constructions. In particular, they distinguish the emergence of new nodes (constructionalization) from alterations in existing nodes (constructional change), and they differentiate between the constructionalization of elements with contentful and procedural meanings. If actual developments of modal expressions are taken into view through the lens that Traugott and Trousdale provide, what new insights can be gained? Conversely, what do findings from diachronic corpora tell us about constructionalization and constructional change?

A focus on modality in diachrony from a constructional perspective will be useful for two reasons. First, by addressing a topic that is reasonably well-understood we hope to bring out more clearly what new insights a constructional perspective can yield. Second, by showing that Diachronic Construction Grammar can make a meaningful contribution to the study of modality in diachrony, we can stimulate research that will hopefully appeal even to researchers in other theoretical frameworks.

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“Modality on the move”: A distributional-semantic approach to change in paradigms

Taking literally the rather catchy title of a paper on frequency changes in Late Mod- ern English modal verbs will, would, can, could, etc. (Leech 2003), this talk seeks to visualize the movement in the modal verb paradigm using data-driven distributional methods. It aims to contribute to questions pertaining to the identification of changes in modal verbs or, more generally, in full paradigms. Since distributional methods take into account the linguistic context, it goes beyond tracking simple frequencies. This allows the identification of both shifts and overall stability on a larger scale and is suggested to be useful as a diagnostic tool for similar, more general purposes.

On the one hand, the paradigm of modal verbs has grammaticalized well be- fore the (Late) Modern English period, and recent developments appear primarily situated in changing text frequency (Leech 2003; Millar 2009). On the other hand, the system has been shown to be in considerable flux qualitatively, revealed by changing infinitival collocates as a proxy to increasing epistemicity of individual items (e.g., may; Hilpert 2016). In brief, studying the context of (an) item(s) at a larger data scale provides interesting insights into qualitative changes.

The analysis presented in this talk extends the context-sensitivity potential to the full modal verb paradigm. The recent diachrony of eleven English modal verbs is tracked based on their linguistic context in a distributional-semantic approach (cf. Perek 2016 for an application of this method for argument structure constructions). Based on a comprehensive analysis of data from the Corpus of Historical American English (COHA; 1810–2009), patterns of change and stability can be identified. While the results confirm known or suspected changes from close-reading, it under- lines the diagnostic value of a data-driven approach. In addition, they identify global patterns that are difficult to discern from frequency changes or closer reading.

For instance, the change in modals is overall gradual and temporally con- sistent for all modals except shall, which shows no diachronically consistent pattern (confirming its status as an ‘outlier'). The contracted forms 'll and 'd show distinctly different paths to their ‘hosts', but diverge from them only from the second half of the 19th century onwards. Overall, the

system seems to change abruptly in the 1920s; this change, however, is due foremost to a non-trivial change in COHA's corpus composi- tion and the effect largely disappears when genre is held constant. Thus, methodolog- ical issues are also briefly addressed, including the influence of changing method, algorithm, or model parameters (e.g., size of context windows, dimension reduction, function word inclusion or exclusion).

Despite the open technical questions and methodological issues, ‘brute force' methods ‘from above' can help identify (or confirm) patterns of change at the para- digmatic level, which can feed back into individual studies and theoretical modelling. The insights and methods are thus of interest for other investigations into paradigmat- ic and constructional change.

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Unfolding constructions: Procedural, postmodal meanings of the Finnish "pitää" ('should') and the French "pouvoir" ('can') in complement clauses

This paper investigates the semantic reanalysis of modal verbs into postmodal markers of interclausal link in the complements of stance verbs and negated mental verbs (or corresponding adjectives). The studied constructions can be schematized as follows:

[[Mental V/Adj + Neg] + complement (postmodal V)]

[[Stance V/Adj] + complement (postmodal V)]

Examples (1) and (2) illustrate the postmodal complement uses of the Finnish verb of necessity *pitää* and the French verb of possibility *pouvoir*.

(1) *mitenkää en ois uskont*

no.way NEG.1SG AUX.COND believe.PTCP

*jot näiv vanhaaks **pittää** elleä*

COMP this old.TRA should.3SG live

'there is no way I could have believed that I **should** live this old'

(2) *C' est incroyable que la guerre **puisse** être finie.*

EXPL be.3SG incredible COMPL ART war can.SUBJ.3SG be over

‘It is incredible that the war **should** be over.'

In these constructions, the matrix sets up a mental space (Fauconnier 1985) framed by the epistemic or axiological limits beyond which the event coded by the subordinate clause goes (see Bres & Labeau 2013). The postmodal verb brings to the fore the incompatibility between this event and the reality as projected by the speaker.

The postmodal complement use can be contrasted, and diachronically related, with modal uses of the same verbs in coding obligation or possibility, as well as their postmodal uses in main-clause position (Laitinen 1992; for the equivalent uses of *pouvoir*, see Barbet 2012, Barbet & Vetters 2013). Compare, for example, (1) with (3) and (4).

(3) *se ei ymmärtänny että se* ***pittää*** *savotamieski olla vähän oppinu*.

3SG NEG understand.PTCP COMP EXPL must.3SG lumberjack.CLT be little educated

'S/he didn't understand that even a lumberjack **must** be a little educated.'

(4) *no kyllä* ***pittää*** *olla paikka*

PTCL PTCL should.3SG be place

'that such a place **should** exist'

The paper shows that the grammaticalization of *pitää* and *pouvoir* can be accounted for within the complex syntactic construction. The main thesis is that, as the meaning of the modal verb becomes more procedural (see Traugott 2015), the cognitive-semantic link between the matrix and the complement gets tighter. The postmodal verb no longer expresses obligation or truth-value judgments but codes grammatical relation, in a way comparable to subjunctive forms. It serves as an explicit invitation to identify, in the immediate context, the appropriate sequence – in these constructions, the matrix – that provides mental access to the content of the complement. The verbs *pitää* and *pouvoir* thus both contribute to the unfolding of the chain-like composite construction (see Langacker 2014).

Both possibility and necessity grammaticalization paths are known to have the potential to lead to the postmodal complement function (van der Auwera & Plungian 1998). The analysis shows that the differences observed between the matrices of complement constructions with postmodal *pitää* and *pouvoir*, namely concerning the capacity of producing an axiological reading, can be accounted for by their separate paths.

The French data is collected from the Frantext database (1994-2009). The Finnish data is extracted from dialectal and literary corpora.

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Certainty Adverbs in Galician: Constructionalization and Constructional Changes

Historical research in epistemic modality has gained attention in the last decades, usually with regard to particular items of major languages, viz. English and Spanish. Thus, data from minor languages remains unknown, and systemic or paradigmatic approaches are scarce. This presentation is part of a bigger project dealing with the development of the system for epistemic modality in Galician, a linguistic area that has barely been tackled by linguistic studies.

Particularly, this talk deals with three Galician adverbs (*certamente* 'certainly', *realmente* 'really', and *seguramente* 'surely'), which share two aspects: (i) they were formed on the basis of an adjective through *-mente* suffixation (cf. English suffix *-ly*), and (ii) they convey(ed) epistemic necessity, i.e. certainty. The purpose of this presentation is to show how these micro-constructions evolved through time and developed modal and discourse functions, thus leading to the creation of new nodes in several linguistic networks.

A reference work in the evolution of epistemic necessity items is Schwenter & Traugott (2000), which explains the development of English *in fact* from sentential adverbial to epistemic marker and discourse marker. In the case of Romance *-mente* adverbs, González Manzano (2013) and Villar Díaz (2013) examine some epistemic necessity markers in Spanish from a grammaticalization approach. Their contributions provide a good starting point for further historical research both in Spanish and other Romance varieties.

Corpus data is used as the main source of evidence. Two chronologically complementary corpora are exploited: TMILG (1228-1600) and TILG (1612-2013). Constructionalization (Traugott & Trousdale, 2013) is used as a theoretical framework.

The three adverbs examined here occurred as sentential adverbs during the Middle Ages. The earlier meaning of the adverb predicts where on the epistemic scale will the new construction be located (Schwenter & Traugott, 2000): the sentential meanings 'in actuality,

in practice' (*certamente*, *realmente*) and ‘with confidence' (*seguramente*) invite inferences of factuality, i.e. epistemic necessity, the highest rank in the scale. These adverbs undergo constructionalization as epistemic markers during the Middle Ages and become very frequent from the 1880s onward. Main research focuses on processes taking place during the modern period (1880s-2010s).

As certainty markers, each item follows a different path of development which ensures its viability in Modern Galician. On the one hand, *certamente* and *realmente* develop different contrastive meanings (concessive vs. adversative, respectively), as a result of the inherent dialogic function of certainty items (see Simon-Vandenbergen & Aijmer, 2007). Furthermore, these contrastive overtones determine their corresponding rhetorical function and subsequent evolution towards discourse markers. On the other hand, *seguramente* is demoted in the epistemic scale through a constructional change involving the semanticization of ‘high probability', thus filling in a previously blank spot in the epistemic modal network. The data suggest that this latter change is very recent (first half of 20th century), in contrast with the chronology proposed by Villar Díaz (2013) for the same change of the Spanish cognate (18th century).

Knowing the history of particular epistemic markers helps us get a more precise picture of how epistemic modality works and evolves. But these individual stories only make sense when compared with those of neighboring items in a particular network of constructions.

Questions for further research include: how can we account for the different contrastive overtones of certainty markers? How can we explain that constructions with the same origin develop differently in different languages?

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Mining the modals - On the inclusion of periphrastic do in the paradigm of the modal auxiliaries

Construction Grammar conceptualizes constructions as nodes in a hierarchical network, the organizing principles being that 1) lower-level constructions display a lower level of schematicity than their parents, and 2) multiple inheritance links govern the flow of features from higher-level nodes to their children (Goldberg 1995: 72). While the role of these inheritance links has been thoroughly discussed in the past, the links that hold between constructions at the *same* level of schematicity have only recently entered the spotlight of theory. Within Diachronic Construction Grammar, a growing body of research is currently devoted to the extent to which these horizontal relations enable language change (e.g. Van de Velde 2014, Lorenz 2017, Norde 2017). If constructions are sufficiently similar on a superficial level, speakers might confuse them and link them up in their mental grammars. Crucially, such superficial similarities are not restricted to similarities in form and meaning alone. We argue that distributional similarity too is a factor that impacts the dynamic between sister constructions. If a construction enters a context typical of another (set of) construction(s), their increased distributional similarity might create an associative link which will affect their further developments.

An excellent case study to examine the power dynamics between sister constructions is the 17th-century integration of periphrastic *do* into the paradigm of modal auxiliaries. In Present-Day English, the modal auxiliaries show a remarkable distributional similarity with the verb *do* in its use as an operator:

a) *Do* you like ice cream? - I *do* not like ice cream.

b) *Can/May/Must/Shall/Will* you eat ice cream? - You *can/may/must/shall/will* not eat ice cream

Periphrastic *do* spread to these different syntactic environments at different times (cf. Ellegård 1953, Kroch 1989). While some influence between *do* and the modals has long been recognized, 'the nature of the connection is less clear' (Warner 1993: 198). We model the various changes as an interconnected accumulation of associations between *do*-support and modal auxiliaries in similar contexts. The underlying assumption is that *do*-support in questions is associated with different (uses of) modals than *do*-support in negative statements, *etc*. To enable the comparison of all contexts that *do* and the modals occur in, we use methods based on Artificial Neural Networks (ANNs), a family of learning algorithms that is rapidly gaining momentum in many scientific disciplines that involve data analysis (e.g. De Mulder & al. 2015). ANNs allow to holistically chart (changing) connections between all constructions, which makes it possible to examine the role of multiple connections between constructions in language change.

Preliminary results indicate that the association between *do* and the modals was initiated in their past tense uses, spreading to present tense contexts only later on. In addition, the highest initial association scores are attested between periphrastic *do* and *will*, arguably the most factual among the modals. This suggests that *do* became associated with each one of the modals consecutively, rather than with all of them in one go.

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How many modals are there again? – A diachronic construction grammar approach to English modal contractions

Traditionally, the English central modals (e.g. *would*, *can, could*) represent a rather well-defined class that exhibits a number of distinct features. One is their ability to have a (non-)negative contracted form (e.g. *'d* or *wouldn't*). While these contractions are typically considered a variant of their respective uncontracted counterpart, only a handful of studies have thus far treated at least *'ll* independently of its full form *will* (e.g. Berglund 2005, Nesselhauf 2012, 2013, 2014).

In line with the principles of usage-based construction grammar, the present paper argues that all modal contractions may be viewed as constructions (CxNs) in their own right, i.e. as entrenched form-meaning parings that are either structurally/semantically not fully predictable or occur with sufficient frequency (Goldberg 2006, Langacker 2005, *inter alia*). Based on data obtained from the *Corpus of Historical American English* (COHA) (Davies 2010–), two main properties of contracted English modals are investigated to underscore their status as CxNs independent of their historically related full-forms.

The first property relates to the relative frequency distribution of contracted to uncontracted modal CxNs. According to prevailing opinion, the modals continue to be in a phase of long-lasting change in English (see e.g. Daugs 2017, Hilpert 2012b, Leech 2013, Mair 2015). In contrast to previous studies, this paper focusses specifically on developmental trends of contracted modals and shows that their relative frequency has been increasing over the last 200 years, up to the point where they have become more frequent than the uncontracted forms, thus indicating a change in the constructional network (cf. e.g. Hilpert 2013).

This increase can be linked to a second property of contracted modal CxNs, which concerns the semantic idiosyncrasies they appear to have developed since the early 19th century. By using variability-based neighbor clustering (Gries & Hilpert 2008), the data from COHA are first partitioned into periods suitable for comparison. Following this, distinctive collexeme analysis (Gries & Stefanowitsch 2004) and its application to diachronic data (Hilpert 2008, 2012a) are then employed to show that the contracted modals CxNs, next to having a 'natural' preference for verbs of short character length, shift towards attracting verbs that mainly fall into two semantic clusters. These clusters include verbs of communication (e.g. *say*, *talk, call*) and verbs denoting an emotional/mental activity (e.g. *think*, *want*, *believe*).

Finally, I will discuss the different senses that can be associated with the contracted modal CxNs, i.e. whether the CxNs express root or epistemic meaning (see e.g. Coates 1983, Depraetere & Reed 2006). Following Gilquin (2013), the results are compared with the data from the distinctive collexeme analysis. Given that the modals as well as their collocating main verbs are typically polysemous, this may have an influence on a speaker's choice of a specific sense.

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The emergence of the constructional network of reported commands in German (theme session: Modality)

Much recent research on modality has been devoted to the diachronic relationship between deontic and epistemic modality (cf. e.g. Van der Auwera & Plungian 1998, Traugott 1989, Bybee & Fleischman 1995). Less attention has been paid to the sub-domain of "speaker-oriented" modality covering "markers of directives, such as imperatives, optatives or permissives" (Bybee & Fleischman 1995: 6). The present study deals with the linguistic realization of reported commands, i.e. directives embedded under a complement taking predicate (CTP). In present-day German, there are several options for this purpose: the non-finite clause with *zu* 'to'-infinitive (1), the finite complement clause with *dass* 'that' and the indicative (2), the present subjunctive (3), or a modal verb (4), and the verb-second complement clause with an obligatory modal verb (5).

Peter bat Maria ,
'Peter asked Maria'

(1) [ctp [*zu*-INF]] *nach Hause* ***zu gehen***.
home to go

(2) [ctp [*dass* ... Vsubj]] *dass sie nach Hause* ***gehe.***
that she home go.subj

(3) [ctp [*dass* ... Vind]] *dass sie nach Hause* ***geht.***
that she home go.ind

(4) [ctp [*dass* ... Vinf MV]] *dass sie nach Hause gehen* ***soll/ möge***.
that she home go.inf should.ind /may.subj

(5) [ctp [MV Vinf]] *sie* ***soll/ möge*** *nach Hause gehen.*
she should.ind /may.subj home go.inf

The present subjunctive (2) is considered the oldest option; yet all other forms are attested from the earliest periods of German. The subjunctive has been in continuous decline, while other expressions have gradually gained ground, most notably the modal verbs, as in (4)-(5), which is usually seen as a gradual replacement of the subjunctive by functionally identical "analytical" forms (Lühr 1994, 1997). As shown in a recent diachronic study based on Middle High German and Early New High German data (Smirnova 2017), the situation is much more complex. Several changes in the verbal morphosyntax (e.g. subjunctive > indicative, subjunctive > modal verb.subj/ind) are intertwined with changes in the syntactic structure of the complement clause (*dass*-clause> *zu*-infinitive, verb-final > verb-second). Moreover, these changes vary considerably, depending on the particular CTP. This paper argues that changes in syntactic complementation patterns on the one hand and changes in the linguistics realization of illocutionary modality on the other are two sides of the same coin, if approached from the perspective of Diachronic Construction Grammar.

Using data from a more recent diachronic period of German (*Deutsches Textarchiv* [DTA], c. 1600-1900), the study traces individual small-scale changes in complementation patterns of ten directive CTPs with slightly different semantics. Assuming that complementation patterns are constructions (Cristofaro 2008), the evolution of the patterns in (1)–(5) will be presented as a complex development of a constructional network, in which (sub-)schemas and paradigms emerge on different levels of abstraction. In particular, the study investigates how syntagmatic (horizontal) connections emerge between constructions and how these connections are abstracted to higher (vertical) levels in the network.

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Grammaticalization of verdienen into an auxiliary marker of deontic modality: A usage-based approach using collostructional analysis

The emergence of modal constructions has been a major topic (not only) in grammaticalization studies during several decades now. Most research has concentrated on the rise of epistemic and evidential meanings from constructions with modal verbs and infinitive verbal lexemes denoting non-epistemic (i.e. deontic, volitional, dynamic) modal meanings; in addition, many surveys have focused on constructions with semi-modal verbs and infinitive verbal complements (e.g. Krug 2000, Narrog 2012, Traugott 1989). The verb *verdienen* ('deserve', 'earn') has not been regarded as a modality marker so far. We claim that it is on the rise as an auxiliary verb of deontic modality. The proposed study discusses the synchronic variation of the verb *verdienen* in modern German reflecting its diachronic development from a lexical to a more grammatical sign.

As the following examples illustrate, in modern German the verb *verdienen* occurs in numerous verbal constructions expressing both lexical and grammatical meaning:

(1) *Außerdem haben wir uns eine **Zigarre verdient**.* (DWDS: Benjamin Lebert, 1999: 133)

(2) *Aber ihr mögt darüber sagen, was ihr wollt, er **verdient** doch **Respekt**.* (DWDS: Hans Magnus Enzensberger, 1972: 61)

(3) *Gerade dieses Detail, bedenkt Arlecq schreibend, **verdiente hervorgehoben** zu **werden**, [...].* (DWDS: Murray Barbour, 1966: 8217)

(4) *Ein so Elender **verdiene** nicht zu **leben**.* (DWDS: Jochen Klepper, 1962: 522)

In (1) and (2), the verb *verdienen* functions as a lexical verb occurring with a direct object, i.e an accusative-marked NP. In (3) and (4), it appears in combination with infinitive verbal complements. The verb *verdienen* is regarded here as a more grammaticalized, i.e. an auxiliary, verb in the direction of a deontic modality marker. In view of this, the verb *verdienen* constitutes the four constructions that can be formalised by the following schemas:

(5) [verdienen NPACC-CONCRETE] <'earn'>

(6) [verdienen NPACC-ABSTRACT] <'deserve'>

(7) [verdienen VPP zu werden] <'should be Ved'>

(8) [verdienen zu VINF] <'should V'>

The study reconstructs the grammaticalization path of the verb *verdienen* towards a deontic modal by an in-depth synchronic analysis of its constructional patterns. Additionally, it aims to identify the typical lexical items, i.e. collexemes, which occur in the empty slots of the mentioned four constructions with the verb *verdienen*. For this purpose, we apply a *simple collexeme analysis* (Stefanowitsch & Gries 2003) using the data from the DWDS Core Corpus (*DWDS-Kernkorpus*; Geyken 2007). This quantitative corpus-based technique determines the most attracted collexemes capturing the semantic / functional potential of the each construction under investigation. What is more, we sort these collexemes into semantic groups using classifications of GermaNet (Hamp & Feldweg 1997).

Evaluating degrees of grammaticalization and ordering the explored constructions according to their grammatical status, we deduce a model for the grammaticalization path for the verb *verdienen* and determine its trajectory of meanings in the semantic domain of modality.

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Exploring the relative degree of auxiliarization empirically: Modal constructions with VERMÖGEN, VERSTEHEN, WISSEN, BEKOMMEN

The proposed talk discusses the relative degree of auxiliarization, i.e. “auxiliariness” (Heine 1993), of the verbs *vermögen*, *verstehen*, *wissen*, *bekommen* in modern German. They constitute modal constructions occurring with infinitive verbal complements with the particle *zu* (see ex. 1–4 from DWDS, Geyken 2007) and compete with the highly frequent modal verb *können* in written German.

(1) *Leopardi selbst hatte er anscheinend nicht* ***zu überzeugen vermocht****.* (DWDS: Wolfgang Hildesheimer, 1981: 291)

(2) *Und das alles bis zur absoluten Glaubwürdigkeitsgrenze, wobei er so* ***zu jonglieren versteht****, daß* [...]. (DWDS: Franz Josef Degenhardt, 1999: 177)

(3) *Die Wirtin* ***wußte*** *laut genug auf die spendablen Herren* ***hinzuweisen****.* (DWDS: Kerstin Jentzsch, 1994: 267)

(4) *Mitglieder der unteren, minderbemittelten Schichten* ***bekamen*** *diese gestaffelte soziale Kontrolle mit besonderer Härte* ***zu spüren****.* (DWDS: Wolfgang Engler, 1999: 277)

These modal constructions express the modal meaning ‘possibility'/‘capability' and can be formalised by the following general schema: [V-aux V-lex-inf]. Accordingly, the verbs *vermögen*, *verstehen*, *wissen*, *bekommen* function as grammatical markers of dynamic modality. In addition, they appear to be near synonyms occurring in the modal constructions. Regardless of sharing similar conceptual content, they differ in their verbal lexeme preferences as well as their degree of auxiliarization.

Earlier studies have concentrated primarily on the infinitive verbal complements utilizing collostructional analysis. In view of this, the relative degree of auxiliarization of the verbs *vermögen*, *verstehen*, *wissen*, *bekommen* correlates with token and type frequency of infinitive verbal lexemes as well as variety of their semantic classes.

This case study otherwise aims to ascertain to what extend the corresponding auxiliary verbs of modality are grammaticalized, applying a *multilevel multinomial logistic regression* (for application of the multilevel logistic regression in cognitive linguistics, see Gries 2015, Tummers et. al. 2015). The results of this quantitative analysis demonstrates what usage features (e.g. extraposition, polarity, semantic classes of infinitive verbal lexemes etc.) operationalized as predictors give evidence for a stronger or weaker relative level of auxiliarization of the verbs under investigation. The empirical basis of this study represents an exhaustive set of observations with four modal constructions from the DWDS Core Corpus (*DWDS-Kernkorpus*; Geyken 2007).

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Constructionalization of the nominal modal marker koto in Japanese

In her 1995 paper, Okamoto proposes that the sentence that ends with *koto* in (2) is not an elliptical sentence of (1) with a nominal complimentizer, but it is an independent construction. She shows that the sense of order in (2) is weaker than that of (1), and there are some contexts where only (2) (not (1)) can be used. Therefore, she claims that the sentence in (2) must be a main clause, and *koto*, developed from (1), serves as a modality marker.

(1) [[*Menbaa-ga mina kichinto kōdō-suru*] ***koto***]-*o meijiru*.

member-NOM all properly act COMP-ACC order

"(I) order all members to act properly."

(2) *Menbaa-ga(/wa) mina kichinto kōdō-suru* ***koto***!

"All members act properly!"

The goals of this paper are three-fold. First, this paper will examine the properties of (2) in details and show that: i) while the sense of order in (2) may be weaker than that of (1), (2) still exhibits the well-known characteristics of order (Nitta 1991); and ii) unlike Uchibori (2006, 2007), who assumes that the constituent structure of (2) is similar to that of (1), as shown in (3), the exhaustive listing interpretation (Kuno 1973) and the *shika-nai* test (Muraki 1978) suggest that the constituent structure of (2) is actually more similar to that of modal sentences, as shown in (2') and (4) below.

(3) [*ahita anata-ga hitoride kuru*] ***koto*!** (Uchibori 2007: 301)

tomorrow you-NOM by yourself come

"You come tomorrow by yourself!"

(2')*Menbaa-ga(/wa)* [*mina kichinto kōdō-suru*] ***koto***! (proposed)

“All members act properly!”

(4) *Tarō-ga* [*biiru-o non*da] *rashii.* (Ueno 2017:195)

Taro-NOM beer-ACC drank seem

“Taro seems to have drunk beer.”

Second, to explain the properties of (2) and the differences between (1) and (2), this paper proposes that (2) was *sanctioned* (in the sense of Traugott and Trousdale 2013) by the schema of the prototypical modal (“raising-to-subject”) construction. That is to say, the meaning of order in (2) may have come from inferring the deleted verb of order earlier. However, as the association of the meaning of order with the structure in (2) becomes conventionalized, (2) was reanalyzed to have the constituent structure of (4). Thus, this paper concludes that (2) is an instance of constructionalization where a new form-meaning pair is created (Traugott and Trousdale 2013: 1).

Third, and finally, this paper will show that the grammaticalization of the nominal complimentizer *koto* as a modality marker is not an isolated phenomenon. In Japanese, the culture that favors indirect communication motivates the speaker not to say everything and encourages the hearer to infer the meaning of the unsaid. This culturally motivated practice of omitting and inferring has prompted the development of many modality expressions (Itani 1998). Evans (2007: 367) also reports cross-linguistic instances of “the conventionalized main clause use of what, on prima facie grands, appears to be formally subordinate clauses.” Thus, the constructionalization of *koto* shown in this paper will be presented as part of commonly observed changes.

Constructionist approaches to individual grammars

Peter Petré (University of Antwerp) and Lynn Anthonissen (University of Antwerp)

Language is inherently communal. Wittgenstein showed that private languages are incoherent (1953: §243). Yet language also only exists in the unique minds of individuals. The central question to this workshop is how usage-based theories of grammar, and particularly constructionist approaches, can best model the linguistic relations between idiosyncrasy and alignment to the community flow.

Cognitive construction grammar has been put forward as a psychologically plausible model of language knowledge of individuals. Support comes from language acquisition research (Tomasello 2009), experiments (Goldberg 2006), as well as neurology (Allen et al. 2012, Pulvermüller et al. 2013). Yet most studies still model constructions at the level of the community only. While this may be inevitable in most corpus-based work, thinking through the theory raises questions about what these aggregate models actually represent.

This workshop looks at the interaction of individual and communal language use from different perspectives, and tries to make this interaction more explicit in a usage-based theory.

Language acquisition & psycholinguistics: Cognitive linguistic work has shown that speakers acquire grammars that are significantly different from each other (Dabrowska 2012). What kinds of idiosyncrasy, and to what degree, are possible in adult language before recurrent communicative problems arise? How far can non-canonical associations, such as those apparent in blends (e.g. De Smet 2013), be stretched before becoming 'private language'? Frequency is another factor that tends to be underrepresented in constructionist models. More frequent patterns are more easily accessible, and hence will be more readily used. But frequency can be both internal (self-priming, as in idiosyncratic filler words) and external. Do these two types of frequencies represent different types of knowledge?

(Historical) Sociolinguistics & Historical linguistics: Grammars not only differ across individuals, they also change with time. How does an individual's linguistic knowledge evolve and interact with that of their peers? Do we need to assign primacy to communities of practice (change/linguistic structure, only 'exists' if enough members adopt it) or to individuals (who will only adopt/innovate if their respective grammars are 'ready'). Is competition of inter-individual variants different from intra-individual competition? Also, does the (lack of) intra-individual change represent (lack of) participation in a communal

shift, age-grading effects, or is it mostly a matter of personality? Can we set up similarity measures of constructions and groups of constructions between individuals? To what extent could such similarity measures help us understand who adopts innovations? Older language users for instance have highly entrenched routines, and are less likely to adopt innovative language. Is this mostly a matter of item-based entrenchment? Or is there also a relationship with how they have organized their grammar as a network – which may help in explaining exceptions? And how can we represent such 'distances' between individual grammatical traits in a general usage-based model of language?

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Language as a phenomenon of the third kind

While many linguists tend to view language as *either* a cognitive or a social phenomenon, it is clearly both: a language can live only in individual minds, but it can be learned only from examples of utterances produced by speakers engaged in communicative interaction. In other words, language is what Keller (1994) calls a phenomenon of the third kind, arising from the interaction of a micro-level and a macro-level. Since language learners differ in cognitive abilities that are relevant for language learning and since they do not have direct access to the cognitive routines that other speakers use to produce utterances, only to the utterances themselves, variation is both pervasive and inevitable. However, the amount of variation in language is constrained by social factors, in particular, its communicative function on the one hand and its role in maintaining social cohesion on the other.

In this presentation I show how such a dual perspective helps us understand an otherwise puzzling phenomenon, namely what I will refer to as "non-psychological" generalizations. A non-psychological generalization is a situation in which a pattern which is arguably present in a language is not explicitly represented in most speakers' minds, which therefore raises issues about whether or not it should be considered a construction. I discuss two very different examples of such generalizations, genitive marking on masculine nouns in Polish and some restrictions on questions with long-distance dependencies (LDDs) in English. Both of these phenomena can be accounted for by relatively straightforward rules: for the genitive, nouns designating small easily manipulable objects take -*a*, while nouns designating substances take -*u*; for questions with LDDs, Goldberg's BCI constraint ("Backgrounded constituents are islands": see Goldberg 2006, Ambridge and Goldberg 2008). In both cases, there is experimental evidence that only a minority of speakers have (implicit) knowledge of the underlying linguistic generalization (Dąbrowska 2008, 2013); yet in normal language production and comprehension, speakers behave *as if* they knew the rule. I argue that such patterns can be explained if we assume that linguistic knowledge is distributed, in the sense that different speakers are sensitive to different types of regularities. It is the "sensitive" speakers who introduce and maintain the pattern, while others approximate their behaviour without actually sharing the underlying rule.

Thus a cognitively realistic usage-based construction grammar needs to distinguish between usage patterns (a social phenomenon) and patterns in speakers' minds (a cognitive phenomenon). There are patterns in language which are not explicitly represented in

speakers' minds, or at least not in all speakers minds. This is partly because linguistic knowledge, including grammatical knowledge, is distributed, and partly because different speakers may represent “the same” knowledge at different levels of abstraction.

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The test of time for cognitive sociolinguistics: reconciling individual and aggregate models of usage

Most of synchronic and almost all diachronic studies model lexical semantic usage at the level of the community only. While this may be inevitable in corpus-driven research, there are discrepancies regarding the way aggregate models represent semantic usage and change in comparison to individual-led models based on usage 'on the ground' (Robinson 2012). Therefore, this presentation explores the way in which usage at the aggregate-community and individual levels, come together to shape the trajectory of lexical semantic change.

Useful insights to this question have been proposed in recent sociolinguistic research (Buchstaller 2015, Sankoff 2013, Wagner 2012) which here will complement the cognitive linguistic assumptions on language change. Sociolinguistic findings demonstrate that individuals may: (1) display patterns of stability; (2) change in later life in the direction of a community-wide change; or (3) display retrograde change in later life, with older speakers reverting to earlier community patterns as they age. Patterns of individual variation-change may lead to accelerating (2) or slowing down (3) of community-wide change (Wagner and Sankoff 2014). Studies also indicate that speakers' awareness of change increases in time but it is uncertain to what extent this may affect the pace of on-going change. There is little information on the relationship between individual speakers and their participation in change that is at different stage of development (early, middle, late). Finally, it is unclear how change at different levels of language adds to the dynamic relationship between individual and the community.

The aim of this talk is to look at the interaction of individual and communal language use from the perspective of lexical semantics and comment on how this interaction can be modelled from a socio-cognitive angle. I explore semantic variation of evaluative adjectives in the speech of ten Sheffielders (age 35–70) between 2005 and 2015. The results indicate that usage of variants undergoing community-wide change from below (e.g. *skinny* 'mean') remains most stable across the life of individuals. Markers and stereotypes, such as *wicked* or *cool* undergo some life-span change (2) thus accelerating the pace of the community-wide change to the extent that the change to opposite happens just within one or two

generations. The data also shows that speakers' awareness of change increases over time and this leads speakers, who oppose to the change, to reject the use of a given adjective (e. g. *awesome*, *gay*) with all its senses, and not necessarily by reverting to previous 'pre-change' usage (3). This information is enriched with surveys of perceptions of language change collected from the same participants across the ten-year period. By squaring longitudinal usage and perceptions I comment on the role of personality and individual stance vs frequency in participating in on-going change.

The results also allow for discussion of the individual participation in changes at different stages of development, as speakers over 50 years of age participate in ongoing change of *gay*, *happy*, *chilled*, whereas those below 50 participate in change of *wicked, fit,* or *awesome*. The results of the study complicate the role of frequency in language change by overriding its effect by such sociolinguistic pressures as prestige. In conclusion, I propose a cognitive-sociolinguistic model of longitudinal language usage and change and suggest the most fruitful lines of future enquiry.

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Investigating the ing-form network in the idiolects of 17th century authors

A central claim of construction grammar is that languages are structured inventories of form-meaning pairings (e.g. Croft & Cruse 2004: 255), which are considered to be 'linked' when they exhibit overlapping or related formal and/or functional features with other constructions (e.g. Hoffmann 2017). Diachronically speaking, such inventories may change over time, as links between constructions may fade or emerge (e.g. Barddal & Gildea 2015: 24). A prime example of such a diachronically evolving form-function links can be observed in the 'network' of constructions in English formed with deverbal *ing*-forms, comprising progressive *BE* V*ing* (1), adjectival (2) and adverbial (3) uses of the present participle, and the so-called English verbal (4) and nominal gerund (5) (VG and NG).

(1) *... his Mother and Crimalhaz* ***are plotting his death*** (John Dryden, EMMA, 1674)

(2) *... the firm Earth was not to be distinguish'd from* ***the moving*** **sands** (JD, EMMA, 1698)

(3) *... his wife, ...* ***much detesting Her husband's practises****, had willingly Accompani'd their flight* (JD, EMMA, 1673)

(4) *... the Heroes of all Poets, and have been renown'd through all Ages, for* ***destroying Monsters*** (JD, EMMA, 1683)

(5) *... At* ***the Drawing up of the Curtain****, Veramond King of Aragon appears* (JD, EMMA, 1694)

A wealth of studies has previously discussed the intriguing formal merger of present participles (formerly *–end(e)*; e.g. Lass 1992) and gerunds, and the subsequent rise and development of *ing*-forms in Middle and Modern English. The consensus is that, given the increasing overlap in form and function between them, it seems likely that "the different constructions have influenced and reinforced each other in various ways" (Killie & Swan 2009: 359; AUTHOR1&ANON.; van de Pol & Petré 2015). Particularly, recent studies suggest that the increased formal identity of present participles and gerunds helped 'prime' the rise of VGs (e.g. Fanego 2004), which became a new functional competitor for NGs (e.g. De Smet

2013). This growing competition subsequently led to gradual changes in the functional factors determining the choice between NGs and VGs (AUTHOR1 2016).

However, even though constructional networks, priming, and competition are concepts pertaining to the grammatical knowledge in the *individual* speaker's mind (e.g. Goldberg 2006), the English *ing*-network is predominantly studied as it emerges in population-level language. This study is the first to systematically investigate whether (and to what extent) the suggested cognitive associations in the *ing*-network can be attested in an individual's language, or *idiolect.* Research on idiolect, especially within a forensic linguistics context, has found evidence that personalised grammar emerges from the co-selection of constructions (Coulthard 2004). In this study, we examine the reasons that lead to these selections using the Early Modern Multiloquent Authors corpus (Petré *et al.* 2017) to (i) analyse the functional-semantic properties each individual associates with NGs or VGs (e.g. syntactic function, verb type, givenness) and (ii) compare individualised decision trees. Finally, we discuss the merits of considering individualised decision trees in light of their surrounding constructional network, showing that the extent to which individuals opt for VGs might be related to structural priming by present participles. By scrutinising the selection behaviour of individuals this study contributes to historical research on 'psycholinguistic' concepts as well as the understanding of idiolect, which finds an application in modern forensic linguistics.

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Jakob Neels

Towards an Automation-and-Ritualisation Model of grammaticalisation: With a case study on lifespan change and inter-speaker differences

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Recent research on language change and grammaticalisation shows growing consensus that both methodology and theorising benefit greatly when complementing the common approach of using aggregated speech-community data by an approach zooming in on idiolectal variation and change (e.g. De Smet 2016, Schmid & Mantlik 2015, Petré & Van de Felde 2014). In this spirit, the present paper sketches out a new model of grammaticalisation – the Automation-and-Ritualisation Model (AR-Model) – that pays equal attention to the level of the individual and that of the speech community.

Being inspired in part by Schmid's (2015) Entrenchment-and-Conventionalisation Model of language, the AR-Model comprises two complementary dimensions of grammaticalisation. Automation, on the one hand, is the umbrella term for the cognitive processes in the individual that are involved in a construction's shift to a less controlled mode of processing (cf. Lehmann 2017), and to more procedural functions. The cognitive forces and motivations subsumed under Automation include entrenchment, chunking, habituation, neuromotor practice, schematisation, analogy, (self-)priming, conceptual efficiency of coding, and metaphor and metonymy. Ritualisation, on the other hand, stands for the negotiation and conventionalisation of linguistic signs (with increasingly grammatical functions) in social interaction (cf. Haiman 1994). The forces and motivations at this dimension are socio-communicative in nature, including co-adaptation, rich pragmatic inferencing, extravagance and social fitness, inflationary (invisible-hand) effects, diffusion and normation. Unidirectionality, gradualness and other characteristics of grammaticalisation naturally

derive from the qualities of both cognitive Automation and socio-communicative Ritualisation.

The processes subsumed under the macro-processes of Automation and Ritualisation have two features in common. First, they are not specific to grammaticalisation, in fact not even to language. Rather, they are either domain-general cognitive processes or processes of cultural evolution that operate in complex adaptive systems in the social realm (cf. Beckner et al. 2009, Bybee & McClelland 2005, Croft 2000, Keller 1990). Second, many of these processes are sensitive to frequency of use. Grammatical constructions are linguistic routines, and their emergence resembles that of non-linguistic routines: the routinisation of activities is fuelled by frequent repetition.

The AR-Model aims at contributing to the refinement of frequency-effect explanations of grammaticalisation (e.g. Bybee 2010). To this end, the paper presents a case study on the English construction [X, *let alone* Y] (cf. Fillmore et al. 1988), whose diachrony instantiates the problematic phenomenon of (community-level) low-frequency grammaticalisation. The study analyses idiolect data on *let alone* against the background of the community-wide usage data from the Corpus of Historical American English (Davies 2010–). It traces lifespan change in a self-compiled William Faulkner corpus, demonstrating that compelling evidence for the view of grammaticalisation as routinisation can be found on the small scale of the idiolect as well. Vast intra- and inter-speaker differences in frequency of use are observed. This finding underlines the potential pitfalls when trying to go from community corpus to cognition (cf. Arppe et al. 2010). For cases of alleged low-frequency grammaticalisation, it suggests that the cognitive conditions for frequency-driven innovation on the individual-level need not be so different from those in obvious high-frequency grammaticalisation; what differs may rather be the sociolinguistic conditions for the diffusion of change on the community-level.

Overall, by taking into account cognitive, pragmatic as well as social factors, the AR-Model is intended to be a further step towards a truly unified usage-based framework for grammaticalisation research.

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Cognition in Construction Grammar: Modelling constructional change in individuals

This talk presents one of the first empirical attempts at exploring whether constructional change of syntactic constructions is possible within the adult lifespan of individual speakers. It does so by zooming in on diachronic changes in passives of the type *He is said to be a thief*, a construction known as the nominative and infinitive (NCI), which gained ground in Early Modern English when the rigidification of SVO increased the need for topical or unmarked subjects (Los 2005, 2009, Dreschler 2015). By focusing on individual grammars, this talk puts cognitive mechanisms of change (such as analogy and entrenchment) centre stage and contributes to the discussion on the adaptive capacities of adult cognition (cf. Ramscar et al. 2014, Fruehwald 2017) more generally, and the extent to which the adult mind can adapt to ongoing linguistic change in particular.

Until recently, grammatical change has been primarily described at the aggregate level of speech communities. However, grammatical changes ultimately represent the cumulative effect of recurrent changes across individual language users whose innovative language use reflects adjustments in the mental representation of their linguistic knowledge. As linguistic knowledge has been shown to exhibit significant degrees of idiosyncrasy (Chipere 2003, Dąbrowska 2012, Schmid & Mantlik 2015, Günther 2016), radically usage-based constructionist approaches to change should "constantly ask whether there is a solid internal basis for externally apparent semasiological developments" (Noël 2016: 48). So far, diachronic construction grammar has insufficiently operationalized the individual-cognitive dimension of change. The field of historical sociolinguistics arguably has a longer tradition of dealing with interspeaker variation, social networks and the role of individual speakers in ongoing change (e.g. Bergs 2005; Nevalainen et al. 2011), yet existing work is rarely longitudinal, typically small-scale, and therefore usually limited to changes associated with high frequency elements, such as lexical or morphological change. Intragenerational changes relating to syntactic constructions remain largely unexplored (notable exceptions include Raumolin-Brunberg 2009, Petré and Van de Velde 2014).

Against this background, the present talk examines diachronic changes in the NCI's constructional semantics and contrasts writers' individual trajectories in the use of the NCI. Two main usage types are discerned: the evidential NCI (*He is said to be a sinner*) and the modalized NCI (*He may be said to be a sinner*) (cf. Noël 2008). Drawing on data from the

longitudinal EMMA corpus (Petré et al. 2017), the study demonstrates that the proportions of these usage types shift during the lifetimes of first-generation EMMA authors (ca. 4,000 instances of the NCI), with informants showing linear trends that persist into old age. The incremental entrenchment of the evidential NCI in the first generation paves the way for its growing acceptability with active dynamic verbs in second- and third-generation EMMA authors (e.g. *the Basilisk is said to* ***kill*** *with her sight*, 1686). On communal level, the general increase in evidential uses is argued to reflect the construction's growing emancipation from the passive construction and its development into a reportative marker.

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L2 learners' use of competing alternatives

When native speakers judge the acceptability of novel sentences, they implicitly take competing formulations into account, insofar as they judge novel sentences with a readily available alternative formulation to be less acceptable than novel sentences with no competing alternative (Robenalt & Goldberg 2015). Moreover, novel sentences with a competing alternative are more strongly dispreferred when they contain high- compared to low-frequency verbs (Brooks et al. 1999; Theakston 2004; Ambridge et al. 2008). Compared to native speakers, L2 users are less able to generate online expectations during language processing, implying a reduced ability to differentiate between novel sentences with and without a competing alternative, except at the highest levels of proficiency in L2 (Robenalt & Goldberg 2016). We report new experimental work that investigates the effects of priming and proficiency on the extent to which individual speakers take competing alternative formulations into account.

TALKS

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Preverbal processing cost in locative alternation in Japanese

Locative alternation is a well-known argument alternation between the theme-object and the location object.

(1) a.

John-wa kabe-ni penki-o

John-top wall-dat paint-acc "John smeared paint onto the wall."

nut-ta. (Theme-object type = T-type) smear-past

nut-ta. (Location-object type = L-type) smear-past

b. *John-wa kabe-o penki-de* John-top wall-acc paint-with "John smeared the wall with paint."

So far the verb semantics have received much attention in the alternation. For example, in a constructional approach as in Goldberg (1995), the single meaning of the alternating verb is associated with two constructions through matching for a constructional meaning. Such ideas, however, seem incompatible with SOV languages when considering sentence processing.

The research questions in the present study are as follows:

- Is there a difference in the processing cost between the two variants of locative alternation constructions before the verb appears in a SOV language? If the alternation were centered on the verb meaning, then there would be no differences between the RTs at the preverbal region.

- The acc-second order in Japanese ditransitive sentences is canonical because of easier processing (Koizumi & Tamaoka 2004). Is such a word-order preference observed in locative alternation?

- If there is a preference for one of the constructions, does the preference effect remain even at the verb region, where matching between the verb and the constructional meaning is triggered? Prior to the main experiment, a norming study was conducted: the verbs mentioned in previous studies were classified into two classes: T-oriented

verb, which showed significant higher acceptability ratings for the T-type construction than the L-type one, and L-oriented verbs, which showed higher acceptability for the L-type construction. Then two self-paced reading studies were conducted using these verbs. The experiment had a 2x2 factorial design crossing (i) the construction factor (T-type/L-type) and (ii) the word-order factor (acc-first/acc-second). Regions of interest were the object and the verb region. Because the two object regions were not lexically consistent across the four conditions, the first object region and the second one were put together, and treated as the one region. Participants

were 110 native speakers of Japanese in the case of the T-oriented verbs and 109 in the L-oriented ones.

Results showed (i) at the object region, for the construction factor, there was a main effect in the T-oriented verb experiment *(t* = -2.64, *p*<.01; Fig1.) while there was only a trend in the L-oriented verb *(t* = -1.74, *p* = 0.08; Fig2.). At the verb region the main effects of construction type were observed both in the T-oriented verbs (*t* = -5.07, *p*<.01; Fig3.) and the L-oriented verbs (*t* = 2.16, *p*< .05; Fig4.) in the opposite direction. This might be due to the mismatch between one of the verb meanings and the other type construction.

In conclusion, in the SOV language like Japanese, there is a preverbal preference for processing T-type construction independently of the verb types, but a reanalysis of the matching between the verb types and the construction is triggered at the verb.

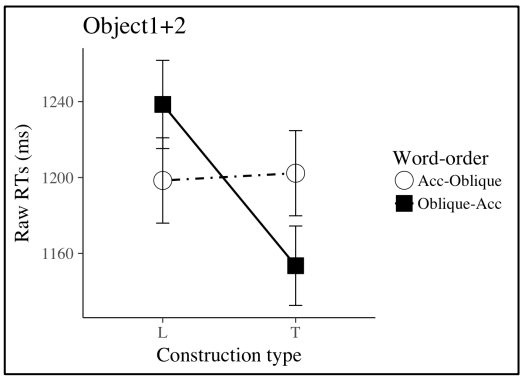

Figure 1. Mean RTs at Object1+2 of the T-oriented verb

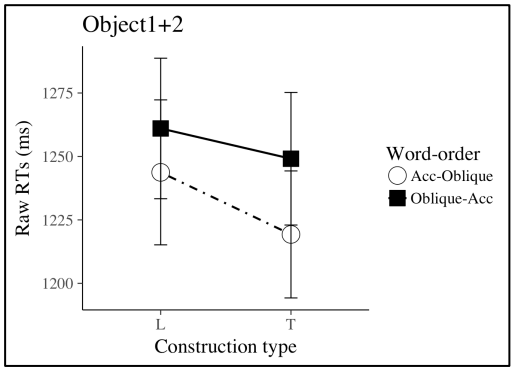

Figure 2. Mean RTs at Object1+2 of the L-oriented verbs

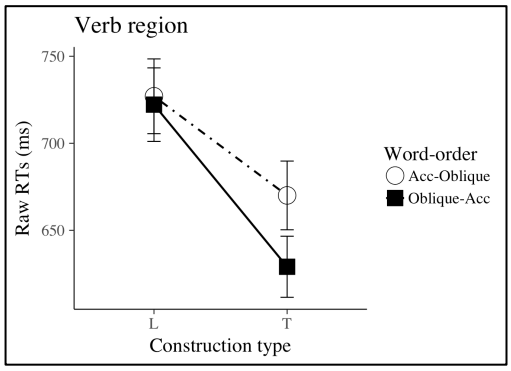

Figure 3. Mean RTs at the verb region of the T-oriented verb

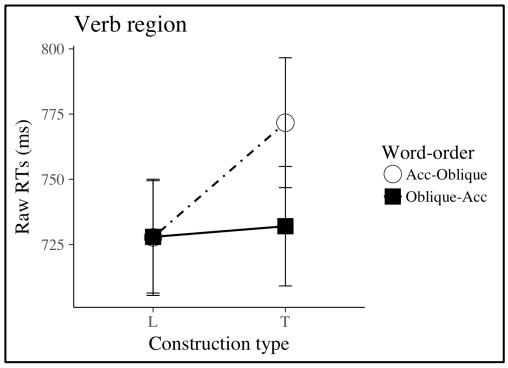

Figure 4. Mean RTs at the verb region of the L-oriented verb

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Sister schemas in morphology and syntax

Construction-theoretic thinking traditionally emphasizes the fact that constructions and subconstructions are hierarchically linked as mothers and daughters. Recently, however, the focus of attention has expanded to include 'horizontal' connections among sister constructions (Cappelle 2006, Van de Velde 2014, Norde in press, Traugott forthcoming). These are of particular importance for Construction Morphology (Booij 2010), since morphology abounds in sister words and schemas.

This talk explores the ways in which sister links among constructions can be formally modelled and theoretically understood. We start out from the assumption that they constitute *paradigmatic* links, as in (1)-(3):

(1) *schreib-e* 'write-1SG.PRS' ≈ *schreib-t* 'write-3SG.PRS' (German)

(2) *Marx-ism* ≈ *Marx-ist* (English)

Haus-frau 'housewife' ≈ *Haus-mann* 'stay-at-home husband' (German)

zwarte thee 'black tea' ≈ *groene thee* 'green tea' (Dutch)

(3) *hard-ness* ≈ *weak-ness* (English)

Paradigmatic links are also found in syntax, where they have occasionally been called "allostructions" (Cappelle 2006).

Within Construction Grammar, paradigmatic relations have been analyzed as links between shared subparts of constructions (Goldberg 1995: 78, Hilpert 2014: 83). If such structure sharing is systematic, it can be captured in a *second-order schema* (Booij & Masini 2015). For example, the relation between derivations in *-ism* and *-ist* can be formalized as in (4):

(4) < [x-*ism*]Ni ⟷ SEMi > ≈ < [x-*ist*]Nj ⟷ [person with property Y related to SEMi]j >

In this talk, we argue that this understanding of sister links has more benefits than commonly recognized, but also raises currently unaddressed difficulties.

An important advantage is the fact that sister links can relate items that do not share a 'mother'. If (4) is enriched by a coindex flagging the variables in both schemas as the same,

”supercategories” as in Cappelle (2006) are rendered superfluous. This has the additional advantage that sister links can be modelled uniformly for lexical constructions as in (1)-(3) and for schematic constructions as in (4), since shared stems and shared variables can be marked in the same manner.

More problematic is the fact that Booij & Masini propose second-order relations between items that are usually not considered paradigm mates. For example, (5) shows a link between a particle verb, a syntactic construct, and a derived word, a morphological item. The linked words in (6) share a root, but one is an inflected and the other a derived word. Such relations are not commonly considered paradigmatic.

(5) *aanval-* ‘to attack' ≈ *(de) aanval* ‘the attack' (Dutch)

(6) *lov-ed* ≈ *lov-er* (English)

This reveals an important difference between sister constructions and traditional paradigms. Paradigmatic relations involve not only shared structure, but also membership in the same system, such as an inflectional paradigm or a word family. Second-order schemas, as currently understood, are indifferent to this dimension.

We discuss the implications and suggest that those second-order relations where the difference matters, e.g. inflectional class systems, can be formalized by means of a more advanced coindexation system, which captures the relevant relations in an insightful way.

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On the reconfiguration of networks: evidence from participial constructions in Old Spanish

Spanish verbal auxiliary system was formed by four different auxiliary verbs: haber 'have', tener 'have.poss', ser 'be' and estar 'be.loc' which combined with different types of participles to produce constructions with singular meanings. Although Modern Spanish auxiliary system is still formed by these four auxiliaries, their semantics and their combinatorial possibilities with participles have radically changed. For instance, in Old Spanish unaccusative verbs selected both ser and haber, whereas unergative verbs only selected haber for the perfect (Aranovich 2003; Mateu 2009; Rosemeyer 2014). In this respect, Sánchez-Marco (2012) observed that the functions of the auxiliary verbs in Old Spanish were considerably more versatile than the functions they have in Modern Spanish, as all of these auxiliary verbs could participate in constructions which yielded interpretations which are now restricted only to specific auxiliaries; interestingly, also the perfect. However, each auxiliary acquired a more restricted role in the later centuries until they specialized in one function, i.e. the one they display in Modern Spanish.

In this talk, I will argue that this reconfiguration of participial constructions is a case of reconfiguration of the radial networks of participial constructions, following the work of Torrent (2012, 2015) within the CxG framework. The changes on the auxiliary system of Old Spanish are due to the reconfiguration of the radial network of these constructions (i.e. auxiliary verb + participle) as each construction specialized in one function in the later centuries. I will show that this specific inventory of constructions was altered over time due to the links between the different constructions fading away and disappearing as well as the nodes in this network merging and being altered. For instance, the links between the nodes have been clearly altered since with the perfect construction there has been a complete reconfiguration of the links between auxiliaries, as haber become the sole auxiliary to express this. In a similar vein, although the traditional approach to the birth of the modern perfect in Romance and Germanic languages claims that this was due to a process of grammaticalization or reanalysis of stative possessives into a perfect construction (Benveniste 1968; Harre 1991; Romani 2006), I will follow Fontana (2014) in arguing that there has been no such grammaticalization but instead a "rearrangement of different components of already existing preiphrastic perfect constructions which can be considered cases of constructional changes and constructionalization (Traugott and Trousdale 2013). [...]" (Fontana 2014: 68).

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Catenative verb constructions in L2 acquisition: The role of frequency

Although the effects of frequency on language have gained considerable attention as being one key determinant of language learning (e.g. Behrens & Pfänder 2016; Diessel 2007; Ellis 2002; Gries & Divjak 2012) the impact of frequency on the organisation and mental representation of constructions in second language (L2) learning is still considerably understudied. For instance, in the case of multi-word constructions, more research is needed on which component parts of linguistic input need to be experienced by learners with sufficient frequency to lead to entrenchment and a target-like (i.e. native-like) schema representation.

The present study addresses this question, using the English catenative verb construction as a testbed phenomenon. The catenative verb construction consists of a 'catenative verb' (see bold verbs in (1) and (2) below) and a non-finite complement, the so-called 'catenative complement' (Huddleston & Pullum 2002), which is prototypically a gerund-participial or a *to*-infinitival complement:

(1) *She **refused** to do her homework.*

(2) *Laura **enjoys** reading love stories.*

(3) **He **avoids** to listen to loud music.*

This construction is especially interesting because learners often show choices of the complement type different from those of native speakers (e.g. Gries & Wulff 2009; Martinez-Garcia & Wulff 2012) as in (3) above. To explore how different frequency-based variables affect this variation, two complementary experimental studies were conducted. These studies were a sentence completion task and a grammaticality judgement task with advanced German learners of English (C1). In both cases, the focus was on a selection of verbs which are distinct for one of the two catenative complements types mentioned above and which occur with different frequencies in the catenative verb construction. Distinctiveness and frequencies were both determined on the basis of the *British National Corpus.*

With the help of multivariate statistics, it was examined whether the frequency of the matrix verb (i.e. the catenative verb in all of its different uses), the frequency of the verb together with its distinct catenative complement and/or the verb's faithfulness (cf. Schmid 2000; see also Ellis et al. 2016) for the catenative verb construction can predict the learners' preference for a particular catenative complement type (the dependent variable). In both studies, it was shown that the frequency with which the catenative verb occurs with the respective complement type, as well as its faithfulness for the construction, made a strong

and significant prediction of the target-like complement choice. By contrast, the frequency of the matrix verb was no significant predictor.

These findings provide an important insight into how frequency affects the mental representation of the catenative verb construction for L2 learners: it is argued that the frequency of the catenative verb plus its complement type as well its faithfulness promote entrenchment of the construction and motivate a taxonomic generalisation across related exemplars (cf. Traugott & Trousdale 2013: 13) whereas the experience of the verb itself is not sufficient to form a native-like schema for the catenative verb construction.

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Ghent University [1] and IXL Learning [2]

Reconstructing ‘Success' in Indo-European: The Relation between Polysemy, Metaphor and Argument Structure

Interestingly, a large majority of Indo-European roots ‘succeed’ occur with subject-like arguments in the dative or accusative case, constituting a subset of predicates that take non-canonically case-marked subjects, well documented across the Germanic languages (cf. Barðdal 2004, Barðdal et al. 2016) and Indo-European languages more generally (cf. Danesi 2015 on Greek, Fedriani 2009, 2014 on Latin, Hock 1990 on Sanskrit, among others). In addition to the shared argument structure of these verbs of success, these verbs are also etymologically metaphorical extensions of roots that fall mainly into the conceptual domains of:

i) motion

ii) giving

iii) touching/contact

iv) aiming/reaching

v) growing

vi) luck

The fact that these semantic extensions recur in our dataset is not unexpected, as semantic extensions in general give evidence of basic metaphorical extensions commonly made by all humans; thus, they are repeatedly found in the histories of languages (Fortson 2005: 658). Regardless of whether these extensions are universal or specific to Germanic, the fact that such verbs also co-occur with non-nominative subjects is noteworthy and the subject of our investigation.

(1) **hős** **hoi** **dólōi** **ou** **proekhőree** (Greek)

since him.**DAT** craft.**DAT** not [< motion]

'since he could not succeed by craft' (Hdt. 1.205)

(2) **him** wiht ne **speow** (OE)

he.**DAT** thing not [< grow]

'he did not succeed at all' (Beo. 2852)

The largest set of verbs with oblique subject-like arguments used to indicate success are derived from verbs of motion accompanied by a preposition/prefix, e.g. Old Icelandic *ganga* 'go (+ well)' and Germanic cognates (from the Proto-Germanic verb **gangan-/gungan-*), Latin *succedō* (< *sub* 'under' + *cedō* 'step'), and Greek *sym-baínō* (< *syn* 'with' + *baínō* 'step/go/walk'). Other categories of 'success' metaphors that produce verbs that take oblique subject-like arguments include "touch success" (e.g. Old Icelandic *taka* < **takan-/tēkan-* 'touch', Latin *contingere* < *cum* 'together' + *tangere* 'touch'), "give success" (e.g. Old Icelandic *gefast vel* 'give well', Old Russian *ou-dati-sja* < 'at' + 'give' + refl), "grow success" (OHG *ge/spuon* ~ OCS *(ou-)spěti* < PIE **speh$_1$-* 'to succeed, prosper' [< 'become fat, ripen']) and "luck success" (Icelandic *heppnast* < *heppni* 'chance', *auðnast* < *auðna* 'fortune, good luck', *lánast* < *lán* 'luck' ~ Middle Dutch *ge/lucken*).

Based on the large set of cognates across Germanic and their analogues across Indo-European, we reconstruct an argument structure construction meaning 'succeed' for Proto-Germanic with a dative subject and verb of motion (**gangan-/gungan-*, **faran-*, **lingwan-*; for reconstructed forms, see Kroonen 2013), growth (**spōan-*), and luck (**lukjan-*) and a more general schema for Indo-European, where such meanings are produced by a construction with verbal roots used metaphorically and an oblique subject-like argument. In their basic sense, the verbs in these constructions also occur with a different predicate-argument structure, i.e. with a nominative subject and a concurring change in meaning. These facts about Indo-European are modeled in a Constructicon, representing speakers' knowledge about the interrelation between verbal polysemy, metaphor and argument structure. The goal is to contribute to a better understanding of Indo-European syntax, namely, the relation between conceptual domains and morphosyntactic patterns.

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It turns out 'Turns out' is not Ellipsis? A Construction Grammar view on reduced constructions

The use of fragment sentences like in (1) is a pervasive feature of spoken language events. In traditional syntactic theories, structures such as in (1) are seen as cases of ellipsis, i.e. the deletion of underlying syntactic material which is present in (2) and (3) (among others Hankamer 1979; Quirk 1985; Merchant 2001).

(1) *Turns out, I was right.* (Red Hen 2017-10-04_0300_FOX_News_FOX_and_Friends)

(2) *It turns out, I was right.* (Red Hen 2017-08-25_1000_KABC_The_View)

(3) *As it turns out, I was right.* (Red Hen 2015-01-15_0400_FOX_News_FOX_and_Friends)

In contrast to this deletion-based approach, which results from the idea that completeness is a main characteristic of sentences, Usage-based Construction Grammar (Croft 2001; Goldberg 2006; Bybee 2013) advocates a surface-oriented view of syntax. Consequently, Construction Grammar eschews the postulation of unexpressed, covert syntactic information. Moreover, CxG offers a framework in which reduced forms can be treated as independently stored constructions linked to their full forms within a bigger hierarchical network (Goldberg 2006; Heine 2011).

In this paper, we draw on one of the largest corpora of spoken English (the UCLA NewsScape Library of International Television News corpus from the RedHen project with more than 2 billion words), which yields more than 30,000 relevant tokens of the *As it turns out* ... / *It turns out* ... / *Turns out* ... constructions. Analyzing these data for their distributional frequency as well as their emotive content (using the automatic sentiment analysis R package syuzhet (Jockers 2015; Mohammad and Turney 2013), which detects lexis associated with eight basic human emotions), we will show that instead of treating the reduced forms as deleted versions of a full form, these three structures should be analyzed as three individual, yet taxonomically-related constructions. On top of that, we will also provide a cognitive explanation as to how such reduced constructions can arise in the first place, namely as online constructs in the working memory (Hoffmann 2017).

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Representing constructional dependencies in computational construction grammar

Computational construction grammar implementations come in different flavours, each with their own formal notation and integrated development environment, which allow construction grammarians to implement linguistic phenomena of their interest. Typically, they take as input an utterance or meaning representation and return a detailed constructional analysis, consisting of an enumeration of the constructions involved, and a resulting syntactico-semantic representation. This analysis, in combination with contextual resolution mechanisms, serves as an important component in applications for natural language understanding and production (Spranger et al., 2012; Khayrallah et al., 2015).

The two leading computational construction grammar implementations, Embodied Construction Grammar (ECG) (Bergen and Chang, 2005; Feldman et al., 2009) and Fluid Construction Grammar (FCG) (Steels, 2011, 2017), implement constructional processing as a search process in which the constructions apply through unification. For larger utterances and grammars, this search process is immensely complex, not only because of the number of constructions involved, but also because of the interdependencies between the constructions. Often, it is the information contributed by a combination of earlier constructions that fulfil the preconditions of a later construction. While a good insight into the puzzle of how the constructions of a grammar fit together when comprehending or formulating utterances is of crucial interest to the construction grammarian, current ECG and FCG representations do not capture well the dependencies that individual constructions impose on each other.

We propose a novel representation of constructional processing, which specifically reveals the often immense degree of interconnectivity between the constructions that were involved in composing a solution. Our tool is an extension to FCG and represents the dependencies between the features that are contributed by certain constructions and serve as preconditions for other constructions as constructional dependency graphs. These graphs do not only allow to precisely visualise how the different constructions fit together to analyse a single utterance, but also to aggregate the constructional dependencies over a corpus, providing a grammar-wide constructional dependency network.

A constructional dependency graph is made up of constructional units as the nodes, and dependencies as the edges. Constructions are visualised as clusters of nodes. Figure 1 shows

the dependency graph for the sentence “The river Seine runs through Paris” from Simple English Wikipedia, analysed using the Basic English Grammar (BENG) (van Trijp, 2017). The graph can be read from left to right, as the leftmost constructions feed into their neighbours on the right. There are many dotted arrows, which indicate dependencies that go back further than one step in the sequential application path. It is for instance the morpheme “runs” that provides syntactic features for the present-tense-construction, which can only apply after the vp-cxn contributed a VP unit. That construction, on its turn, depended on the input of the lexical construction for run.

The constructional dependency graphs have been integrated into the Fluid Construction Grammar web interface. For each utterance that is comprehended or formulated, the graphs reveal at a glance how the constructions of the grammar have worked together to provide the construction grammar analysis.

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An experimental and construction-based approach to embedded gapping in Romance

It is usually assumed (Hankamer 1979 and the subsequent literature) – based especially on English data in (1) – that some elliptical constructions, such as gapping, cannot be embedded within the conjunct it belongs to. Therefore, according to Johnson (2009), there would be a strong syntactic constraint on gapping (and a diagnostic of this elliptical construction), i.e. 'the No Embedding Constraint'. The unavailability of embedded gapping is considered as strong evidence for a low (subclausal) coordination analysis of gapping (Coppock 2001, Johnson 2009).

(1) *Alfonso stole the emeralds, and **I think** [**that** Mugsy the pearls]. (Hankamer 1979)

We show, based on empirical evidence from three acceptability judgment tasks for Spanish, Romanian and French, that there is crosslinguistic variation with respect to the No Embedding Constraint. Embedded gapping is acceptable in Spanish and Romanian, but it obeys more general semantic constraints.

Previous work on Spanish embedded fragments (de Cuba & MacDonald 2013) insists on the crosslinguistic relevance of the semantic distinction (factive vs. non factive predicates) as a very strong constraint for fragment embedding: only non-factive verbs can embed fragments. In order to test the interaction between gapping and embedding on the one hand, and between gapping and factivity on the other hand, we set up an experiment (with 24 experimental items) on acceptability judgments for each language on the Ibex Farm platform, by using a crossed factorial design (2x3) with two factors (gapping and embeddability), giving rise to six conditions, as in (2). We compare elliptical occurrences (conditions a-c) with non-elliptical ones (conditions d-f), in order to better control our two factors. We pay attention to the heterogeneous behaviour of factive verbs (Karttunen 1971, Hooper & Thompson 1973, Hooper 1974), and take into account a more fine-grained distinction: true factives (e.g. emotion verbs) vs. semi-factives (e.g. knowledge verbs).

(2) a. **[+gapping, –embedding]**

María estudió piano y Angel guitarra.

b**. [+gapping, +embedding&nonfactive]**

María estudió piano y me parece que Angel guitarra.

c. **[+gapping, +embedding&factive]**

María estudió piano y me sorprende que Angel guitarra.

d. **[–gapping, –embedding]**

María estudió piano y Angel estudió guitarra.

e. **[–gapping, +embedding&nonfactive]**

María estudió piano y me parece que Angel estudió guitarra.

f. **[–gapping, +embedding&factive]**

María estudió piano y me sorprende que Angel estudió guitarra.

Our experimental results for Spanish and Romanian show that embedded gapping is acceptable in the same way as its embedded non-elliptical counterpart. Moreover, there is a sensitivity to the semantic type of the embedding predicate (cf. Fernández-Sánchez 2016): embedded clauses under a factive verb are less acceptable than embedded clauses under a non-factive verb; however, factive predicates don't behave the same, confirming the dichotomy proposed by Hooper (1974) between semi-factive and true factive verbs: semi-factive verbs are much closer to non-factives than to true factive verbs. Crucially, all these effects are not correlated with ellipsis (no significant difference between gapping and non-elliptical counterpart). Therefore, what has been claimed to be specific to gapping is in fact more general.

The 'No Embedding Constraint' considered to be a strong syntactic constraint specific to gapping must be reconsidered. Our findings are problematic for a movement-based analysis of gapping (low-coordination analysis à la Johnson 2009, 2014), but not for a construction-based analysis (with semantic reconstruction of ellipsis), as proposed by Abeillé *et al.* (2014) and Bîlbîie (2017) for gapping in Romance and by Ginzburg & Sag (2000) for fragments in general.

Embedded elliptical clauses as well as embedded non-elliptical clauses (*pace* de Cuba & MacDonald 2013, Fernández-Sánchez 2016) are sensitive to the semantic type of the embedding predicate. The fact that some predicates embed clauses better than others can be explained by the semantic principle postulated by Hooper & Thompson (1973): embedded assertions are more acceptable than embedded presupposed clauses (factive verbs are presupposition triggers: they presuppose the truth of their complement). It is inappropriate in language to emphasize backgrounded or already known material.

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Verbless Sentences: A Corpus-based English and Russian Contrastive Study

This paper examines sentences in which the verb – the typical marker of tense and aspect - is absent. We aim to account for the semantic and pragmatic factors influencing the use of these structures on the basis of Russian and English monolingual and parallel corpora. The difficulty of automatically processing the absence of the verb from a sentence has meant that most analyses have relied on fragmented data and syntactic theory has dominated the discussion (McShane 2000, Weiss 2013). Overcoming the typical problems of fixed annotation and verb-centric syntactic modeling associated with most existing parsed corpora (Landolfi et al. 2010), we develop a new method of automatic verbless sentence extraction. Cross-linguistic differences make it particularly relevant to compare Russian, which permits the most liberal use of verbless sentences among the Indo-European family, with English, known for its dependency on the verb phrase (Kopotev 2007).

Taking a corpus-linguistics approach, we investigate the structures from a monolingual perspective using Dostoyevsky's Russian dialogue-centered *Brothers Karamazov* (1880) and Pinter's English play *The Caretaker* (1960). Relying on the principle that cross-linguistic comparison reveals constraints that would otherwise remain hidden (Guillemin-Flescher 2003), we explore re-occurring verbless sentence translation patterns using a bidirectional parallel-corpus that includes several corresponding translations (Pevear-Volokhonsky 1990, Avsey 1994, Doroshevich 2006), selected in line with Stolz (2007), Nádvorníková (2017), Baker (1993). Special sentence segmentation, morphosyntactic annotation, automatic extraction, and paragraph alignment, were followed by statistical analysis. Trameur (Fleury & Zimina 2014) was used to find the statistically characteristic elements as well as repeated clusters of text in verbless and verbal sentences. The software permits automatic correction of most errors and allows us to visualize multiple translations aligned in their original context. Translation correspondences were manually annotated for antecedent-based ellipsis (McShane 2000), discourse type, information structure (Lambrecht 1994), and predication (Hengeveld 1992).

While establishing the statistical significance of expected frequency differences regarding the use of the structures in Russian and English, the results surprisingly reveal English overrepresentation of antecedent-based ellipsis. In both languages, verbless sentences are statistically shown to be structures that do not depend on a verbal antecedent in the linguistic context. A strong correlation with direct speech is revealed, suggesting pragmatic restrictions. Furthermore, the structures are statistically characterized by informal markers.

Information structure analysis of translation correspondences reveals an English trend of activating contextually implied topics, particularly over distances. (1) illustrates a pattern in which a subject representing the topic is lexically evoked. In Russian, omission of the extra-linguistically implied topic (‘the woman') is carried over (a) and (b); whereas in English, the topic is omitted in (b) only after having been established in the linguistic-context in (a). This trend influences the realization of the verb.

(1) (a) {Immediately after the woman tells a story about herself, the elder asks her:}

Izdaleka?

from.far.away-ADV

‘Have you come from far away?'

(b) {Woman:}

Za pyatsot verst otseleva.

over-PREP five.hundred-NUM-ACC verst-F-PL-GEN from.here-ADV

‘Over three hundred miles from here.'

Furthermore, a phenomenon of ‘predication transformation' was recorded. Ellipsis of the non-copular *‘come'* in (b) results in a syntactically verbless sentence, which is, following Hengeveld (1992), a case of semantically verbal predication. Despite literal translation, the verbal predication in (b) was originally non-verbal. These findings imply that the predicative status of sentences without a predicate, i.e. syntactic link between non-verbal elements (Creissels 1995), is required for the cross-linguistic stability of the semantic notion of predication.

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Contradictions as declared constructions

This contribution is based on the assumption that ‘contradiction' is not only – and not even primarily – a logical relation of inconsistency between two propositions p and not-p in the Aristotelian sense, but that ‘contradiction' is a communicative resource

– that is established by declaration (cf. Searle 1995 and 2010) in actual language use, and

– that can be described as a range of constructions varying in complexity.

What has classically been treated as a logical impossibility amounting to a cognitive error, can in fact be seen as a viable means for communication (cf. also Norrick 1991, François et al. 2013, Drouet 2015) that displays a vast constructional diversity, ranging from lexical compounds and phrasal structures to argument structures and complex syntactic constructions (for an introductory account on German constructions, see Ziem & Lasch 2013). My research aims to give an integrative constructional account of the ‘linguistics of contradiction' in German by describing and explaining its syntactic, semantic, and pragmatic features with this specific contribution exemplifying this with a focus on declared ‘contradictions in terms,' but not being limited to them.

My presentation focusses on types of explicitly declared self-reflexive contradiction (also termed ‘oxymoron,' ‘contradiction in adiecto,' ‘contradiction in terms') in a corpus of German, examples being

(1) ***Friedenssoldaten*** *ist ein Widerspruch in sich.*
‘**Peace soldiers** is a contradiction in terms.'

(2) ***Islamische Demokratie*** *– ein Widerspruch in sich* [...].
‘**Islamic democracy** – a contradiction in terms.‘

(3) ***Eine tragische Figur, aber auch eine alberne Existenz****. Ein Widerspruch in sich*.
‘**A tragic figure, but also a ridiculous existence.** A contradiction in terms.'

The case study presented is based on a large, heterogeneous corpus of German language use with a core sample of 1 000 instances of declared contradictions. As a first step in the larger investigation, a qualitative analysis of these instances was conducted with two questions in mind:

– What constructional levels (e.g., lexical, phrasal, sentential, textual levels) and what constructional types (e.g., types of word formation, phrasal and sentence types) are used to establish a semantic relation between two constituents that is declared ‘contradictory'?

– What other semantic and syntactic phenomena come to light in connection with this kind of meta-linguistic declaration (e.g., a diverse temporality in contrast to the supposed synchronicity of p and not-p; complex embeddedness in constructions)?

Further studies will focus on the specific semantic frames that can enter constructions when declared as contradictions (for instance with respect to the question, whether there are preferred fillers for certain slots, cf. Busse 2012), as well as on their pragmatics (e.g., as a resource in political communication, cf. Donald Trump's use of contradiction).

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The role of constructions in Motion Events encoding. An account from four Romance varieties

The traditional typology of Motion Events (MEs) encoding (cf. Talmy 2000) distributes languages into two macro-types, based on the preferred loci for Path and Manner expression. Satellite-framed (SF) languages typically lexicalize Path in verb-dependent satellites (e.g. preverbs and verb particles) and Manner in the main verb; whereas verb-framed (VF) languages tend to include Path information within the verbal locus, leaving Manner to adjuncts and expressing it only when functionally relevant (cf. Slobin 1996, 2004).

Although this dichotomy seems valid in terms of general tendencies, many studies proved its insufficiency in accounting for encoding patterns fitting none of the two types identified or cases of typological encroachment (cf. Beavers et al. 2010; Croft et al. 2010; Filipović 2007; Goschler & Stefanowitsch 2013; Grinevald 2011; Slobin 2004). The examples below show how VF Romance languages not only present SF patterns—as in (1) with *balzare fuori* 'to pop out'—but can also express Path with a verb plus an adposition—as in (2) with the Path verb *sortir* 'to exit' followed by the directional PP *hors de murs*, and in (4) with the non-directional motion verb *ir* 'to go' followed by the directional PP *fora dos muros*—or with covert strategies like the syntagmatic relation of a verb and its arguments—as in (3) with the transitive manner verb *saltar* 'to jump' and its DO *las murallas*—(cf. Aske 1989; Buoniconto 2017; Iacobini & Masini 2006; Kopecka 2009).

(1) it.

Ne ***balzano fuori*** *all'istante i romani*

'The romans immediately pop out'

(2) fr.

Sa fille [...] ***sortie hors des murs*** *pour chercher l'eau*

'His girl had gone out of the walls to look for water'

(3) sp.

Remo ***saltó las murallas***

‘Remus jumped over the walls'

(4) por.

[...] ***fôra*** *ella* ***fora dos muros*** *buscar agua*

‘She had gone out of the walls to look for water '

The aim of this contribution is to investigate the degree of cross-linguistic and intra-linguistic variation shown by Italian, French, Spanish and Portuguese in ME encoding. We assume that the semantic units of a ME are simultaneously distributed within several sentence loci (Sinha & Kuteva 1995), whose combination determines a number of different constructions (cf. Croft et al. 2010; Fortis & Vittrant 2016) governed by a series of lexical and morphosyntactic constraints (Beavers et al. 2010), as well as inferential and cultural factors (cf. Iacobini & Vergaro 2014; Ibarretxe-Antuñano 2009). The term ‘construction' will be used to identify the syntactic organization of a set of formal devices appearing in the same clause to express a ME (Fortis & Vittrant 2011: 86).

The investigation will be carried out following a constructional, non-dichotomic approach, which will allow to place the four varieties along a typological continuum (Filipović 2013) ranging between the VF and SF poles. These assumptions will be supported by data gathered from diachronic parallel corpus investigation, which will cover (i) multi-loci expression of Path; (ii) covert expression of ME subcomponents; (iii) numerical overview of all the constructions available. The texts analyzed are translations of Livy's *Ab Urbe Condita* collected by Stein (1997). The occurrences extracted have been annotated following the methodology of Iacobini et al. (2016), which grants data comparability combining morphosyntactic and semantic information at different levels of detail.

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Coercing Italian: Valency Coercion in a Romance Language

Valency coercion phenomena arise when constructions and verbs are combined in novel and flexible ways. This flexibility is one of the main supporting of argument constructions as structural units of language, with abstract and independent semantics that dynamically interact with the semantics of the main verb (Goldberg, 1995; Michaelis, 2005; Pustejovsky et al., 2010; Lauwers and Willems, 2011; Perek, 2015). Despite the pivotal role of coercion in construction grammar, however, little research has been done outside the domain of English (Gonzalvez-Garcia, 2007; Boas and Gonzalvez-Garcıa, 2014; Booji and Audring, 2015), and – to our knowledge – no attempt has been previously made to analyse constructional flexibility in Italian.
We present the results of an empirical study on Italian valency coercion, which aims to contribute both to a still lacking constructionist description of Italian and to a cross-linguistic debate on the cognitive reality of constructions. The first part of the research was carried out by means of an acceptability rating test based on Perek and Hilpert (2014): the experiment is structured around 9 argument structure constructions of Italian; a set of 21 sentences was created for each construction, divided in 3 experimental conditions: *grammatical, coercion, impossible*. Between conditions, sentences differ only in their verb, to insert as little variation as possible.

1) a. *Gianni ha detto che verrà domani* (Gianni said that he will come tomorrow)

b. *Gianni ha fischiettato che verrà domani* (Gianni whistled that he will come tomorrow)

c. *Gianni ha cucinato che verrà domani* (Gianni cooked that he will come tomorrow)

120 Italian native speakers from three age groups were tested: adolescents, young adults (18 - 35 years old), and adults (over 40). The data was analysed both with statistical tests and with linear mixed effect modelling. Results show coercion as an “intermediate” condition, significantly different from both grammatical and ungrammatical sentences. Moreover, the recognition of coercion appears to vary with age, as older speakers tended to polarise their answers towards the extremities of the scale (1 or 7).

The data also showed inter-construction variability. Constructions appeared to have different degrees of flexibility, that we are addressing in the second part of the study. We are constructing a corpus-based distributional model to operationalize the notion of (partial) productivity of constructions (Barðdal, 2008; Zeschel, 2015). Our assumption is that coercion mechanisms are influenced both by the productivity of the construction and by the distance between source and target meaning of the verb embedded in the creative structure (Barak and Goldberg, 2017; Perek and Goldberg, 2017). We measure the latter by representing construction meaning with distributional vectors trained on a large Italian corpus, following the approach in Lebani and Lenci (2017). As data, we matched syntactic frames automatically extracted from the Universal Dependency Italian treebank (Rambelli et al., 2016) to our constructions and identified the more frequent verbs. The results of the second part of the study, which are still being processed, will provide distributional evidence to shed new light on the flexibility of Italian constructions.

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Constructions as single nodes - defining the boundary for two temporal collocations

The Albanian grammarians do not accept any continuous tenses in the system, but they recognize two synonymous forms though: [*po (progr. formant) + present/imperfect*] and [*be + pres. participle*]. These are granted the status of (aspectual) *states,* not tenses. This paper re-evaluates the two existing alternatives, from the CG cognitive framework, in a usage-based perspective. It is significant to evaluate the two collocations regarding the status of constructions (Goldberg 2006/1995 definition), also assessing where these represent nodes in their own frame (Croft and Cruse 2004). It is an interesting case on the boundary of single construction (versus composites) status, to consider whether there has been a grammatical blend.

One obvious tool is the quantitative assessment of both collocations, applied in a broader sense for the degree of entrenchment, including the token frequency for components as well as for the joint collocation in their proper linguistic environment (Ellis, 2006; Gries, 2013), considering as well a directional association measure (ΔP), (Allan 1980, Desagulier 2016). The token frequency and the association measure show high values for the [*po+present/imperfect*] and low values for [*be+participle*], confirming asymmetry in both. However, the paper shows that association measures are significant but not very accurate in the grammar area. Quantitative assessment needs to be directly related to i) the internal entrenchment - the immediate frame of the components, and ii) the external entrenchment - the immediate frame of the collocation, measuring the overall proportionality/entrenchment in its own environment. The outputted values are significantly different but still confirm high entrenchment value for the former and low value for the latter.

Then follows the qualitative assessment, observing the *networks* that both collocations are entrenched in, focusing on the shared area where the two compete. The evaluation proceeds to another aspect, compositionality, observing that the former collocation appears compact, whereas the second collocation is loose, broken in by time/place/manner modifiers. Preemption (Goldberg 2011) is observed and evaluated in this case too. There is differentiation in the content of the latter collocation, but it still retains part of the content area.

The paper discusses the handling of the quantitative measures, in view of improving their relevance, with regard to entrenchment or collocation strength, measuring the

proportionality of its own components, evaluating these against the collocation's proportionality, in an effort to ‘draw a line' between idiom and open-choice collocations - which is a gradient range actually. This case contributes clues to defining the entrenchment degree or collocation strength for the status of single construction, as nodes in the array of wired constructions. It is argued that quantitative measures only are insufficient to evaluate the threshold for a collocation, as may be needed to reach the status of single construction/node (Bybee 2001, 2010).

In the end, the evidence and the overall account serve to determine that the former collocation is entrenched in the frame of tenses, whereas the latter fails both, the status of tense and that of a blended temporal collocation.

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Blending the unblendable: descriptive and metalinguistic negation in existentials

Ever since Russell's (1905) paper *On Denoting*, philosophers and linguists alike have given the king of France's baldness extensive treatment (cf. Reicher 2015). The current consensus is that the utterance *The king of France is not bald* can receive two rather different interpretations (Horn 1985, Geurts, 1998, Carston 1996, Burton-Roberts 1999, Pitts 2011, Moeschler 2015). On one of them, the speaker wishes to state non-baldness of an erroneously assumed present king of France, in which case the negation is of the ordinary, descriptive kind. On an alternative interpretation, as when the speaker continues with *...because there is no king of France,* the negation is 'metalinguistic', targeting in this case a faulty presupposition. The portrayal of these two very different interpretations as mutually exclusive has never been called into question, however. Obviously, a speaker either knows or fails to know that France is at present a republic and not a monarchy and it therefore seems only reasonable to assume that a speaker cannot intend negation to be both metalinguistic and descriptive at the same time. This paper argues that speakers, within a single clause, can nonetheless blend these two kinds of negation. I thus aim to demonstrate that the distinction between descriptive and metalinguistic negation, as linguists have drawn it in the literature, is too sharp.

The paper first raises the question whether the negative existential clause used as the follow-up clause after Russell's famous *king of France* example above is (just like the clause it is added to) metalinguistic. What would plead for such an analysis is the possibility of giving the existential Theme echoic intonation (*...because there is no 'king of France'*). Moreover, a "locative" *there*-existential is in this context equivalent to a negative existence statement with the verb *exist* (*...because the king of France doesn't exist*), which by its very nature denies its own existential presupposition (Cartwright 1960, Clapp 2009). Yet, given the possibility of an internal-negation paraphrase with 'be non-existent', I argue that both kinds of existential follow-up clauses do exhibit ordinary descriptive negation: simply stating non-existence of the topical entity.

I then present and discuss relatively rare but sufficiently well-attested examples such as (1) and (2), in which similar descriptively-negative existentials, either with *there* or *exist*, appear in contexts in which they are *also* metalinguistic.

(1) There Is No Such Thing As Islamophobia: It's Called White Supremacy! (web-attested)

(2) The “University of El Paso” does not exist; the school's correct name is the University of Texas at El Paso. (Corpus of Contemporary American English)

In these cases, the follow-up clause makes it clear that the entity whose existence is seemingly denied does in fact exist under what the author points out is a more appropriate or correct name.

These examples are accounted for by treating the echoic element as a space-builder (cf. Fauconnier 1994) setting up an alternative mental space, corresponding to the addressee's speech habits or assumptions shaped by fiction or by a different – and, from the speaker's point of view, mistaken – world view.

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How to form compounds? A construction morphology account of Japanese compound verbs

The question of how a newly coined complex word is formed has been discussed in a number of studies (Pinker 1999, Daelemans 2002, Tuggy 2007). Recently, assuming a hierarchical lexicon with different levels of abstraction, Booij (2010) claimed that both analogical word formation and word formation based on schemas, namely completely abstract schema [X-Y]word and partially fixed schema (the construction idiom) exist. However, even if these mechanisms are all possible, it is still unclear whether all of them can be employed in different types of complex words.
In this paper, Japanese [V-V]v compound verbs (henceforth JCVs) are examined. Further, it is argued that in case of compounds with relatively low productivity like JCVs, novel words are created based on analogy or constructional idioms, but not by completely abstract schema. To determine how a newly coined word is created, I focused on the cultural representations (Enfield 2002), which were developed recently, and explored how they are expressed in the form of JCVs based on the "Web-based database of Japanese compound verbs." First, because of the subculture of *Moe*, which are feelings of strong affection mainly toward animate characters in Japan, JCVs such as *moe-tukiru* (adore-run.out) "adore exhaustedly", are based on the analogy (*moeru* 'adore' is a homonym of *moeru* 'burn') of the existing compound verbs like *moe-tukiru* (burn-run.out) 'burn out'. With regard to schematic word formation, [V-*toru*]v, [V-*otosu*]v, and [V-*kesu*]v, in which V2s all represent the meaning of 'removing' (each carries a slightly different meaning) are examined. In recent years, cosmetic surgery in which spots are removed by laser irradiation has become popular. To represent this cultural representation, it is possible to create new JCVs like *yaki-toru* (to.burn-remove) and *yaki-otosu* (to.burn-remove), but there are no examples of **yaki-kesu* (to.burn-remove). The ill-formedness of **yaki-kesu* cannot be explained by semantics because its non-compound form *yai-te kesu* 'erase by burning' is grammatical. This result suggests that constructional idioms are used instead of [V-V]v when creating a new JCV. Since the type frequency of [V-*toru*]v, [V-*otosu*]v, and [V-*kesu*]v are 29, 16, and 5, respectively, we can assume that while [V-*toru*]v and [V-*otosu*]v are listed as productive constructional idioms, [V-*kesu*]v is not.

One possible reason that JCVs cannot be formed by the abstract schema [V-V]v is that [V-V]v is not listed in the lexicon. Another possible explanation is that [V-V]v is listed as an unproductive schema. With respect to this issue, Asao (2008) analyzed JCVs with a simulation model and showed that [V-V]v has a high degree of entrenchment, which

supports the notion that [V-V]v is listed. He also claimed that schemas with a high degree of entrenchment are also high in productivity. However, from a diachronic perspective on lexicon, the fact that the existing compounds are related to a certain schema does not necessarily mean that a new compound can be created based on that schema. Whether a new compound can be formed is determined on the productivity information retained for that schema.

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Breaking down the data: Metaphors and constructions in Mandarin Separation event verbs

It has been shown that metaphoric meanings interact with grammatical constructions in particular patterns (Sullivan 2013): e.g. in English attributive Adj-N constructions, source-frame meaning belongs to the adjective slot and target-frame meaning to the Noun slot (*bitter tears, dirty money*). We argue here that in Mandarin, metaphoric and literal senses of SEPARATION (CUT/BREAK) verbs correlate significantly with different patterns of transitivity, word order, and use of compound verbs. That is, given a particular verb and its lexical valence semantics, metaphoric and literal senses have separate syntactic constructional "niches."

It has been argued (Chen et al. 2017) that for a given Mandarin lexical item, the most frequent grammatical contexts of metaphoric senses are distinct from those of literal senses, as evidenced by the natural language processing task of word embedding. Here, we focus on Mandarin separation verbs, contrasting their metaphoric and literal grammatical preferences. BREAK verbs such as *po* 'break' express events of separation involving a single core patient participant (and may or may not also include a causal agent). It is thus unsurprising that literal breaking in Mandarin is predominantly expressed intransitively, unlike cutting events which normally involve agents and are transitively expressed. But 76.5% of metaphoric BREAK examples are in transitive constructions with expressed agents: *po shiyan* 'break promises', *po chuantong* 'break traditions' or *da po jilu* (hit break records) 'break records'. Promises, traditions and records can't "break" like vases, some agent necessarily breaks them.

CUT verbs (e.g. *qie '*cut') are invariably transitive, but show variation in word order. Literal cutting is strongly correlated with SVO constructions, as in *qie dangao* 'cut cakes', while metaphoric cutting *quanxi buneng qie* (relationship cannot cut) 'cannot cut relationship' is frequently OV and typically subjectless. In the Chinese Gigaword corpus, 68.9% of literal CUT examples are VO and only 5.69% non-VO, while 36.3% of metaphoric CUT examples are VO and 63.6% non-OV.

As Stickles (2016) notes, manner is less expressed in metaphoric motion event descriptions than in literal ones (Time *flies*, but does not *flap* or *flutter*). Mandarin double-verb constructions canonically express manner in the first V, and resulting event in the second.

CUT verbs frequently occur in the initial V1 slot as manner expressions, while literal BREAK is commonly in the V2 slot, as in *da-po* hit-break (i.e. 'break by hitting'). However, Mandarin metaphoric BREAK uses are predominantly single-verb rather than VV constructions: in Chinese Gigaword, 60.7% of metaphoric BREAKs are single verbs with no expression of manner. Mandarin metaphoric breaking of relationships does not include a mapping for a manner (or a tool), though it does saliently involve an agent.

Thus, metaphoric and literal uses of separation verbs evoke different TRANSITIVITY and WORD ORDER constructions. This is because they differ in profiling and backgrounding of conceptual arguments (agent, manner), and are thus are coherent with different syntactic constructions. These distributional differences are of added interest to a computational analyst of metaphor, since they could readily be incorporated as factors in natural language generalization for metaphoric senses of common separation verbs.

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The case of ʔaoy , ‘give' in Khmer and the ditransitive construction of transfer: an imperfect correlation

In English, the ditransitive construction is strongly associated with scenes of transfer (Goldberg 2006) with *give* as a prototypical verb. But in Khmer, the verb *aoj*, ‘give' partly falsifies this correlation. First, the ditransitive/transfer construction is not as fixed: ***ʔaoj***, ‘give' with its (DONOR, OBJECT, RECIPIENT) arguments often occurs in combination with the directional verb-preposition *mɔɔk*, ‘come', sometimes with the RECIPIENT omitted:

(1)***ʔaoj*** (*kʰnɔm*) *muɜj kilo* ***mɔɔk***

give (me) one kilo come

‘Give me one kilo.'

A similar construction exists in which *ʔaoj* introduces a peripheral BENEFICIARY argument (2), which can also be omitted for discourse reasons, with only *mɔɔk*, ‘come' left suggesting transfer (3).

(2) *cak* ***ʔaoy*** *baŋ məpʰeɲ* ***mɔɔk***

pour give me tank come

‘Fill up the tank for me.'

(3) *cak tae məpʰej lit* ***mɔɔk***

pour just twenty liters come

‘Just pour me 20 liters!'

Newman (1996) observes that independently existing serial-verb constructions in Khmer favor this flexible behavior; in (4), it is difficult to decide whether the transfer component is due to the presence of *ʔaoj* or the serial verbs that freely occur with it:

(4) ***jɔɔk*** *sâmlâ:* ***tɨw ʔaoj*** *cʰkaɛ* ***si:*** *tɨw*

take soup go *ʔaoj* dog eat then

'Give the soup to the dog, then!'

A more serious challenge for the centrality of transfer is that *ʔaoj* is polyfunctional (Enfield 2002): a very frequent non-transfer construction is when *ʔaoj* is used as a "change-of-subject marking complementizer" (Heiman 2011: 309):

(5) *kʰñɔm cang* ***ʔaoj*** *miñ kat ʔaw ʔaoj kʰñɔm*

I want *ʔaoj* you cut blouse ʔaoj me

'I want you to sew a blouse for me.'

Other constructions include *ʔaoj* as a causative verb with *tʰwe*:,'make' (6) and a resultative "target" construction (7):

(6) *rɨɜŋ nih tʰwe*: ***ʔaoj*** *kʰñɔm jum*

story this make *ʔaoj* me cry

'This story makes me cry.'

(7) *kʰɲie bok kruəŋ* ***ʔaoj*** *mat haɜj*

I crush spices *ʔaoj* thin PST

'I've already crushed the spices thinly enough.'

In these examples, the « different-subject » constraint (Heiman 2011: 311) seems to be a more general explanation than simply transfer. Our objective in this empirical study is, based on a corpus of authentic examples, to adopt the method used by Newman (1994) and Michaelis & Ruppenhofer (2001) to account for the polysemy structure of *ʔaoj*. We will show that regular patterns of semantic extension can be modeled from a basic event-structure representation for *ʔaoj*, which does not consider transfer as a central sanctioning sense. After making an inventory of the constructions that *ʔaoj* participates in, taking our cue from

Paillard (2011), we will postulate that the central sense is abstract: in the "X *ʔaoj* Y" configuration, *ʔaoj* carries with it the notion of a specific orientation path or target, in line with Newman's observation that *ʔaoj* signals that "X is a significant contributing factor towards Y" (171), which gives rise to metaphoric extensions of causation, intention, change of subject, result with a purpose, etc. Therefore, in the transfer scene, *ʔaoj* explicitly specifies not the directionality of the passing event, but that there is a specific target for the event.

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Towards a constructional framework of the polyfunctionality of discourse markers

Discourse markers are defined as "sequentially dependent elements which bracket units of talk" (Schiffrin 1987: 31) such as *mais*, *donc*, *enfin*, *tu vois* or *alors* in French. They are famous for their polyfunctionality, which has been explained and modeled under several different theoretical frameworks. Among them, Construction Grammar has recently been used by authors to illustrate how discourse markers can activate different interpretations by changing one aspect of their form (Fried & Östman 2005; Fischer 2015; Aijmer 2016).

This study intends to go beyond the description of particular expressions and proposes a Construction-Grammar inspired framework to account for the different types of polyfunctionality that discourse markers can display. In particular, the study focuses on three mechanisms of meaning variation:

(i) polysemy, which corresponds to different constructions;

(ii) multidimensionality, which refers to the instantiation of a single construction in different frames or domains (Author1);

(iii) underspecification, which applies to monosemous markers (one construction) enriched through compositionality.

It is argued that a Construction Grammar approach (as defined in Golberg 1995, 2013) to the polyfunctionality of discourse markers can effectively capture their broad functional spectrum and high variation in an economical model which bears methodological and potentially pedagogical implications. The overarching goal is to improve the reliability of functional corpus-based analyses by reducing the number of semantic labels (e.g. six for *donc* 'so' in Bolly & Degand 2009) and by providing stable criteria to distinguish between these labels. Such a structured view of their functional spectrum can also contribute to the development of lexicons, for an efficient use by students, learners or translators.

The study develops and illustrates the notions of polysemy, multidimensionality and underspecification as they apply to the three most frequent discourse markers in spoken French, viz. *et* 'and', *mais* 'but' and *donc* 'so', on the basis of authentic examples which have previously been disambiguated by (Author2). The analysis of *et*, *mais* and *donc* through the

lens of Construction Grammar led to the following results: polysemous *donc* spreads into a causal and a non-causal construction, which can themselves be further specified across several frames or domains; *mais* seems to constitute a single yet multidimensional construction attested in (Author1)'s four domains; monosemous *et* can acquire additional readings through compositional enrichment in context.

This proposal relates to Fischer's (2006) division of labor across an invariant meaning, a structural context and a frame. However, in contrast with previous research, the present study overcomes the limitations of case studies and strives towards a comprehensive framework that potentially covers any discourse marker, including the very frequent and very challenging *et* 'and'. It also comes to terms with the theoretical overlap between polyfunctionality, polysemy and underspecification. It remains to be determined how this conceptual framework can be implemented into operational models, yet ongoing corpus-based research shows promising compatibility (Author3).

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A conversational perspective on the development of the grammatical subject in childhood

The subject position is a core grammatical function (Andrews, 2007). Researchers of language development agree that learning how grammatical subjects are expressed and used in their language is critical for young children, as subjects are related to virtually any aspect of syntactic and pragmatic development (Allen, 2000; Serratrice, 2005; Veneziano & Clark, 2016). The current study investigates the production of grammatical subjects in the peer-talk of native Hebrew-speaking children aged 2 – 8 years. Peer conversation serves as a crucial site for syntactic and pragmatic development, as children co-construct grammar dialogically in terms of social-interactive projects, negotiating how they stand vis-a-vis one another (Blum-Kulka, Hamo & Habib, 2010; Köymen & Kyratzis, 2014).

Hebrew has two different default word orders (Ravid, 1995), which we term ‘the Nominative and Ergative alignment constructions', with implications regarding the grammatical subject, the verb and inflection biases. The notion of ‘grammatical subject' is associated in Hebrew mainly with the A argument of the Nominative alignment: an agentive or agent-like subject at clause initial position, conferring agreement on the predicate. The AVP construction strongly associates grammatical subjects with lexical verbs, declinable in all temporal categories. Grammatical subjects are less associated with the Hebrew Ergative alignment, where the sole argument of intransitive constructions is accusative or dative marked, has non-agentive referents, and coffers agreement restrictively, thus resembling the transitive P argument.

Materials consisted of a peer talk corpus of native Hebrew speaking children in six age groups (2–2;6, 2;6–3, 3–4, 4–5, 7–8 years) in spontaneous interaction. Grammatical subjects were coded for referential expression (lexical, pronominal, zero), person and number, and order of subject and predicate. Each utterance was coded according to its role in the of interaction: initiated, repeating, resonating, and responsive. We hypothesized that the grammatical subject category will develop on a construction based path, taking into account the local context imposed by the properties of the interaction.

Results show clear correspondences between age group and research variables. Age groups corresponded with different referential expressions and person markings, each of which started as construction specific in the younger groups and variegated with age. Age group was also clearly associated with subject-predicate order and utterance type: Young children mostly used initiating and resonating utterances, while older children used both initiating

and responding utterances. The Ergative alignment constructions were correlated with presentational and existential discourse functions, and were associated with a small set of grammatical subjects and with the younger groups. Conversely, Nominative alignment constructions allowed for the maintenance of the topic of conversation, and thus were associated with a wider set of subjects and with the older groups.

Our findings confirm that subject marking in young children involves gaining command of language-specific grammatical resources, as well as in the consolidation of conversational skills, culminating in flexible and non-restricted usage in 7-8 year olds. The development of the grammatical subject as category is construction specific (Croft, 2001), first used only with reference to a narrow range of entities and interaction scenarios, growing wider with age.

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Testing the limits of the de-profiled object construction in a corpus of poetry

Objectless constructions have been studied extensively by linguists (Fillmore 1986, Rice 1988, Levin 1993 Lemmens 2006, Goldberg 2006). In *Constructions at Work* (2006), Goldberg describes the “de-profiled object construction” and notes that “the underlying motivation for the expression of arguments is at root pragmatic” and that “the semantic requirement of recoverability must be satisfied”, underlying the pragmatic constraints of this construction.

However, no matter how creative they sometimes are, all of the examples studied in previous works come from everyday English language, triggered by reasons of frequency. In poetry, language is not bound by standard English pragmatics (Traugott and Pratt 1980, Guéron 2015), but rather subverts them. In consequence, are objectless constructions motivated by the same pragmatic constraints in poetry as in everyday language ?

Ever since the advent of usage-based and corpus linguistics, poetry has rarely been the focus of linguistic studies. Yet, because of the sheer number of non standard occurrences it provides, poetry is an interesting conterpoint to regular corpus. Our corpus corresponds to the poetic work of contemporary poet Rosmarie Waldrop (+100 000 words). This corpus presents a number of occurrences of objectless constructions, and while they broadly adhere to Goldberg's theory on emphasis, it seems like not all of them can be explained by this analysis : namely it is not always possible to recover or even identify a missing object. Furthermore, the occurrences cover a wide variety of types of verbs, going beyond the frequently observed action verbs such as “kill” (Goldberg 2006, Lemmens 2006) “give” (Levin 1993, Goldberg 2006) or “eat” (Rice 1988, Levin 1993, Lemmens 2006).

For example :

- [...] Or a flock of swallows, alarmed suddenly,

  sucked crazily in all directions. The light **appropriates**, even to the

  unsounded spasms of treble and flight, and the fields stretch into what,

  lacking the parameters must be nowhere.

(*The Reproduction of Profiles,* p41, 1987)

- [...]

  I'm not sure what's to be done with this picture. Or the dog.

  a mirror

  complicates

  Clearly we must explore.[...]

(*Reluctant Gravities*, p182, 1999)

- [...]

  Like the phoneme that makes possible language. Neither physical nor psychological

  reality, but a value with an abstract and fictive importance. That **enables**.

  [...]

(*Driven to abstraction*, p117, 2010)

None of these occurrences can be explained by the possible pragmatic contexts listed in Goldberg (2006, 196-197) (Repeated Action, Discourse Topic, Narrow Focus, Strong Affective Stance, Contrastive Focus). In order to account for them and to determine the properties of this construction, our chosen methodology will be empirical. We intend to carry out an exploratory study of the corpus. Each time the previously observed pragmatic contexts are absent in an objectless construction, we will look for recurrent co-occurent markers such as the types of verbs used in the construction, as well as markers of tense, aspect, modality and negation.

We expect to find that in these cases, the objectless construction mainly occurs in contexts of genericity, and denotes a process of conceptualisation or characterisation.

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The morphosyntactic variation of the ditransitive argument structure construction in present-day German

In Goldberg's Construction Grammar approach the ditransitive (or 'dative') alternation in English is analyzed in terms of two argument structure constructions. The ditransitive Double Object Construction 'X CAUSES Y to RECEIVE Z' (e.g., *John gave Mary an apple*) is contrasted with the Transfer-Caused-Motion Construction (e.g., *John gave an apple to Mary*) which in turn is considered a metaphorical extension of the Caused-Motion construction 'X CAUSES Y to MOVE Z' (e.g., *Joe kicked the bottle into the yard*) (Goldberg 1995, 2006).

The goal of this paper is to determine, from a typologically informed perspective, whether the ditransitive alternation in present-day German can be explained using the contrasts of constructions and senses proposed for English. It is argued that German differs from English in the way the Ditransitive Construction and the Caused-Motion Construction are morphosyntactically expressed with the transfer verbs *geben* 'give' and *schicken* 'send'. The analysis is based on a dataset drawn from the Mannheim DeReKo corpus. A random sample of N = 1179 occurrences of the Indirect Object Construction (IOC) with dative case and N = 1670 occurrences of the Prepositional Object Construction (POC) with prepositional case assignment was annotated for semantic, morphosyntactic and pragmatic factors as well as constituent length and then analyzed quantitatively (logistic regression analysis) and qualitatively.

Geben strongly prefers IOC and is attested only with the preposition *an* (+ accusative) in POC. IOC instantiates the Ditransitive Construction with a Recipient argument (cf. Malchukov et al. 2010, Bickel 2011, Haspelmath 2013, 2015) (1) but POC with *an* is observed both in the Caused-Motion sense (2) and in the ditransitive sense (3) (Fig. 1)

(1) *Der Kassierer gab dem Räuber das Geld aus der Kasse.*
'The cashier gave the robber the money from the cash register.'
(2) *Einen Teelöffel Honig an die Sauce geben.*
'Add a teaspoon of honey to the sauce.'
(3) *Opa und Oma dürfen Geld an die Enkel geben.*
'Grandpa and grandma are allowed to give money to their grandchildren.'

Schicken is common in both IOC and POC. The verb is attested with five prepositions in POC, viz. *an*, *auf*, *in*, *nach*, and *zu*, whose meanings generally fall within the purview of English *to*. IOC instantiates the ditransitive sense. By contrast, while POC invariably instantiates the Caused-Motion sense with *auf*, *in*, and *nach*, POC can remain underspecified with regard to the distinction between the Caused-Motion and the ditransitive sense with *an* and *zu*, compare (4) (Fig. 2).

(4) a. *Er wird dir helfen und deiner Oma eine E-Mail schicken.* (Ditransitive)
'He will help you and send your grandmother an e-mail.'
b. *Man schickte sie zur Sommerfrische an die See.* (Caused Motion)
'They sent them to the seaside for the summer vacation.'
c. *Die Ärztin schickte ungefragt Rezepte an ihre Patientinnen.* (Unspecified)
'The doctor sent unsolicited recipes to her patients.'
d. *Die Polizei schickte einen Streifenwagen zu der Adresse.* (Caused Motion)
'The police sent a patrol car to the address.'
e. *Liebe Jungs und Mädchen, bastelt Engel und schickt sie zu uns!* (Unspecified)
'Dear boys and girls, make angels and send them to us!'

To accommodate the data a layered approach in line with Gricean and neo-Gricean pragmatics (cf. Grice 1989, Levinson 2000) is proposed in which different levels of encoding and (default) inference are distinguished. On the systemic level we posit a construction with three arguments characterized by an extended Goal argument, which is not specified for Locative or Recipient in German. The Caused-Motion sense is realized by the dedicated prepositions *auf*, *in*, and *nach* (POC) with a verb such as *schicken* while the ditransitive sense invariably correlates with dative case (IOC). Conversely, POC with *an* and *zu* are used to express either sense. Moreover, logistic regression analysis indicates strong correlations between POC with *an* and *zu* and collective and metonymic Recipients (Locative > Recipient) which are predominantly discourse-new and longer than the Themes. This finding corroborates earlier research that found that information structure and constituent length play a key role in the ditransitive alternation in various languages.

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Inflectional Constructions and the Meaning of Progressive Performatives in English

English performative sentences take the simple-present rather than the present-progressive form (1); they differ in this respect from canonical concurrent-event reports, which require progressive aspect in present-day English (2):

(1) *I* ***promise / ? am promising*** *I'll be there*.

(2) *I * **write / am writing** an abstract right now*.

While progressive occurrences of performative verbs are typically treated as descriptive, non-performative uses (Levinson 1983, Verschueren 1995, *inter alia*), we offer data from the Corpus of Contemporary American English (Davies 2008-) showing that progressive form and performative function often coincide (3-4):

(3) *I'**m advising** you to take this seriously and use full precautions.*

(4) *Oh, cicadas, I'**m begging** you, please, get out of my trees and go home.*

These sentences have performative force identical to that of their simple-present paraphrases: while (3) is an act advising and (4) is a plea. Comparison of simple-present and present-progressive performative sentences representing 159 performative-verb lexemes (McCawley 1977) reveals that verbs from certain illocutionary classes receive progressive inflection more often than others: whereas progressive inflection is fairly prevalent among exercitive tokens, it is extremely rare among commissive, behabitive and verdictive tokens.

We argue that these patterns are attributable to the semantics of the simple-present and progressive inflectional constructions in English (Sag et al. 2012). In line with Condoravdi & Lauer (2011), we view a performative utterance as an act in which the speaker makes public a commitment to preferring a certain set of outcomes (e.g., that the addressee of (3) act in accordance with the speaker's advice). This commitment is made as soon as the act is underway, and in this sense a performative utterance reports a resultant state: *I warn you to stay away* and *I have warned you to stay away* are one and the same report. Reports of commitment states, like other state reports, are typically expressed by means of simple-present predications, which describe situations that can be identified from a durationless sample that aligns with 'now' (De Wit 2017). What does it mean for a public-commitment state to receive a progressive construal? Our answer leverages theories of aspectual meaning, and in particular theories of the interpretive effects that speakers achieve when they combine progressive morphology with state verbs, e.g., I'm *liking this* (De Swart 1998, Michaelis 2011). Following Goldsmith & Woisetschlaeger (1982) and De Wit & Brisard (2014), we assume that the English progressive construction is used to report incidental situations—states of affairs that cannot be assimilated to known schemas. We suggest that progressive-form performative acts like (3-4) express commitments that the speaker was not previously inclined to make, and therefore also commitments that are subject to retraction as circumstances change. This treatment has a straightforward application to exercitive acts "by which one orders, requests, advises, etc. a person to do something" (McCawley 1977: 14). A progressive-form exercitive act represents a revocable commitment to the advisability, necessity or appropriateness of a particular course of action.

Our findings suggest that conditions governing the use of the simple-present (vs. present-progressive) form in performative utterances are the same as those that govern the use of these forms in constative utterances. Performative utterances are reports of states of affairs (commitment states) that hold at speech time, and they reflect the same encoding options that other present-time reports do.

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A corpus-based investigation of the diachronic development of the particle verb construction with op in the Modern Dutch period

Traugott & Trousdale (2013) discuss the emergence of word-formation schemas as an instance of lexical constructionalization, i.e. the formation of a new form/meaning-pairing with contentful meaning, and show that this process involves e.g. increasing productivity of the schema. After constructionalization, word-formation schemas may persist, but often they eventually become obsolescent, changes they qualify as post-constructionalization constructional change. This study aims to gain more insight into these processes by investigating the diachrony of Dutch particle verb constructions with *op*, a few instantiations of which are given in (1-3).

(1) Ze hielpen me de motor **op te tillen.**

'They helped me lift up the motorcycle.'

(2) Raymond is blank , **opvliegend** , driftig en meer impulsief.

'Raymond is white, short-tempered (lit. flying up), irascible and more impulsive.'

(3) Insuline zorgt ervoor dat glucose wordt **opgenomen** in ons spierweefsel

'Insulin causes glucose to be absorbed (lit. taken up) into our muscular tissue.'

(SoNaR Dutch Reference Corpus)

These verbs are (separable) lexical units that consist of (usually) a verb and the preverbal element ('particle') *op,* which corresponds to the adposition *op* 'up, on'. The verbs in (1-3) can be seen as instantiations of the constructional schemas in (4-6) (cf. Booij 2010).

(4) [[*op*] V]V ↔ 'to (cause to) move to a higher place by V-ing'

(5) [[*op*] V]V ↔ 'to (cause to) go to a higher level of agitation by V-ing'

(6) [[*op*] V]V ↔ 'to absorb something by V-ing'

Dutch particle verbs are claimed to emerge through reanalysis of combinations of a verb and an adposition as a lexical unit (Blom 2005; Los et al. 2012). In the case of *op,* this results in the schema in (4), the meaning of which corresponds to that of the adposition *op*. After reanalysis "the new structure may develop its own semantic characteristics through semantic extension and inference" (Blom 2005:277). From a construction-based perspective, this implies that over time (sub)schemas with extended (non-spatial) meanings develop, e.g. the schemas in (5-6).

This paper investigates the constructionalization and following constructional changes of particle verb constructions with *op* in the Modern Dutch period on the basis of data from the *Corpus Literair Nieuwnederlands* and *SoNaR Dutch Reference Corpus.* We investigate whether and how semantic schemas (dis)appear in that period and what changes they undergo in terms of productivity, token frequency and the types of verbs they combine with. Preliminary results show that, overall, particle verbs with *op* are equally productive in Present-Day Dutch and in the first half of the seventeenth century (measured on the basis of the number of hapaxes). The spatial schema in (4), however, is combined with a smaller set of verbs in Present-Day Dutch than in the first half of the seventeenth century. Even though more extensive research is needed, this suggests that individual schemas have undergone divergent changes and that non-spatial schemas have come to constitute the productivity domain of the particle in Present-Day Dutch.

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Cognitive Mechanisms of the “Shenme Po+N” Construction

Despite the fact that cognitive processes like categorization, analogy and chunking etc. are widely acknowledged in accounting for language change (Barlow & Kemmer 2000; Langacker 2000, 2004; Bybee 2010 etc.), there are controversies concerning the substantial status of blending. Some studies disregard blending (Hale 2007 etc.) or downplay it as being peripheral and marginal (Anttila 1989: 142; McMahon 1994: 75), while others insist that blending is also an indispensable mechanism underlying the structuring of novel language constructions (Barlow 2000, Kemmer 2003). Moreover, it is strongly argued that blending is a covert process operating under the guise of analogical extension and henceforth is more likely to be underestimated (De Smet 2013).

Upon this backdrop, this study further explores how blending and analogy interact in recombining constructions within the domain of mood expressions. In this fashion, not only the shaping force of blending is verified but also the reciprocal interaction between analogy and blending is borne out. To this end, this study conducts a diachronic case study which addresses the structuring of “Shenme Po+N” constructions in Mandarin as exemplified in (1).

(1) a. Shenme Po xiguan! b. Kai Shenme Po hui.

what broken habit attend what broken meeting

‘What a terrible habit!' ‘How terrible it is to attend a meeting!'

The research hypothesis is that “Shenme Po+N” is a blended output of “Shenme+N” and “Po+N” in analogous to prefabs like “Sheme Hao+N” etc. To test this research hypothesis, we resort to the CCL corpus to search for the concordances of “Shenme” and “Po” and investigate their development, collocation and semantic encoding with AntConc.

As a preliminary result, striking evidences in favor of the above hypothesis can be specified from chronological, distributional as well as semantic perspectives. First, it turns out that “Shenme Po+N” (1850s) neither emerged after the conventionalization of “Shenme+N” (990s) nor the wide use of “Shenme Hao+N” (1740s) but appeared after the appearance of “Po+N” in 1800s. This chronological sequence suggests that “Shenme Po+N” derives from three source constructions of clearly distinct lineages (Van de Velde etc. 2013). In addition,

the formal pattern, distribution and usage of “Shenme Po+N” align closely with that of “Shenme Hao+N”, which to a great extent implies that “Shenme Po+N” results from the analogical extension of “Shenme Hao+N”. What's more, as attested in the diachronic data, “Shenme Hao+N” conveys a positive mood while “Shenme Po+N” denotes a negative attitude. This minor semantic variance circumstantially substantiates that the analogical extension to “Shenme Po+N” occurs under the support of an underlying blending of “Shenme+N” and “Po+N” which both express a negative mood.

With authentic data from a diachronic corpus, this study not only reveals the independent relation between blending and analogy but also highlights the substantial status of blending as a cognitive process. One more contribution of this study lies in uniting facts about usage, cognitive processing and language change to provide explanation for the emergence “Shenme Po+N” constructions in Mandarin.

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Is motion a catalyst for subjectivity? – From constructions of REMAINING to constructions of evaluativity in Finnish and French

In this paper, I examine the evaluative meanings of the Finnish and French verbs of remaining as illustrating the case of motion and dynamicity being associated with subjectivity. Finnish traditionally distinguishes between two verbs of remaining, i.e. denoting the continuation of a spatial or more abstract relationship: the verb *pysyä* ('to remain, stay), which governs a locative argument in a stative case, and its near-synonym *jäädä* ('to remain, stay), requiring its locative argument to be marked with a directional local case, implicating motion (or change) towards something. According to Huumo (2007: 87), the motion-orientedness of *jäädä* arises from the contrast implied by the verb between a projected course of events (whereby the entity acted upon by the subject should leave its current location) and the actual scenario (which the same entity fictively steps back into while rejecting the projected course of events).

Unlike its stative counterpart *pysyä*, the dynamic verb *jäädä* has developed an evaluative meaning (abbreviated as *jäädä*EV), e.g. *Avioliitto jäi lyhyeksi, mutta elämä jatkuu* 'The marriage met an early end (lit. 'remained TOWARDS-short') but life goes on' (Suomi24). Virtanen (2015) defines the "evaluative *jäädä*" as a resource for reviewing elements (in his case, Finnish academic publications) "against a backdrop of shared communal norms, values and expectations": it expresses disalignment between two viewpoints.

A similar semantic development has been observed in French where the corresponding verb of remaining, *rester*, exhibits also an evaluative meaning (abbreviated as *rester*EV): *Le paquet de Lucky va valoir 25 centimes de plus. La hausse reste raisonnable.* 'The pack of Lucky Strikes is about to cost 25 cents more. The rise is still (lit. 'remains') very reasonable.' (Est Républicain). Interestingly enough, the polarity orientation of the construction *rester*EV is opposite to that of *jäädä*EV. While *jäädä*EV reviews negatively an element against a positive backdrop (implied or expressed), *rester*EV conversely gives a positive evaluation of a rather negative starting point. Although *rester* has traditionally been described as "stative" (e.g., Kalmbach 2009; Hamma et al. 2012) or "non-dynamic" (Helland 2006), a corpus data analysis of its actual usage shows in fact that the verb's semantics does include components of motion, at least in the form of contrast or expectation.

Why the evaluative schemas of *jäädä*EV and *rester*EV represent the opposite ends of the polar scale might be partly a coincidence. I argue, however, that it is the motion-like dynamics of the verbs *jäädä* and *rester* that make them prone to evaluativity. This is supported by the fact that in previous work on Finnish language, subjectivity has been tied to oriented motion in different contexts (e.g., Herlin 2005, Huumo 2006). The category of verbs of remaining, through which I approach this question, is in itself a particularly revealing one since it crystallizes tension between motion and non-motion.

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Transfer of verbs and their constructional properties in German-American varieties

Traditional accounts of language contact (e.g. Clyne 2003) often seek to isolate specific modules of language and categorize specific transfer phenomena accordingly, e.g. code-switching vs. loan translation vs. structural interference (Backus and Dorleijn 2009). A constructional view of language structure, however, suggests that many instances of transfer involve complex constructions in which phonology, semantics, syntax, and the lexicon cannot clearly be isolated. This talk draws on data from verb (phrase) code-switches and loan translations in Wisconsin (Low) German and Texas German to demonstrate the inseparability of such transfers according to traditional classifications and embed these findings within (Diasystematic) Construction Grammar (Höder 2014). To demonstrate, while the Texas German data in (1) shows a simple insertion of an English lexical item into German structures, data such as that in (2) involve the transfer of a (phonologically similar) English verb along with its collocational, semantic, and structural properties.

(1) Der wollt nich nach die Stadt **move**.

he wanted not to the city move

‘He didn't want to move to the city.'
Standard German: ‘Er wollte nicht in die Stadt ziehen.'

(2) Junge Leute kennen kein Leben **machen** auf 'ne kleine Ranch.

young people can no living make on a small ranch

‘Young people can't make a living on a small ranch.'

Standard German: ‘Junge Leute können hier auf einer kleinen Farm kein Auskommen haben.'

After briefly introducing the Texas German and Wisconsin Low German speech communities, I review both traditional language contact research and recent developments in Construction Grammar, focusing on Höder's (2014) notion of constructional diasystems. I then present data from both

German-American varieties and attempt to classify these according to the language-affiliation of lexical items (e.g. code-switching vs. loan translation) and the number and types of items influenced by the transfer. For instance, examples may include a simple verb code-switched or loan-translated from English, a verb-object collocation that is conventionalized in English but not German, or a complex verbal construction with structural features and morphemes adopted from English, among others.

From a theoretical viewpoint, I first assess the degree to which Höder's notion of "diaconstructions" – form-meaning pairings that are similar across languages in a multilingual community – can account for each type of data. Specifically, I identify which aspects of the transferred verbs and their constructional properties can be viewed as equivalent "diaconstructions" across German and English. I also test hypotheses put forward by Backus and Dorleijn (2009) and Dux (fc.) that loan-translated items have more general and bleached semantics than code-switches, are typically transferred as parts of larger idioms/collocations, and are more likely to give rise to structural interference. Finally, I briefly discuss some transfers that are found in both Texas and Wisconsin German and speculate what (structural, communicative, or cultural) factors lead these independent communities to use the same English expressions.

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Acquisition of verb semantics in Russian

The paper discusses some problems of Russian verb semantics acquisition. Russian is a morphologically rich language, and the acquisition of different morphological and grammar structures is quite well studied [Tseitlin 2007; Gagarina 2008; Xanthos et al. 2011]. The process of syntax and semantics acquisition is mostly vague. The paper focuses on the verb semantics and its syntactic structures as verb is the propositional center of any utterance, and shapes the speaker's understanding of the described situation.

The study relies on the results of a series of experiments with Russian native children at the age of 2;7 to 7;6, who had to retell a story, presented to them either as a series of toy actions (for 2;7-3;6 year old children), or as a picture book (for 3;7-4;6 year old children), or as a cartoon in a silent mode (for 5;6-7;6 year old children). The total number of 213 children has been studied, the total number of tokens is 25689, 6521 of them verbs. The actions performed by the experimenters with the toys, by the cartoon characters and the characters of the picture book were similar, so all verbs of the texts of all age groups have been divided into 13 semantic classes, such as verbs of motion, verbs of communication, emotional verbs, verbs of mental activity, verbs of object manipulation, etc. Each verb has been attributed with its specific list of semantic roles and its syntactic structures.

The comparative analysis of verb lexemes and verb tokens has shown that the most frequent syntactic structure in all age groups is 2-argument structure, even if the verb requires three semantic roles to be fulfilled (e.g., verbs of communication or verbs of movement causation). The total number of three-argument verb lexemes increases with the age, but the two-argument verbs remain the most frequent. The third argument is explicit only if the object has been named, while syntactic subject may be either omitted or expressed.

Semantic object seems to be the most important argument for children of any age. The youngest children at the age of 2;7-3;6 name the object of the action twice more often than the action itself, and 74% of their utterances omit semantic agent. The word order ‘object-verb' also emphasizes the significant role of semantic objects for children as its preposition reflects the change of topic-focus order that is typical for child language [Narasimhan, Dimroth 2008] and for Russian spoken language [Zemskaya 1973].

Thus, regardless verb semantic class the evolution of verb syntax-semantic structure is the following (where subject is usually elliptical):

Object/Patient > Verb > Object/Patient – Verb > Verb – Object/Patient > [Subject/Agent] – Object/Patient – Verb > [Subject/Agent] – Verb– Object/Patient.

These results support the idea of Accusative case being default in Russian [Eisenbeiss et al. 2009], but also reveal that it follows the children understanding of any action as an object directed phenomenon, and 2-argument Agent-Patient structure remains basic for the whole period of language acquisition.

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Exploring the Psycholinguistics of the Constructicon using the Lexicon as a Guide

There is a rich history of psycholinguistic investigations of single word processing. For example, single word reading has been shown to be sensitive to frequency, cumulative frequency, age of acquisition, orthographic and phonological neighborhood effects, contingency of form-function mapping, imageability, prototypicality, semantic richness, and spreading activation (Yap & Balota, 2014). These phenomena have prompted the development of sophisticated theoretical models of visual word recognition.

Theories of construction grammar hold that grammatical constructions, like words, are symbolic linkages of form-meaning correspondence, and they deny any strict separation between syntax and lexicon. Accordingly, the same investigative techniques that have illuminated the structure and functions of the lexicon are worth directing at the constructicon.

This study therefore investigates Verb-argument (VACs) such as the verb locative (VL), verb object locative (VOL) and the ditransitive (VOO). It begins by investigating their usage patterns in a large corpus of English to identify the effects of (1) verb frequency in the language, (2) verb frequency in the VAC, (3) VAC-verb contingency, and (4) verb prototypicality in terms of centrality within the VAC semantic network. It then looks for effects of these usage patterns upon VAC processing in speeded automatic on-line processing tasks of the sort used in lexical research. Five different experiments used on-line processing tasks designed to span: (1) perceptual recognition, (2) naming, (3) successive lexical decision, (4) interposed lexical decision, and (5) meaning judgment. Frequency and conditional frequency effects were robustly evident in all of the processing tasks. Contingency was additionally influential in recognition and in meaning decision. Semantic prototypicality was influential in both successive and interposed lexical decision and in naming.

These findings suggest that the constructicon has detailed associative knowledge of the bindings of verbs and VACs. The statistics of verb-VAC type and token frequency are clearly represented and this knowledge guides the wide range of language processing for recognition, comprehension, and production. The prototypicality effects replicate the finding of spreading activation between words in lexical decision tasks as discovered by Meyer and Schvaneveldt (1971), a finding that revolutionized our understanding of the mental lexicon, extending the phenomenon to the processing of grammatical constructions. We believe the

differential effects of prototypicality in lexical decision and meaning decision tasks relate to and index the spreading activation of unconscious parallel meaning representations in comparison to the election of a unitary interpretation in conscious comprehension.

We conclude that speeded automatic on-line VAC processing involves rich associations, tuned by verb type and token frequencies, their contingencies of usage, and their histories of interpretations, both specific and prototypical, which interface syntax, lexis, and semantics. The results encourage the conception of a unified constructicon where words and VACs alike are symbolic representations, acquired from usage, statistics and all, with their subsequent processing tuned probabilistically to usage experience.

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Entrenchment and Productivity: The role of input in the code-mixing of a German-English bilingual child

Patterns consisting of a frame that is partially lexically filled and contains one or more open slots play an important role in language acquisition scenarios, both in the input children receive as well as in their early language production. Studies of child-directed speech (CDS) have provided evidence that the input children hear contains a high degree of lexically restricted utterances such as *Look, an x* (Cameron-Faulkner, Lieven, and Tomasello 2003). Children's early language production mirrors this finding and also shows a high degree of lexical restrictiveness: The ubiquity of conventionalized chunks and partially schematic patterns such as *I want x* supports the idea that children construct their early utterances out of concrete pieces they have heard and stored before (Lieven, Salomo, and Tomasello 2009). Recently, Quick et al. (2017) have shown that partially schematic patterns also play an important role in the code-mixing of a German-English bilingual child, e.g. *I want* x as in *I want die paint* 'I want the paint' suggesting that children's code-mixing is influenced by the child's recent linguistic experience.

The idea behind the current study is to combine the findings from CDS, language acquisition and code-mixing to investigate whether partially schematic patterns in the code-mixing of a German-English bilingual child (n=1024) between the age of 2;3 to 3;11 can be traced back to patterns found in the input (n=61077), which would suggest that bilingual children construct their code-mixed utterances on the basis of concrete lexical strings and partially schematic patterns they have heard before.

To this end, we investigate utterance-initial "frames", i.e. chunks as well as partially schematic patterns that occur at the beginning of utterances. We follow Stoll et al. (2009) in our operationalization of utterance-initial frames: Repeated lexical strings are considered frames if they occur at least four times in the corpus. In a first step, utterance-initial n-grams were retrieved automatically to identify patterns both in the child's utterances and in the

input material. In line with the operationalization mentioned above, they were considered frame patterns if they occurred at least 4 times. (n-grams embedded in other n-grams were of course subtracted, i.e. if 7 utterances start with *I* and 4 of these sentences start with *I want*, then *I want* qualifies as a frame pattern while *I* doesn't as it does not reach the threshold of 4 with 7–4 = 3 attestations.) In a second step, these patterns were checked manually.

The results suggest that a large proportion of the code-mixed (78%) and input (59%) data can be accounted for by means of partially schematic patterns, which conforms to the findings obtained by e.g. Stoll et al. (2009). In addition, we demonstrate that a large proportion of the frames used by the child (74%) correlate with the frames that can be found in the parental input. Furthermore, many of the frames that cannot be found in the input can be accounted for as self-entrenched bilingual patterns (e.g. *ich like* X 'I like X'*, das hat time* 'this has time').

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A Constructionist Approach to the Classification of the German Pronoun ‘es'

During the last decades, numerous studies have been conducted in the field of Construction Grammar, proving that this approach is very powerful in explaining language phenomena of every stripe. However, many of these studies up to now have proved to be occasional single studies, and there is still a lack of extensive constructionist analyses. My study aims to contribute to a reduction of this research desideratum by developing a model of the German ‘es' which integrates most of the functions of this pronoun.

A large number of research contributions devoted to the pronoun ‘es' exist, most of them following a traditional classification with only four ‘es' classes, as described e.g. in Eisenberg 2013. These models have two weaknesses: first, their classification is normally not based on authentic speech data. Second, they assume relatively large categories, which do not necessarily fit the speakers' mental representation. Apart from traditional classification models, there are very few attempts to a constructional classification of the pronoun ‘es' (Czicza 2014, Miyashita 2014). Although these analyses are very useful, they sometimes lack the necessary level of detail and cannot provide an overall picture of German ‘es'.

In my project, a corpus of natural, spoken German has been exhaustively analyzed regarding the occurrence of ‘es'. My research has indicated that a constructionist approach is highly suitable for this phenomenon of the German language, following Goldberg's (1995, 2006) definition and assuming that a construction is a form—meaning pair that is non-compositional and non-predictable; the frequency criterion as postulated by Goldberg 2006 is also critically discussed and applied.

The benefit of a constructional analysis is briefly exemplified here by the category of projector constructions which has been developed from the data, following on from Günthner 2009. An utterance like ‘Es ist schön' (i.e. ‘It is lovely'), with the ‘es' referring to already established facts, is normally expressed with falling tone. However, in a sentence like ‘Es ist schön, dass du kommst' (i.e. ‘It is lovely that you are coming'), the first part (‘Es ist schön') adopts a rising tone, indicating something to come. Thus, the form (the prosodic structure: falling vs. rising) is strongly connected with the function (referring back vs. projecting something). A theoretical framework which allows a combined analysis of the clear link between form and meaning offers many analytical advantages.

My study shows that the traditional classification model of German ‘es', containing only four classes, is not sufficiently fine-grained as a categorization. In my corpus study I identified 20 ‘es' constructions, with a varying degree of abstraction: from highly schematic, abstract to lexically fully specified constructions.

In my talk, I will present the results of my corpus study and the developed constructionist model of German ‘es', focussing on a clear explanation of how the constructionist approach may enrich the existing research on the pronoun ‘es'.

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The diachronic organization of constructional paradigms: An ecological approach to slots

In Construction Grammar, some constructions are schematic and contain a slot which needs to be filled by other constructions; these constitute what can be called a paradigm within the host construction. A famous example of this is the 'motion/manner' verb in the Way construction – e.g. *wriggle* one's way – (Israël 1996). Since a schematic construction only exists through constructs (which amount to the specification of a paradigm member), the paradigmatic organization of these constructs seems crucial to understand the semantic features of a construction.

An interesting question raised by these paradigms concerns the relationship between the emergence of a schematic construction and that of its paradigm members (Noël 2007). There are at least two possibilities: according to the Constant Rate Hypothesis (Kroch 1989), all members emerge simultaneously and similarly whenever the construction starts to emerge; according to the Lexical Diffusion Hypothesis (Ogura 1996), the construction spreads gradually from context to context, that is, members appear sequentially, more and more easily as there are more members in the paradigm, because of analogical strengthening (Fischer & De Smet 2017).

Here, we propose that a schematic construction can be better understood as an ecological niche for which different filler constructions can compete, so that the relationship between the construction and its paradigm members is more complex than those two possibilities suggest. Crucially, the competition is not dual, but actually takes place between structured clusters of paradigm members. Such a view makes it possible to identify deviations from the ecosystemic organization of the paradigm, hinting at the individuation of a construct as a separate construction. It has been debated whether frequency alone could allow a construct to be entrenched as a construction on its own (Goldberg 2006, Blumenthal-Dupré 2013); our observations lead us to prefer an alternative view, according to which what matters is not a frequency threshold, but a discrepancy in frequency behavior with respect to the overall organization of the different paradigm members.

To support these claims, we present three case studies from French; the quantifier construction [un/une/des N de] – e.g. *un tas de* (‘a heap of'), *des douzaines de* (‘dozens of') – , the [par N] adverbial construction – e.g. *par hasard* (‘by chance') – and the [faire N] verbal noun construction – e.g. *faire peur* (‘to scare'), *faire référence* (‘to refer to'). Our methodology consists in reconstructing the synchronic organization of the paradigm at any time period by carefully comparing the diachronic frequency profiles of the different paradigm members. The frequencies are obtained from the Frantext corpus (Base textuelle Frantext, 2016), which encompasses about 300 M occurrences for the studied time range (1401-2013). These comparisons allow us to construct networks of paradigm members and track the evolution of their structure. Our results show that they are built around clusters of core members, which can break apart and reform. Interestingly, the core members are not necessarily the most frequent, but those whose functional overlap with each other is minimal.

By combining tools from corpus studies and network science, we shed a new light on the diachronic evolution of schematic constructions, and show how it relates to the evolution of their individual constructs. We believe that our study opens new perspectives on the diachrony of constructions as it tackles with the difficult issue of a multi-layered evolution, in which each layer influences the others.

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German Framing Signals as Constructions

Much previous work has argued that discourse markers may have a framing function, such that they may indicate the beginning of a new topic or activity or the end of a previous one, i.e. "entering (or starting) and exiting (or stopping) a part of an activity" (cf. also Bangerter & Mayor 2013: 265). Furthermore, it has long been suggested that these readings are associated with specific formal, especially prosodic, features (e.g. Wichman 2014; Konerding 2002, 2004; Fischer & Alm 2013). However, previous studies either concentrate on the prosodic properties of very few items (e.g. Hirschberg & Litman 1993), or the prosodic analysis is carried out rather superficially (e.g. Fischer 2000), and/or is restricted to a single prosodic feature, for instance the intonation contour (e.g. Ehlich 1986).

In this paper, we look at discourse markers in framing function from a construction grammatical perspective. A construction grammar account of such framing signals would need to demonstrate stable associations between the framing function of discourse markers and certain formal configurations, which comprise positional and prosodic information, but which ideally are lexically underspecified and thus account for all kinds of discourse markers. In our paper, we present an analysis of German *so*, for which we develop a detailed prosodic analysis of its instances in framing function. We then expand this analysis first to other speakers and second to other discourse markers. In this way, we can accommodate the high demands of a prosodic analysis concerning phonetically comparable data and work towards a generalized construction grammar account in a step-wise fashion. Based on these analyses, we are able to postulate general framing constructions (cf. also Välimaa-Blum 2005; Ogden 2010; Ward & Gallardo 2017).

In particular, we analyze 43 instances of the German discourse marker *so* in the speech by TV moderator Stefan Raab in the late night show TV-Total in framing function concerning the following features:

- durational features:
    - relationship between the duration of the consonant and the vowel
    - duration of the whole discourse marker in the different positions
    - duration of pauses following each discourse marker
    - duration of syllables following the pause after the discourse marker
    - intonation /speech melody
        - movement of intonation contour

- range of F0
- relationship between rising and falling contours
- phonetic properties
    - voice
    - formant frequencies

Our results show that there are two different kinds of framing uses, which can be understood as forward and backward looking, and which come with different prosodic realizations (see Figure1).

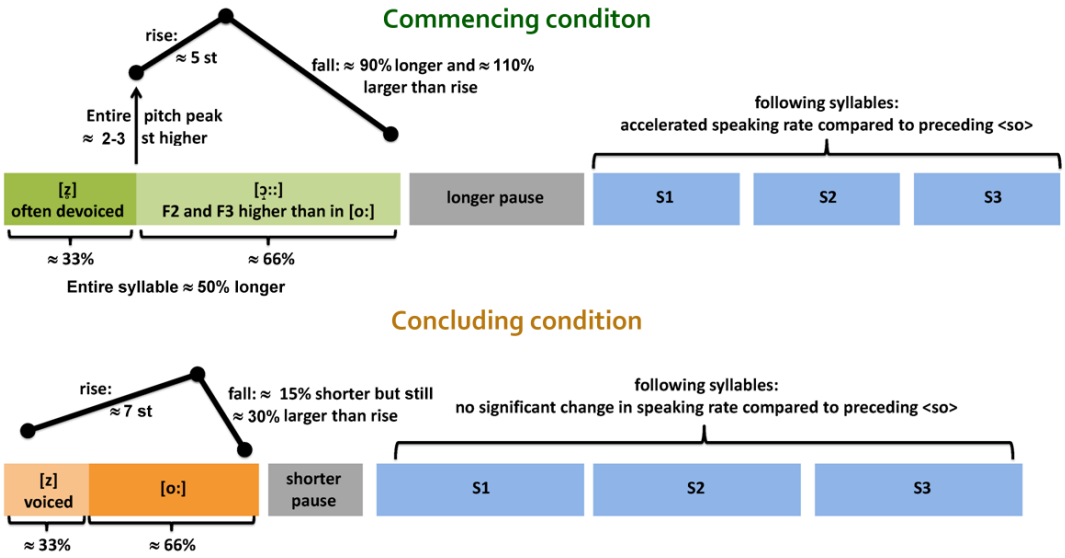

Figure 1: Prosodic features of so in the two framing constructions

The prosodic analysis reveals two different prosodic gestalts of framing *so*, which are reliably associated with the opening versus closing of conversational topics. The prosodic gestalts, which combine durational, intonational and phonetic features, can also be found in other late night show moderators' speech, and the durational and intonational properties also generalize to other discourse markers. The analysis thus allows us to postulate two general framing constructions, one forward looking, thus focusing on the opening of a new topic, and one backward looking, focusing on the closing of a topic. The challenge to include prosodic information in CxG is addressed by assuming prosodic gestalts, which serve as recognizable composite forms that apply to a range of different lexical items, i.e. different framing signals.

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“Learning what not to say” — but when? A case study in morphological constraint acquisition

The English serial verb constructions go-VERB (Go get the nurse!, Let's go have lunch, I'm asking you to go see an advisor) has a peculiar morphological constraint: it does not occur with inflections (*She went saw the doctor, *He goes gets the paper in the morning). Since there is no immediately obvious functional-semantic reason for the restriction, the constraint seems arbitrary and thus explicable only within formal-generative frameworks (Bjorkman 2016; Jaeggli & Hyams 1993). This view is also found in works on language acquisition data, which concludes that children have ‘parameter awareness' at age 2 (Sugisaki & Snyder 2013).

A recent usage-based approach to the constraint assumes that it is functionally conditioned (anonymised): it follows from a non-causal interplay of go-VERB's non-assertive semantics and the make-up of the English morphological paradigm. While go-VERB prototypically expresses commissives and directives, means to encode non-assertiveness in English are all bare. Constructional semantics can be shown through a corpus-based analysis of the syntactic environment of go-VERB as a proxy to meaning (imperatives, requestives, deontic modals etc., to the near-exclusion of indicatives). Thus, following a brief illustration of adult use and the pertinent distributional method, this paper will take a closer look at acquisition data. It addresses the question of how children acquire the constraint, which in turn is closely linked to the question of how they develop the schema. The main argument is that (age of) schema and constraint acquisition is contingent on (age of) morphological maturity.

The results are based on a distributional analysis of 5,000+ data points of child-directed speech (CHILDES) in two sub-studies, which measure the rate of children and adults becoming more similar and track the children's schema representation between 2 and 5 years. The main results are, first, that children initially make consistent inflectional use of the construction, despite the absence of inflected input. Second, the fact that early in development they use go-VERB primarily in assertive contexts suggests that they have a compositional schema representation at age 2. Third, they proceed to commissives and requestives at age 3, and to the adult-like core schema between ages 4 and 5. Fourth, interestingly, the biggest leap in development and the drop in inflectional uses occurs between ages 3 and 4, i.e., only after a full(er) acquisition of morphology. The proposed explanation is that for children to be able to infer the constraint from the input presupposes the expectation of inflection, which in turn presupposes mature general morphological

knowledge. In other words, it is not input per se, but the ability to notice negative evidence, which is contingent on morphological maturity enabling such an expectation.

The results do not support a generative parameter awareness conclusion, but suggest a long-term development consistent with usage-based, constructionist arguments in language acquisition. Thus, this talk contributes to current issues in studies of negative evidence, the learnability of (formal) constraints, their interaction with construction-external phenomena as well as their developmental chronology.

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A constructional bootstrapping account of the early acquisition of Japanese conditionals

This paper examines the relatively early emergence of conditional constructions in L1 acquisition of Japanese in a usage-based constructional approach.

Clancy (1985) and Okubo (1967) report that conditionals appear early (before age 2) in Japanese L1 children. They also demonstrate the relatively early emergence of conditional connectives in the developmental sequence of complex sentences. This early emergence contrasts sharply with findings from other languages, which suggest that children acquire conditionals relatively late (Clancy, Jacobsen & Silva 1976, Reilly 1982). Motivated by Clancy's (1985) observation, Akatsuka and Clancy (1993) argue that the affective meaning and cognitive accessibility of deontic conditionals are responsible for the precocious emergence of conditional sentences.

My study takes a constructional approach to the issue, and highlights the significant roles played by CONSTRUCTIONS in varying degrees of IDIOMATICITY that are associated with certain pragmatic functions, in addition to the effects noted earlier of high frequency and accessible affective meanings associated with deontic conditional constructions.

This paper analyzes the ways children and adults use conditional constructions in different CONSTRUCTION TYPES (i.e., reduced, integrated evaluative, and full bi-clausal construction types) all sharing a certain CONSTRUCTIONAL SCHEME for conveying a certain pragmatic function. This includes constructional schemes for deontic modality of permission, prohibition, obligation, etc. (1) below illustrates the CONSTRUCTION TYPES sharing the CONSTRUCTIONAL SCHEME of Suggestion/ Advice:

(1) CONSTRUCTION TYPES sharing the CONSTRUCTIONAL SCHEME of **Suggestion/ Advice**

Antecedent (P) Consequent (Q)

Full bi-clausal conditional construction (FBC)
kono kusuri o nomeba naori masu yo
this medicine ACC take-COND((R)EBA) cure/recover POL PART
If (you) take medicine, (you) will recover.

Integrated evaluative conditional construction (IEC)
Kono kusuri o nomeba ii desu yo
this medicine ACC take- COND((R)EBA) good POL PART
It will be good if (you) take this medicine.

Antecedent-only Reduced conditional construction (RDC)
kono kusuri o nomeba
this medicine ACC take- COND((R)EBA)
Lit. If (you) take this medicine. >> You should take this medicine. Why don't you take this medicine?

Based on an analysis of six child-caregiver interactions drawn from the CHILDES corpus, this paper shows that utterances both produced and heard by children start with the antecedent-only reduced construction and the integrated evaluative construction, rather than the full bi-clausal conditional construction. Earlier utterances using IEC are highly idiomatic and consistent in pragmatic function. Antecedent-only utterances (heard and produced by children) also clearly convey specific pragmatic functions, and exhibit uniformity in using the same form of conditional marker (clause-linking morpheme) and the affirmative/negative value within the antecedent. Moreover, initially, full bi- clausal conditional utterances convey pragmatic functions consistent with their IEC and RDC counterparts.

This paper argues, based on this corpus analysis, that the pragmatic functions common among CONSTRUCTION TYPES serve to bootstrap the acquisition of the bi-clausal conditional construction. More crucially, what makes this bootstrapping possible is the overarching CONSTRUCTIONAL SCHEME that exhibits pragmatic and formal commonalities. I thus propose a constructional bootstrapping that supports a pragmatic bootstrapping as well as the morphological acquisition in RDC and IEC as a springboard for more complex FBC.

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The acquisition of Japanese deictic verbs of giving and receiving: dialogicality and conventionality

The paper discusses the ever-expanding boarder of *Construction Grammar*, taking up the case of Japanese deictic verbs of giving and receiving and claim that the notion of "conventionality" is essential defining *Construction Grammar*.

In Japanese, the selection of the appropriate verbs of giving and receiving depends on whether the speaker is taking the viewpoint of the giver, in which case *ageru* is used, while of the recipient, *kureru* is used (Clancy, 1985, p.405). Several studies have investigated the acquisition of these verbs by L1 Japanese children based on their production, by looking at corpus data or diary methods (Okubo, 1967; Fujiwara, 1977, Clancy, 1985). They found children's consistent errors in *ageru-kureru* alternation and argue that *kureru* is acquired later than *ageru* in Japanese children's language development.

The present study looked at the children-caregivers interactions in corpus data in order to examine the use of verbs of giving and receiving by Japanese children and their caregivers. I used MiiPro Corpus from CHILDES (http://childes.talkbank.org/access/Japanese/MiiPro.html), which has longitudinal data of 4 Japanese children, roughly 2-5, grew up in Tokyo. I obtained about 2,000 tokens of giving and receiving verbs from the children's utterances in total. The children's error was typically found in misuse of *kureru,* where they are expected to use *ageru*, which confirmed the previous studies. However closer examination of discourse analysis revealed that children do not randomly make *ageru-kureru* mistakes, but rather resonated with the caregiver's prior utterance that contains *kureru;*

(1) Ari 4;8.01

MOT: *konsento ire-te* ***kure****-ta no*?

plug plug.in receive-PAST NOML

'Did (you) plug (it) in for me?'

CHI: **ire-te **kure**-ta yo*

plug.in receive-PAST SFP

‘(literal meaning) (I) plugged (it) in for me'

The child should have use *ageru* here not *kureru*, however here the child used the same to the adjacent pair utterance.

Recent development of Construction Grammar witnesses different brunches from the central claim that language is a large network of form-meaning pairings. One such approach is found in Brone & Zime (2014), where they proposed a resonance activation (Du Bois, 2014) as *ad hoc construction* in ongoing interaction. Although this approach successfully bridges dialogic syntax and Construction Grammar and offers many theoretical insights as to how adult speakers create grammar locally, I argue from language acquisition perspective that children need to go beyond local resonances and learn conventional way of describing a world event. That is, *conventionality* (Fillmore, 1977, Fillmore et al., 1988, Goldberg, 2006) is a crucial key notion when determining constructionhood and children must learn a network of conventional pairings of signs and meanings.

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"Let's go" in child development

The English verb *go* is one of the verbs which are acquired early and used frequently in child speech (Clark 2003: 181), and Theakston, Lieven, Pine and Rowland (2002) discussed how the different forms of this verb (i.e., *go*, *going /gonna*, *goes*, *gone*, *went*) are acquired, in relation to the syntactic structures produced, the meanings encoded, and the frequency of each use in the input. Most research on the acquisition of the verb *go*, however, has not dealt with in detail the construction of *let's go*, in spite of the fact that “let's go” utterances comprise over 90% of “*let's* + motion verb” constructions in the Eng-NA database in CHILDES.

The present study, therefore, investigates “let's go” constructions in child-caregiver or child-child interactions, placing special emphasis on their performative aspects. Based on the data retrieved from CHILDES corpora (especially, from the Eng-NA database), I examined how “let's go” is used in both caregiver and child speech and how their uses are related to or different from each other from both syntactic and semantic points of view. The syntactic analysis reveals that: (i) not only the simple “let's go,” but also “let's go” followed by a verb appears frequently in caregiver speech from the early stage of development, as seen in (1); and (ii) “let's go” seems to be further grammaticalized when it occurs with a motion verb, as in (2). The semantic analysis of “let's go,” which was conducted from the perspective of subjectivity and intersubjectivity, shows that: (i) “let's go” in caregivers' utterances can convey not only a hortative sense that the speaker (i.e. caregiver) urges the hearer (i.e. child) to do something together, as in (3a), but also a more intersubjective sense that the speaker encourages the hearer to do something, as in (3b) (see also the discussion of “let's” in Traugott and Dasher (2002: 176-178)); and (ii) some uses of “let's go” in child speech convey an inchoative or intentional rather than an intersubjective meaning, as in (4). These data suggest that “let's go” constructions in child speech are not a simple reflection of the input. The process of social and physical development will provide us with some possible reasons for this result.

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Cognitive operations and illocutionary meaning: the Don't X Me construction

The study of illocutionary meaning has been present in different approaches to the pragmatic dimensions of language. Some linguists, especially functionalists, have sometimes attempted to build pragmatic categories into their accounts of grammar. For example, Dik (1989/1997) argues that illocutionary meaning is to some extent coded in natural languages and is to be made part of grammatical explanation.

In Cognitive Linguistics, Ruiz de Mendoza and Baicchi (2007)'s work is in line with Dik's proposal of giving illocution a constructional treatment. These authors postulate the existence of a broad range of conventionalized illocutionary constructions that contain fixed and variable elements. They also argue that illocutionary interpretation is based on providing access to high-level situational models, which can be identified with what Panther and Thornburg (1998) have called *illocutionary scenarios*.

Ruiz de Mendoza and Galera (2014) put forward an account of cognitive models and operations and analyze the ways in which they intertwine at different levels of meaning representation.

In this context, the present work aims to provide a descriptive and explanatory analysis of the cognitive mechanisms that underlie the interpretation of the *Don't X Me* construction. More specifically, the focus of our study is placed on those cases in which the X slot is not filled in by a verbal predicate, but by the repetition of a statement previously uttered by the hearer. Consider the example below:

Husband: But if this were Syracuse, we would be in the air, honey.

Wife: Don't ‘honey' me. You were in charge of this.

There are two cognitive processes that run parallel in the interpretation of this utterance. In the first place, the repetition (or echoing) of the appellative shows the second speaker's disapproval of the first speaker's appeal to their intimate relation. This is achieved by calling upon the whole event (through metonymic expansion) so as to lessen the negative effects brought about by previous actions, i.e. not having been able to comply with the duty of getting tickets for the flight. In the second place, the appellative “honey” needs to undergo a process of categorial conversion before it can be subsumed into the *Don't X Me*

construction, which is licensed by the high-level metonymy result for action: the scenario where the addressee feels comforted by the use of the vocative (result) stands for the action of psychologically making the addressee feel that he is involved in such a scenario.

The outcome is initially an implicational construction (involving irritation) built on the basis of a level-1 construction (a negative imperative amalgam). However, its prototypical illocutionary import is conventionally attached to it thus making it into an illocutionary construction.

Drawing from naturally occurring data (i.e. movie scripts, internet searches), we analyze a number of instantiations of this construction in which the X variable is saturated with echoed information (e.g. *Don't 'Hello' me, Don't 'What's the problem' me*), exploring the cognitive models and operations involved in their interpretation.

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Moving from syntactic to morphological constructions. Developmental steps in first and second language processing

Cross-linguistic studies in first (L1) and second (L2) language processing with children and adults show that learners seem to go through specific developmental stages when processing non-canonical sentences. In L1-processing, children acquiring languages that use morphological case marking to depict semantic role relations within transitive constructions determine the agent of the action by using syntactic cues first before turning to more reliable morphological cues (e.g., Dittmar et al. 2008, Lindner 2003). Within the Competition Model-framework (Bates & MacWhinney 1989), this transition from syntactic to morphological cues is regarded as a *cue strength*-adjustment process. A similar adjustment process can be observed in L2-learners. When acquiring a second language, L2-learners tend to process non-canonical sentences on the basis of syntactic cues first before adjusting to reliable morphological ones (e.g., Sasaki 1994). Both in L1- and L2-processing, the timing of adjustment might be influenced by the reliability of cues in the target language as well as cue validity in the respective L1s. Regardless of such timing differences, adjustments occur cross-linguistically.

In terms of CxG-approaches, this adjustment process implies that learners process sentences on the basis of broader syntactic constructions before they can ‚handle' smaller morphological entities. There thus seem to be developmental processing steps in which learners move from larger to smaller constructions as cues for semantic role relations in non-canonical conditions.

To test this hypothesis, a cross-sectional forced-choice task with monolingual (German) and bilingual (Russian-German, Dutch-German) children (average age 9;7) and adult monolingual controls (German) was carried out. The children were controlled for overall proficiency in German. Participants were asked to determine the agent of a reversible transitive action in 96 NVN-sentences varying according to constituent order (SVO vs. OVS), case marking, gender and animacy opposition (2 x 6 x 6 x 4–design). Results show that both L1 (in the bilingual children), and overall proficiency in German determine whether larger (i.e., syntactic) or smaller (i.e., morphological) constructions are used as cues to determine semantic role relations. In addition, some children adopt a third cue by combining prototypical morphological and animacy cues within nominal phrases. This phrasal cue

seems to be an ‘in-between'-strategy when moving from a stronger syntactic to a morphological processing strategy.

From a developmental perspective, the results indicate that cue adjustment is carried out in three steps: Children start off processing non-canonical sentences by using larger syntactic constructions, then move to medium-sized phrasal constructions, and finally choose small constructions at the word-level. Individual differences resulting from different L1s or overall proficiency seem to influence how long learners prevail in those different phases, and also might determine the timing of transition from one step to the next.

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Mi-construction in Sicilian: Historical, typological and functional characterization.

Since the seminal work of Evans 2007, the topic of Insubordination has gained much attention in current functional and typological literature. In particular, much interest has been paid to the evolution of insubordination across world languages (Lombardi Vallauri 2007, Mithun 2008, Cristofaro 2016, Narrog 2016 among others). According to these studies, the emergence of insubornitative constructions across world languages can be promoted by several diachronic processes (i.e. reduction or omission of the main verb, unembedded conditionals etc.) and can show different functions (i.e. interpersonal control, modalization and presuppositionalization).

This work aims at a) reconstructing the evolution of *mi*-construction; b) describing the function conveyed by the construction in contemporary Sicilian. *Mi*- construction is often used to link subordinate and principal clauses, marking deontic modality. The construction is formed by the*mi* complementizer (which always introduces the construction) and a present indicative verb form:

(1) vogghiu **mi** vai

Want.1.SG. CMP go.2.SG

'I want you to go'

Furthermore, *mi*-costruction can also appears in independent clauses, indicating a wish or a desire of the speaker:

(2) **mi** hai beni

CMP have.2.SG good

'may you be fine'

In order to highlight which factors are engaged into emergence of *mi*-construction, the study will adopt a Usage-based approach (Bybee 2006). The frequency with which the etymological source of the complementizer (the temporal adverb *modu*, meaning "now, soon" Rohlfs 1972) appears in combination with verbs entailing modal interpretation will be

put into relation with entrenchment of the construction. In particular, the analysis of ancient texts will reveal how subjectification (Traugott 1989, Langacker 2006, Cornillie 2006) and pragmatic enrichment (Hopper & Traugott 2003) promote the emergence of the pragmatic values of *mi*-construction. As for the formal properties of the construction, three concomitant processes take place: a) the phonological reduction of original adverb *modu* in *mi*, b) the restriction of *mi* to preverbal position and c) the emergence of the complementizer function.

The proposed analysis is based on three data sources:

a) *Corpus Artesia*: A corpus of Old Sicilian texts, collecting material from the origin to the 16th Century for oldest data.

b) A collection of more recent literary and anthropological texts (for 17th and 18th Centuries) for intermediate phases.

c) A small corpus of recorded conversations (10 hours) collected for Contemporary Sicilian.

As for the diachronic analysis, every token of *modu* appearing in the ancient texts will be manually extracted and will be evaluated against its meanings and its linguistic contexts. This analysis will show that at first *modu* presents just adverbial functions, focusing on the temporal setting of the verb it combines with:

(3) Eu vignirò **modu** a quilli

I will.come soon to those

‘Now I will deal with those' (Accursu di Cremona, Valeriu Maximu [VII, 3, 9]; 1321-1337)

Among oldest uses, we will particularly consider those engaged in the diachronic process leading to modern complementizer constructions (which appears fully established in b corpus). Through the analysis of more recent data, we will reconstruct the historical dynamics among the emergence of insubordination, showing a complete characterization of *mi*-construction in Contemporary Sicilian.

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Mixing among equivalent constructions: evidence from three bilingual 2.5 year olds with English as one of their two languages and Polish, German, or Finnish as the other

Earlier claims that children aged 2;5-3;3 develop rules of one language and apply them to both in mixed utterances provide indirect evidence that early code-mixing may be facilitated by structural overlap of the two languages learnt (Volterra and Taeschner, 1978). More recent research confirms that code-mixing recorded at later stages of development (3;6-5;6) can be attributed to the degree of morphosyntactic overlap between constructions: German-English children switch significantly more within the noun phrase than Russian-English children which stresses the role of input in mixing (Endesfelder Quick et al., 2017). Our qualitative study aims to test the latter findings with reference to the earlier age. As such, it sets out to examine early bilingual constructions in three 2.5 year olds raised bilingually using English as one of their languages and Polish, German, or Finnish as the other. The aim of this design is a) to capture any common patterns in acquisition and explain them in terms of processing mechanisms and b) to determine whether differences in usage patterns may be attributed to input. The data used in this study come from transcriptions of 20 video recordings made for each of the children at home, during mealtimes, playtimes, and getting ready for preschool. Our preliminary qualitative data reveal that mixing in each child exploits similarities between their two languages from very early on, with bilingual constructions built on schemas which exhibit structural overlap. Among them are bilingual constructions which exploit similarities in the word order, for example the Polish-English *DAJ MI milk* [give me milk], the German-English *KEINE clothes* [no clothes] and the Finnish-English *ME ensin* [me first]. These findings highlight the importance of structural properties of each child's two languages and as such they emphasize the role of input in language usage. They are further discussed in light of processing mechanisms used in the production of overlapping structures.

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Explaining English variable tag questions within an Applied Construction Grammar framework

In line with De Knop & Gilquin (2015), this paper sets out to provide a pedagogically adequate constructionist account of English *variable tag questions* (VTQs), i.e. those containing a grammatically dependent question tag such as *It's like tonic water isn't it?*, which are shown to qualify as constructions (i.e. form/function pairings) (Goldberg 2006). Unlike prior functional typologies that are mostly single-layered and/or focus exclusively on interactional and/or stance meanings (Lakoff 1975; Holmes 1995; Tottie & Hoffmann 2006), three layers (*locution*, *illocution* and *perlocution*) and two main usages (*interactional* and *interactive*) are recognized in the functional pole that comprise four macro-functions (*information/confirmation-seeking*, *action-seeking*, *attitudinal,* and *textual*), taking into account interactional features (type of response and role in adjacency pair) as well as contextual information (genre and speakers' role). In addition, in the form pole information is provided about the interplay of intonation (e.g. fall/rising) with other relevant grammatical characteristics (illocutionary force, polarity, position, Subject and verb of the tag) (Author 2012, 2016, Forthcoming). Based on the analysis of 383 VTQs extracted from *International Corpus of English–Great Britain*, this maximized explicit input allows us to elicit the formal, semantico-pragmatic and discourse-functional connections that exist between VTQs and other interrogatives such as “yes”/ “no” or “wh-” questions.

Finally, learning material on tag questions is proposed especially designed for Spanish University students of English. More specifically, exercises of different kinds are presented involving writing (e.g. cloze tests, filling the gap, multiple choice), speaking (e.g. reading aloud examples, role play involving data with overt and covert question tags), listening (e.g. sound files with right and wrong intonations in specific communicative situations), reading/speaking (e.g. discussing whether the choice of a question tag is appropriate or not in different texts according to different sociolinguistic variables), as well as pertinent self-evaluation questions.

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Building Fictional Worlds with Linguistic Constructions

In this paper, we would like to analyze two important points that are seldom addressed by Construction Grammar:

- the relation between Constructions and textual genres (here literary genres);

- computer methods that allow the unsupervised identification of possible Constructions.

How do linguistic Constructions (in the sense of Construction Grammar) contribute to the creation of fictional literary worlds? We will suggest some possible answers to this question, by comparing two French literary corpora: 50 contemporary French detective novels, and 50 romance novels (from the Harlequin collection).

These corpora have been morpho-syntactically annotated to enable the extraction of lexico-grammatical patterns; by the statistical calculation of "specificities", we have highlighted the characteristic patterns of the two subgenres. E.g.:

Il N'Y Avoir Rien à Inf. (there is nothing to + Inf.): in the detective novel the pattern negatively constructs a world in which objects, traces, clues, etc. remain hidden

Maïté Joigny regarda par la fenêtre où il n'y avait rien à voir parce que la nuit était tombée depuis un bail (Maïté Joigny looked out the window where there was nothing to see because night had fallen quite a while earlier // But there was nothing to discover. // There was nothing to look for. // Y a rien à attendre. (There is nothing to expect) // Y a rien à raconter. (There is nothing to say), etc.

Ne Pas Avoir Le N de Inf. (not to have the N to Inf.): in the romance novel, the pattern expresses the position of a character towards a love affair:

Elle n'avait pas l'intention de mettre cet équilibre en péril à cause d'un béguin ridicule pour cet homme. (Lit.: She had no intention of jeopardising that balance because of a ridiculous crush on that man.) // Pourtant, elle n'avait pas l'impression de trahir qui que ce soit (Lit : Yet, she did not have the impression that she was betraying anyone)

These patterns correspond to:

- specific Constructions (which are sometimes phraseological units): for example : **Jeter / glisser un coup d'œil** (to glance) which is characteristic of the romance novel;

- to semi-specific constructions; for example, ***laisser INF un NC*** (lit. to let inf. a N) (in the romance novel) :

Lorsqu' il fut dans la salle de bains, Samantha laissa échapper un soupir de soulagement. (When he was in the bathroom, Samantha let out a sigh of relief.) // De temps à autre, il laissait transparaître un aspect juvénile qu'elle préférait nettement au côté plus sérieux qu'il affichait le plus souvent (From time to time, he showed (Lit. : let transpire) a youthful side to his character that she clearly preferred to the more serious side he usually displayed.

- schematic Constructions : for example : the "juxtapositive" Construction (noted ***N, N,***) in the Detective novel which is used in descriptions with a cumulative effect :

Des quartiers chics, où le centre de la ville s'était déplacé avec *bars, restaurants, cinémas,* au quartier nord (lit. Smart neighborhoods, where the city center had moved with bars, restaurants, cinemas, to the northern district)// Il traversa la place, puis la rue Corneille, comme s'il allait entrer à La Commanderie, une boîte de nuit où se côtoyaient *journalistes, flics, avocats et truands* (He crossed the square, then rue Corneille, as if he were going to enter La Commanderie, a nightclub where journalists, cops, lawyers and mobsters mingled.)

Our presentation will first present the computer method used to automatically identify these constructs (a method that can be applied to any type of corpus, literary or otherwise); we will then discuss, through a choice of examples, the relation between the semantics of Constructions and the semantic construction of fictional universes: it is the linguistic structures, i.e. formal units, which create fictitious worlds, and which make these worlds coherent and credible.

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The emergence of ESL morphosyntax from usage: Effects of statistical symbolic learning

We report a usage-based analysis of Chinese ESL (English as a Second Language) learners' knowledge of four English inflectional morphemes: past tense *-ed*, progressive *-ing*, and 3rd-person singular *-s* on verbs, and plural *–s* on nouns. The constructivist view maintains that patterns and errors in language acquisition are reflective of the distributional properties of the linguistic input, and that it is the nature of the exemplars in learners' experience that drives the emergence of morpho-syntactic systems. Previous studies have established language learners' sensitivity to the probabilistic distributions of linguistic units of different sizes (morphemes, words, collocations, phrases, etc.). We investigate how frequency distributions at different linguistic levels – lexical level (Expt. 1) and phrasal level (Expt. 2) – contribute to the ease with which embedded inflectional morphemes are acquired, processed, and produced. In an Elicited Imitation Task, participants listened to length- and difficulty-matched sentences each containing one target morpheme. They were asked to type the whole sentence as accurately as they could after a short delay. Expt. 1 investigated frequency effects at a lexical/morphemic level. We expected facilitation effects driven by the "availability" and the "reliability" of the morpheme exemplars: a morpheme is more easily processed 1) when it occurs as a word-form that is frequent in usage (i.e., highly available), and 2) when it is attached to a word that is more consistently conjugated in the form containing this morpheme compared to other forms (i.e., highly reliable). Thirty sentences were made for each of the target morphemes, divided into three frequency groups on the basis of corpus analysis in COCA (Davies, 2008-): 10 included target words particularly high in word-form frequency, 10 high in reliability, and 10 low in both reliability and frequency. Responses were scored on whether the target morpheme was accurately reproduced given production of the correct lemma. A 4*3 ANOVA showed significant effects of morpheme type and the grouping factor, and a significant interaction. Between-morpheme Tukey comparisons showed that the plural *-s* was the most difficult, followed by the 3rd-person *-s*, followed by *-ed*, followed by *-ing*. A general linear mixed-effects logit model (GLMM) with random effects of subjects and items revealed independent effects on production accuracy of morpheme type, morpheme frequency and morpheme reliability. Expt. 2 successfully replicated these results and extended to the investigation of frequency at a phrasal level, i.e., the frequency of the 4-gram strings that contains the target morpheme. In addition to the 120 sentences used in Expt. 1 which contained high-frequency 4-gram strings *a priori* (e.g., 'I asked him if'), 120 additional sentences were created to constitute the low string frequency condition for Expt. 2 (e.g., 'Tina asked John if'). GLMM analyses of Expt. 2 revealed that along with the frequency and reliability of the word-form inflected with the target morpheme, the frequency of the 4-gram carrier was an additional independent positive

predictor of morpheme production accuracy. These results support cognitive theories of the statistical symbolic learning of morphology and have implications for the grain-size of the units of language acquisition.

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Back to the future (again): Revisiting the German werden + Infinitive construction

The development of the future construction *werden* + Infinitive is among the most widely-discussed topics in German historical linguistics. Two of the open questions are a) how the temporal and modal meaning elements inherent to the construction relate to each other and b) how these meaning variants developed historically (e.g. Vater 1997, Mortelmans 2004, Diewald 2005). More generally, the origin of the construction is hotly debated as well: While Leiss' (1992) idea that Czech influence might have given rise to the pattern is widely rejected (e.g. Schmid 2000, Hilpert 2008), there are multiple scenarios of how the construction may have developed via analogy to existing constructions (e.g. Schmid 2000; Diewald & Habermann 2005).

The fact that recent years have seen the release of large diachronic corpora of previous stages of German allows us to revisit these points of debate. In this talk, we will focus on two sets of hypotheses:

a) Leiss (1992) assumes that the spread of *werden* + Infinitive relates to a disintegration of the German aspectual system. According to this theory, German used to have aspectual verb pairs like *tuon* 'do' (imperfective) vs. *ge-tuon* (perfective). While the imperfective variants were used for reference to the present, the perfective ones could be used for future reference. As the aspectual verbs lost their partners, *werden* + Infinitive was used as a replacement strategy for encoding future reference. This leads to the prediction that imperfective verbs should combine with *werden* first, while perfective verbs enter the construction at a later point in time (Hacke 2009: 59).

b) While some scholars see the older *werden* + Participle construction as analogical source for *werden* + Infinitive (*inti nun uuirdist thu suiginti* 'now you become/will be silent', REA), others assume that modal constructions like *suln* 'shall' / *weln* 'want' / *mugen* 'may' + Infinitive or inchoative constructions like *beginnen* 'start' + Infinitive served as analogical "template" (Schmid 2000, Diewald & Habermann 2005, Hilpert 2008, Szczepaniak 2011).

While previous studies on German future constructions have almost exclusively relied on synchronic data (e.g. Heine 1995, Krämer 2005) or on rather small diachronic corpora starting in the 17th century (Hilpert 2008), the present study uses data from the Reference Corpus Middle High German (REM) as well as the German Text Archive (*Deutsches Textarchiv*, DTA), which together cover the time span from the 13th to the 20th century. As

the Early New High German period from the 15th to the 17th century is particularly relevant for the spread of *werden* + Infinitive, this database allows for a more detailed investigation of the aforementioned aspects. As for the aspectual characteristics of the infinitives that occur in the construction, a collexeme analysis (Stefanowitsch & Gries 2003) presents tentative evidence against the hypothesis that *werden* prefers imperfective verbs at first, as it combines with imperfective and perfective verbs alike. Regarding potential analogical sources, we find that the same verbs that tend to occur in the *werden* + Participle construction in Middle High German later combine with *werden* + Infinitive. However, this does not rule out the possibility that the *werden* + Infinitive construction may have multiple sources.

From a more theoretical perspective, we will argue that diachronic construction grammar provides an ideal framework for accounting for the multifactorial development of *werden* + Infinitive, including changes in the prominence of its temporal and modal meaning components.

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The development of the adversative VP ON NP construction (he called the cops on me)

In a section on 'actors and patients', Jackendoff (1990: 187-188) discusses the use of an 'adversative adjunct' in English, as in *he called the cops on me*. The meaning is rather clear: an agent 'he' targets his actions at the 'cops' and the participant 'me' is negatively affected by the result of the event. At first glance, each part of that structure can be analyzed as an instantiation of general syntactic patterns: the NP construction, the subject-predicate construction, the PP construction, etc. Even if the structure seems to be semantically and structurally transparent, I argue that it could qualify as a construction in its own right, as broadly construed by usage-based and cognitive models of constructional approaches (Goldberg 2006: 5). This corpus-based study (*eg*. *COCA*, *COHA*) combines corpus analysis and native-speaker judgment.

The construction is productive, as evidenced by its type frequency. The less conventionalized instances (*people change on you* / *you grew up on me*) seem to be analogical extensions of well-entrenched constructions (*cheat on sb, tell on sb*, *play a joke on sb*, etc.). It can be argued, therefore, that repeated exposure to frequently occurring instances of varying size and complexity has led speakers to abstract away from individual differences to perhaps arrive at a schema *VP ON NP*.

Other facts militate in favor of a constructional approach: for example, an instance like *he called the cops on me* can be available, albeit sporadically, for passivization, *I was called the cops on*. This suggests that some speakers may have already started to perceive the PP as an argument of the verb, as with other verbs like *cheat on sb* (considered synchronically an indirect transitive verb: *he was cheated on*); the PP is reanalyzed as being part of the *VP ON NP* construction. Note that cotextual factors (topic continuity, morphosyntactic persistence) may serve as triggers for those 'unusual' choices.

Diachronic evidence from *COHA* indicates how a locative/metaphorical adjunct (*a curse fell on me*) has come to be used more abstractly over time to describe a non-spatial relationship instantiating the conceptual metaphor AFFECTING IS TOUCHING (Boers 1996). Plausibly, the metaphorization of the adjunct developed in parallel with the extension of the construction to new tokens. For instance, the use of the verb *die* in the construction, as early as 1888, may have facilitated the development of a metaphorical sense since a locative meaning of the PP in *he died on me* (= *while I was lying under him*) was improbable from the start. The idiomatization of the PP must have contributed to greater cohesion with the verb and

favored the formation of an independent schema, with concomitant partial loss of compositionality.

The data reveals verb-(class)-specific sub-constructions (Croft 2003), mainly speaking verbs, change-of-state/of-location verbs, with idiosyncratic constraints: the verb *leave* cannot enter the construction as it lacks an inherent dysphoric feature that co(n)text may begin to provide: ?*he left on me in the night* ≈ *snuck out on me*). These sub-constructions may serve as exemplars and could explain subtle meaning variations.

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Testing usage-based learning of English resultative constructions in Korean EFL learners' argumentative essays

The present study investigates the production of English resultative constructions by Korean-speaking learners of English as a foreign language (EFL) from a perspective of usage-based constructional development. English resultative constructions project an object complement as a resultative phrase that denotes a change of path or state of a theme or object[1]. Previous studies on the first language (L1) acquisition of English argument structure constructions revealed a gradual development of facility with resultative constructions in which the productive use of complex constructions like resultatives sets in considerably later than that of syntactically and semantically simpler constructions such as simple transitive and intransitive constructions[2]. The process of developing constructional knowledge from simple to complex constructions in language development is best captured by usage-based language acquisition wherein item-based acquisition advances into a formulation of cognitively more complex and abstract constructional knowledge[3]. Motivated by the usage-based language learning in L1 acquisition, this study examined whether a similar developmental pattern is observed in L2 acquisition by analyzing the usage of a group of English resultative constructions by L2 learners at different proficiency levels in their argumentative essays.

We predicted that the facility of resultative constructions will contribute to differentiating L2 writing proficiency more strongly than that of simple constructions. Specifically, L2 learners with higher proficiency will produce more instances of resultative constructions than lower-proficiency learners. To test these predictions, we analyzed the production of 3 resultative-type constructions (CM, RT, CT) along with 5 non-resultative-type constructions (IU, IM, IR, ST, DI) (Table) in 78 argumentative essays produced by college-level Korean-speaking learners of English[4]. The essays were divided into two proficiency levels (39 beginner and 39 advanced) based on the Common European Framework of Reference for Languages[5]. Two coders counted the occurrences of the target constructions across the essays (agreement rate: 98%).

Analysis of variance tests (IV=group, DV=frequency of the target constructions) showed that, among these 8 constructions, 4 (ST, CM, RT, CT) contributed significantly to group differences: As proficiency level increased, the essays contained more RT ($p<.001$), CM ($p<.001$), CT ($p=.010$), and ST ($p<.001$). We subsequently conducted a discriminant function

analysis with these 4 variables as predictors to explore the degree of contributive powers to the prediction model among the predictors. The examination of the standardized discriminant function coefficients (DFC) demonstrated that the most powerful predictors to the discriminant function were RT (DFC=.677) and CM (DFC=.651) followed by ST (DFC=.418) and CT (DFC=.387). A classification analysis was also conducted to estimate the agreement degree between the original group membership and the predicted group membership formulated by the discriminant function. The result showed that the discriminant function successfully predicted 82.1% of the advanced and 82.1% of the beginner texts as the original membership, respectively.

Taken together, the current results showed that the 3 resultative-type constructions (CM, RT, CT) significantly contributed to discriminating the L2 writing proficiency, confirming our predictions that resultative-type constructions can account for L2 writing development. These findings indicate that usage-based constructional development applies to L2 writing development.

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The obsolescence of the adverse avertive schema in Chinese

Introduction

This paper aims to account for the obsolescence of the adverse avertive schema in Chinese, showing that (1) change in prototypicality motivates the loss, and (2) the obsolescence can be construed as involving generalisation, but no replacement.

Obsolescence

During obsolescence, a construction's form or function may 'survive'. For example, in degeneracy, an obsolescent construction's function is maintained by one or more pre-existing constructions (Van de Velde 2014); in exaptation, an obsolescent schema's form is recruited to express a different function (Norde & Trousdale 2016). However, obsolescence can also happen without degeneracy or exaptation: a construction can genuinely disappear (Petré 2010).

The adverse averetive schema is a case in point. Functionally, the schema expresses four features: imminence, pastness, counterfactuality, and adversity (see Kuteva 2001 and Heine & Miyashita 2008 on the features). Formally, it is an adverbial schema with an expletive negator. It is formalised as [[ADV EXP.NEG VP] [almost did VP (VP = adverse)]]. Only one adverbial *chayidian* + expletive negator *mei*, historically able to fill in the schema, exists in spoken Chinese. Yet, it does not necessarily express adversity, indicating that the schema has obsoleted.

Change in prototypicality

The loss of the schema can be accounted for quantitatively by decreases in type and token frequencies. Qualitatively, the change in prototypicality in the schema also provides an explanation. Following Casenheiser & Goldberg (2005) and Goldberg (2006), a schema's constructional meaning is supplied by its most frequent, and thus prototypical member (e.g. *give* in the ditransitive schema). In the case of the adverse avertive, *wei* and *xian*, both lit. 'danger; to threaten', were the first two prototypical members, supplying the schema with its adversity meaning through their semantic links to the notion of 'danger'. However, *chayidian*, lit. 'differ (by) a little', later became the most frequent and prototypical member

of the schema, thereby disrupting the association between ‘danger' and the adversity meaning in the schema and lifting the adversity constraint on the VP.

Generalisation

Linguistic obsolescence has mostly been construed as involving competition and replacement: after competition, either (A) an older global usage context (e.g. narrative structure) is replaced by a newer one (Petré 2010 on *weorðan* in English), or (B) an older expression is replaced by a newer one, comparable in function (‘renewal'; see Rosemeyer 2014 on Spanish auxiliaries). However, the loss of the adverse avertive suggests a different story, one that involves generalisation. No newer construction has come to express the adverse avertive function (i.e. no B). The usage context in which speakers express [almost did VP (VP = adverse)] also has not disappeared (i.e. no A): it is still expressible by *chayidian + mei*, but not conventionally. That is, *chayidian + mei* has generalised to the point that it has no inherent adversity.

Conclusion

This paper shows that Prototype Theory is applicable in not only diachronic lexical semantics (Geeraerts 1997), but also diachronic construction grammar (see also Colleman & De Clerck 2011), and obsolescence can be construed as involving generalisation.

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Embedded depictions as multimodal constructions

Recently defined by Clark (2016), depictions are physical scenes people create and display with a single set of actions at a single place and time, for others to use in imagining the scenes depicted. Depictions make up the part of language use where the relation between the semiotic signal and its denotation is iconic, as opposed to symbolic (as is the case for descriptions) or indexical (as is the case for indices). Based on the relation between a depiction and its adjacent or accompanying utterance, Clark further identifies four types of depictions; among them is the embedded depiction, which takes up a syntactic slot in a descriptive utterance. In an example discussed by Clark (ibid.), a movie director recalls filming being interrupted by falcons:

"In L.A., they would have—" He leveled a finger at some imaginary nestlings and made a gun-cocking sound.

Instead of uttering "shot those falcons," the director stages a depiction with manual and vocal gestures where the verb phrase would otherwise be, for the addressee to imagine the depicted scene accordingly.

To facilitate further investigation, the establishment of unit status is crucial. With the multitude of signals often observed in depictions, however, even an operational definition of unit status can be challenging, as the boundaries of the multiple signals rarely coincide. In view of this formal issue, we turn to Construction Grammar (Goldberg, 1995, 2006; Croft, 2001), a framework where function and form receive equal attention, and into which attempts have been made at incorporating multimodality (Steen & Turner, 2013; Zima & Bergs, 2017). Data was examined comprising video-recorded masterclasses retrieved from MasterClass.com, given by three instructors and on three topics. To focus on the interactional aspect of depicting, only segments where the instructor and students interact were investigated. In total, 100 tokens of embedded depictions were collected from ca. 5 hours of data.

In this talk, we will illustrate the aforementioned methodological challenge of unit status definition, before showing how insights from Construction Grammar can inform potential resolution. Specifically, we operationalize "minimal functional unit" for depictions as the smallest unit where the functional temporal boundaries of the multimodal signals of a depiction overlap, be it on the level of phrase, sentence, or turn. This definition allows us to see through the ostensibly "messy" formal features of multimodal depictions, and to operationalize unit status in a consistent and functionally motivated way. Interestingly, numerous *ad hoc* constructions (Brône & Zima, 2014) were observed emerging out of embedded depictions in ongoing discourse, where form and function are paired for specific purposes in interaction, reused, and established as a construction. This dynamic online process highlights how Construction Grammar can indeed enlighten usage-based research on multimodality, and further justifies the definition of unit status for depicting in Construction Grammar terms. Although opinions remain divergent as to whether multimodal constructions truly exist (Ningelgen & Auer, 2017; Schoonjans, 2017), the fact that embedded depictions serve as constituents of canonical verbal utterances argues for multimodal semiotic signals being integral parts of constructions.

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Perfective marking conditioned by transitivity status in Western Mande

A number of Western Mande languages (most Greater Manding varieties and Soninke) use different Positive Perfective construction markers depending on the transitivity status of the clause, as illustrated in (1) and (2) from Bamana. Thus, in Positive Perfective, the verb is marked by the suffix *-rá* ~ *-lá* ~ *-ná* in the intransitive variant of the construction (1a), while the transitive variant (1b) uses the marker *yé* in the post-subject slot. At the same time, in Negative Perfective, the same marker *má* is used in both the intransitive variant of the construction (2a) and the transitive one (2b).

The situation in Western Mande is reminiscent of the well-known TAM-based split ergativity, such as found in Georgian and Basque. However, the Western Mande case is typologically unusual in that the polarity of the clause is relevant in addition to the aspect, while the nominal arguments are not marked for case. At the same time, the transitivity status of a given predication is anyway always obvious in Western Mande due to the rigid SOVX word order and the fact that S and O arguments are obligatory present. A number of functional (DeLancey 1981, Tsunoda 1981), formal (Werner 1996) and "structural" (Cohn 2013) explanations of TAM-based split ergativity have been proposed in the literature.

This paper contributes to the growing body of evidence on the nature of explanation in linguistics by providing a diachronic construction-based explanation of the difference in TAMP marking conditioned by transitivity status in Western Mande. I argue that this differential marking results from a conflation of two different constructions, viz. C1 with mostly resultative semantics that used to function primarily as intransitive and C2 with a more general perfective semantics that used to be largely indifferent to transitivity status. Along with the integration of C1 and C2 as variants of the new construction C', C1 has further specialized as a dedicated intransitive construction, the intransitive variant C'i of the new construction C'; and C2 has become confined to transitive uses as the transitive variant C't of C'.

Bamana

(1) a. *Músá yáálá-lá súgú ˬlá* (intransitive pfv: -rá ~ -lá ~ -ná)

Musa wander-pfv.i market.art at

‘Musa wandered through the market.'

b. *Músá yé súgú ˬyáálá* (transitive pfv: yé)

Musa pfv.t market.art wander

same meaning as (1a)

(2) a. *Músá má yáálá súgú ˬlá* (intransitive pfv.neg - má)

Musa pfv.neg wander market.art at

‘Musa didn't wander through the market.'

b. *Músá má súgú ˬyáálá* (transitive pfv.neg - má)

Musa pfv.neg market.art wander

same meaning as (2a)

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A Cognitive Grammar approach to dynamic uses of *have*

The distinction between a stative (*The chair has beautifully carved legs*) and a dynamic (*We have dinner at Maxim's quite frequently*) meaning of the verb *have* is widely acknowledged (e.g. Quirk et al. 1985: 178). While the stative meaning of *have* has been covered in Construction Grammar approaches within Langacker's (1993, 1995, 1999) description of possession and possessive constructions, the dynamic meaning has so far mainly been discussed within a principles and parameters approach (Ritter & Rosen 1993, 1997), where the aim was to provide a unified account of all uses of the verb *have*.

The aim of this paper is to provide a description of dynamic uses of the verb *have* within the framework of Cognitive Grammar, based on its central claim that grammatical structures are meaningful. This stands in opposition to Ritter & Rosen's (1997: 295) claim that "the lexical representation of *have* has no independent semantic content" and "the various interpretations of *have* are derived from the syntactic structure". Langacker (1999: 182) has proposed that the schematic value of stative *have* is the profiling of a complex reference point relationship that is scanned sequentially and construed as being homogeneous, which means that stative *have* is an imperfective verb. Dynamic *have* also profiles a reference point relationship, but the relationship is not construed as homogeneous. Instead, the establishment of the relationship is profiled, it is thus construed as heterogeneous and dynamic *have* is a perfective verb. This is in accordance with the syntactic behaviour that has been described in the literature (Quirk et al. 1985, Wierzbicka 1982).

After establishing the schematic value of dynamic *have*, the different senses of dynamic *have* when it occurs in a symbolic assembly with a noun phrase will be explained based on data from the BNC and COCA. This will show that there is a cline from control to no control by the reference point (the trajector, which is usually animate). The degree of control depends on the conceptual content and construal of the target (landmark) and the element to which the reference point corresponds in the conceptual content contributed by the target. Thus, we can, for example, explain the different senses ascribed to *have* in *I'm having a bath* vs. *He was having a heart attack.*

Finally, this account of dynamic *have* can be extended in future work in order to explain "causative" (*He had his hair cut*) and "experiencer/passive" (*She had his car stolen*) uses of *have* in even more complex symbolic assemblies.

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Construction Grammar and Cognitive Approach to French Experiencer Object Verb Construction.

Focusing on Extended Dative Construction (EDC, cf. Leclère1978) with Experiencer Object Verbs (EOVs), such as (1)*Cela me réjouit le coeur*(lit. ‘it delights the heart on me') in which experiencer argument is in indirect object position and its inalienable possession argument is in direct object position, this paper aims to show that some EOVs are connected with non-EOVs by means of construction's schematic feature and to argue that EOVs do not constitute an independent category, but a node in constructional network with other verbs and constructions.

Traditionally, Lexical Semantics (LS) has dealt with EOVs because of their mysterious projection of the theta role onto the syntax (cf. Postal1971, Pesetsky1995). Following LS, it is the verb that determines the whole sentence form and meaning. However, with in this theoretical framework it is hard to explain the phenomena as the example (1). Compared with another example with the almost the same meaning such as (2)*Cela me réjouit*(lit.‘it delights me'), the example (1) has an additional argument (i.e. an extended dative)(cf. Ruwet1993). As a EOV, *réjouir* does not take third argument in general and the experiencer is in direct object as the example (2) (Accusative Construction, AC). To this syntactic difference is added another question about semantic difference between them. LS approach does not allow us to explain this constructional alternation and the difference in meaning.

Based on Construction Grammar (CG) and the Cognitive framework, the syntax and semantics of sentences of the type (1) are supposed to share the same schematic constructional feature (i.e. EDC) with other constructions (cf. Goldberg1995, Langacker2005). In fact, the EDC, conceived as a schematic construction, seems to include not only psychological events, but also other events involving physical contacts (e.g. *Paul m'a cassé le bras,* ‘lit. Paul broke the arm on me') or sensation (e.g. *Le soleil me cuit le dos,* ‘lit. the sun burns the back on me'). These constructions are interrelated in that the extended dative plays the same role expressing the affectee, and the construction of psychological events is distinguished from that of physical contacts by low transitivity on one hand, and from that of sense events by the metaphorical shift of interpretation of body parts on the other hand; in the sense event such as *le soleil me cuit le dos*, the physical part ‘the back' is semantically activated, but in the psychological event such as *cela me réjouit le cœur*, it is not the body part but the expriencer's psychological domain that is semantically activated. However such metaphorical shift does not exist in all constructions involving EOVs as the

EDC and AC alternation indicates. In the exampe (2) there is no metaphorical shift for its interpretation; the experiencer is construed directly as affected participant.

Consequently, the psychological events expressed by EVOs are construed differently according to the constructions types and constitute a node in constructional network with other verbs such as *casser* and also with different types of constructions such as EDC and AC.

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Parfait surcomposé, unicité et variété : Une approche contrastive allemand-anglais-français des formes surcomposées [AVOIR EU PP]

Parfait surcomposé, unicité et variété :

Une approche contrastive allemand-anglais-français des formes surcomposées [AVOIR EU PP]

Nous proposons ici une approche du parfait surcomposé en termes de constructions : phénomène linguistique relativement rare, essentiellement ignoré par les grammaires traditionnelles aussi bien en allemand et en anglais qu'en français, il est pourtant attesté dans les trois langues. Souvent décrit comme régional et familier[1] (Wilmet : 2009), il s'observe pourtant chez des auteurs littéraires classiques :

(1) Enfin à quatre heures, nous en **avons eu fini** (S. de Beauvoir).

Et si la surcomposition a régulièrement suscité l'intérêt des linguistes (cf. par ex. Schaden : 2009, Haß : 2016), une majorité de travaux se contentent d'exemples fabriqués : c'est que les exemples attestés, heuristiquement plus riches, sont aussi plus difficiles à collecter sur les corpus non-annotés, sur lesquels les requêtes génèrent un bruit important.

Cependant, ce que montre par exemple une recherche à partir de « had had », en anglais, c'est que cette construction apparaît associée à des verbes particuliers dans des emplois particuliers : ainsi, le verbe *try* semble associé à l'idée de suicide :

(2) She said her brother **had had tried** to self harm in previous years. (Daily Mail, GB)

(3) By 1993, she **had had tried** to commit suicide several times. (Blog australien)

(4) He **had had tried** to hang himself from a tree. (Blog américain).

Mais des observations sur l'allemand dans un sous-corpus étiqueté du DeReKo (corpus de référence de l'allemand) sont encore plus étonnantes, puisqu'on y trouve pas moins de 2 250 occurrences de parfait surcomposé dans la presse, pratiquement toutes dans la même

construction modale (*Konjunktiv II*) et la très grande majorité, bien que de différentes sources, avec le même verbe, *verdienen* (*mériter*) :

(5) Wir **hätten** einen Sieg **verdient gehabt**. (*Nous aurions eu mérité de gagner*)

(6) Sie **hätten** mehr als einen Punkt **verdient gehabt**. (*Ils auraient eu mérité plus d'un point*).

On voit donc l'intérêt d'une approche de ce phénomène dans le cadre d'une grammaire de construction pour rendre compte, d'une part, des constructions schématiques qui s'associent autour de ce parfait surcomposé et de leur sémantique spécifique[2], et d'autre part de l'attraction particulière de certains emplois, liés à certains lexèmes et à certains types de textes, qui demandent de ne pas se limiter à une sémantique « abstractionniste » (Legallois & Patard : 2017). Dans ce cadre, en étudiant les contributions respectives des constructions et de leurs composants, en particulier des verbes, nous rendrons compte de l'intégralité des occurrences de la construction [AVOIR EU PP] présente dans le DeReKo (Tagged-C), Frantext[3] et le COCA, tant quantitativement que qualitativement.

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[1] Pour ce dernier point, il s'agit probablement d'une confusion entre oralité et registre familier.

[2] Analysée selon un modèle néo-reichenbachien faisant appel également à Vendler pour l'aspect lexical.

[3] Frantext n'étant pas étiqueté, le langage de requête génère beaucoup de bruit pour les occurrences de la construction [AVOIR ETE PP], ce pourquoi nous nous sommes limité à l'étude de la variante *avoir* et homologues dans les trois langues.

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Contribution of L1 Constructional Repertoire to L2 Statistical Preemption: Korean EFL learners reject ‘The lifeguard swam the boy to the shore' more strongly than Chinese EFL learners

Recent L1 studies have discovered that the availability of competing alternative (CA) expressions inferred from frequent input leads to the acceptability of creative expression. Thus, while a novel formulation (e.g., *the magician disappeared the rabbit*) is disallowed if it is expected to be consistently replaced by a more readily available CA expression (e.g., *the magician made the rabbit disappear*), a creative expression (e.g., *the lifeguard swam the children to the shore*) is judged to be acceptable if it is not expected to consistently be replaced by a more appropriate alternative construction paired with the given verb.

The present study explored whether grammatical judgment on L2 creative formulation resorts to the frequency distribution of L1 verb-construction compatibility? The participants of the study were novice-level learners of English as a foreign language with two different L1 backgrounds. The one is the EFL learners with L1 Chinese, where intransitive verb (e.g., swim) is allowed to be incorporated into caused-motion construction (e.g., *ba*-construction) and the other is those with L1 Korean, where such verb-construction pair is ‘*statistically preempted*' (or consistently constrained) by a readily-available CA expression (e.g., bi-clausal intransitive construction).

Experiment 1 asked the Korean-speaking (N=34) and Chinese-speaking (N=35) EFL learners to participate in an English paraphrasing task, and investigated whether they transferred their L1 constructions in generating L2 constraints. A test item was judged as “has-CA” (or constructionally acceptable novel formulation) when more than fifty percent of the participants consistently agreed that it had a better paraphrase. Otherwise, a test item was accepted as “no-CA” (or constructionally acceptable novel formulation). The results confirmed that caused-motion constructions with L2 intransitive verbs (e.g., S-Vi-NP-PP) were disallowed if such formulation was restricted in the learners' L1 system; Korean participants showed a tendency to replace such novel formulation of English caused-motion construction with L1 canonical bi-clausal intransitive construction, while Chinese participants accepted them.

Experiment 2 examined how Korean/Chinese EFL learners used English *statistical preemption*. Results of Acceptability Judgment Test (AJT) by L1 Korean (N=165) and Chinese (N=73) EFL learners were analyzed using a linear mixed model (*lme-4*) in R software. The results of Experiment 1 allowed us to hypothesize that Korean EFL learners would give better performance in English *statistical preemption* than Chinese EFL learners. The results of Experiment 2 confirmed the hypothesis: Korean EFL learners failed to reject ungrammatical (has-CA) English sentences with high-frequency verbs, while Chinese EFL learners and English native speakers successfully rejected.

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What does not kill us, tears us apart: Accusative Subject Verbs in Russian

Unlike dative subjects, accusative subjects have remained an under-researched topic in the field of noncanonical case marking of subjects. Such structures are found abundantly in Old Germanic, but are less represented in other early IE languages. Modern Russian has an abundance of such constructions, although the question of how to account for them remains controversial. Some researchers view them as another sub-type of oblique subjects (Barðdal & Eythórsson 2009), while others argue that clauses containing such structures must be separated from dative subjects and treated as null subject cases (Zimmerling 2013).

The goal of this presentation is to investigate how such structures arise and to provide a constructional analysis of that development, focusing on three types of Nom–Acc alternations in Russian, as shown below.

(1) Eto menja unichtozhajet

this.NOM me.ACC destroy.3SG

'This destroys me'

(2a) Eto menja ubivajet

this.NOM me.Acc kill.3SG

‘This kills me'

(2b) Menja ubivajet, chto ty ne prishel

me.ACC kills.3SG that you not come.PST.3SG

‘(It) kills me that you didn't come'

(3a) Eto menja razryvajet

this.NOM me.ACC tear.apart.3SG

‘This tears me apart'

(3b) Menja razryvajet ot gorja

me.ACC tear.apart.3SG from grief.GEN

‘I'm torn apart with grief'

The first type is a simple transitive clause (1) with a verb that can only be used with a nominative subject and an accusative object. Type (2b) will be shown to be a transitive clause with a dropped subject and a relative clause originally dependent of that dropped nominative. The example in (3b), however, is a true ‘accusative subject', an anticausative variant of the transitive in (3a). One of the differences between (3b) and (2b) is that relative clauses cannot depend on (3b), as in (2b), suggesting that there is no dropped nominative:

(4) * Menja razryvajet, chto ty ne prishel

me.ACC tear.apart.3SG that you not come.PST.3SG

While the virtual absence of clauses of the (3b) type in Old Russian may be explained by the features of the corpus, their scarcity even in early 18th century texts suggests that it is a relatively recent development.

The traditional discussion characterizes the verbs that can participate in the constructions of the third type as verbs that denote events and situations that are outside of the Patient's control (Mel'chuk 1979). This, however, is far from representing the full picture: all three verbs have a similar primary meaning, and there is no control over the event in any of the three examples.

I argue that in the course of the history of the Russian language several semantic classes emerged participating in these alternations, and that the syntactic types are distributed according to the semantics of the verb. New metaphorical meanings of the type in (2a) and (3a) called for anticausative usage – and the grammatical differences between (2b) and (3b) are those of the different stages of the process that leads to the emergence of accusative subjects.

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The dative alternation revisited: The role of verb polysemy in constructional profiling

The present study employs quantitative corpus methods to investigate the interaction between the semasiological structure of a single verb and the onomasiological structuring of the dative alternation. The verbal category examined here is *give* in English and *dać* in Polish. The specific method used is known as the profile-based approach – a combination of multifactorial qualitative analysis with multivariate statistical modeling (Geeraerts *et al*. 1994; Gries 2003; Bresnan *et al*. 2006; Glynn & Fischer 2010; Glynn & Robinson 2014).

The primary objective is to examine the relationship between morpho-syntactic variation and lexical semantic variation. More specifically, the study addresses the importance of accounting for variation in semasiological *lexical* structure while modeling morpho-syntactic structure. It is argued here that the polysemous nature of lexemes licensed by constructions has an impact on the choice of alternate constructions. In other words, some meanings of a given lexeme are likely to be more distinctly associated with one construction than the other. The study employs quantitative modelling to test this hypothesis.

The alternation under investigation obtains between two dative constructions illustrated below:

(1) [VERB + RECIPIENT+ THEME]

a. *She gave* [*Peter* NP RECIP] [*the keys* NP THEME].

b. *Dała* [*Piotrowi* DAT NP RECIP] [*klucze* ACC NP THEME].

(2) [VERB + THEME + RECIPIENT]

a. *She gave* [*the keys* NP THEME] [*to* [*Peter* NP RECIP]PP].

b. *Dała* [*klucze* ACC NP THEME] [*Piotrowi* DAT NP RECIP].

The difference between the two constructions lies in their word order. In English, the construction in (1a), where the recipient precedes the theme, is known as the double object construction. The other construction in (2a), where the order of participants is reversed, is

known as the prepositional dative. In Polish, both alternates are double object constructions and case marking is used to differentiate between the two arguments.

The present study has a number of descriptive goals. In the most general terms, the objective is to test the findings of Bresnan *et al*. (2006) for the dative alternation in English. However, there are a number of important differences. Firstly, based on the assumption that semasiological variation of the predicate contributes crucially to the onomasiological structuring of constructions, this study includes lexical semantic contribution of the lexeme to the constructional profiling. Bresnan *et al*. (2006) exclude polysemy from their final logistic regression model by treating it as a random variable. To make this inclusion feasible, the analysis here is limited to only one lexeme. Secondly, in order to verify the results for English, the study employs a different type of data: web-based diaries. Finally, the analytical tools will also be applied to another language, Polish.

In this study, the data amount to over 600 occurrences of the two constructions in Polish and American English. The observations were extracted from the *TenTen* corpus (Sketch Engine, Kilgarriff *et al*. 2014). The data were manually annotated for a set of factors found significant in prior research. In addition, the examples were tagged for verb sense. The findings obtained through multivariate statistical modeling demonstrate that the semasiological variation of the lexeme is an important predictor of the choice between the dative constructions in both English and Polish.

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On the Emergence of Modal Copula Constructions in Korean

In Contemporary Korean, two types of so-called Copular Noun Phrase Complement Construction(Verb-l Noun-ida) can be found. While in both types the head noun is used as a predicate noun with a post-nominal copula it can appear either as a bound or as a free noun morpheme. Depending on the meaning of the noun and the adnominal ending used in the construction, it can convey various modal meanings. In this paper, I will specifically discuss constructions concerned with the modal meaning of ‘intention' like the ones below.

1st type: Nae-ga jib-e ga-l teo-ida.
I home go ‘Bound Noun'-be. (I am about to go home)
2nd type: Nae-ga jib-e ga-l gehwek-ida.
I home go plan-be. (I am planning to go home)
Both the 1st and the 2nd type of this construction allow a modal reading, namely ‘speakers intention'. In the case of the former, a bound noun morpheme is semantically bleached and its use is usually constrained to this particular construction, which also lost its originally transparent syntactic structure due to the grammaticalization process this construction as a whole underwent. In the case of the later, even though only free nouns are allowed the syntactic structure of the whole construction still displays some degree of idiosyncracy, which can only be explained through its relation to the former one.
Based on the data from The Historical Corpus of Korean Language we can see that the first instances of the 2nd type Cnx coincide in time with a period of spike in the number of types of the 1st type Cnxs. Therefore the 2nd type Cnx which has been traditionally considered to posses an inherently distinctive syntactic structure is in fact a product of speakers' effort to reanalyze a group of grammaticalized idiosyncratic Cnxs by reassigning certain semantic features(+intention) to the [N] slot originally taken by a semantically bleached bound noun morpheme.
Meanwhile being primarily concerned with the cline along which the construction moves as grammaticalization progresses the research on grammaticalization tends to explain the whole spectrum of the changes involved within a simple “syntactic string to grammatical morpheme” direction and fails to encompass the paradigmatic relations being established as more and more types of this construction appear. In this respect, I will demonstrate that a Construction Grammar based approach proves to be significantly useful as it allows us to account for the emergence of the 2nd type Cnx by establishing its taxonomical relation with the 1st type Cnx via overarching schematic construction. Such schematic construction could have been constructionalized as a result of the increase in types of the 1st type cnx. In turn,

we can argue that even though each of these 1st type Cnxs underwent routinization and chunking with a subsequent loss of its original syntactic structure a sufficient number of such constructions facilitated the possibility for new schematic constructions with a new syntactic structure to arise. Thereby a new productive modal shematic construction was born due to speakers' ability to form generalizations over a group of idiosyncratic constructions.

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Modeling Relations and Constraints in the FrameNet Brasil Constructicon

This work presents how relations and constraints are modeled in the FrameNet Brasil Constructicon (FNBrCcn), a resource developed to account for phenomena not captured by lexicographic analyses. After the implementation of the Constructicon, two relations were created. First, to develop the notion of constructional network, the Inheritance relation between constructions was modeled, following Kay & Fillmore (1999). Without it, the Constructicon is no more than a list of constructions, losing capacity of generalization and economy. Another important relation to be implemented was the Evokes Relation, capturing the cases in which a construction evokes a frame. Thus, in such cases, a Construct Element (CE) is linked to the Frame Element evoked, as well as the construction itself is connected to the frame evoked. However, some aspects of constructions go beyond the generalizations captured by inheritance and the semantic import represented in terms of frames. As an example, consider the Inceptive Aspect Construction (IAC) in (1) and (2).

(1) Ele rompeu a chorar

He break.PST.3SG to cry.INF

He burst into tears

(2) *Ele rompeu a pensar

He break. PST.3SG to think.INF

**He burst into thinking*

This construction is formed by a VPfin followed by an VPinf, which, in turn, may or may not be headed by a preposition. The VPfin slot can be filled by a variety of verbs that are not typically aspectual such as *entrar 'enter' and romper 'break'*. Sigiliano (2011) shows that semantic types occurring in the VPinf slot are correlated with Vfin, for instance, aspectual markers such as *romper* can only take verbs of emotion, motion and action as Vinf in this

construction. To model that and other types of properties constructions may have, a property editor was added to the FNBrCcn. Through this tool, analysts can easy model aspects such as:

- the order in which CEs must appear: for the IAC, the Vfin CE must come *before* the Vinf CE;
- whether a given CE is *optional* or not: the preposition heading the Vinf is marked positively for this property;
- the necessary adjacency between two CEs: for those cases where there is a preposition, no intervenient material can appear between it and the Vinf;
- the LUs that can fill a CE: this property can be implemented in three different levels, depending on whether only specific LUs can fill a given slot, or if all the LUs evoking a frame or a family of frames are accepted. For the IAC, specific LUs can fill the Vfin slot, while all the verbal LUs in the frames related to the emotion, motion and action domains, for example, can appear as Vinf;
- the constructions licensing each CE: in the IAC, different types of VP constructions license the CEs.

It is important to notice that modeling relations and properties in the FNBrCcn is significant for the resource improvement, and also for displaying the mechanisms needed for many computational applications, such as constructional parsing, for example (MATOS ET AL., 2017).

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Towards an image schema diachronic study of the fi [fy] (‘in') constructions in Tunisian Arabic

The aim of this work is to study the cognitive causes that led to the grammaticalization and meaning extension of the preposition *fi* in Tunisian Arabic. The equivalent of the preposition *fi* [fy] (‘in')) has been studied in other languages: English (“in”) (Evans & Tyler, 2003), French (“dans”) (Vandeloise, 1986) and Classic Arabic (“*fi*”) (Esseesy, 2010). The comparison of those studies with the present one could help to get more accurate results. We hypothesise that the container image-schema (Johnson, 1987) is a universal one and can be the origin of the etymological meanings and meaning extension of the preposition *fi* (‘in').

The study is corpus based: the *Tunisian Arabic Corpus* (859,814 words), and *TuniCo* (34.798 wordforms) (“TUNICO,” 2016) in order to study the frequency of use of the different meanings of the preposition *fi*. Our methodology refers to a Diachronic approach of Construction Grammar (Hilpert, 2013, 2016).

Fi in Tunisian Arabic results from the grammaticalization of the word *fam* (‘mouth') in Pre-classical Arabic (before 7th century) (Esseesy, 2010). We propose that, as a preposition, *fi* has undergone several meaning extensions from the prototypical container image-schema (1) (Navarro I Ferrando, 1998), extensions partly based on:

1a.Prototypical spatial meaning total enclosure (Vandeloise, 1986 et Ferrando I Navarro, 1998):

ياناه يـف تيبـلا

hāny fy ālbyt.

I'm in the-badroom.

‘I'm in the badroom.'

1b.Extended spatial meaning (partial enclose):

ياناه يـف جهن يجنوم يالب

hāny fy nahğ monğy bāly.

I'm in street *Monji Bali*.

‘I'm in the street of *Monji Bali*.'

1c. Further abstraction of the extended spatial meaning (no physical enclose):

ال‌حرث فـي هاني

hāny fy ālḥarṯ.

I'm in the-plow.

‘I'm in the plowed field'.

The second group (2) of meaning extension that the preposition has undergone is due to the conceptual metaphor (Lakoff & Johnson, 1980) “time is space”.

2.a time is space (Evans, 2013):

درج فـي جا

ǧā fy draǧ.

came-he**past** in step-one.

‘He came after five minute'.

2.b A progressive aspectual marker that is the result of a meaning extension from the time meaning of the preposition *fi* (McNeil, 2017; Ritt-Benmimoun, 2017). McNeil have studied this progressive meaning in Tunisian Arabic and Ritt-Benmimoun in the Southern Tunisia Dialect:

جريدة فـي نقرى

naqrā fy ǧaryda.

I-read**present** in newspaper.

‘I'm reading a newspaper'.

Putting the sentence in the future tense or in the past tense will lead to the removal of the aspectual marker *fi*:

جريدة قريت

qryt ǧaryda.

read-I**past** newspaper.

‘I read a newspaper'.

The third group of meaning is due to the conceptual metaphor “**states are locations”** (3) (Evans & Green, 2006, p. 299) or, after the “addition of the Container [image] schema to states are locations”, **“states are bounded regions or containers”** (Dancygier & Sweetser, 2014, p. 47):

دیپریسیون فـي طحت

ṭoḥt fy dyprysywn.

fall-I**past** in depression.

‘I fell into depression'

Furthermore, based on (Blank & Koch, 1999; Geeraerts, 1997; Winters, Tissari, & Allan, 2010), we hypothesise that cognitive linguistics theories can help to explain language evolution.

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The Brazilian Portuguese Constructicon and the use of Universal Dependencies for multilingual alignment of Constructicons

The Brazilian Portuguese Constructicon has been developed by FrameNet Brasil, in parallel with the network of frames defined for this language. One of the goals of the the BP Constructicon is the development of analysis towards a multilingual alignment through an interlingual comparison of constructions and constructicons. The first step of this attempt was a bilingual comparison, between the entries in the Berkeley Constructicon and possibilities in Brazilian Portuguese (Laviola 2015). The results showed that the languages are comparable, but it was necessary a more accurated methodology not only based in the comparison of examples. Then, it was proposed a definition of criteria to compare constructions in different languages. Lyngfelt et al (no prelo) did this based in a trilingual comparison among English, Brazilian Portuguese and Swedish, in which the Berkeley Constructicon entries were compared in the two other languages based in four criteria, regarding to their form and function. This kind of analysis aimed to map similarities and differences between constructions (and constructicons) in different languages and try to solve questions that emerge regarding to an approach towards an interlingual constructicography. The next step is the definition of the methodological approach to connect the resources computationally. Therefore, in this work, we aim to show a proposal of using Universal Dependencies (UDs) in the constructicon database to help with the connections of Constructicons through the comparison of annotated sentences for each language. UDs can be defined as typed dependency relations between words in which any given word in a sentence is the dependent of another (Universal Dependencies 2016). The dependency relations aim to maximize parallelism by allowing the same grammatical relations to be annotated in the same way across languages. Thereby, this work seeks to show in which way UDs could be added to the Constructicon in order to favor the multilingual alignment intended by the BP Constructicon.

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C'est très théâtre. On the rise and expansion of a productive category-changing construction in French

This talk deals with the [Degree Adverb + N] construction in French, as illustrated in (1):

(1)	*C'est*	*très théâtre, c'est-à-dire*	*très*	*faux*
	It is	very theater, that means	very	fake

'it is very theater-like, that means very fake'

In present-day French, this Cx appears as a powerful means to contextually recategorize nouns into adjective-like elements. It allows speakers to describe a referent in terms of a vague resemblance with another entity. This construction, which has often been considered 'incorrect' in the prescriptivist tradition, has already been studied from a synchronic point of view (author xxx; López Díaz 2008). It is often mentioned (or one of its cognates) in papers on category change and coercion (Gaeta 2014, Audring & Booij 2016). By contrast, it has never been studied from a diachronic point of view. The diachronic perspective is interesting, however, since it reframes the coercion-debate in terms of (increasing) syntactic productivity and its underlying measures (Baayen 1993, 2009; Barðdal 2008, Zeldes 2012).

In order to find relevant instances of the construction (and its 5 subconstructions), I performed searches in the (literary) Frantext corpus on 5 degree adverbs (*si, très, trop, plus* and *assez*) followed by a noun, excluding intrinsically dual-life forms that have both nominal and adjectival status. The Cx has been oberved from 1700 onwards. In addition, exhaustive lexical searches have been performed for the period 1560-1620 to formulate some hypotheses on the origin of the construction. Finally, I checked in a webcorpus, viz. the French Ten Ten corpus of the Sketch Engine family (Kilgarriff *et al.,* 2014), if the ongoing evolutions are being continued in present-day French.

This research has led to a series of interesting findings, both with respect to the origins and the development of the [Degree Adverb + N]$_{Cx}$. The pattern started out as an extension of the [Degree Adverb + Adj]$_{Cx}$ construction, under the analogical pressure of a family of

bicategorial [+ human] nouns, e.g. *ami* 'friend'. This 'multi-source' origin was supported by some higher-order typological properties of Old and Middle French. The investigation of the usual productivity parameters (type fq, hapax fq, type/token ratio etc.) and the relative weight of the semantic filler classes (inanimate nouns, proper nouns, etc.) shows that during the 19th Century, the [Degree Adverb + N]$_{Cx}$ became more and more productive. This observation is corroborated by some qualitative changes. At the same time, the construction got 'rid' of the core of its lexical inheritance, reducing the weight of - productivity-inhibiting - highly-token frequent types in its frequency spectrum. These changes in productivity clearly document a gain in schematicity (Langacker 1987), and hence, upward strenghtening (Hilpert 2015).

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Diachronic frame analysis: The Purpose frame in French

Theories of semantic change have struggled to strictly define metonymy. In metonymy, including metonymic change, one item represents another item with which it is contiguous. Outside the domain of physical location, however, it can be difficult to define contiguity, and therefore difficult to delimit the scope of metonymy (Radden & Kövecses 1999). One approach has been to use the concept of frames, where metonymy is the use of one frame element (FE) to stand for another in the same frame, and metonymic change involves shifts in the FEs licensed by a given lexical unit (Blank 1999, Koch 1999). This is an attractive proposal, in part because for those frames that have been analyzed as part of the FrameNet project, the FEs have already been defined and documented. However, work in Frame Semantics (Fillmore 1982) has been primarily synchronic, leaving the validity of this proposal in question. Also unexplored are the possible constraints determining which FEs may stand for which others, and how shifts in the meaning or valency of one lexical unit may affect other lexical units that evoke the same frame. This paper presents a preliminary case study of a diachronic frame analysis in the aim of exploring these questions.

The ASFALDA French FrameNet project (Djemaa et al. 2016) contains 105 frames. Of these, I selected the Purpose frame for analysis because it contains a manageable number of lexical units (17), most of which have undergone semantic change since Old French as documented by etymological dictionaries. I extracted the sentences containing these lexical units from two corpora: the ARTFL-FRANTEXT (ATILF, CNRS, ETS) for the years 1600-1999, and a 2009 French corpus from the Leipzig Corpora Collection (Goldhahn et al. 2012). I separated the data into half-century periods, annotating 10 sentences within each for each lexical unit, according to the annotation methodology used by the French FrameNet team (Candito and Djemaa 2017). An example of an annotated sentence from the corpus is provided in (1).

(1) *Après* [Agent*ils*] *ont AMBITIONNÉ*Target [Goal*la pairie*]. (Saint-Simon, 1700)

'Next they coveted the peerage.'

From these annotations, I assembled valence patterns for each lexical unit, comparing them across time periods. The data show a change in the instantiation of the Means FE, which denotes an act performed by the Agent to achieve the Goal. In the early 17th century, Means is instantiated in the target's syntactic locality in 12% of sentences. By the 21st

century, that number has more than doubled to 29%. Nouns lead the change in early time periods, but it has now spread throughout the frame to adjectives and verbs. This finding exemplifies the advantage of diachronic frame analysis, as changes in frame structure affect the semantics of many lexical units. It also lends support to the frames approach to metonymy, as within this frame it appears that a metonymy of Means for Agent is active and has become more widespread. This approach therefore represents a promising new type of historical semantic analysis.

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Lexico-grammatical alignment in metaphorical constructions

It has been observed that semantic dependency relations, manifested in syntactic structure, correspond to and explain metaphorical lexicalization processes. For example, absent context, certain combinations of economic lexis in noun-noun compounds will be understood as metaphorical (*investment climate*, *debt storm*) while the reverse ordering will not (*climate investment*, *storm debt*). Due to the structural role of the source domain, Sullivan (2007, 2013) proposes that syntactic predicates should align with source (not target) lexis from set conceptual metaphors, but her hypothesis has yet to be tested at scale. Our paper is the first we know of to empirically examine asymmetries by cataloguing a large collection of corpus data. By preselecting established metaphors and then searching for lexical patterns, we invert the common approach to metaphor study. Our results support her predictions –metaphorical lexico-syntactic alignment is not haphazard.

Building on Lederer (2016), we take source and target domain seed language from conceptual mappings in economic discourse (money is liquid; economy is a ship; economy is a weather event; economy is an (ailing) body) and record the specific patterns of how metaphorical pairs align in five syntactic constructions: A-NP, N-N, NP-of-NP, V-NP, and X is Y. Using the Corpus of Contemporary American English (Davies 2008-), our examination includes 12 frequent metaphorical target triggers combined with 84 source triggers to produce 2,016 ordered collocations, i.e. *investment freeze* and *turbulent market*. Coding for metaphorical usage followed the widely used MIPVU procedure (Pragglejaz Group 2007; Steen et. al. 2010), totaling approximately 13,000 manual searches (up to five intervening wild card between each source-target pair) and resulted in a database of 9,001 phrasal tokens representing 331 out of 1,008 possible pairing types.

Source domain lexis disproportionally fills predicational positions, while target lexis primarily fills argument roles. Of the 530 pairing configurations, 95.8% of type and 98.4% of token counts follow the expected alignment. (See Table 1.) Thus, given a lexeme's origin -source or target- we can predict, with a high degree of accuracy, syntactic alignment when used in metaphorical phraseology: *market climate* is metaphorical, *climate market* is not. We explain exceptions to these strong tendencies through genre-specific lexicalization processes in

which predicational terms like *bubble* (*market bubble*) establish themselves as domain modifiers (*bubble market*).

We discuss several implications for syntactic and semantic theory in addition to automated approaches to metaphor identification. The predicational versus specificational role of adjectives, for example, nicely predicts metaphorical domain origin and vice versa in A-NP constructions (a relationship mirrored in N-N and NP-of-NP sequences). Moreover, our results show, in fact, that the vast majority of metaphorical co-selection is encoded within syntactic subjects or predicates (A-NP, NP-of-NP, N-N, V-N) not across syntactic subjects and predicates (X is Y). Finally, ordering asymmetries in metaphorical construal confirm the unidirectional nature of cognitive bindings in conceptual metaphor (Lakoff and Johnson 1980) –evidence against the notion that metaphor construal results from simple frame mismatches in cognitive processing (cf. David et al. 2014), confirming the important role of metaphor ontologies in designing a comprehensive approach to metaphor analysis.

Table 1. Metaphorical source (S) and target (T) trigger alignment across five syntactic constructions.

Construction	Sullivan's Prediction	Type Count	Token Count	Example collocations
A(predicate)(T)-N(S)	No	0	0	
A(predicate)(S)-N(T)	Yes	86	1,091	*sinking stock prices*
A(domain)(S)-N (T)	No	1	1	*oceanic market*
A(domain)(T)-N (S)	Yes	91	4,088	*financial aches and pain*
V(T)-NP(S)	No	7	27	*rate US business conditions*
V(S)-NP(T)	Yes	83	858	*cure their debt*
N(T)- N(S)	Yes	90	1114	*investment waters*
N(S)-N(T)	No	8	99	*bubble economy*
NP(T)-of-NP(S)	No	5	8	*rate of a normal recovery*
NP(S)-of-NP(T)	Yes	126	1010	*sea of money*
Copula X is Y (T is S)	Yes	32	174	*prices are frothy*
Copula X is Y (S is T)	No	1	1	*The remaining cloud is corporate debt*

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Conventionalization in spoken discourse: the case of right dislocations in Czech

Right dislocations (henceforth RDs) have received a wide attention of linguists over the last decades, mostly in Romance and Germanic languages (see e.g. Ashby 1988, Auer 1991, Averintseva-Klisch 2008, Brunetti 2009, Villalba 2011, Crocco 2013), much less so in Slavic languages (see e.g. Duszak 1984, Franks 1995, Krapova & Cinque 2005). In our contribution, we adopt a construction-based, discourse approach to RDs extending the originally predominantly syntactic analysis of the phenomenon to its various discourse functions. In accord with the previous research, we expect RDs to refer to discourse-given topics. However, it is commonly assumed that RDs are structurally atypical in Slavic languages and thus marginal in usage. We provide arguments against this claim in a case study on salient prosodic features of RDs in Czech spoken discourse. First, we present a number of corpus-based data (extracted from the corpus ORTOFON, Komrsková et al. 2017) in order to show that Czech speakers use RDs in conversations similarly to the languages that are well studied in this respect.

Particularly, we focus on whether Czech users have developed a consistent way of marking RDs prosodically (by pitch or accentuation). We have conducted a reading production experiment inspired by the Kalbertodt et al. 's (2015) study on RDs and categorially akin afterthoughts in German. Our pilot research focused uniquely on prosodic features of RDs in Czech. The stimuli comprised 2 sets of 72 items in total (24 targets and 48 fillers), each item consisting of a short transcribed extract of a naturally attested Czech dialogue containing RD. The stimuli were adapted in order to reach their mutual homogeneity with respect to the length in words and syntactic complexity. The procedure consisted of audiotaped reading of the stimuli by 30 participants divided into 2 groups. The recorded data were first transcribed and coded by 2 independent annotators for prosodic features, namely pitch range, phrasing and accentuation patterns and then a mixed-effects model was fitted using these variables.

The RDs produced by participants were distributed along a continuum with 2 distinct and opposed prosodic patterns: the first was characterized by low pitch and accent and the absence of a boundary between the matrix clause and the RD, the second was marked by a distinctive pause and middle values of the two remaining variables. In fact, the former pattern resembles to RDs in German, whereas the latter to German afterthoughts (cf. Kalbertodt et al. 2015). These findings may suggest that RDs in Czech have not yet fully conventionalized to a prosodically consistent construction, oscilating between a common RD realization on one side and a more general pattern, recognized in other postponed

constructions in Czech, such as afterthoughts or repairs. In order to verify this assumption, a follow-up study surveying all the mentioned categories is needed. On a general level, we advocate a more thorough and systematic study of naturally attested spoken interactions which may challenge the traditionally reproduced claims about inter-language variation.

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Stay where you walk. Durative light verbs in Odia

In this paper, we present our constructional account of light verb constructions in the Indo-Aryan language Odia (earlier known as Oriya). These light verb (LV) constructions are asymmetric complex verb predicates of the form *V-i-v*, combining a main verb (*V*) with a light verb (*v*), joined by the linking morpheme *-i*. In Odia, there are 10 'true' LVs:

(1) motion verbs: *-jā* '-go', *-tʃāl* '-walk', *-paḍ* '-fall', *-pakā* '-drop', *-uʈh* '-rise', *-ās* '-come'
(2) stative verbs: *-bas* '-sit', *-rah* '-stay'
(3) transfer verbs: *-ḏe* '-give', *-ne* '-take'

While the LVs are form-identical with a lexical verb, they have lost their original lexical content as well as their argument structure. Taking a constructional approach, we argue that LV constructions present a coherent system of event modulators, as shown in Figure 1 (appendix). First, ***all*** LVs modulate the interpretation of the event encoded by the main verb by adding a particular aspectual (phasal) profile on the event (onset, duration or completion). Secondly, ***some*** LVs further add a mirative interpretation, i.e., they express that the event is unexpected or not supposed to have happened. These 'aspectuo-mirative' LVs can be characterised as non-parasitic expressions of mirativity (T. Peterson 2015) whose main purpose is to express surprise, as opposed to parasitic expressions where pragmatic inferencing may lead to a mirative interpretation.

In complement to our earlier work on these aspectuo-mirative LVs in Odia (AUTHOR 2017, forthc.), this talk presents our corpus-based analysis of the four ***durative*** LVs *-ās* '-come' *-rah* '-stay', *-bas* 'sit', *-tʃāl* '-walk', illustrated in examples (1a-c) (see appendix). Strikingly, they never express mirativity. This is due, we hypothesize, to absence of differentiation between the states within the event profile, as opposed to the LVs profiling onset or completion, where the difference between successive states can be seen as triggering the surprise reading.

The distribution of the four different LVs cannot be explained easily, as there do not appear to be any specific and strict constraints based on features such as transitivity, telicity,

semantic class, agent or event type, etc. However, the corpus data reveal some tendencies (partly confirmed by a collostructional analysis). In general, the LVs -*bas* ‘-sit' and -*rah* ‘-stay‘ often occur with the perfective, profiling the end state of a process that continues on (see examples in (2)). More specific tendencies are the following:

- -*rah* ‘-stay‘ has a preference for ***states*** (‘wait', 'live', ‘be depressed'), ***contact verbs*** (‘be touching', ‘be attached', ‘be covered'), and ***perception verbs*** (‘watch', ‘look');
- -*tʃãl* ‘-walk' has a preference for ***change of state verbs*** (‘increase', ‘swell', ‘develop') or ***motion verbs***;
- -*as* '-come' also prefers motion verbs and is often used in contexts where something has started in the past but continues up to the present;
- -*bas* ‘-sit' has a preference for Agentive verbs.

As far as we know, our constructional account of these LVs presents the first comprehensive account of Odia LVs; moreover, it presents an innovative contribution to the study of LVs in South-Asian languages that is both theoretically coherent and descriptively adequate. [498 words]

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Constructions in American Sign Language

Usage-based approaches to linguistic structure, whether addressing acquisition (Tomasello 2003), processing (Christiansen and Chater 2016), or change (Bybee 2010), contend that instances of language use shape the mental representation of grammar, and that similarities across languages arise from general social and cognitive processes work in language use. Two such processes are *categorization* and *chunking*, through which frequently co-occurring sequences become packaged together, and accessible as a single unit in memory and action (Bybee 2010:19,34). Under a Construction Grammar framework, chunks of linguistic structure are called constructions: they are conventional and entrenched pairings of form and meaning that exhibit both fixed and schematic aspects of structure (Croft 2001, Goldberg 2006).

Sign languages like ASL are an important resource for probing how the processes of chunking and categorization might affect any language's network of conventional constructions. To date, however, there have been no large-scale analyses of idioms or other collocations in any sign language (although see Johnston and Ferrara 2012, Wilkinson 2016). Instead, in the generative tradition, these structures are typically analyzed as the output of synchronic derivational rules (following, e.g., Liddell and Johnson 1986). As a consequence, our knowledge about the linguistic effects of categorization and chunking come primarily from spoken languages.

In this talk, I present a usage-based, construction grammar analysis of three sign types: fingerspelled words, collocations, and morphologically complex "classifier construction" signs. I argue that a particular utterance's internal structure is based on associations between the utterance and the more general constructions from which it arose. In the context of fingerspelled words, chunking accounts for the gradual shift from a linear sequence of more-or-less independent alphabetic handshapes to a phonetically-coherent unit. I demonstrate, through analysis of a small corpus of fingerspelled tokens extracted from internet news reporting, that fingerspelled words reduce in length within a single discourse context (Figure 1), and that the highest-frequency fingerspelled words have also undergone more dramatic reduction as bona fide ASL signs. Like the sequences of handshapes in fingerspelled word, individual signs occurring together in ASL discourse can also be chunked together, with repeated use, to form categories of prefabricated sequences (Figure 2). In ASL as in English, knowledge of "prefab" items is a prerequisite for accurate and idiomatic language use. Finally, the case of morphologically complex "classifier construction" signs is particularly interesting for discussions of chunking and categorization in ASL: unlike fingerspelled words and collocations, classifier constructions largely exhibit non-

concatenative morphology and thus are typically formally indistinguishable from morphologically simplex "lexical" signs. However, classifier constructions are also a productive source of new vocabulary items. Though they do not undergo dramatic phonetic reduction in terms of overall length or segmental content, morphologically complex signs nevertheless fuel the formation of increasingly autonomous chunks with repeated use. In this way, the analysis of ASL signs from a usage-based perspective provides a new lens through which to assess the implications of categorization and chunking for the use and representation of linguistic structure in a construction-theoretic framework.

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Collostructional predictability and communicative efficiency: A new perspective on English near-synonymous constructions

Theoretical background and aims of the study

One of the central themes in corpus-based Construction Grammar has been the relationships between constructions and their collexemes (e.g. Stefanowitsch & Gries 2003 and later works). In this study, I want to focus on one aspect of collostructions that has not received much attention yet, namely, maximization of communicative efficiency. If some collexemes are frequently used with a particular construction, e.g. the verb *give* with the ditransitive construction, one can say that this use has high predictability, or low information content/ surprisal, using the terms from information theory (Shannon 1948). In human communication, more predictable information tends to be expressed by shorter forms, and less predictable information is usually conveyed by longer forms. This idea has been re-emerging in different guises as the principles of economy, least effort, minimization of forms and uniform information density (e.g. Zipf 1949, Haiman 1980, Croft 2003, Levy & Jaeger 2007, Hawkins 2014). Some empirical support for predictability effects in constructional variation has been found in data from different languages (e.g. Wasow et al. 2011, Kurumada & Jaeger 2015).

Hypothesis and object of study

I expect shorter constructional variants to be preferred when the collostructional combinations (e.g. the ditransitive construction + *give*) are more predictable, and longer variants to be chosen in less predictable contexts. This hypothesis is tested on the following functionally similar constructions in synchrony and diachrony:

a) *help* + (*to*) Infinitive, e.g. *Mary helps John (to) cook the dinner*;

b) *let* + bare Infinitive vs. *allow/permit* + *to*-Infinitive, e.g. *Mary let John go* vs. *Mary allowed/permitted John to go*;

c) *go* (*and*) Verb, e.g. *Go (and) bring them in*;

d) stative verbs + *home* vs. *at home*, e.g. *You should stay (at) home*.

Data and methods

I use different English corpora and datasets (BNC, COCA, COHA, GloWbE and Google Book Ngrams) to model the relationships between the above-mentioned constructional variants with the help of generalized additive mixed models (GAMMs) and Bayesian generalized mixed models. The individual collexemes serve as random effects (intercepts). Since some of these alternations also vary along other parameters, e.g. formality and *horror aequi,* I also take into account other variables known from the literature.

Results

The preliminary results suggest that the predictability of a collexeme given the construction in question or the predictability of the construction given a collexeme (cf. Attraction and Reliance in Schmid [2000]) have an expected effect in all these alternations, in addition to the effects of other relevant variables. The longer variant of the constructions is more likely to be preferred in less predictable combinations of constructions and collexemes. These findings lead me to conclude that language users tend to optimize communication by taking into account collostructional predictability.

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Events in Constructionalization: Evolutionary Path of Directional Complements

The two-way typology proposed by Leonard Talmy has been extremely influential in the past few decades. In this typology, language falls into two types: verb-framed and satellite-framed. This typological proposal is essentially based on the detailed analysis of five types of events (macro-events in Talmy's term), as illustrated in (1).

(1) a. The ball rolled ***in***. (*Motion event*)

b. They talked ***on***. (*Event of temporal contouring*)

c. The candle blew ***out***. (*Event of state change*)

d. She sang ***along***. (*Event of action correlating*)

e. The police hunted the fugitive ***down***. (*Event of realization*) (Talmy 2000: 214)

In this bifurcation, Mandarin is characteristically satellite-framed, and has been identified to use directional complements in encoding the PATH, and express the five as follows.

(2) a. *Motion Event*

Ta deng ***shang*** zhu feng

He climb-Vd Everest summit

He ***climbed up*** the summit of Everest.

b. *Event of Temporal contouring*

Ni jiu zhe yang yi zhi chang ***xia qu***

You like this forever sing-C

You ***keep on singing*** like this.

c. *Event of state change*

Tian man man re ***qi lai***

Weather gradually hot-C

It's ***getting hot*** gradually.

d. *Event of action correlating*

Ta pao guo le ta

He outrun-C-LE her

He ***outrun*** her.

e. *Event of realization*

Wo tou tou ca qu yong chu de lei shui.

I silently wipe -Vd pouring out tears.

I silently wiped off the tears pouring out.

The directional complements in Mandarin form a closed-class of 28 members, including 11 simplex (*Lai*-come, *qu*-go, *shang*-ascend, *xia*-descend, *jin*-enter, *chu*-exit, *hui*-return, *guo*-pass, *qi*-start, *kai*-begin, *dao*-arrive) and 17 compounds (*shanglai*-ascend come, *shangqu*-ascend go, etc.). These 28 linguistic forms were originally used as independent verbs in ancient Chinese, now they are constructionalized in the "Verb Complements" construction through grammaticalization, and now express 5 types of constructional meaning mentioned above.

The objectives aim to explore the evolution path of the 5 types of events (constructional meaning); as well as the mechanisms underlying the constructionalization. The data will be collected from the following 5 works representing 5 diachronic periods:

Upper ancient Chinese (BC 1600-24): *Zuo's Commentary on Spring and Autumn Annals*

Mid-ancient Chinese (25-618): *Shi Shuo Xin Yu*

Pre-modern Chinese (619-1279): *The Annotation of Dunhuang Literature*

Modern Chinese (1280-1911): *Shui hu zhuan*

Contemporary Chinese (1912-): *I'm Your Daddy*

This study brings together two seemingly unrelated areas of research, that is, the area of event typology and that of grammaticalization and constructionalization (Traugott and

Trousdale 2013), thus providing a new perspective on the Talmyan typological paradigm. Furthermore, it explores the mechanism of constructionaliztaion from the theoretical perspective of macro-event; it also examines the conditions under which the second clause combines with the first one and integrated into "Verb complements" constructions. All these might have further universal implications. Formally, a tentative conclusion might indicate the following evolutionary path: **(Open Class Form) > Motion event > Event of realization > Event of state change > event of temporal contouring > event of correlation > (Closed-class form).**

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Onset Causation and Extended Causation: An Empirical Study on their Lexicalization and the Resultant Individuation of Events

Onset causation and extended causation, proposed by Talmy (Talmy 2000: 473, 498), are a pair of terms differing as to the coextensiveness of the causing event with the resulting event. See examples in (1).

(1) a. I pushed the box across the ice.

b. I slid the box across the ice by pushing on it (steadily). (*extended causation*)

c. I slid the box across the ice by giving it a push. (*onset causation*)

Sentence (1a) is ambiguous in that it has two interpretations, i.e. (1b) and (1c), which represent extended and onset causation, respectively.

Different terminologies expressing the same or similar notions are proposed in the literature as well, including launching causation and entraining causation (Michotte (1946/1963), ballistic causation and controlled causation (Shibatani 1973), point-durational causation and extent-durational causation (Talmy 2000:498), “instantaneous” vs. “continuous” causation (van Lambalgen & Hamm 2005:43-45), “continuous causation” by McCawley (1976:119) corresponding to extended causation. The majority of the literature focuses on the temporal relations between cause and effect (causing event and caused event in Talmy's term), aspect and causation, the telic and atelic nature of the two events, etc.

There is relatively little literature on other aspects of the two types of causation, such as lexicalization differences and event individuation. The other high imbalance lies in the fact that the majority of the literature uses western languages as data, with little or rarely any using Mandarin as source data. There is little literature on differentiating these two notions from the perspective of lexicalization and event individuation in Mandarin as data source. A forthcoming study by the present authors analyzes data from Mandarin, proposing a series of constructional patterns typically expressing onset and extended causation. Therefore, the

current study constitutes a follow-up on that one, exploring further the issue of whether the two notions are lexicalized by the same or different verbs, and if they are treated as the same event or different events. Data were elicited from 20 videoclips recorded by the authors, with 10 on each causative situation respectively, and with 50 subjects interviewed.

The preliminary data analysis strongly indicates: both onset causation and extended causation tend to be lexicalized in the same verbs, i.e. causative verbs are intrinsically ambiguous in this regard; different types of event integration have to be employed in differentiating these two types of causation. The full and complete analysis will be reported at the conference.

This research is significant for the research on the topic of causation and the research on events, both being areas which are widely studied in linguistics, philosophy, and psychology.

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On the syntax and semantics of Verb-Direction Constructions in Mandarin Chinese

Sign-Based Construction Grammar (SBCG) is a formal syntactic theory that associates construct types with syntactic and semantic constraints (Sag 2012; Michaelis 2013). One challenge for SBCG is representing complex predicates in languages other than English. Mandarin Chinese is known for many kinds of serial verb constructions (SVCs) and compounds (Li 2016). Analogous to English Verb-Particle Constructions (Tyler 2003; Mahpeykar and Tyler 2015), Verb-Direction Constructions (VDCs) in Mandarin can have both concrete and abstract meanings, the latter of which can be described as metaphorical mappings (Lakoff and Johnson 1980). The semantics of particles in English is realized in directional verbs (DV, including V2s and sometimes V3s) in Mandarin, which can have five basic functions when coming after other verbs (V1s):

A.ta zou chu le fangjian (self-motion, subject-control)
he walk exit ASP room
“He walked out of the room.”

B. ni ba wo hong xia tai (caused-motion, object-control)

you BA I hiss descend stage

"You hissed me off the stage."

C. wo cong bozi shang jie xia weijin (resultative, object-control)

I from neck top untie descend scarf

"I untied my scarf from my neck."

D. ling-sheng xiang qi (aspect, raising)

bell-sound ring ASP

"The bell started ringing."

E. jie xia lai, ni yao zuo shenme (discourse connective, raising)

link descend come, you want do what

Next, what do you want to do?"

It remains a question how to combine syntactic and semantic information in the analysis of VDCs. One syntactic property of the VDC is that both V1 and DV have their own argument structures, such that certain arguments can be shared (Huang 1992). For example, both *ta zou le* "he walked" and *ta chu le fangjian* "he moved out of the room" are entailments of Sentence A, showing that it is the agent argument that is shared. The argument-sharing types are given in the above examples. I argue in this paper that by classifying VDCs according to their argument-sharing properties (distinct lexical classes as per SBCG), different syntax-semantics correlations can be found based on an annotated corpus including 618 metaphoric VDCs. These correlations are between argument sharing and functions of VDCs, and between metaphor interpretation and functions.

In part one, a mapping is probabilistically established between function and different patterns of argument sharing. It is found that subject-control are correlated to agentive actions; caused motion and many resultative VDCs involve object-control; and aspectual and most discursive ones only allow raising.

In part two, in an effort to link the metaphoricity with function of VDCs, we tag V1 and DV as literal (L) or metaphoric (M). Metaphoric VDCs can be MM/ML/MM (Morgan 1997). Result, aspect, and motion with abstract locations fall into both and LM and MM. However, concrete motion with figurative manners is unique to ML and discourse is related to LM.

The major finding of this research is: by analyzing SVCs as different argument-sharing patterns in SBCG, we argue that they are licensed primarily by control constructions; some functions can be described by metaphor types.

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An Event Integration Approach to the Variation of "V+Dào" Construction in Mandarin Chinese: A Corpus-based Method

There are a lot of discussions and controversies to the complement classification of "V+Dào" construction in Mandarin Chinese due to the asymmetric mapping between form and meaning. Lyu Shuxiang (1980) considers "V+Dào" construction as directional complement, while Wang Yin (2011) contends it as resultative complement. What's more, Chao Yuanren (1968) explains that some examples of this construction belong to directional complement, yet other instances should be taken as phase complement but not resultative complement. Instead of judging and reclassifying them into various verb complements and in order to make clear what semantic and syntactic factors influence the disputes, this research found Talmy (2000)'s event integration (also known as "Macro-Event") theory and Hopper & Traugott (2003)' grammaticalization theory could elucidate these controversies. Then this paper did an exhausted analysis of 6696 sentences collected in CCL (oral materials only) by means of association measures and cluster analysis in R language of computer programming, and the research results discover that: ①the event integration not only occurred between the conceptual primitives of [motion] and [support relation] (from Co-Event to Main-Event) in Talmy's Macro-Event, but also existed in the event integration between [motion] and [path], that is, another level of event integration in "V+Dào" Construction;②the distribution of "V+Dào" construction in the five types of Macro-Event could help classify the concept definition and classification in resultative complement, directional complement and phase complement, and the intrinsic nature of "V+Dào" construction is the variation of verb complement classificaitons; ③based on the grmmaticalization model of the complement "Dao", it could be predicted that the degree of event integration in "V+Dào" construction on Macro-Event is an increasing continuum such as "motion event → temporal contouring event → action correcting event → state change event → realization event". We find these findings play a heuristically significant role to make the better localized researches of "V+Dào" construction on Talmy's Macro-Event and benefit Chinese learning and teaching in the future.

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Analysis of Chinese Construction "V-lai-V-qu" From a Cognitive Perspective

This research focuses on the case study of Chinese four-character constructions: "V-lai-V-qu" ("lai" means "come", "qu" means "go"). Previous studies tell us that there are two different variants in this construction: "V1-lai-V1-qu" and "V2-lai-V2-qu" (Liu , 1999). See example (1) and (2):

(1) V1: Displacement

Xiao-pengyou men jingchang zai menqian **pao-lai-pao-qu**.

Children PL often PREP doorway run. back and forth

“Children often run back and forth in the doorway.” (BLCU Chinese Corpus)

(2) V2: Non-displacement

Zhe dao ti hen nan, wo **xiang-lai-xiang-qu** haishi meiyou nong-mingbai.

This CL question very hard 1SP think. back and forth still not make clear

“This question is very hard, I still can not make it clear even if I have thought back and forth.” (BLCU Chinese Corpus)

From V1 to V2, the meaning of V-element can be changed from displacement to non-displacement. (Zeng, 2008; Zhou, 2017) This phenomenon can be explained by *Conceptual Metaphor* (Lakoff & Johnson, 1980): "V1-lai-V1-qu"(space domain) can be mapped into "V2-lai-V2-qu" (time domain). However, they didn't explain the conceptual mapping in the construction "V1-lai-V1-qu" and "V2-lai-V2-qu", respectively.

And, In (1) and (2) the position of word "lai" and "qu" are interchangeable, so the meaning of "V-lai-V-qu" is the same as "V-qu-V-lai". However, the usage frequency of "V-lai-V-qu" (38.6%) is much higher than that of "V-qu-V-lai" (25.5%), based on Zhou (2017). So why do people tend to put "lai" before "qu" in the construction to express the same meaning? Previous studies didn't explain it clearly.

Our goals are to solve the two main research questions:

(1) What is the conceptual mapping in "V1-lai-V1-qu" and "V2-lai-V2-qu"?

(2) Why the construction "V1-lai-V1-qu" is more widely-used than that of "V1-qu-V1-lai"?

What we have found are:

(1) Both two variants of this construction have the concept of Quantity.

a. The meaning

"V1-lai-V1-qu": numerous repetitions of V1

"V2-lai-V2-qu": numerous repetitions of V2

b. Conceptual mapping

"V1-lai-V1-qu": space→number

"V2-lai-V2-qu": time→number

(2) The preference for "V-lai-V-qu" in usage can be explained by our social cognition, which reflects the Iconicity of Sequence.

a. Self-centeredness: we visualize ourselves as the focus of attention.

We prefer to use "lai (come)" because the meaning of "lai" is the action that sth. or sb. is toward us, and the word "qu (go)" is the action that sth. or sb. is away from us.

b. Empathy: we prefer good (things) rather than evil (things).

The word "lai" tends to be a preferential word in the usage of this construction because the metaphorical meaning of "lai" is to show getting something, the metaphorical meaning of "qu" is to show losing something.

Generally, the significance of this study is to fill the research gaps by testing the theory of Metaphor in this Chinese construction. This study gives us implications on how to explore

cognitive mechanisms in similar Chinese four-character constructions, and offers a reference to the studies of similar constructions in other languages such as the English construction "back and forth".

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Constructions all the way up: The case of clausal patterns in Swedish

"It appears to us that the machinery needed for describing the so-called minor or peripheral constructions [...] will have to be powerful enough to be generalized to more familiar structures [...]" (Fillmore et al. 1988: 538)

Construction Grammar (CxG) is concerned with the language as a whole, designed to handle the full spectrum of linguistic patterns. While the approach has often been criticized as a theory of the so-called periphery, dominated by case studies of low- and mid-level constructions, the coverage of “core” phenomena is steadily increasing, especially as regards argument structure.

Yet, one prominent area of language that remains understudied from a CxG perspective is abstract syntactic patterns. With a few exceptions like Kuzar (2012) and Sag (2010), constructionist studies focusing on abstract phrasal and clausal constructions are strikingly rare (cf. Hoffmann 2013 for an overview). Furthermore, existing general models of CxG (e.g. Fillmore & Kay 1999; Boas & Sag 2012), for which a basic account of syntactic structure is a central task, typically focus on English (Croft 2001 being an exception). Thus, there is still a general lack of CxG studies of abstract syntax, especially regarding other languages than English.

In this talk, I will present a case study of clausal patterns in Swedish. Swedish is a V2 language, with the finite verb in second place in the clause, which means that the subject follows the verb (appears inside the VP) whenever it is not clause-initial. Hence, unlike English, a basic NP-VP structure (subject-predicate construction) would not serve as a general point of departure. Instead, many Swedish grammars assume a topological model adapted from Danish (cf. Diderichsen 1946, Teleman et al. 1999). While this model has proven fairly successful, there remain a number of structures that do not fit into the general schema and its flat structure has limited power to handle hierarchical relations (cf. Andréasson 2007, 2008). Some of these issues may be handled by adding a moderate degree of phrasal hierarchy (Börjars et al. 2003, Engdahl et al. 2004, Andréasson 2008). I borrow a few of these ideas, adapting them to a CxG setting.

Characteristic of most approaches to Swedish clause structure, and prevalent in syntax in general, is a reductionist aim for maximal generality. In contrast, I take a non-reductionist approach, recognizing several levels of generalization. Some evidence supporting this

position comes from work on L2 Swedish (Ganuza 2008), indicating other salient levels of generalization than the highest one (Author 2014).

A wealth of previous work in CxG has convincingly made the case for constructions all the way down. Accordingly, I will suggest a multi-granular account of Swedish clause structure consisting of constructions all the way up.

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Shift-ing networks: modelling paradigmatic relations in the gerund system

The network of English *-ing* forms covers a broad range of interrelated constructions, ranging from fully clausal forms such as the present participle (1), over hybrid constructions as the verbal gerund (VG) (2), to fully nominal forms like the nominal gerund (NG) (3).

(1) She'd spread her arms out wide, *twirling her hands a bit*. (COCA)

(2) He looked forward to *having her all to himself in the big city*. (COCA)

(3) I traveled to Monterey to oversee *the unloading of our goods off a Yankee ship*. (COCA)

The research on clausal *-ing* forms is extensive, with recent discussions zooming in on whether or not verbal gerunds and present participles should be conflated into one grammatical category (Huddleston and Pullum 2002: 82; Aarts 2007; De Smet 2010). The particular position occupied by nominal gerunds remains underresearched, however: although they are derived by means of the same suffix and thus exhibit formal ties to the productive schema of *-ing* forms (cf. De Smet 2008 and Fonteyn 2016 on the diachronic development of VGs out of NGs), they are mainly considered as belonging to a wider network of deverbal (action) nominalizations. As such, the NG represents a blind spot in our knowledge of the complex network of English *-ing* forms.

This paper wishes to fill this gap by providing a quantitative assessment of the paradigmatic relations that exist between Present-day English NGs and VGs. By means of a hierarchical configural frequency analysis (Gries 2008; Hilpert 2009) of 800 NGs and 800 VGs from BNC and COCA, I identify clusters of features that are unique to either NGs or VGs, as well as possible zones of overlap between them. A distinctive collexeme analysis (Gries and Stefanowitsch 2004), then, provides a token-level perspective on variation between NGs and VGs.

Firstly, NGs are shown to behave quite uniformly, with prototypical instances occurring in core clausal functions, actual mental spaces (cf. Fauconnier 1985) and without coreferential subject, as in (3). The class of VGs, in contrast, is fairly heterogeneous, lacking a clear prototype. It encompasses uses in peripheral clausal slots, virtual mental spaces and with subject control, as in (2), as well as uses that perfectly fit the NG prototype, as in (4).

(4) *Building the new reactors* is expected to cost about $1,500 per kilowatt of capacity. (COCA)

It is in those latter cases that functional interchangeability between NGs and VGs should, in theory, be possible. Yet, at the micro-level, the collexeme analysis reveals that there is hardly any overlap in the types of verbs NGs and VGs typically derive from, as the formation of NGs is heavily constrained by blocking effects from other nominalization patterns. Thus, despite the functional overlap at a higher-order level, NGs are only rarely viewed as suitable alternatives for a VG construction at the micro-level. The present findings, I will argue, can pave the way for a better understanding of the different levels at which paradigmatic relations operate.

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Variation in Constructional Grammar: the network of impersonal verbal predication constructions in Portuguese Grammar

Considering that in Construction Grammar field there is some reluctance to account for generalizations about variability and variation, we intend to contribute to the debate about the locus of variation in the Construction Grammar model by describing microconstructions and (sub)schemas related to impersonal verbal predication uses at the Brazilian academic discursive domain. Based on empirical data, this study makes concrete suggestions for the modeling of the phenomenon of variation in the construction network. We delineate it under the interface of Funcional-Cognitive Linguistics and Sociolinguistics. As far as we know, this research configuration is original in Brazil.

Impersonal predication is a conceptual domain where, in Portuguese, we find syntactic structures that express either subject participant lacking its canonical properties or participant (agent/inductive force) defocusing, backgrounding or deleting. The analysis of instances of discursive impersonalization in Portuguese grammar in order to show how variation can be accommodated in the construction grammar architecture is the scope of this communication. It counts on qualitative and quantitative analysis of the impersonal verbal predication data collected in Brazilian academic interactions and texts. In such analysis, social, pragmatic, discursive, semantic and morphosyntactic attributes were statistically investigated (through R version 3.4.3 software).

We describe variation triggered by analogy, a process of association of properties of the attributes involved in the form-function faces of certain pairings. We explore links of associations between predication constructional patterns serving the conceptualization of states of affairs/events from a discursive impersonalization perspective. We are going to argue that variation can be conceived on the basis of comparability relations ("imperfect" synonymy), which are drawn by the speakers and stored in their mental linguistic knowledge and/or are due to the account of either horizontal associative links and inheritance links or schematicity and productivity parameters (concepts in Traugott & Trousdale, 2013). We have detected two possibilities of symbolic units subjected to these types of relations: (1) constructional patterns and (2) units that are compatible in slots of less schematic

constructional patterns. We have also identified the possibility of association of more than one constructional pattern with a cognitive-conceptual paradigm, such as, for example, the one at academic discursive repertoire. So, we will deal with variation between certain impersonal constructions explained by configurational similitude, symbolic similarity relation and paradigmatic association.

In Brazilian statistical computing data, we find reasons to stress the concepts of “allostructions” (Cappelle, 2006), "metaconstruction" (a kind of area of constructional patterns differences neutralization, partially underspecified) and “discourse pattern” (Leino & Östman, 2005), from which we conceive cognitive paradigmatic association.

It is not a matter of conceiving identity between impersonal constructional patterns or between forms that are compatible in filling the slot in one pattern of the impersonal construction network, but of considering the potentiality of variation in terms of divergence of a prototype and due to a certain alignment between properties of attributes of independent constructions or between properties of the linguistic elements which are compatible in a constructional pattern. Then, we argue that variability is a central topic to understanding how linguistic units behave in grammar.

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The significant relationship between the VP-and-VP and the V-and-VP constructions in English

This paper demonstrates the significant relationship between the *VP-and-VP* and the *V-and-VP* constructions in English, by showing common features that counterexamples to the Coordinate Structure Constraint (CSC) (Ross 1967: 161) share. As Ross points out, there are counterexamples to the CSC, as in (1)-(3), where extracting a noun phrase out of the second verb phrase of the coordinate structure is possible.

(1) Here's the whisky which I went to the store and bought.

(2) Which dress has she gone and ruined now?

(3) I've got to try and find that screw. (Ross 1967: 170)

In this paper, the counterexamples to the CSC are divided into two types, the genuine counterexamples where the *VP-and-VP* construction occurs, as in (1), and the apparent counterexamples where the *V-and-VP* construction occurs, as in (2)-(3).

Previous studies generally treat the genuine counterexamples. The *VP-and-VP* construction in the genuine counterexamples has three features in (4)-(6).

(4) two verb phrase

(5) comma intonation before the conjunction *and* (Lakoff 1986)

(6) occurring only under specific conditions that are semantically restricted (Deane 1991)

By contrast, this paper argues that the *V-and-VP* construction in the apparent counterexamples represents a verb-specific construction where the first verbs (V1s) are limited to *come*, *go*, *remember*, *run*, *sit*, *start*, *try*, and *up*. The *V-and-VP* construction has three features in (7)-(9), in sharp contrast to the *VP-and-VP* construction.

(7) a single verb phrase: no words can be inserted between the V1 and the conjunction *and*.

(8) the reduced pronunciation of *and* that is spelled '*n*' in phrases like *rock'n'roll*

(9) occurring without any specific conditions that are semantically restricted

It should be emphasized here that the *V-and-VP* construction discussed here is not the *V-and-VP* construction where the first VP happens to consist of a verb only.

In this paper, the apparent counterexamples are further divided into two subtypes, the adjunct/oblique and the semi-complement subtypes. In the adjunct/oblique subtype, as in (10)-(11), the word sequence after the V1 is not in the semantic scope of the V1, but it is semantically either like an adjunct of the V1 or like an oblique argument of the V1.

(10) What did he go and buy?

(11) What did policymakers sit and discuss?

In the semi-complement type, as in (2)-(3), the word sequence after the V1 behaves like a non-finite complement of the V1, and it is in the semantic scope of the V1.

From the above discussion, it is clear that the internal organization of the *VP-and-VP* construction is significantly different from the one of the *V-and-VP* construction. Moreover, there is one definite conclusion to be drawn. The two different types of constructions share three constraints in (12)-(14)

(12) The subject constraint: The V1 and the V2 share the same subject.

(13) The temporal constraint: The situation that the first conjunct expresses and the one that the second conjunct expresses represent simultaneity or temporal adjacency.

(14) The spatial constraint: The place that the first conjunct expresses and the one that the second conjunct expresses share the same location.

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From 'come out' to 'outcome' in Hebrew and English

Constructional approaches to language description have proven useful in the analysis of a range of lexical and grammatical phenomena (Yoon & Gries, 2016), as well as informative for cross- linguistic comparison (Boas, 2010). This paper investigates the Hebrew construction *yaca l-* ('exit'+ dative). A comparison of its usage patterns with those of its nearly synonymous English phrasal verb *come out* sheds light on the two constructions and drives a constructional analysis of *yaca l-* and its various sub-constructions.

The verbs *yaca* 'exit' and *come out* can denote 'change-of-location', yet they also share an additional meaning that involves a general sense of 'outcome' (1).

(1) ha-'uga yac'a nehederet. the-cake.SF came.out.3SF great.SF 'The cake came out great.'

In both languages the verb relates a THEME and a DEPICTIVE. The THEMEs are typically outcomes of creative processes (e.g., cooking, writing, photographing) and the DEPICTIVEs are a non-trivial (partly unexpected) property of the THEME at the end of the process.

That 'exit' verbs can also express 'outcome' is not surprising. The relationship between these concepts derives from the conceptual metaphors ACTION IS MOTION ON A PATH[1], and A PROCESS IS A PURPOSEFUL ACTION (Lakoff & Johnson, 1999): a process has an outcome. English *outcome* and Hebrew *toca'a* 'outcome' are morphologically related to *come out* and *yaca* 'exit', respectively.

In the *yaca l-* construction the verb *yaca* 'exit' in its 'outcome' sense takes an additional dative argument, which does not have an English equivalent (2).

(2) ha-'uga yac'a l-i nehederet. the-cake.SF came.out.3SF to-me great.SF

Moreover, in (3), a variant of (2), the DEPICTIVE and THEME form a syntactic constituent that denotes the entire OUTCOME.

(3) yac'a l-i ['uga nehederet]. came.out.3SF to-me cake.SF great.SF

Dative arguments in Hebrew assume various semantic roles (Berman, 1982; Ariel et al., 2015), including (external) POSSESSORs (4).

(4) yaca l-i dam me-ha-af. exited.3SM to-me blood.SM from-the-nose ‘Blood came out of my nose.’

Although (3) and (4) are structurally similar, the dative in (3) is not a possessor, and (2) is not synonymous with (5), where the possessor is internal.

(5) ha-‘uga šeli yac’a nehederet. the-cake.SF my came.out.3SF great.SF ‘My cake came out great.’

With *yaca* as ‘outcome’, *yaca l-* expresses a complex event: I made a cake and it came out great. Until now work on the dative in Hebrew has not identified this semantic function.

The sense of unexpectedness extends to *yaca l-* expressions where the not-completely-intended OUTCOME is an event and the dative is a participant in the event (6). Unlike the dative- creator-experiencer in (2)-(3), the dative here is obligatory.

(6) yaca la-nu lišmo’a bikoret. came.out.3SM to-us to.hear criticism ‘We happened to hear criticism.’

This new constructional analysis, which teases apart the semantic contributions of lexemes and constructions, accounts for the data. Moreover, it exploits the mechanism of inheritance to capture the similarities and differences found within the *yaca l-* “family” and related constructions in Hebrew. The present analysis adds to the literature on the dative in Hebrew, and demonstrates the efficacy of constructional approaches to lexicon and grammar.

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[1] Although this specific metaphor is not in MetaNet (Dodge et al. 2015), it derives from information in MetaNet’s repository, which the reader can explore here: https://metaphor.icsi.berkeley.edu/pub/en/index.php/MetaNet_Metaphor_Wiki.

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A Construction Grammar approach to Argument Structure in Italian

This paper aims to present an analysis of the argument structure of some verbs in Italian according to a costructionist (Goldberg 1995, 2006) and usage-based approach (Bybee 2006; Perek 2015). As the literature shows, most verbs undergo various syntactic valency-changing operations. This kind of change has been proved not to be due to verbal semantic features, as syntactic constructions may carry meaning of their own. Furthermore, the meaning of the constructions is often non-compositional. The constructionist approach to argument structure is a useful means to account both for the different verbal syntactic patterns and their associated meanings. This contribution shares the following assumptions:

- speakers' communicative needs determine creative uses of verbs (Perek 2015);
- constructions may contribute to argument selection;
- frequency of occurrence may contribute to the entrenchment of linguistic patterns (Langacker 1987, Bybee 2006) and to the storing of exemplars in the speakers' mind (Perek 2015);
- the verb meaning may emerge from the construction it occurs in (by means of semantic enrichment) or by inherent compatibility. Thus, verbs may present several profiles, and their valency can vary through *coercion* (Michaelis 2005; Perek 2015).

Constructionist approaches to argument structure have been mainly applied to English, but rarely to Italian. This contribution intends to analyze different semantic classes of Italian verbs (e.g. commercial transaction verbs, *hit*-verbs, *break*-verbs, etc.). Syntactic and semantic verbal frames will be selected from different corpora (*ItWak, Paisà*). On the basis of samples of occurrences, for each verb we will identify:

A) its prototypical and peculiar constructions, e.g. the most prototypical pattern of *comprare* 'buy' is the bi-argumental transitive rather than the three-argumental construction. When present, the third argument is polysemous (i.e. money, benefactive, purpose). A peculiar construction occurs when an oblique with the role of money raises to subject position:

(1) *i soldi* comprano la vita

‘money buys life' (from: people buy life *with money*)

B) argument alternances due i) to the context of use or ii) to inherent meaning:

(2) 'colpire qualcuno alle gambe ‘hit somebody at his legs'

''colpire le gambe di qualcuno ‘hit somebody's legs'

(3) 'martellare le dita sul tavolo ‘pound the fingers on the table'

''le dita martellano sul tavolo ‘the fingers pound on the table'

'''martellare con le dita sul tavolo ‘pound with the fingers on the table'

C) commonalities of patterns to single verbs or verb classes: e.g. the pattern *SUBJ-OBJ-LOC* is common to *hit*-verbs:

(4) *tamburellare/martellare/sbattere* le dita sul tavolo

‘drum/pound/beat the fingers on the table'

Ultimately, the analysis will show that argument structure is not determined once and forever in an abstract way, but is built on the basis of the linguistic/situational context. In this sense, the notion of argument should be intended as *scalar*, as it may be enlarged to comprehend more semantic roles, and it would be useful to recur to the concept of *semi-argument*, any role -over a set of possible semantic roles- completing the meaning of a predicate (Jezek *et al.* 2014).

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A multifactorial approach to constructions Corpus-driven study of Norwegian future forms

Norwegian has at least three interchangeable constructions expressing the future: [*skal* 'shall' + inf], [*vil* 'will' + inf] and [*kommer til å* ('coming to') + inf]. Although some uses are formally determined and others semantically distinct, there exists a large number of contexts where all three constructions are semantically similar, as can be shown in the following example:

(1) Teateret {skal/vil/kommer til å} presentere to Ibsen-stykker

theatre.def shall/will/coming to present.pres two Ibsen-plays

'The theatre will present two plays by Ibsen'

Labels such as intentional (*skal*), probable (*vil*) and actual (*kommer til å*) future are frequently employed (Faarlund *et al*. 1997, Lie 2005, *inter alia*) but fail to account for all uses. Factors such as grammatical person, agentivity, controllability, engagement and speaker certainty have been proposed (Næs 1979, Mac Donald 1982, Vannebo 1979, 1985, Kajerova 2007) to play a role in the choice of construction. Furthermore, these constructions interact in complex ways with modality, aspect and voice. While some constraints on use are known, others remain problematic, and the majority of proposed factors determining the choice of uses are yet to be confirmed quantitatively.

Following Hilpert's (2008) collostructional analysis on related languages, AUTHOR & AUTHOR (2017) attempted to confirm quantitatively the role of these factors in Norwegian, with limited success. In a second attempt to test the previous results and more adequately account for constructional variation, this study employs multifactorial feature analysis (MFA) / the behavioral approach (Dirven *et al*. 1982, Geeraerts *et al*. 1994, Gries 2003). One advantage of using MFA is that the hypotheses previously proposed can be operationalised in terms of usage-features, which can be annotated making it possible to direcly test the descriptive and predictive accuracy of these factors. A second advantage is that the set of features employed can be formalized in terms of an attribute-value matrix permitting direct integration of the results into any phrase-structured grammar.

Data are drawn from the NorGramBank (Dyvik *et al*. 2016) and are subjected to feature analysis. The analysis manually annotates a subsample of 200 occurrences of each

construction, controlled for stylistic variation but not lexical slots. The feature set is based on the results of earlier introspective studies, mentioned above, and mixed-effects multinomial logical regression is used to model the results of the feature analysis. The results corroborate previous research and show that the intentional future (*skal*) correlates with agentivity, engagement and controllable events, the probable future (*vil*) with 3rd person, non-agentivity and non-engagment, and the actual future (*kommer til å*) with non-controllable events. In terms of speaker certainty, the three constructions can be placed along a continuum going from least (*vil*) to most (*kommer til å*) certain. Future research will need to examine these results in order to determine the exact constraints on the licensing of the complement predicate.

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Grammatical gender as a tool to create humor in Hindi: A construction grammar approach

This paper explores the interaction of linguistic structure, cultural constructs and speakers' cognition taking the specific case of grammatical gender in Hindi. Previous research within linguistic relativity suggests that speakers of languages with this feature tend to genderise objects in contexts that do not require doing so (eg. Sera, 2002; Boroditsky, 2002, Alvanoudi, 2013). Hindi is an Indo-Aryan language with a strict two gender system. Personifications of non-human animates and inanimate objects in Hindi often exploit grammatical gender of the referents in literary and everyday discourse. The present paper analyses the use of grammatical gender to create humor in particular discourse frames using construction grammar approach which treats conventionalized discourse frames at par with the traditional unit of construction that is sentence (Antonopoulou and Nikiforidou, 2011).

Source of data is internet and the specific content type considered is humor in the form of dialogues, caricatures and rhymes where animates and inanimate objects are personified. For the purpose of this paper, data has been narrowed down to six instances where grammatical gender of the objects is used to pair them up as male and female in a cultural frame of man-woman relationship. Other socio-political sub-constructs like caste and class also contribute to establish this larger schema. While man-woman relation provides the main frame, incongruity required for humor element is provided by the mapping of biological sex onto members of noun classes based on linguistic gender. The paper discusses six instances that belong to three specific contexts in the larger cultural and discoursal frame of man-woman relation- courtship, formal match-making, first night.

The analysis shows how the presence of grammatical gender can affect imagination and creativity in specific discourse structures. This indicates a more complex interrelation between linguistic structure and thought than a simple correspondence between the two. The paper finds that construction grammar approach can help expand the horizon of linguistic relativity research to look at the multimodal interactions of language-specific grammatical features with conventionalized discursive frames rather than limiting their cognitive implications to lexico-syntactic level. The analysis also sggests a need to question the boundaries created between ‘linguistic' and ‘non-linguistic' domains while looking at the implications of linguistic structure on thought.

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Time flies like an arrow and fruit flies like a banana; parsing multiword constructions with DepVis

Multiword expressions (MWEs) are strings of two or more lexemes that are idiosyncratic in some respect. Such complex strings are frequent. Sag et al. (2002) estimate that 41% of the entries in WordNet 1.7 are MWEs. MWEs assume a wide range of forms such as institutionalized phrases and clichés (love conquers all), idioms (kick the bucket), fixed phrases (by and large), compound nouns (frequentflyer program), verbparticle constructions (eat/look/write up), light verbs (have a drink/*an eat), named entities (Paris), lexical collocations (telephone box/booth/*cabin), etc. The grammatical status of MWEs has been an issue at least since the “rules vs. the lexicon” debate (Langacker 1987; Pinker 1999; Pinker and Prince 1988; Rumelhart and McClelland 1986). Because rules capture all the regularities in language, MWEs does have no place in the grammar proper because they are lexical. Because the lexicon consists of words or morphemes, it should not include MWEs because they are phrasal. Jackendoff (1997, chapter 7) advocates the inclusion of “phrasal lexical items” in the lexicon. An alternative, although related, solution inspired by construction grammar approaches delegates MWEs to a “constructicon” (Goldberg 2006, p. 64). In this paper, we treat MWEs as multiword constructions (MWCs). The interpretation of MWCs poses a major challenge for NLP techniques due to their heterogeneous nature. We address two challenges: the automatic detection of MWCs from large corpora and the automatic resolution of ambiguities. With respect to the first challenge, we present a parsing algorithm that combines ngram processing and dependency analysis based on dictionaries. MWC candidates are extracted using one of the two methods and then compared to dictionary entries. If a MWC candidate matches at least one entry, the algorithm treats it as meaningful and stores it in the inventory of verified MWCs. With respect to the second challenge, one common issue is the case where a MWC is ambiguous in a sentence, as in (1). (1) Fruit flies like a banana. Stateoftheart dependency parsers such as Stanford CoreNLP (https://stanfordnlp.github.io/CoreNLP/) or Universal Dependencies (http://universaldependencies.org/) fail to recognize that fruit flies is a compound NP and treat flies

like a verb (Figure 1 c & d). To fix this kind of problem, we built ‘DepVis', a visual system that displays and compares the results from both the Stanford CoreNLP parser and our algorithm. With ‘DepVis', users can visualize not only MWCs (Figure 1 (a)) but also their internal dependencies (Figure 1 (b)). With the help of experiments and case studies on ambiguous sentences, we verify the effectiveness and usability of ‘DepVis'. Results show that our parsing algorithm recognize MWCs quickly and accurately, including in ambiguous sentences. This is because it captures problematic expressions, compares them to the repository of verified MWCs, and outputs a correct representation. We believe our algorithm is a significant contribution to the understanding of the constructicon in construction grammar approaches to language.

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Relating alternations to constructional change: stimulus marking in Finnish

Although usage-based models of grammar rest on the premise that "synchrony and diachrony have to be viewed as an integrated whole" (Bybee 2010: 105), empirical studies rarely strike a balance between present and past. This holds particularly true for investigations of argument structure phenomena (noteworthy exceptions include Barðdal 2008, Hilpert & Koops 2008, as well as Colleman 2011). In response to that, this study of argument structure alternations in Finnish aims to provide a holistic application of usage-based construction grammar.

The Finnish language has several near-synonymous verbs that denote the onset of anger, e.g. *suuttua* 'get angry' and *raivostua* 'get furious'. Whereas the experiencer of these verbs always appears in unmarked subject position, marking of the stimulus is more diverse: inanimate referents are usually marked with the elative case ("from within"), animate referents with the allative case ("onto"). But, a corpus analysis reveals that many of the verbs in question also allow for illative marking ("into") on both animate and inanimate referents.

I will argue that this pattern is 1) motivated by various links in the constructional network of the Finnish language and 2) associated with a particular function, i.e. emphasizing that the experiencer was exposed to the stimulus for a considerable amount of time prior to the emotional reaction denoted by the verb. This hypothesis is supported by a *multiple distinctive collexeme analysis* (cf. Gries & Stefanowitsch 2004) of the argument structures of the verb *hermostua* 'get unnerved/upset': among the most distinct collexemes of the construction [*hermostua* N-ill], we find nouns that frequently co-occur with verbs denoting surfeit, boredom or impatience, all of which require illative marking on their second argument.

The link between verbs denoting anger and verbs denoting surfeit is further supported by diachronic corpus data. Originally, one of the most frequent verbs of anger, i.e. *suuttua* 'get angry', appeared with the meaning 'get fed up' and illative marking on its second argument. Drawing on the notion of constructional change (cf. Traugott & Trousdale 2013), I will attempt to retrace the development of the construction [*suuttua* N-ill] and show how illative marking got marginalized by the constructions [*suuttua* N-ela] and [*suuttua* N-all], while at the same time spreading to new contexts. Thus, the talk does not only provide a holistic perspective on the issue of argument structure alternations, it also provides further evidence

for a usage-based approach to argument structure constructions as proposed by Perek (2015).

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Constructions in contact: Two studies of English-influenced language change

Across theoretical frameworks, the effects of language contact have typically been considered ‘marginal' or ‘peripheral', and are mainly discussed in contexts where language contact is the specific object of study. Here, we present data from two languages which are morphologically complex in very different ways -- American Sign Language (ASL) and Malayalam (Dravidian) -- and are both in considerable, prolonged contact with English. Adopting a Radical Construction Grammar approach (RCxG, Croft 2001), where constructions are identified on a language-by-language basis, we compare and taxonomize a number of language-specific constructions resulting from contact with English. We also demonstrate that the theoretical apparati from construction-theoretic approaches to linguistic analysis (CxG, e.g., Fillmore 1988, Croft and Cruse 2004, Booij 2010, Goldberg 2013) can be extended to explain contact phenomena more generally. This is achieved through the (motivated) assumption that contact effects result from correspondences across constructions from any language in which a speaker has (even limited) competency.

Language contact is heterogenous: the degree of exposure and use of the languages in contact varies greatly in contact situations. For example, whether speakers identify a construction as a loan relies on their experience with each language: In contexts where borrowing is proscribed, identifiably English-origin constructions are avoided, whether or not they are of English origin historically (c.f., Walter 2017 for Bosnian/Serbian/Croatian). In ASL, the practice of “de-initialization”, by which vocabulary items are altered to reduce their phonological resemblance to English words, affects the form of the lexical constructions LANGUAGE, FAMILY, and CULTURE, among others (c.f., Padden 1998). The relative frequency of constructions also varies by speech community, which can result in different borrowing patterns. The translation equivalent of the “play the [musical instrument]” construction in English is conventionally expressed using the verb ‘read', as “[musical instrument] ʋaːjikːuka (‘read')”, in Malayalam. However, the relative frequency of the English construction relative to the conventional Malayalam construction for many speakers has led to innovation of a construction using the verb ‘play': “[musical instrument] kaɭikːuka (‘play')”. We also observe similarities across contact contexts: in both Malayalam and ASL, we observe grammaticalization of English constructions along with re-structuring based on contrasts (e.g., gender) which only exist in one or the other language, based on re-analysis of borrowed constructions as belonging to a family of constructions in the borrowing language.

We conclude that systematic description of languages on their own, as well as the careful comparison of similarities across constructions and across languages, provides a helpful approach to language diversity. In this approach to language contact, two usage-based assumptions provide descriptive power beyond more traditional accounts: i) changes are driven by an individual's language experience (i.e., frequency of exposure and use across the lifespan) and ii) linguistic constructs can be used productively without necessarily being compositional. The result of this

exploration of borrowing patterns in two quite different languages which have in common their extensive contact with English is an inventory of contact outcomes that can be further tested in additional languages, but moreover provide a unique view of the networks that constructions participate in, within and across speaker's languages.

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On the importance of lexical constructions; accounting for the distribution and polysemy of a motion verb

One line of research in constructional analysis has supported (on occasion controversially – cf. Boas 2005; Goldberg & Jackendoff 2005) an upgraded role for lexical constructions headed by verbs, since verb senses are often associated with idiosyncratic properties that are not derivable from their interaction with grammatical constructions (e.g., Croft 2003; Boas 2008, 2013; Nemoto 2005). As per Boas (2013: 191), "individual verb senses should be regarded as mini-constructions with their own frame-semantic, pragmatic, and syntactic specifications whenever abstract meaningful constructions overgenerate". Such approaches descriptively tally with a long line of earlier (e.g., Atkins 1987; Fillmore & Atkins 1992; Hanks 1996) and more recent work (e.g., Gries 2006; Berez & Gries 2008; Jansegers & Gries 2017; Hilpert 2008, 2016), which takes verbal polysemy as inhering in, and correlating with, all kinds of syntactic, morphological, and lexico-semantic features.

In the present work, we provide further evidence for enriched lexical constructions and their indispensability in describing the polysemy of one of the basic motion verbs in Ancient Greek, the verb *baínō*, whose most general gloss is 'go', characterized as denoting self-propelled, goal-directed movement (Napoli 2006; Nikitina 2013). Drawing on the behavioral profile approach adopted in several of the works above, we retrieved all instances of the verb (total of 579 tokens) in three different authors (Homer, Euripides, Plato), each representing a different genre and era (8th c. BC–4th c. BC). The data were extracted from the Perseus digital library (http://www.perseus.tufts.edu/hopper/; last access April 2017) and each occurrence was annotated manually for features like sentence type, subject animacy, syntactic (e.g., prepositional phrase, infinitive, participle, zero) and semantic (e.g., source, goal, path) type of complement, lexical fillers of the complement slot, transitivity (since *baínō* also has transitive uses), verb inflection (showing tense-aspect and person-number), word order (of verb and complement) and discourse type (e.g., narrative, direct

speech, chorus – a parameter that does not feature in earlier works). We then created separate pivot tables that allow us to automatically sort and display the data in a multidimensional chart, and most importantly to extract significant patterns.

Results clearly show that particular senses of *baínō* are attracted to particular morpho-syntactic, semantic, and discourse-pragmatic features. We suggest that such constellations should be analyzed as distinct lexical constructions, since the idiosyncratic features do not follow from more abstract grammatical constructions or from verbal semantics. We find, for instance, that particular senses may correlate exclusively with perfective aspect (e.g., the inchoative construction), or with a specific person-number inflection, or with a particular type of complement, or with very specific lexical fillers (as in the sense 'mount', which mainly co-occurs with the nouns *naûs* 'ship' and *díphros* 'stool'), or with particular discourse contexts (in fact, some of these lexico-grammatical combinations seem to function as formulaic markers correlating with particular text-types and contexts). Importantly, more than one of these constraints (conventionalizations) may co-exist in the same sense, strongly arguing for enriched gestalts of morpho-syntactic and semantic-pragmatic features that are necessary for an adequate account of the verb's polysemy and distribution.

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A corpus-based study on the development of constructions in Chinese child language

Based on construction grammar theory (Goldberg 1995, 2009), previous research on Chinese has found that the symbolic correspondence between semantic and syntactic levels is not always applicable to Chinese constructions (Lu 2008; Zhang 2000). This is caused by the fact that there can be multiple semantic structural relations between Chinese words (Lu 2010a). For instance, the sentence "Yi4guo1fan4--chi1bu4liao3---shi2ge4ren2", which literally means "A pot of rice--eat can not--ten people", does not indicate that the subject "rice" acts as an agent and eats ten people. Instead, the construction indicates a semantic structure of "Carrying capacity + Manner of Capacity + The amount that's to be carried" (Lu 2011). Considering this specificity of Chinese, Su and Lu have put forward a Construction-Chunking Analysis Approach (Su 2009 , Su & Lu 2010, Lu 2010b). According to this hypothesis, a chunk is the basic unit for syntactic analysis; within a construction, chunks link with each other with finite semantic relations in a linear way. This hypothesis has shed lights on how to teach Chinese as a foreign language, and the construction-chunking teaching methods have improved foreign students' learning outcomes (Su 2010). Despite this, the hypothesis has not yet been attested against evidence from language development. The present study is an attempt to fill this gap with a focus on causal events which normally involve one or more than one simple event roles (Li 2013). It tries to answer the following questions:

(1) Are there chunk units in Chinese children's expressions of causal events in their early childhood language?

(2) How do they develop their grammatical constructions during this process ?

(3) Does evidence from child language support the Construction-Chunking Analysis Hypothesis? If so, from what stage of language development?

A sub-corpus of the Child Language Data Exchange System (MacWhinney 2000) was adopted for analysis, namely the Xinjiang/Chinese corpus (https://childes.talkbank.org/access/Chinese/Mandarin/Xinjiang.html). It includes the transcripts of how Chinese children (aging from 4-7, with 15 children in each age group) narrate *The little airplane*. Their narrations on causal events, which involve direct force interactions between two entities and a resultative change, were examined in terms of the following criteria:

- what the subjects of different ages expressed among the four semantic elements of *agent*, *patient* (in some cases *experiencer*), *causing action* and *result*;
- what devices the subjects used to express the causal meaning;
- which age group began to use causative constructions, and how they reconciled constructions with verbs.

The results show that there *are* chunk units in Chinese children's language, starting from age 5, and in this way, the development of their use of constructions in grammar lends support to the Construction-Chunking Analysis Hypothesis.

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Inside the Japanese constructicon: A partial network of constructions involving internally headed relativization

This paper discusses the so-called internally headed relativization (IHR) (1) in Modern Japanese in comparison with other constructions that are related to it either formally or semantically. It argues that they form a part of the network of constructions in the Japanese constructicon, linked by inheritance links such as instance, subpart, and metaphorical links. Especially, it claims that subpart links play an important role in connecting IHR to other constructions at the same level of abstraction.

Although Construction Grammar has been employed in analyzing various constructions in Japanese, there are very few works that discuss the overall network structure of the Japanese grammar, that is, the Japanese constructicon. IHR in Japanese has been extensively studied using various approaches (both formal and cognitive/functional) since Kuroda (1992[1974-1977]). In the last 20 years there has been a resurgence of interest in IHR, specifically from cognitive-linguistic perspectives. However, how to make sense of the relationship between IHR and other constructions has remained unsolved (cf. Horikawa 2000, Tsubomoto 2003, Amano 2011).

The paper proposes that relations between IHR and other constructions can be described using inheritance links (cf. Goldberg 1995, Hilpert 2014). IHR is linked with the Bi-clausal construction via an instance link. IHR is linked with externally headed relativization (EHR) by a subpart link (sharing the propositional content); the Complementation construction by a subpart link (sharing some structural properties); the *Ga*-coordinated construction by a subpart link (sharing temporal sequencing); and the Concessive construction by a subpart link (sharing the pragmatic function of making an assertion) and a metaphorical link.

Crucially, IHR is NOT linked with either the Complementation construction or the Concessive construction by a polysemy link, since they are structurally different (Author, in press). Subpart links play an important role in connecting IHR with the other constructions. Unlike the other kinds of links, subpart links may connect constructions that are at the same level of abstraction. They relate constructions that show either formal or semantic overlap, but which do not allow the classification of one construction as an instance of the other (Hilpert 2014:63). EHR, the Complementation construction, *Ga*-coordinated construction, and the

Concessive construction are all analyzed to be at the same level as IHR in the network of constructions in Japanese.

To summarize, the paper proposes that IHR and EHR, the Complementation construction, *Ga*-coordinated construction and the Concessive construction exhibit a partial network of constructions in the Japanese constructicon, linked by subpart links. The paper thus presents a hypothesis concerning a part of the Japanese constructicon. It is hoped that the present analysis will serve as a starting point for behavioral and experimental studies concerning the nature of linguistic knowledge of Japanese speakers.

(1) *[[[Ringo ga tēburu no ue ni atta]S1 no] o Midori wa totta]S2*

apple nom table gen top loc existed nmlz acc top took

Literal translation: ‘Midori picked up [that there was an apple on the table].'

Intended meaning: ‘There was an apple on the table, and Midori picked (it) up.'

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Caso-Conditional Constructions in Portuguese

There has been a great debate on the overall characterization and development of conditional meaning and form (Traugott, 1985; Traugott et al., 1986; Athanasiadou & Dirven, 1997; Dancygier, 1998; Dancygier & Sweetser, 2002). Within this context, this paper attempts to describe the development of conditional connective *caso* as a case of constructional change in Portuguese (Traugott & Trousdale, 2013).

This paper maps the historical development of 'caso' from head of a noun phrase to its procedural meaning as a connective. Based on Traugott and Trousdale (2013), it is possible to account not only for the final step of its development but to explain the various sub-steps the term endures. The representations of the sub-schemes allow us to understand the inheritance relations between the source concept and the connective. In addition, it is also possible to explain the similarity relations between the members of the category and to verify what are the shared features that allow the noun *caso* to be reanalyzed as a conditional connective. This development can be arranged in a linear fashion (figure a) in a network of relationships across the different stages that accounts for the functional and semantic differences between the three stages ((b)-(e)).

(a) fact > situation > circumstance > eventuality > hypothesis

(b) noun meaning of fact – ['caso' (N) + Ind V]

(1) O caso Ricupero deflagrou uma onda confessional. (19N:Br:Folha)

The Ricupero case triggered a confessional wave.

(c) situation/circumstance - [Inf + 'caso' (N) + Prep + N + V]

(2) Se for o caso de Bauru, que será apontado por esse estudo, será Bauru. (19Or:Br:Intrv:Cid)

If it is the case of Bauru, which it will be pointed out by this study, it will be Bauru.

(d) situation/circumstance - [V + 'caso' (N) + Prep + Verb Inf]

(3) Será que não seria o caso de fazer uma oração, dizer algumas palavras, sei lá? (19:Fic:Br:Amaral:Amigos)

Wouldn't it be the case to say a prayer, say a few words, I don't know?

(e) hypothesis/condition - [‘caso' (Conj) + V Subj]

(4) Caso surja alguma notícia ou a senhora se lembre de alguma coisa que possa nos ajudar a encontrar seu irmão, telefone, mas não fale nada com mais ninguém, mesmo da polícia. (19:Fic:Br:Garcia:Silencio)

In case anything comes up or you remember anything that might help us find your brother, call us, but do not say anything to anyone else, even to the police.

Since conditionality covers for a range of very different constructions, a comprehensive theory of conditional meaning should consider how more peripheral constructions relate to the core meaning in order to understand how the category is organized. At the end we provide tools for a uniform framework of conditionality that goes beyond the description of particular conditional form and that contributes to the understanding of how the conditional meaning arises. The data for this analysis was collected at *Corpus do Português* (Davies & Ferreira, 2003), a database of written and spoken Portuguese (available: https://www.corpusdoportugues.org) from the 14th to the 19th century.

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Frequency and unique types - the productivity of Swedish motion constructions.

In construction grammar, the notion of productivity is often based on type frequency (cf. Goldberg 2006; Barðdal 2008; Bybee 2013), on the assumption that the higher the type frequency the higher the likelihood that speakers will use new items in the construction (for instance verbs in an argument structure construction). Thus, a construction with higher type frequency than another construction is considered more productive. The question is whether all of the types that constitute the type frequency of a construction are equally adequate indicators of productivity. Consider the following examples of Swedish motion constructions.

(1) Siri gick iväg till bussen (‘Siri walked off to the bus')

(2) Siri älgade iväg till bussen (‘Siri moved off in a moose-like manner to the bus')

(3) Siri skojade runt på stan (‘Siri joked around in the city')

The examples (1-2) instantiate a construction that consists of a verb, the directional adverb *iväg* ‘off' and a prepositional phrase with the preposition *till* ‘to' referring to the object to which the subject is moving (cf. author 2014, 2017). Example (3) instantiates a syntactically similar construction that is lexically filled with the adverb *runt* ‘around' and a prepositional phrase with the preposition *på* ‘on' referring to an area in which the motion is carried out. Hence the former construction can be called [verb-*iväg-till*] ‘verb-off-to' and the latter [verb-*runt-på*] ‘verb-around-on'.

In this talk, I will present a comprehensive corpus study of 17 Swedish motion constructions, such as these. In a corpus of Swedish blogs, the verb *gå* ‘walk' is common in a variety of motion constructions, while the verb *älga* ‘to moose' in (2), and similar verbs such as *orma* ‘to snake', *åla* ‘to eel', *snigla* ‘to snail' are mainly found in the [verb-*iväg-till*] construction, and *skoja* ‘joke' in (3), and similar verbs such as *busa* ‘play', *spexa* ‘horse around', *clowna* ‘to clown' are exclusively found with the [verb-*runt-på*] construction. These can be considered unique types, in the sense that they are exclusively used in one of the 17 motion constructions. The corpus shows that constructions such as [verb-*runt-på*] and [verb-*iväg-till*] not only occur with more types than other constructions such as [verb-*in-till*] ‘verb-in-to' and [verb-*ner-till*] ‘verb-down-to', they also occur with more unique types.

The question asked in the present study is whether these unique types tell us more about the productivity of a construction than the common promiscuous motion verbs such as *gå*. I will argue that the measure of productivity would benefit from using more refined type frequencies such as the amount of unique types, as well as the amount of types without a conventionalized motion meaning such as *skoja* in (3). By using these frequencies, I will show that there is a difference in the degree of productivity among the investigated constructions.

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From compounding to derivation: reflexives and intensifiers in word-formation in Indo-European languages

Word formations with a first constituent with a reflexive or intensifying origin are traditionally classified as processes of derivation or compounding, according to the specific language's rules. Thus, for instance, Ancient Greek *autodídaktos* 'self-taught' is a morphologically complex lexical unit, made up of two elements, each of which can function as a lexeme (Bauer, 2001: 695). Contrarily, *self-*, as in English *self-taught*, is an affix, a bound grammatical morpheme. While a discrete classification between derivation and compounding is problematic (Scalise & Vogel, 2010), cross-linguistic comparison suggests two opposite tendencies in word formation: a more lexical type and a more grammatical type. As for the so-called 'reflexive' constituent, this and other close semantic functions, such as anticausatives (*self-administered*) and focalizers (*self-acquisition*), are formally identical but need to be semantically differentiated.

The aim of this talk is to show how a constructionist approach helps to set a possible correlation among certain Indo-European languages between the reflexive/intensifier distinction of the first constituent and the process of word formation, considering it as a lexical-grammatical continuum.

To do so, in our investigation we analyzed three kinds of data from different modern and ancient languages:

- large corpora: constructions with *self-* (English), *auto-* (Spanish),

- closed corpora: constructions with *sva-* (Vedic), *auto-* (Ancient Greek, Latin), *āñcäm* (Tocharian A), *āñm-* (Tocharian B), *atma-* (Tocharian, Sanskrit),

- bibliographical review + native expertise: constructions with *eigen-/selbst-* (German), *само-* (Russian), and ink'n (Armenian).

The classification of such constructions as reflexives, focalizers, and anticausatives (Mutz, 2003), and the eventual characterization as free words for some of the analyzed elements, lead us to claim that while constructions closer to the lexical pole can be more often analyzed as intensifiers (anticausatives or focalizers), constructions closer to the grammatical pole allow reflexive restrictions. Diachronically, this distinction is often reflected in the distribution of the analyzed languages: on the one hand, Vedic, Tocharian and Classical Greek constructions show little grammatical restrictions, as X1 in [[self]+[X1]] does not specify a specific valency; in this sense, these are closer to the lexical pole, which is consistent with the possible use of first constituents as independent words. On the other hand, and following proposals such as those by Hüning and Booij (2014), Spanish, English and German constructions allow also the constructionalization of a subschema with more grammatical restrictions: [self-[X2]], being X2 biargumental and coreferent. These constructionalizations tend to occur in varieties where the first constituent cannot be used as a free word. From this, we conclude that constructionalizations are changes from a more lexical macro structure towards a more grammatical substructure, with new restrictions, such as valency specification and coreference.

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On the (ir)relevance of “proper” for noun phrases

Since constructions are generalizations over instances and Construction Grammar (CxG) is usage-based, we not only need to reanalyze constructionally language instances that have previously been analyzed from other points of view; we also need to revaluate (on the basis of attested usage of instances) the details of the tools that we have taken over from traditional analyses.

The Noun Phrase (NP) is almost a *sine qua non* for any work in grammar. The construction licensing NPs in CxG is the Determination construction (Det cxn), where the word-class specification “noun”, [cat n], is *inter alia* accompanied by the indication [proper -] ‘proper minus', specifying that the construction does not license constructs where the “head” noun is a proper noun.

Non-prototypical expressions like *(1) the Helsinki of the Moomin trolls* have in CxG been dealt with as coercion (cf. e.g., Michaelis 2005) or in terms of feature-changing constructions (cf. Fried & Östman 2004: 39); see also studies in Van Goethem, et al. (2018). Other grammatical challenges offered by names are (i) whether cases like *(2) Captain John Smith* should be approached with tools like title, epithet, appellation, or apposition (cf. Matthews 1981); (ii) why speakers vacillate between *(3a) Liljendal församling* (‘The congregation of Liljendal') and *(3b) Liljendals församling* in Swedish; and (iii) the seemingly ambivalent proper-common status displayed in *(4a) Tromsø is the Paris of Northern Europe, (4b) Tromsø is the paris of Northern Europe*, where a “proper” name has “common” properties (cf. coercion), but is not totally common.

To complement other constructional studies on proper names (see in particular Marmaridou 1991, Dancygier 2011), this study argues that we need to make a distinction between the Det cxn and a Proper-Name-Phrase construction (NaP cxn), and that names are not licensed by the same resource as other noun phrases.

This distinction makes it possible to tackle the challenges above: I show that (3b) is licensed by the Det construction, whereas (3a) is licensed by the NaP construction; that the notion of “head” is not a central [role] value in the NaP construction; and in relation to (2): that characteristics with respect to restrictive or non-restrictive attribution of NaP are not the same as those for constructions with common nouns.

In order to capture the different meaning potentials of (4a) and (4b), I make use of contextual attributes within Construction Discourse (CxD; cf. Östman 2015, where external, contextual attributes are inside grammar), and of recent work on the dynamics of names within socio-onomastics.

When establishing abstractions to capture the linguistic resources that speakers have at their disposal, the crucial question is not to decide where to draw the line between one construction and another, but rather how much, and what kind of variation can be allowed when depicting the resources available, and ultimately how (non-intentional) ambivalence and constructional overlaps should be depicted.

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A usage-based analysis of low-level constructions: The case of synonymous verb-particle constructions

With the development of methods in corpus linguistics, the usage-based constructionist approach has been increasingly focused on so-called low-level (mid-level or concrete) constructions (Goldberg 2006; Taylor 2012). One theoretical implication of the usage-based approach is that we store rich low-level constructions in addition to abstract constructions: if our knowledge of grammar is abstracted from utterances we hear, then we must acquire multiple concrete constructions on the way to developing the abstract knowledge (Goldberg 2006). Previous studies have examined certain types of low-level constructions, such as collostructions or idiomatic constructions (e.g. Stefanowitsch and Gries 2003; Boas 2003; Hilpert 2014). However, the kind of information that is carried by low-level constructions is still under discussion. In particular, little attention has been paid to the way discourse information is conveyed by low-level constructions.

To discuss the nature of low-level constructions, this paper carries out extensive research on the *British National Corpus* (*BNC*), focusing on three synonymous verb-particle construction (VPC) pairs (*beat up/down*, *smash up/down*, and *tear up/down*):

(1) He *beat* {up/down} the man.

(2) He *smashed* {up/down} the ball.

(3) He *tore* {up/down} the paper.

These VPCs are regarded as synonymous in that they can be used interchangeably only with slight semantic modifications. However, the usage-based nature of constructions implies that even apparently synonymous constructions show different behaviors.

The method of this study involves the following steps: First, I retrieved all the examples of the verbs *beat*, *smash*, and *tear* from the *BNC* (8186, 1550, and 2946, respectively), then manually selected all the examples of verb-particle constructions including *up* and *down* (578, 161, and 370, respectively). Second, I annotated six features: (i) particles, (ii) type of constructions (VPO, VOP, passives, and intransitive), (iii) word order of the particle and the object noun, (iv) definiteness of the object noun, (v) word class of the object noun, and (vi)

length of the object noun. Third, I generated co-occurrence tables of these factors and evaluated them.

The results include the following points: First, the average length of the object noun phrase is 3.16 words in the VPO type (e.g. *smashed up the door*), and 1.34 words in the VOP type (e.g. *smashed the door up*). Second, in the VOP type, the object NP has a strong tendency to be used as a definite noun phrase (Table 2). Third, unlike in other low-level constructions, more than 70 percent of the objects are pronouns in the VOP type of *beat up* and *tear up*. Fourth, in the two synonymous VPC pairs *beat up/down* and *smash up/down*, the frequencies of passives are quite different. Fifth, the relative frequency of intransitives in *smash down* is much higher than in that of other low-level constructions. These results, taken together, suggest that (i) even for synonymous constructions, quite different distributions (or skewed frequencies) are observed, and (ii) lower-level constructions, such as the VPO/VOP types, convey information structure.

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Construction grammar, perception, and production, as exemplified in language development

Language development has been notorious for creating a debate about whether perception is ahead of production or vice versa, with both types of order existing during the actual course of development (Clark & Hecht, 1983). The important variations between perception and production, including within the development of the same child, are difficult to explain within classical grammatical approaches for two reasons. First, the very notions of perception and production are used in psycholinguistics, and they are not explained by linguistic theories. Secondly, it is rather peculiar that two systems, which should be hugely correlated, present important and irregular differences.

Cognitive grammar (Goldberg, 1995, 2006) is a framework and a grammatical theory that offers a perfect solution to the relationship between perception and production, especially when associated with an interactive and dialogic approach. It applies very well to language development, as well as to the whole lifespan. Language development offers a very interesting case in point because of its dynamic aspect, and dynamicity is necessary for a theory of language that includes perception and production.

Our proposal is that perception and production work at the level of the construction. All constructions are made of bundles that consist of properties that can be functional or formal (functional in our approach includes meaning and pragmatics, formal includes all physical expressions of language, including prosody, gesture, and context). The constructions can be very specific, i.e. including several exemplars only, or generic, i.e. generalizing over dozens, hundreds or more exemplars. Perception is the act of finding a bundle in the knowledge of the receiver that matches what happens in interaction. Production is the act of playing out the content of a bundle. The goal of the interaction is to adjust perception and production.

The development of reference to time by children is a perfect example of this model. Our work is based on a corpus of two children in spontaneous interaction with their parents from

age 1;6 to age 4;6, and on an analysis of more than 44800 utterances produced by children and adults. Very young children start with specific items that are often interpreted as containing more semantic value by the adult than the child's form might suggest, because the semantic information given by the context is quite rich. In this situation, semantics help to build form, so semantics are ahead of form, and production is behind perception. Later, children start to produce forms that cannot be understood on the basis of the here and now, because they start speaking about disconnected elements, i.e. not present at the moment of speech. In this situation, forms are the only means to build semantics. Form is thus ahead of semantics, and production is ahead of perception. Within construction grammars, it is easy to implement such a huge variety of situations because constructions start to develop independently, at the exemplar level, before being progressively generalized into larger scale constructions.

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Spanish verb-congruent clause meaning and the role of morphological aspect - a contrastive perspective

In this study, we examine the combined role of the verb lexeme and morphological aspect in Spanish clausal constructions. This is an interesting question since Spanish constructions are highly verb-constrained (cf. Goldberg 2006: 120):

Pedro bajó / **bailó a* (LOCATIVE) *la playa*

'Pedro moved down / danced to the beach'.

The verb also constrains how the construction interacts with the context. *Bailar* 'to dance' cannot provide a usage of 'goal-reaching motion' in the "right" context. However, when the verb lexeme (Path or Manner) has an element of directedness, a context of boundedness may facilitate the construction of goal-reaching meaning: *Pedro corrió a la playa* 'Pedro ran to the beach'.
In English, the clausal core meaning is not necessarily a reflection of the verb meaning (Goldberg 1995). In addition, the concrete context may have a crucial role in facilitating the interpretation of the intended meaning independently of the verb: *Two people* ***stumbled in the room****. The woman.... As she walked in..., someone was right behind her*. The goal-reaching usage of the locative *in* is acceptable in specific contexts (Nikitita 2008; Beavers 2010). The constructionist view of highly abstract, verb-independent encoding of the core meaning arguably implies a flexible interaction with the context. In contrast, this interaction is constrained in Spanish in which the core meaning is bounded to the substantial meaning of the verb lexeme.

Since argument structure and aspectual (time) structure are interdependent, the expectation is that the Spanish verb constrains not only the former but also the latter. As the time context seems to interact with the verb we hypothesized that verb-inflected morphological aspect may have a crucial role in the construction of Spanish argument structure.

In a large corpus study, including collexeme analysis (Stefanowitsch & Gries 2003), we examined the combined role of the verb lexeme and morphological aspect in Spanish

constructions of goal-reaching motion with the locative *a*-marker: SUBJ V *a* NP. We found that this usage requires 1) A verb component of directedness, 2) A context of boundedness, 3) Verb-inflected perfective aspect or imperfective iterative aspect.

We argue that the Spanish verb meaning represents the basic condition (directionality). We interpret the morphological aspect as a verb marking of the aspectual verb-context interaction. The lexical constraint combined with the morphological constraint seems to be a way to achieve verb congruence with the intended meaning, both at the level of argument structure and aspectual structure. In a general perspective, we hypothesize that Spanish – in contrast to English – strongly favors *verb congruent* encoding of the clause (Author, forthcoming).

Recent lexicalist research has explained the absence of unaccusativization (goal-reaching usage of manner verbs) in Greek and similar languages, including Spanish, by claiming that such processes are blocked by the presence of a grammaticalized aspectual opposition (cf. Horrocks and Stavrou 2007). We suggest a constructionist cross-linguistic framework, in which Spanish and similar languages are *verb-congruent languages*, which accounts in functional terms for the presence of grammaticalized aspect.

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Creating a Constructicon from the COBUILD Grammar Patterns and FrameNet

In recent years, the field of Construction Grammar has seen an impetus to build constructicons: inventories of constructions in a given language. This paper describes a proposal to create a construction of English, focusing in particular on verbs, drawing from two existing resources: FrameNet and the COBUILD grammar patterns. The first findings of this project are reported.

The COBUILD project was one of the first attempts to create dictionaries from corpus data, and led to the insight that typical uses of a word, such as the syntactic frames or “patterns” it can occur in, should be included as part of that word's description. This notion was further taken up in the compilation of a pattern grammar of English (Hunston & Francis 2000): a list of all the patterns found in COBUILD, with the set of lexical items attested in them, which was soon published as the two-volume grammar patterns series (Francis et al. 1996, Francis et al. 1998).

The COBUILD patterns are very similar to constructions, as they are conceptualised as single coherent grammatical units consisting of fixed parts and open slots, existing independently of the words that fill those slots. Hence, the COBUILD patterns can provide the basis for a constructicon of English verbs, which would nicely complement the FrameNet Construticon project (Fillmore et al. 2012), currently under development, as the latter tends to focus on idiosyncratic constructions rather than the common, regular constructions exemplified by the COBUILD patterns. However, contrary to constructions, patterns are not semantically motivated, and they are not explicitly paired with meaning or semantic role descriptors, although the semantic groupings of verbs found in a pattern's entry do provide an indication of the kind of verbal semantics that the construction tends to convey. In the present approach, the FrameNet database is used to provide the semantic component that is missing in patterns. Besides describing the semantics of English words in terms of coherent representations of experience or knowledge that they evoke, FrameNet also includes valency information describing how frame elements are encoded in selected corpus examples, which can be matched with the COBUILD patterns.

In a pilot study, all verbs listed in the patterns of *Collins COBUILD Grammar Patterns 1: Verbs* (Francis et al. 1996) were searched for in FrameNet, and if the verb was found with a matching valency pattern, the pairing of the verb's frame with the relevant pattern was posited as a potential construction. Preliminary findings show that most grammar patterns

are related to more than one frame, suggesting that they correspond to more than one construction, but frame-to-frame relations can be used to highlight commonalities between frames that motivate a higher-level generalisation. Conversely, some of the verb classes listed with the COBUILD patterns can help highlight relations between frames that are not recorded in FrameNet. Overall, the information provided by the two resources is quite complementary: the COBUILD patterns tend to list more verbs than FrameNet, while FrameNet often accounts for subtle semantic differences between uses of the same verb.

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Semantic polyfunctionality and constructional networks. On insubordinate subjunctive complement constructions in Spanish

This paper suggests a constructional approach to semantic polyfunctionality through a detailed analysis of independent subjunctive complement constructions in Spanish (1):

(1) [A student is talking about one of their teachers at school]
J02: qué bueno chicas que esté tardando mucho (...)
J02: chicas hace quince minutos que deberíamos estar en clase
que haya falta-do (.) por favor
COMP have.3SG.PRS.SBJV be.absent-PTCP by favor
'J02: it's great girls that she is taking so long (...)
J02: girls the class should have started fifteen minutes ago.
[I hope] she hasn't come (.) please'
(BABS2-03, COLA BA, apud Sansiñena, 2015: 65-66)

This example illustrates the phenomenon of insubordination, "the conventionalized main clause use of what, on prima facie grounds, appear to be formally subordinate clauses" (Evans 2007: 367). On the one hand, the construction includes an initial complementizer and a verb in the subjunctive mood, which is typical of subordinate complement clauses. On the other hand, it is syntactically and pragmatically independent, since no candidate main clause material occurs or can be reconstructed in the speaker's turn or in the preceding turns. Insubordinate constructions tend to express the same functions crosslinguistically (Evans 2007): interactional, modal and discourse-organizational. In particular, insubordinate subjunctive complement constructions (ISC) can express either (third-person) commands/orders (2), wishes (3) or quoted commands/orders (4) (Pons 2003, Sansiñena 2015):

(2) ¡Que te ayude Antonio!
'Antonio should help you!'

(3) ¡Que pases un buen día!
‘I hope you have a good day!'

(4) A: ¡Ven!
B: ¿Qué?
A: ¡Que vengas!

‘A: Come!
B: What?
A: I told you to come.'

However, there is no agreement in the literature on whether these three functions should be treated as instances of a single construction or as independent constructions, with their own formal and interpretive features (cf. Verstraete, D'Hertefelt and Van linden 2012). This raises interesting theoretical and methodological questions: How should we draw the lines between constructions? What aspects of contextual discourse-pragmatic information are coded in linguistic structure? How should we model them?
In order to avoid repeating the polysemy vs. monosemy debate (Sandra & Rice 1995), a constructional approach may refer to inheritance relationships, including all the relevant information needed to account for specific constructs in the constructional hierarchy in such a way that shared abstract features are situated in higher positions of the network without licensing new expressions, making use of the distinction between licenser vs non-licenser constructions (Sag 2012). In order to operationalize this, we posit a new licenser construction whenever interpretations correlate with specific non-functionally motivated formal marking(s); shared features between licenser constructions are represented in a higher node of the constructional network as non-licenser constructions. Our analysis suggests that wishes and commands/orders are instances of the same deontic construction, whose interpretation depends on independent pragmatic principles —i.e., conditions on speech acts (Searle 1969)—, whereas quoted commands/orders are both instances of the insubordinate complement deontic construction and of the insubordinate complement quotative construction (Gras 2016), through multiple inheritance relations (Sag 1977).

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Constructionalisation of in the same vein as a text-connective marker: A side effect of the decline of subject-verb inversion?

Research on the emergence of constructions (e.g. Israel 1996, Noël 2007, Bergs and Diewald 2008, Bolly 2009, Bybee 2010, Hilpert 2013, Traugott and Trousdale 2013, Barðdal et al. 2015) has offered new perspectives on how to study the evolution of language.

This paper focuses on the constructionalisation of the text-connective marker *in the same vein*, based on *Early English Books Online* (EEBO) and on the *Corpus of Historical American English* (COHA) (Davies, 2010-). One can observe that the evolution of the syntactic position of *in the same vein* is accompanied by fixation and a loss of semantic compositionality. The meaning of *vein* ("a special or characteristic style of language or expression in writing or speech" (OED)) was diluted within the construction, which increasing performs a purely discursive function. *In the same vein* was originally used within a verb phrase to signal Similarity of Manner:

(1) *In truth I am almost decided to answer this precious billet-doux* ***in the same vein*** *in which it was written.* (1877, COHA)

Once in initial position, however, the construction acquired new functions and exhibited a gradual backgrounding of its Manner component in favour of the mere notion of Similarity. The combination of the metatextual term *vein* with the anaphoric value of both *the* and *same* has turned into a text-connective marker signaling the introduction of a new topic related to the previous one:

(2) *Ride less. That's right, less. If wedging more cycling into your life results in stress and frustration, relieve the strain by making your rides 10% shorter. The pressure will disappear but your fitness won't if you increase ride quality as described above.* ***In the same vein****, plan not to ride some days so you don't feel like you're being deprived*. (1999, COHA)

Interestingly, quite a few early examples include subject-verb inversion, like (4). These cases seem to have been subsequently replaced by modern instances of the construction.

(3) *That is a plain downright irony in 2 cor: 11: 4: if he that cometh preacheth another Iesus, ye might well bear with him [...].* ***In the same vein*** *is that in 2: cor: 12: 13: forgive me this wrong: he had told them in the same verse, that they were inferiour to no churches in any thing*. (1693, EEBO)

Crucially, this suggests that the steady decline of the subject-verb inversion construction, which accelerated in the 17th century (Jacobsson 1951), may have favoured the constructionalisation of *in the same vein*. This observation may even be extended to other members of the same family of connectives, i.e. *similarly*, *in a similar vein* and *along the same lines*, which exhibited a comparable development.

By studying the syntactic and the semantic evolution of *in the same vein*, this paper wishes to shed some light on the processes at play in the constructionalisation of text-connective markers.

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Why and how we need to incorporate the multi-level nature of the constructicon into corpus research

In recent years, theoretical work in construction grammar has often focused on links between constructions and the design of the constructional network or constructicon (Wellens 2011; Van de Velde 2014; Diessel 2015). Regarding these networks, one of the issues on which we have managed to reach consensus, is the need for a vertical dimension, ranging from fully abstract to lexically specified constructions (Croft 2001: 25–29; Goldberg 2003; Fried and Östman 2004: 15–18). Still, corpus research only rarely explicitly takes this dimension into account and often restrict itself to one particular horizontal level in the network (e.g. Pijpops & Speelman 2017, for exceptions, see a.o. Boas 2010; Wible & Tsao 2017). While such an approach is certainly justifiable, we will argue that neglecting the multi-level nature of the constructicon has led to three problems of constructional semantics.

At least two of these, which will be called the Problem of Prediction and the Problem of Proliferation, have already been noted in earlier studies. The first pertains to the formulation of specific predictions regarding low-level constructions based on only high-level, abstract semantic notions such as affectedness, involvement or agency (see Lenci 2012: 13–15, and also Broccias 2001; Perek 2015: 90–144). For example, when discussing the influence of affectedness on the argument variation of the Italian verb *rimproverare* 'reproach', Lenci (2012: 14) notes that *"this interpretation would require us to stretch the meaning of affectedness well beyond its standard (fairly high) vagueness and polysemy, thereby impairing its reliability as a truly explanatory notion*". The second problem relates to positing ever more concrete constructions (Culicover and Jackendoff 2005; Traugott and Trousdale 2013: 5–11). We will attempt to demonstrate that these problems are caused by a third, more fundamental problem, named the Problem of Precedence. This problem asks at which level in the constructional network speakers primarily employ a construction to

communicate meaning, optimize information structure or express lectal distinctions. Next, we will argue that this concern does not constitute a theoretical issue, but rather an empirical question.

Finally, we introduce a methodological approach to deal with this question. To illustrate the approach, we employ as a case study the alternation between the Dutch transitive and prepositional argument constructions, as in (1)-(2). We identify a seemingly motley collection of 102 verbs exhibiting the alternation and map out the relevant region of the constructional network. Fully abstract argument constructions are first put under scrutiny, after which we continue on to more lexically specific constructions. The goal of this procedure is to identify the precedence level at which the alternation is predominantly active, thus solving the Problem of Precedence. It will be demonstrated that doing so will also enable us to tackle both the Problems of Prediction and Proliferation.

(1) *Minister Vandenbroucke zoekt **(naar)** een oplossing.*

'Secretary Vandenbroucke is searching a solution.'

(2) ***(Met)** hete koffie gemorst.*

'Spilled hot coffee.'

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« Le français n'était pas une montagne pour moi » — Constructions plus ou moins préfabriquées en contexte de langue seconde »

Si dans la perspective de la CxG, les constructions sont définies comme associations forme/sens conventionnelles (Goldberg 2005), l'appropriation d'une langue seconde constitue un processus d'acquisition de nouvelles constructions, perçues dans l'environnement discursif, représentées en mémoire et potentiellement investies dans de nouvelles énonciations (Larsen-Freeman 1997 ; Croft & Cruse 2004 ; Gasparaov 2004) ; ce processus n'est distinct du renouvellement permanent du répertoire du locuteur dit monolingue que par le déficit praxique particulier du locuteur de langue seconde en situation discursive ainsi que par l'intensité du processus de conceptualisation qui en découle et le degré d'hétérogénéité du répertoire à plus long terme.

L'objectif de cette communication consistera à proposer une réflexion préliminaire sur le statut des constructions préfabriquées dans l'appropriation de la langue seconde, français en l'occurrence, fondée sur l'exploitation d'un corpus de 50 entretiens biographiques de sujets bilingues français/arabe résidant en France ou au Québec.

Les unités de construction préfabriqués (UCP) sont définies comme combinaisons verbales polyfactorielles d'un degré de stabilité et d'une prédétermination lexicale et structurelle variables mais suffisantes pour permettre « à un membre de la communauté langagière de la reconnaître et de la réutiliser » (Schmale 2013 :41). L'importance des UCP a été amplement argumentée pour le processus de formulation (Gülich & Krafft 1997), pour l'explication de la régularité/productivité des constructions linguistiques (Fillmore *et al*. 1988 ; Wray & Perkins 2000, Legallois & Tutin 2013), de la constitution textuelle (Günthner 2006) et pour l'acquisition des langues secondes (Widdowson 1989 ; noté aussi par François & Mejri 2006).

Nous interrogerons le statut spécifique des UCP relevées dans le corpus en mettant en exergue les enjeux de leur utilisation effective en contexte. Après une présentation des grands profils de UCP rencontrés, nous proposerons une analyse qualitative de deux mécanismes soujacents à l'emploi effectif, en particulier, aux nombreuses instanciations non standard d'UCP constatées : le priming (*i.e.* comment la séquentialité du discours rend manifeste la capacité du locuteur à passer d'une construction à une autre, en référence à la structuration mémorielle d'une famille de constructions ou d'un schéma abstrait) ; l'articulation discursive de la compétence hétérogène/ du plurilinguisme individuel (*i.e*. l'emploi de constructions concrètes fortement sédimentées *vs*. d'une construction abstraite

alternative, héritée par l'UCP). Ces observations permettront de discuter, en conclusion, l'apport des UCP au processus général d'élaboration des constructions dans différentes temporalités.

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Paradigms and constructions: What the category MOOD can reveal about the structure of grammar

The inherent structure of grammar is relational and indexical (Jakobson 1971). Consequently, elements of various kinds, ranging from affixes to whole constructions, become indices during the process of grammaticalization (Diewald 2010; Lehmann 2002 [1982]). The present paper aims to describe this inherent relational structure of grammar as paradigmatic and argues that reinterpreting the notion of "paradigm" in constructional terms is important for describing grammatical structures and their development.

The oppositions formed by the members of a grammatical category constitute the structure of the category as a whole. All members of a grammatical category share a common semantic basis, e.g. all members of the category tense situate an event relative to the speech time. As a result, the oppositions between the members define the subcategories of the common semantic basis. The category mood in German, for example, features the basic semantic opposition of factual vs. non-factual that subdivides the category meaning of assessing the factuality of a statement. Non-factual is then divided further into the subcategories of deictic, phoric, and quotative. Paradigms in this sense are holistic entities and a special type of construction. Consequently, such grammatical paradigms are the target structures of grammaticalization processes, i.e., they form a special kind of construction, what Diewald and Smirnova (2012) call "abstract constructional schema". The oppositions between their members result in obligatory choice among them (Diewald and Smirnova 2010). Reinterpreting paradigmatic structures in this way allows for evaluating increasingly abstract, schematic constructions with regard to their degree of grammaticalization.

Examples come from data of the German modal constructions *würde* + infinitive (Smirnova 2006) and *dürfte* + infinitive, which both are periphrastic expressions of phoric non-factuality. *Würde* + infinitive is used as a periphrasis of the conjunctive mood or as an evidential construction (ex. 1), whereas *dürfte* + infinitive is used as an epistemic (ex. 2) or as the conjunctive mood of *dürfen* ('would be allowed to do something').

(1) Sabeth **würde** es natürlich anders **taufen**, aber ich weiß nicht wie. (Smirnova 2006: 225)
*Sabeth **would** of course **baptise** it differently, but I don't know how.*

(2) Und das Hotelpersonal **dürfte** schlimmere Anblicke **gewohnt sein**. (DWDS: Regula Venske, 2006: 31)
*And the hotel staff **is probably used to** worse sights.*

Corpus data from the DWDS Core Corpus (*DWDS-Kernkorpus*; Geyken 2007) for these constructions illustrate that they constitute cells of the respective grammatical paradigm, i.e., the category mood, and stand in paradigmatic opposition to the other members of the paradigm such as the grammatical moods and other modal verbs.

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Poly-constructional syntax in Early Vedic and its loss in Epic Sanskrit

My talk will be empirical-philological and is relevant for a typology of cross-linguistic patterns of multiple constructions and argument structures. I will provide a synchronic description of the poly-constructional behavior of the Vedic psych-verb *juṣ-* 'to like stimulus' and 'to please experiencer', and I will further describe its decline from Vedic to Epic Sanskrit from the perspective of construction grammar with a focus on productivity *vis-à-vis* a more restricted boundedness of argument structure (cf. Goldberg 1995, Croft 2001, Bauer 2001, Barðdal 2006, 2008).

Middle forms of the Vedic psych-verb *juṣ-* can occur in the following 10 constructions. (I use standard glosses. I only give relevant glosses.)

(1) *juṣ-* **+** NOM of experiencer + ACC of stimulus

juṣánta *sóma-m*

AORIST:3PL.MIDDLE Soma-ACC.SG.M

'They enjoy Soma.'

NB. Construction 1 is most frequently attested.

(2) *juṣ* + NOM experiencer + ACC of body (stimulus)

juṣánta *tanú-as*

AORIST:3PL.MIDDLE body-ACC.PL.F

'They (e.g. the flames) enjoy their bodies (themselves).'

(3) *juṣ* + NOM agent and experiencer + ACC of body (stimulus)

juṣa-sva *tanú-am*

AORIST-2SG.MIDDLE.IMPERATIVE body-ACC.SG.F

'Please thy body!'

NB. Construction 3 may be an instance of 2; it is separated here because it is possible that there was a slight meaning difference in agency of the NOM.

(4) *juṣ-* **+** NOM of experiencer + ACC of stimulus + INS of body (place and path)

juṣa-sva *stóma-m* *tanú-ā*

AORIST-2SG.MIDDLE.IMPERATIVE praise-ACC.SG.N body-INS.SG.F

'Enjoy the praise with (in, through) thy body!'

(5) *juṣ-* + NOM of experiencer + partitive GEN of stimulus

jujuṣāṇó *ándhas-as*

PERFECT:MIDDLE.PARTICIPLE:NOM.SG.M herb-GEN.SG.N

'enjoying the herb (part of the herbs)'

(6) *juṣ-* + LOC of experiencer + NOM of stimulus

juṣanta *tvé*

AORIST:3PL.MIDDLE 2SG:LOC

'They may please you.'

(7) *juṣ-* + NOM of experiencer + INS of stimulus + implicit agent

juṣāṇó *arkaíṣ*

AORIST.MIDDLE.PARTICIPLE:NOM.SG.M song:INS.PL

'(having been) pleased by the songs (by an implicit agent)'

(8) *juṣ-* **+** NOM of stimulus and donator + ACC of experiencer and recipient + INS of stimulus and thing given (= theme)

mā *juṣantām* *páyasā*

1SG:ACC AORIST: 3PL.MIDDLE.IMPERATIVE milk:INS.SG.N

'Let them please me with milk (viz. by giving me milk)!'

(9) *juṣ-* **+** NOM of stimulus + ACC of experiencer

ṛtavo *no* *juṣantām*

season:NOM.PL 1PL.ACC AORIST: 3PL.MIDDLE.IMPERATIVE

'The seasons may please us (e.g. by giving us rain).'

NB. Construction 9 with NOM of stimulus and ACC of experiencer is the mirror-image of construction 1 with NOM of experiencer and ACC of stimulus.

(10) *juṣ-* **+** NOM of stimulus and theme + ACC of experiencer and recipient + implicit donator

yān *odano* *juṣa-te*

RELATIVIZER:ACC.PL.M rice.gruel:NOM.SG IMPERFECTIVE-3SG.PRES.IND.MIDDLE

'to whom the rice-gruel is pleased (given with pleasing the experiencer and recipient)'

After a synchronic description of these constructions in the early language, I will show that this verb is continued with the restricted meaning 'to enjoy stimulus' in Epic Sanskrit. I will thereby outline the loss of multiple constructions and the emergence of the restriction of this verb to the NOM of experiencer + ACC of stimulus construction from Vedic to Epic Sanskrit.

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The Use of Medieval Narratives as Meta-constructions Creating Socio-cultural Identity

My examination of the distribution and function of Historical Present (HP) in Old French, Old English, and Old Norse narratives suggests that extending the notion of construction to include a range or suite of strategies (including historical present, genre, characters, and setting) is useful in understanding how narrative structure is used to convey, construct, reinforce, and re- define socio-cultural identity.

This paper argues that the definition of 'construction' given by Goldberg (1995, 2009) may be expanded and applied to include narrative structure as a whole. Thus the narrative itself, in which HP is embedded as a smaller component construction, is stored as a meta-construction. Eckert (2008) and 3rd wave variationists suggest that language use centers on speakers constructing personas, whereas I consider the possibility that the speech community as a whole also constructs a meta-persona. Where Croft (2001) speaks of how "The elements of a syntactic structure in fact evoke an entire semantic frame which contains components and relations not encoded by the syntactic structure...", I would add that the narrative itself as a meta-construction evokes an entire speech community frame or culture.

I combine the methods of corpus-based discourse analysis with insights from work in sociolinguistics, linguistic anthropology and medieval studies (e.g., Jaffe, 2009; Clift, 2006; Englebretson, 2007; Sherzer, 1987; Silverstein and Urban, 1996; Davis-Secord, 2016), and I apply these methods and insights in my analysis of the use of HP in conjunction with other features such as genre, use of direct speech, etc. I find that the HP is employed as a strategy to establish stance but also that the HP serves as a polysemous feature whose meanings are revealed in combination with other features and strategies. The following table lists some of the features that combine to form a meta-construction for each given culture:

Speech community / culture	HP Patterns	Narrative Stance	Genre	Characters	Cultural Message
ON/Icelandic	Flexible, irregular, random, extravagant	Direct, informal	Narrative prose	Bold rule breakers, flamboyant	Evoke and maintain Viking Age Free State (Byock, 2001) values
OF/French empire	Flexible, frequent, but regular and purposeful	Direct, formal	Epic poetry	Larger-than-life, zealous, dutiful	Propoganda. Message: French empire and people are superior
OE/Anglo-Saxon	No HP	Authoritative, formal, distant, didactic	Epic poetry	Loyal, strong, flawed but noble	Reinforce and model value of warrior-hero loyal to his word and Lord

Much more than providing immediate vividness and other uses suggested by Fleischman (1990) and others, the HP strategy interacts and clusters with other strategies and features to do important culture-constructing work. This allows the narrative itself to function as a meta- construction and evoke an entire speech community frame or culture. My examination of the interplay of different levels and embeddings of the HP construction in narratives in turn reveals how narratives can construct and express socio-cultural identity for an entire speech community.

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Collocation-based generalisations: a case study of the causative alternation

This paper argues in favour of positing collocation-based generalisations for argument structure constructions. It is commonly believed that argument structure constructions derive their meaning from the verb(s) with which they occur most frequently, and constructional polysemy is assumed to be the result of extensions from a prototype (Goldberg 2006). However, researchers such as Croft (2003), Perek and Lemmens (2010) and Perek (2014) have shown that this does not hold for certain constructions whose polysemy cannot be accounted for by a central, prototypical verb meaning, but rather via lower level generalisations such as verb-class generalisations. Drawing on these works on verb-class generalisations, we propose an even finer-grained approach, which would not only take verb classes into consideration but also the interaction of verbs with certain themes. We apply this to the so-called transitive alternation in English where certain verbs are found to alternate between an intransitive non-causative construction (*The glass broke*) and a transitive causative construction (*Sasha broke the glass*). Via a systematic study of the interaction between a given verb and the themes that occur with it in a selected corpus, we can draw lower-level generalisations based on entrenched collocations.

Our hypothesis is that the combination of a given verb with certain kinds of argument in one construction or the other will trigger generalisations over the possibility for certain verbs to be used in one of these constructions only. For example, speakers know that things such as laws can be broken, but cannot break, as illustrated in (1) and (2).

(1) *BREAK LAW*

a) I've never broken a law in my life.

b) she liked to break rules and listened to no one.

c) I had broken the first commandment of political life.

d) Petoskey broke regulations whenever it suited him.

(2) **LAW BREAK*

a) * A law has never broken.

b) * rules break.

c) * The first commandment had broken.

d) * Regulations broke.

The following generalisation is assumed to be part of speakers' knowledge of their language: instances of the BREAK LAW collocation do not allow the intransitive non-causative construction. In order to come to generalisations over groups of semantically related themes, we rely on distributional semantics which allows for a systematic grouping based on collocations. This method is applied to all themes occuring with a given verb, and groups are made on the basis of each construction individually. This allows us to identify different categories such as the LAW category which contains themes such as *law, rule, commandment* and *regulation*. Via the use of distributional semantics and a systematic analysis of the interaction between verb, construction and theme we manage to reach a level of generalisation which accounts both for semantic and syntactic constraints.

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Sitting, standing, and making one's way: Language contact and constructional change in Welsh

It is claimed that words in one language do not have exact equivalents in another. This is less so with concrete nouns--a *hammer* is mostly a *marteau* in French and a *morthwyl* in Welsh--than with abstract and polysemous nouns such as *way,* whose equivalents may be varied and context-dependent. But in situations of prolonged language contact, even abstract words like *way* may come to have one-on-one equivalents. Indeed, the Welsh word *ffordd* has come to map fairly consistently onto the English word *way* to the point that these can be viewed as interlingual equivalents. A particularly interesting example is afforded by the English *way*-construction *(make) one's way (to) (a place)* and its most direct Welsh equivalent (*gwneud) ei ffordd (i) (rywle*). This is different from the cases referred to earlier in being an abstract schema [verb + possessive + *way/ffordd* + path] where most of the elements are left unspecified; it can take forms like *elbow one's way through the crowd, dig one's way out of prison*, *giggle one's way up the stairs*, etc. As such, it is a particularly good example of a *construction* in the terms of Construction Grammar (CxG) and similar models. Thus, *dig* and *giggle* are only construed as verbs of motion by virtue of appearing in the Way Construction.

The fact that Welsh has come to share this construction with English lends support to the claims of scholars such as Pietsch (2010) and Höder (2014) for whom the construction has been seen as the primary cognitive unit involved in contact-induced language change. The case of the *way*-construction being taken over from English into Welsh can be seen as an instance of convergent change via what amounts to the wholesale borrowing of a construction. We will also consider a slightly different case, one in which a traditional Welsh construction is now undergoing competition from a contact-inspired alternative. This is the case with expressions of bodily posture such as ‘stand up', ‘sit up', ‘sit down', ‘lie down', ‘crouch', etc.

In the traditional Welsh pattern for these expressions (as confirmed by the fact that Breton, Welsh's closely related sister, uses the same pattern), these expressions use a body-part construction taking the form [path verb + preposition + possessive + posture noun], e.g. *mynd ar ei eistedd* ‘to sit down (lit. go on his sitting)', *mynd yn ei sefyll*, ‘to stand up (lit. go in

his standing)', *codi ar ei eistedd* ‘to sit up (lit. to rise on his sitting'), *mynd yn ei gwman* ‘to crouch down (lit. to go in his crouching).' This construction undergoes competition today with a contact-induced pattern formed on an English model, e.g. *eistedd i lawr* ‘to sit down', *eistedd i fyny* ‘to sit up', etc., making use of the directional particles *i lawr* ‘down', *i fyny* ‘up' etc. (Previous work by Rottet 2005 and in press has explored the influence of English phrasal verbs and directional metaphors on the use of the Welsh verb-particle construction).

Thus we have in the case of the *way*-construction and the bodily posture expressions clear cases of convergent change in a setting of intense language contact, in which abstract constructions come to be shared across the language boundaries within the bilingual community. With data primarily drawn from a translation corpus and a Welsh Internet corpus, it will be seen that the older Welsh patterns are still available in literary and more formal styles, while the English-inspired patterns are the predominant pattern in colloquial Welsh today.

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Verb use in the caused-motion-construction in monolingual and bilingual children

Research has shed light on the role of verbs in the acquisition of argument-structure-constructions in monolingual first as well as in second language acquisition. Goldberg et al. (2004) have shown that those constructions are typically used first with one generic and highly frequent verb, which is also prototypical for a specific construction (e. g. *put* in caused-motion-construction). Once an abstract construction has developed, the verbs become increasingly more specific. But the existence of abstract constructions has been questioned (Langacker 2000). For example, Dabrowska (2004) and Perek (2013) provide empirical results that support the assumption that, in particular, verbs must be considered more at the level of low-level constructions.

The present study aims to investigate the verb types in the caused-motion construction(s) within three different caused-motion event-types focusing on German-French bilingual children. These languages differ regarding the construction-types available to express caused motion: whereas the caused-motion construction (VOL) as defined by Goldberg (1995) exists in both languages, German also has a construction containing two locatives (*Du hängst es an den Haken an*. 'you put onto the hook on.'). In French caused-motion can be expressed without a locative (*Tu les accroches.* 'you on+stick it.' VO). Moreover, German and French show different semantic categorization of motion verbs (Cadierno et al. 2016). Speakers of French tend to use more generic verbs (*mettre*) (Hickmann/Hendriks 2006), whereas languages like German have a much larger motion verb lexicon (Harr 2012). Therefore, the question arises to what extent verb use between monolinguals and bilinguals is similar. Furthermore, we will investigate whether the use of specific verbs rather is affected by the constructional form, meaning that the verbs are different in the different construction-types, or by event-type, which could imply low-level-schemas. We compared German-French bilingual children and monolingual control groups (4, 6 and 8 years, n=20/group) using descriptions of object displacements of three different types: Onto, Joining and Into (cf. Hickmann/Hendriks 2006).

First results show striking differences regarding the verb use: Although monolinguals and bilinguals show a shift from generic to specific verbs, monolinguals use more specific verbs compared to their bilingual peers at all ages. Concerning the verb types, the results suggest that verbs are not limited to one constructional form but rather that different verbs are used to describe each event-type. For example, monolingual German children use *stecken* 'to

stick' in half of their utterances to describe joining-events. The bilingual peers on the other hand, make use of *stecken* to a lesser extent and also use *kleben* ‘to glue', which could be an influence from French. From a developmental perspective, we observed that the use of one specific verb usually increases from 4 to 8 years, indicating that a low-level schema for this event-type is evolving with age. Our findings are discussed in the context of the importance of generic and specific verbs for the acquisition of abstract constructions and/or low-level-schemas.

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Constructional and metonymic motivation in the development of requesting behavior: Experimental data from Greek children

The aim of this paper is to explore the constructional nature of request realization patterns from a developmental perspective. Recent work on speech act description departs from the traditional direct/indirect dichotomy and postulates higher order cognitive models or illocutionary scenarios which capture the whole range of variables included in the conceptual make-up of the speech act under consideration. *Illocutionary constructions* are conceived as form-meaning pairings capable of metonymically activating one or more parts of the relevant scenarios in combination with the context of the utterance (Panther & Thornburg, 2005; Pérez, 2013; Ruiz de Mendoza & Baicchi, 2007). Within this framework, several corpus-based studies provide evidence for the constructional nature of the traditionally called "indirect" request patterns mainly with reference to English (del Campo Martínez, 2011; Pérez, 2013; Ruiz de Mendoza & Baicchi, 2007; Stefanowitsch, 2003). However, research on how directive illocutionary constructions develop in first language acquisition is scarce and focused on early spontaneous speech (Kania, 2016).

The present study draws on data elicited experimentally from 73 Greek children aged from 4 to 11 years old. Participants produced requests on the basis of cartoon scenarios depicting everyday interactional situations. Requests were addressed to familiar or unfamiliar adults and children and involved either high or low cost for the addressee. Children's responses were coded for a range of grammatical and lexical specifications in order for requestive patterns to emerge from the data in a bottom-up fashion. Three quarters of the total utterances were accommodated under four dominant patterns or *base* constructions (Pérez, 2013): (i) can-you VSUBJUNCTIVE?, (ii) will-you V?, (iii) can-I VSUBJUNCTIVE?, (vi) VPRESENT-YOU?. These constructions are all interrogative and represent highly conventionalized request patterns in Greek (Sifianou, 1992; Vassilaki, 2017). Imperatives, which prototypically tend to be associated with directivity, are notably marginal even at 4 years of age. Statistically significant variation in the distribution of the dominant patterns across age groups indicates that with age children take into account more and more sociocultural parameters of communication, especially the cost of the requested action and the addressee's face needs. Overall, the results suggest a developmental path whereby children successfully manage base illocutionary constructions from as early as 4 years of age but they

gradually elaborate their requestive repertoire by *linguistically* activating more socioculturally bounded specification links of the speech act scenario. Findings seem to favor constructivist or usage-based accounts of language acquisition (Diessel, 2013) and can also contribute to current discussions on the constructional nature of illocutionary patterns, in fact through a lesser studied language.

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A semantic network of modal micro-constructions in Catalan: grammatical and lexical constructionalization

1. State of the art

Modal verbs have been studied with a diachronic perspective, yielding the settlement of a cross-linguistic semantic map of modality (Bybee et al. 1994; van der Auwera & Plungian 1998). However, there is no unanimity among scholars about modal and evidential categories and subcategories (Nuyts & van der Auwera 2016).

Diachronically, the grammaticalization of Catalan modal verbs has created several polysemic verbs (Sentí 2017, in press). The modal *deure* ('must') developed a deontic meaning and an external-participant necessity, but future values and inferential evidentiality arose too. The verbs *haver de* and *tenir de* ('have to') developed in a similar way. However, the verb *poder* ('can/may') has other values, such as dynamic, deontic and epistemic meanings.

2. Goals and theoretical approach

Our main aim is to outline a taxonomic map of Catalan modal constructions, focusing on Old Catalan (11th-16th centuries) and the verbs *deure, haver de, tenir de, poder* and *voler*. In particular, we will show the semantic and morphosyntactic features of the modal micro-construccions (i.e. schematicity, productivity and compositionality), according to the constructional approach of Traugott & Trousdale (2013). Thus, we want to deal with the degrees of schematicity, i.e., the relation between micro-constructions and abstract schemes as well as relations among micro-constructions themselves. At the same time, we will pay attention to the link between the micro-constructions and the modal and evidential semantic meanings.

Grammaticalization (Lehmann 1995; Himmelmann 2004) and lexicalization (Brinton & Traugott 2005) theories have been integrated into constructionalization and constructional changes in Traugott & Trousdale (2013)'s model. In this study, we will focus on a particular case where procedural and contentful constructionalization are specially linked: the grammatical constructionalization of <*poder* + Inf> and the lexical constructionalization of the epistemic adverbs *potser* (< *pot* + *ser*, 'maybe') and *poder* ('maybe'); and also, their pre-

and post-constructionalization constructional changes. Likewise, we will show that gradualness and instantaneous constructionalization play an important role.

3. Data and methodology

We present a usage-based approach using the diachronic corpora data, mainly from the *Old Catalan Corpus* (CICA), carrying out a quantitative and qualitative analysis of tokens.

4. Results and hypothesis

In this work, we hypothesize that it is possible to apply recent functional approaches of modal categories (Nuyts 2006, 2017; Nuyts et al. 2010; Squartini 2008; Cornillie 2009) and the cognitive description of modal meanings (Langacker 1987, 1991, 2006; Pelyvás 2000, 2006) to a constructional approach. The expected results are five abstract subschemata which cover all micro-constructions and their modal, evidential and temporal semantic meanings:

a) A necessity subschema with three micro-constructions: deontic, convenience, external necessity (Nuyts 2006).

b) An inferential evidentiality subschema with three micro-constructions (specific, generic and conjectural) (Squartini 2008, Cornillie 2009).

c) An epistemic modality subschema with a micro-construction.

d) A dynamic subschema with three micro-constructions: inherent dynamic, external dynamic and situational.

e) A temporal subschema with a future meaning and two micro-constructions: scheduled future and imminence.

f) A speech-act subschema with two micro-constructions: directive and permission (Nuyts 2006; Nuyts et al. 2010)

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Contrastive negation in English and Finnish: towards an interactional construction grammar account

Contrastive negation refers to expressions that combine a negated element with a parallel affirmative one (Gates Jr. & Seright 1967; McCawley 1991). Its function is to replace one or more elements of the discourse universe with other ones. In the following examples, for instance, *stirred* is replaced by *shaken*:

(1) Shaken, not stirred

(2) Not stirred but shaken

(3) Not stirred – shaken.

(4) I don't want my martini stirred, I want it shaken.

Since Anscombre and Ducrot's (1977) seminal paper, it has been known that there is a typological distinction between languages that have a dedicated marker for contrastive negation and languages that do not. To illustrate, the Finnish conjunction *vaan* is dedicated for corrective contexts and differs from the general adversative conjunction *mutta*, while in English, both of these are translated as *but*, for which the adversative use is primary.

(5) [...] *em mä mistään terveydellisistä syistä niinku ruvennuv*
NEG.1SG 1SG any.ELA health.related.PL.ELA reason.PL.ELA like start.PTCP

vaan ekologisista syistä
vaan ecological.PL.ELA reason.PL.ELA

'...I didn't start it for any health-related reasons but for ecological reasons' (Finnish, spoken; Arkisyn)

Most of the research on contrastive negation is of a theoretical nature, focusing in particular on cases of metalinguistic negation (Horn 1985), in which what is negated is the way content is expressed, not the content itself. This presentation, in turn, will study contrastive negation empirically, from the point of view of interactional construction grammar (Fried & Östman

2005; Wide 2009). The data come from corpora of English and Finnish spoken interaction in informal settings (the Audio BNC for English, Arkisyn for Finnish). By considering empirical data, this study will answer the following research questions: (i) what are the ways of expressing contrastive negation in English and Finnish interaction? (ii) how frequently are they used? (iii) what are the purposes for which they are used?

The results of the analysis suggest that English and Finnish interaction differ quite substantially in how contrastive negation is expressed: English favours asyndetic clause combinations such as (4) while in Finnish even syndetic coordinations such as (5) are used. Furthermore, the array of constructions used in Finnish is wider than suggested in the literature. As to the functions, contrastive negation often appears in contexts in which meanings and the progression of the discourse are negotiated. This is shown by other constructions in the vicinity, such as mental and communication verbs (e.g. *I mean*, *I said*) and adverbs (e.g. *siis* 'so, in other words'). In addition, despite their formal and functional similarity, some constructions show specialisation: for example, condensed constructions of contrastive negation such as (3) seem to be used for repair. All in all, the analysis shows that the contrastive negation constructicons of English and Finnish are organised rather differently, lending support to the language-specificity of constructions (Croft 2001).

Abbreviations

1SG: first-person singular

ELA: elative case

NEG: negation

PL: plural

PTCP: participle

Data sources

Arkisyn: A morphosyntactically coded database of conversational Finnish. Database compiled at the University of Turku, with material from the Conversation Analysis Archive at the University of Helsinki and the Syntax Archives at the University of Turku. Department of Finnish and Finno-Ugric Languages, University of Turku.

Audio BNC: the audio edition of the Spoken British National Corpus. Phonetics Laboratory, University of Oxford. http://www.phon.ox.ac.uk/AudioBNC

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Using intonation to delimit grammatical constructions: the case of Chilean “que + indicative"

This paper argues in favour of the inclusion of intonation as an inherent part of grammatical constructions through the detailed analysis of a problematic aspect of Spanish grammar: the limits between free-standing *que*-constructions. In particular, our findings help delimit two insubordinate complement constructions (Evans 2007) found in Chilean Spanish: the exclamative-evaluative construction (1) and the self-repetition construction (2). Both constructions carry a subordination marker (*que* ‘that') and are not constituents of a broader syntactic unit. In isolation, they have the same surface form, i.e. unstressed *que* followed by a clause in the indicative.

(1)

[Comment on Twitter]

que and-ai agresiv-o!

COMP go-IND.PR.2SG aggressive-MASC.SG

‘You are so aggressive!'

(2)

A: *Andai agresivo.*

B: *¿Qué?*

A: *Que andai agresivo.*

‘A: You are aggressive! B: What? A: You are aggressive.'

By means of the exclamative-evaluative construction in (1) the speaker offers a positive or negative evaluation of an entity of which a certain quality is predicated (author 2015, another author and author 2017), whereas by means of a self-repetition construction in (2) the speaker reproduces her previous intervention (see Escandell 1999 and Pons 2013, among others). We claim that the scalar-exclamative meaning of the construction in (1) is encoded in its intonation, which has not been accounted for before. The purpose of this paper is to describe the intonation of both constructions, and to show that interlocutors use intonation as a cue to assign a certain interpretation to each construction.

The intonational patterns for both constructions are in line with those described by Ortiz-Lira et al. (2010) for narrow focus statements in Chilean Spanish: they show a nuclear configuration consisting of a rising stressed syllable and a falling boundary tone. However, as illustrated in Figure 1, there are salient differences between them. Whereas the self-repetition construction shows the typical narrow focus configuration, the exclamative-evaluative construction shows a wider range and a greater duration, especially in the last syllable of the utterance.

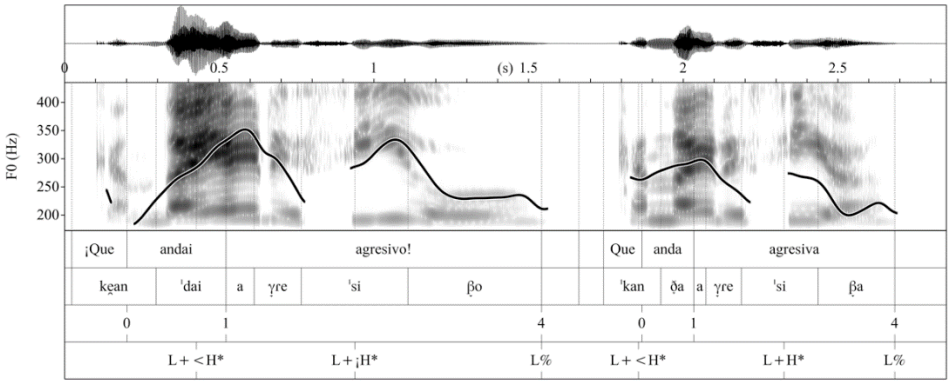

Figure 1*. Waveform, spectrogram and pitch contour of* "¡Que andai agresivo!" *‘You are so aggressive!'(left) and* "Que anda agresiva" *‘You are aggressive' (right).*

Our findings go in line with previous studies in which either range (Borràs-Comes, Vanrell and Prieto 2014) or duration (Escandell-Vidal 2011) have been signaled as responsible for distinguishing between pragmatic meanings in Spanish.

Instances of the constructions under examination were collected by querying the component from Santiago de Chile of the *Corpus Oral del Lenguaje Adolescente* (COLA) and by searching on the internet. Furthermore, two perceptual forced-choice discrimination tests were conducted. The first test is an identification test with a AB-X design in which the listener is given a context and has to choose the most suitable sound between two sounds with the same segmental content (<*que* + indicative>) and different prosody: one has a wider range and lengthening than the other. The second experiment is designed as a

grammaticality test where the listener is given a context and has to grade -in a 7-point Likert scale- how appropriate the sound is for that context.

The results of the two perceptual tests are complementary and reflect a clear preference for one lengthened intonation in exclamative-evaluative contexts, showing that intonation is a formal feature that should be included alongside morphological, syntactic, semantic, pragmatic and discursive features in the description of constructions.

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Competition between Verbs and Constructions for Sentence Meaning: Evidence from Sentence Interpretation in English and Korean

This study tests two hypotheses regarding sentence comprehension. The lexical approach (LA) emphasises verb's dominant role in sentence interpretation by assigning grammatical roles to its arguments [1][2], whereas the constructional approach (CA) favours the direct contribution of argument structure constructions to sentence meaning [3][4]. Relative to extensive documentation on sentence comprehension in English notwithstanding [2][5][6][7], few studies have examined how speakers of head-final languages draw upon information from verbs or constructions and compared their behaviours with those from head-initial languages, particularly with regard to the two aforementioned accounts. We tested both approaches by investigating how sentence meaning is derived when speakers of English and Korean, two typologically distinct languages in terms of word order and case marking, interpret sentences in each language. To measure the contribution of verbs and constructions to sentence meaning, we conducted a sentence-sorting task where lexical information of verbs was manipulated. Method Native speakers of English (n=60) and Korean (n=60) sorted 16 sentences into four piles based on overall sentence meaning under real-verb (RV) and nonce-verb (NV) conditions. Sentences were created by crossing four types of constructions with four RVs or NVs (Table 1). Half of participants in each language group saw RVs and the other half saw NVs. Participants' sorting was computed into deviation scores for verb- (Vdev) or construction-based (Cdev) sorts [6]. On a scale from 0 to 12, a Vdev or Cdev closer to 0 indicates a stronger verb- or construction-centred sorting tendency, respectively. The data was also submitted to a cluster analysis [8] to identify participants' specific sorting tendencies. Prediction LA predicts a dominant role of verbs and thus a similar degree of verb-based sorting between the NV and the RV conditions, not affected by lexical contents and argument structure information encoded in verbs. Alternatively, CA predicts stronger constructionbased sorting for the NV group than for the RV group because the NV group cannot extract lexico-semantic information from verbs, relying instead on constructional information, whilst the RV group can have access to both verb and construction cues. We also predicted that the degree of reliance on verb or construction cues will be modulated by typological differences of those languages (e.g., the location of verbs and the presence of case marking). Results and Discussion Both groups exploited construction cues more when verb semantics was eliminated, as predicted by CA. Cross-linguistic differences were also found in the RV conditions: English participants had strong recourse to verb cues whereas Korean participants utilised both verb and

construction cues as sorting criteria (Table 2 & Figure). Results indicate that constructions are utilised to a different degree across the languages, independent of individual lexical items. The distinct sorting patterns between English and Korean suggest that language-specific mechanisms of sentence comprehension are contingent on verbs and pre-verbal elements for sentence meaning in each language. Compared to English where a verb is an early-arriving cue with rigid word order, Korean has pre-verbal elements with particles clearly visible in a sentence [9], which may allow Korean speakers to effectively draw upon constructional information via those local cues.

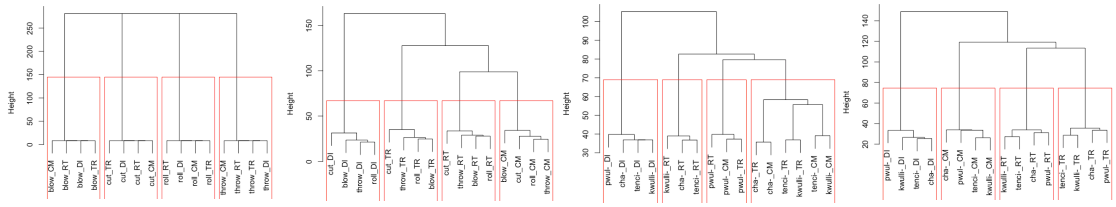
TABLE 1. Construction and Verb Used in Experiment

Construction		Transitive, Ditransitive, Caused-motion, Resultative
Verb	English RV/NV	*blow/fego, cut/keebo, roll/suto, throw/moopo*
	Korean RV/NV	*pwul-/tami-* 'blow', *cha-/mikku-* 'kick', *tenci-/goppu-* 'throw', *kwulli-/pilkku-* 'roll'

TABLE 2. Deviation Score of Each Condition in English and Korean

Language Type	Deviation Score Type	Mean (SD)		F	η^2	Sig.
		Real Verb	Nonce Verb			
English	Vdev	1.20 (3.66)	8.23 (4.95)	39.119	.403	< .001
	Cdev	10.80 (3.66)	5.07 (5.02)	25.564	.306	< .001
Korean	Vdev	6.27 (5.77)	7.10 (5.42)	0.332	.006	
	Cdev	6.03 (5.66)	5.50 (5.36)	0.140	.002	

FIGURE. Cluster Analysis (Euclidean distance; Ward's method)



English RV English NV Korean RV Korean NV

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Where do prototypes come from? An input-output analysis of the basic verb put in first language acquisition

Although the nature of linguistic categories has been one of the central domains of inquiry in cognitive-functional linguistics since its early days (e.g. Lakoff 1987), research on how they are acquired has lagged behind. In particular, the notion of where prototypes of linguistic categories come from has not been investigated systematically. When one assumes that *break a cup* is more prototypical than *break the tradition* in the polysemous category *break,* where does this intuition come from? One obvious answer is that breaking a cup is more concrete, imageable, and embedded in our perceptual experience (and thus embodied), and thus more basic than extended, metaphorical meanings. Another possibility is that prototypical meanings are simply more frequent in discourse and acquired earlier.

How these two factors (frequency and embodiment) play roles in language acquisition has not been fully investigated. However, Shirai (1990) elicited native speaker intuitions of the prototype of the polysemous verb *put* through free elicitation, and found "physical transfer of a concrete object to a horizontal surface" to be the prototypical meaning of *put* for native English speakers. He further found, based on frequency data from the UCLA Oral Corpus (Celce-Murcia 1987) and the Brown Corpus (written) (Francis & Kučera 1982), that the physical transfer meaning of *put* is less frequent than metaphorical extensions (e.g., *put a blame on someone*). Thus, there seems to be a gap between what native speakers perceive to be prototypical meaning and what is frequent in discourse, and the results suggest that frequency in discourse may not be the source of the native speakers' intuition about what is prototypical of the basic verb *put*. Shirai (1990) speculated on various possibilities regarding this discrepancy between the prototype and frequency (cf. source conflict, Hopper, 1997), one of which was that once the prototype is acquired in childhood, it would stay the same in adulthood. This hypothesis has so far not tested (but see Johnson 1999 and Goldberg et al. 2004 for related studies.)

Rice (1999) investigated the acquisition of spatial prepositions *to* and *for* by 32 children in the CHILDES database, and found that experientially based embodied meanings are not always acquired first, but that acquisition order is largely determined by input frequency, although input frequency cannot explain everything. The study appears to suggest that prototypes of polysemous lexical or grammatical items are determined by both frequency

and embodied experience. However, it is clear that more concerted effort should be made to understand how prototypes of linguistic categories are acquired.

The present study directly investigates how the basic verb *put* is used by adults and children (Adam, Eve, Brown 1973; and Naomi, Sachs 1980) and attempts to identity the effect of frequency and embodiment. A preliminary analysis shows that the concrete use of *put* to denote physical transfer predominates in child-adult discrouse, suggesting the possibility that once the prototype is established, it will stay the same later in life.

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Constructional death – investigating the demise of Old English ‘Poss+Dem constructions'

This paper investigates the demise of the constructional family of Old English Poss+Dem constructions. It aims to contribute to the development of a constructional model of language change (Traugott & Trousdale 2013; Hilpert 2013; Barðdal et al. 2015) by discussing how the emergence of a new node (constructionalization) but also the reorganization of node-external, vertical and horizontal links can lead to constructional competition and ultimately to the dissappearance of a node in the network (constructional death).

In Old English, it is possible that a demonstrative and a possessive pronoun co-occur in the same NP. The folowing 4 construction types exist:

(1) [DEM+POSS+ADJ+CN]NPdef

*ac he teah forð **þa his ealdan wrenceas.** but he brought out **these his old tricks.*** (cochronE,ChronE_[Plummer]:1003.6.1640)

(2) [POSS+DEM+ADJ+CN]NPdef

*He sealde **his þone readan gim**. He sold **his that red jewel.*** (coblick,HomU_18_[BlHom_1]:9.125.121)

(3) [POSS+DEM+CN]NPdef

*lufa ðu **þinne ðone nehstan**. Love you **your that neighbor***. (cobede,Bede_4:29.370.6.3698)

(4) [DEM+POSS+CN]NPdef

ða mine þeowas *sindon wisdomas & cræftas*. ***These my customs*** *are wisdom and virtues***.** (coboeth,Bo:7.18.5.287)

These constructions are claimed to be relatively common in Old English (Mitchell 1985; Traugott 1992; Allen 2004, 2006; Wood 2007) and have repeatedly been investigated. It has been debated if the constructions are Latin *calques* (loan translations) used primarily in Latin translations (Kytö & Rissanen 1993; Wood 2007) and their existence has been used to argue against the existence of a DP and the definite article in Old English (Osawa 2000; Denison 2006; Van de Velde 2010). However, so far no large-scale corpus study exists which elicits how frequent these constructions really are in Old English. Additionally, it is well known that these constructions are not productive in Modern English; still not many studies convincingly explain why this is the case.

This is why this paper empirically investigates the co-occurrence of possessive and demonstrative qualitatively and quantiatively in 13 Old English prose texts in the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) using R. It will be shown that the forms co-occur in all the investigated manuscripts in 241 examples, which corresponds to 0,25% of all NPs with a common noun head. Thus, co-occurrence is rarer than the handbooks suggest. Moreover, co-occurrence is not used significantly more often in Latin translations. Still, it can be confirmed that co-occurrence significantly decreases in time.

The paper also wants to make a theoretical contribution by sketching the network of this constructional family and by discussing the cognitive and systemic constructional factors which have led to the demise of the constructions. It is argued that the 4 constructional nodes ultimately dissolve in the network due to the constructionalization of a more abstract NP construction with a determination slot that can only be filled by one determinative:

[[DETdef]DETERMINATION + [CN]HEAD]NPdef

Complex analogy and frequency effects trigger the emergence of this abstract construction (Author X, X). This constructionalization leads to an extensive reorganization of the network of referential definite NPs in which linguistic information is inherited down to lower levels in a new manner and which no longer licenses co-occurrence.

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The English System of Degree of Control: A Columbia School Account of Transitive and Ditransitive Constructions

Like other frameworks in Cognitive Linguistics, Columbia School linguistics (Diver 1995/2012) adopts a view of grammar as a fully meaningful symbolic system. Unlike other approaches though, Columbia School analyses distinguish sharply between the constant semantic input made by linguistic forms, and the communications to which they contribute.

The CS English System of Degree of Control (Huffman 2009, Reid 2011) offers a semantic account of transitive and ditransitive clauses, by positing relational meanings for subject and objects in these constructions. The Control analysis hypothesizes that word order is a consistent signal of linguistically encoded meanings that are present in every instance of use. The analysis posits the relational meanings HIGHER Control and LOWER Control in transitive clauses (for, respectively, the noun phrase before and after the verb), and the similar but distinct meanings HIGH Control, MID Control, and LOW Control for the three arguments in ditransitive clauses. For example, in a transitive clause the subject is said to signal HIGHER Control in the event named by the verb, and the object LOWER Control in that event. Control can also be understood as level of involvement or participation in that event.

This paper will show that these invariant relational meanings account for a wide range of phenomena that have been noted by linguists studying these constructions, including prototypical examples as well as extensions. The paper will also show how the Control System can account for a number of related problems, such as why speakers sometimes use transitives in examples like (1) and (2) when an intransitive is available; and why speakers choose ditransitives in (3), an example cited by Goldberg (1995), when a transitive has the same truth conditions. We account also for attested examples like (4), which are interesting not only because speakers sometimes choose a ditransitive when a transitive is available, but also because examples like (4a) violate an animacy constraint that Goldberg (1995 and 2004) notes, citing Partee (1965) and Green (1974), on the first object in ditransitives:

(1) a. She behaved herself

b. She behaved

(2) a. She dressed herself

b. She dressed

(3) a. John taught Bill French

b. John taught French to Bill

(4) a. She gave the wall a push

b. She pushed the wall

We will show that the Control System analysis accounts for all these data. It also illustrates some fundamental ideas of the Columbia School's theoretical framework, including the distinction between meanings encoded in linguistic forms and the more dynamic and complex messages found in communication; the relational nature of meanings; the difference between the message and the scene; the role of inference in the process of building messages on the basis of meanings and contextual factors. With this perspective, we will see how speakers rely on the resources of their language to meet their communicative goals.

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Temporal Interpretation of Serial Verb Constructions in Mandarin Chinese: A Corpus-Based Study

This paper presents a corpus-based framework of temporal interpretation of Serial Verb Constructions (SVCs) in Mandarin Chinese. SVCs are formed by a complex predicate structure which involves two or more verb phrases (VPs) without any conjunction and referring to the same subject, for example: *Ta qiche*VP1 *shangban*VP2 / *He ride a bike go to work / He goes to work by bike.*

The temporal interpretation in Mandarin Chinese, considered as a tenseless language, has attracted attention of many scholars (Smith 2006, 2008; Lin 2003, 2006, 2010, 2012; Ljungqvist 2003, 2007; Smith & Erbaugh 2005; Karlsson 2011a, 2011b; Tonhauser 2015, etc.). But they scarcely paid attention to grammatical constructions in this language.

Previous works have shown that besides temporal/aspectual markers, the temporal interpretation in Mandarin Chinese is also intertwined with situation aspect (or lexical aspect). Many scholars have studied its aspectual constraint on temporal interpretation. Smith & Erbaugh (2005) supposed that unbounded (imperfective) events are located by default in Present, whereas bounded (perfective) events are located in Past.

We agree with this principle named Bounded Event Constrain. But in SVCs, especially unmarked ones, which VP imposes the aspectual constraint? To discover the relation between the boundary of SVCs and the [+/-bounded] character of VPs, we extracted 100 SVCs containing two VPs from an online corpus (CNCORPUS), then analysed them as follows:

(1) ***Aspectual annotation***: annotate the [+/-bounded] character of VPs

(2) ***Default temporal interpretation***: interpreter the default temporality of SVCs

(3) ***Comparison between (1) and (2)***

and discovered that:

(i) Without taking into account contextual factors, unmarked [VP1+VP2+], [VP1+VP2-] and [VP1-VP2+] may be located in Past, whereas unmarked [VP1-VP2-] may be located in Present.

We concluded that if any of VPs is bounded, the SVC may be bounded, then continued the analysis as follows:

(4) ***Aspectual annotation***: annotate the [+/-bounded] character of SVCs according to the above conclusion

(5) ***Comparison between (2) and (4)***

and discovered that:

(ii) Without taking into account contextual factors, bounded SVCs are located in Present when being marked by imperfective aspectual markers, whereas unbounded SVCs are located in Past when being marked by perfective ones.

We concluded that aspectual markers impose a stronger constraint on temporal interpretation, then continued the analysis as follows:

(6) ***Aspectual annotation:*** modify the [+/-bounded] character of marked SVCs according to the above conclusion

(7) ***Contextual temporal interpretation***: interpreter the contextual temporality of SVCs

and discovered that:

(iii) The temporal interpretation of SVCs due to situation types and aspectual markers may be modified by temporal markers or contextual factors.

Based on the above analysis, we suppose that the temporal constraint imposed by implicit aspect may be demotivated by explicit aspect, whereas the constraint imposed by explicit aspect may be demotivated by explicit temporal information or context. Following this assumption, we suppose also that the temporal interpretation in Mandarin Chinese might be in accordance with this Hierarchical Temporal Constraint principle, but further analyses are required to confirm this assumption.

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How non-motion verbs combine with the English Intransitive Motion Construction: an empirical study

In English and other satellite-framed languages, the Intransitive Motion Construction can combine with verbs which do not encode motion, giving rise to instances where the constructional meaning of translational motion is quite distinct from that of the verb (sound emission in 1, substance of the moving entity in 2) :

(1) He **crunched** across the frozen ground up to the porch. (COCA)

(2) Sea slugs **slimed** across the ocean floor. (COCA)

The aim of the current talk is to understand how the translational motion interpretation emerges in such examples and what drives and potentially constrains the combination of verbs with the Intransitive Motion Construction (IMC) in an approach combining a large-scale corpus study and finer-grained qualitative analyses.

The meaning of an argument-structure construction is modelled as an abstract semantic frame (Fillmore 1977, Goldberg 1995) that the verbal co-event can elaborate at different levels of fusion, depending on the conceptual overlap between the two. The hypothesis is that the IMC's frame of translational motion has to be recoverable, be it explicitly or pragmatically from the context and that the ease of this recoverability is the main constraint on the distribution of verbs in the construction.

To assess this hypothesis empirically, non-metaphorical instances of the construction were extracted from the Corpus of Contemporary American English (COCA) and manually sorted. For instances involving a non-motion verb, the causal relationship between the constructional motion event and the verbal co-event was then analysed using the categories established by Talmy (2000) (precursion, enablement, onset and extended causation, manner, result, concomitance, subsequence) in addition to a finer-grained characterisation of the semantic contributions of the verb and the context.

This large-scale corpus study reveals that non-motion verbs are not restricted to verbs of sound emission, the class most commonly quoted in the literature (Goldberg and Jackendoff

2004 among others) and not without reason as it is more frequent: verbs can also encode other concomitant aspects of the motion event such as the shape of the path, a visual or sensory effect created by the motion or a qualitative change in the state of the ground. More crucially, the results show that non-motion verbs, especially more marginal ones, need conceptual scaffolding from the context in order to be interpretable in the IMC. Thus, what could be understood out of context as loose non-causal links between verb and construction very often turn out to be more tightly packaged together by a frame built from the context, no matter whether that frame is conventional or created on the spot, which confirms Goldberg (2010)'s intuition and studies in sentence processing (Kaschak & Glenberg 2000).

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Verbs and argument structures in directive constructions

A great deal of research has been conducted on the relations between verbs and argument structures as well as between alternative constructions within and outside the field of Construction Grammar. However, relatively little attention has been paid to speech act distinctions involved (though notable exceptions include Stefanowitch 2003 and Pérez Hérnandez 2013). In the same way that speakers do not encounter verbs outside of the constructions they occur in (Croft 2012: 28), speakers are not exposed to verbs and argument structures isolated from certain speech acts they are engaged in. In such a case, a usage-based analysis of verbs and argument structures needs to take speech act considerations into account.

As a first step, this paper discusses the ways in which verbs interact with three constructions typically used to perform directive speech acts (i.e. imperative, *Can you* VP? and *why don't you VP?*). The aims of this paper are: (i) to clarify commonalities and differences between these directive constructions regarding their preferred verbs and argument structures; and (ii) to examine ways in which directive acts influence the relationships between verbs and argument structures/realizations. The discussions are based on a total of 1774 tokens of the imperative as well as 197 tokens of *can you* and 171 tokens of *why don't you* constructions taken from 29 fictional stories plus data collected from COCA.

The main findings and claims include the following. First, the verb *tell* is most frequent with both the imperative and the *can you* construction but two deictic motion verbs *go* and *come* are most frequent with the *why don't you* version. Second, though *give* is considered a typical ditransitive verb (Goldberg 1995, 2006; Stefanowitch and Gries 2003; Mukherjee 2005), how often this verb actually takes two objects varies from one construction to another. Third, first person indirect objects are predominant with *can you* but the third person is more common with the imperative (58.4%), whereas first and third person indirect objects are equally common with the *why don't you* construction. Fourth, another 'typical' ditransitive verb *tell* shows a different picture; all the three directive constructions occurred as ditransitive around 66% of the time. Moreover, first person indirect objects occurred predominantly with both *can you* and *why don't you* constructions, as against in only 36% with the imperative. Finally, a close correlation was to be found between first person indirect objects and *wh*-complements in ditransitive imperatives (e.g. *Tell ME* <u>*why you didn't show up*</u>.) as well as between third person indirect objects and *that*-complements in the ditransitive *why don't you* construction (e.g. *Why don't you tell THEM* <u>*that you are busy?*</u>).

The discussions made above imply that argument structures and the encoding of arguments are highly sensitive to not only what verb appears in what construction (Croft 2012: 28, 393) but what speech act(s) they participate in. I hope this paper will contribute to research on the complex interactions between verbs and argument structures vs. discourse and pragmatics (Goldberg 2000; Bergs and Diewald 2009; Schmid 2016).

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Orienting locative constructions in English: mental derivation and use

English prepositional phrases (Stvan 1993: 419) / idioms (Keene & Adams 1996: 232) consisting of a preposition and an articleless noun, e.g. *on hand*, *in detail*, are traditionally studied with respect to their separate elements: prepositions (Contini-Morava & Tobin 2000) or absence of articles (Berezowski 2009).

This presentation proposes to treat them as constructions, i.e. prefabricated patterns entrenched in mind (Goldberg 2006), which perform an orientating function providing for locating mobile situational components by their basic – articleless – form which denotes fixed coordinates. The structure and meaning of these constructions derive from image schemas, i.e. recurring dynamic patterns of our perceptual interactions and motor programs (Johnson 1987: xiv). The schemas serve as the basis for the formation of different groups of orientating constructions: locative (*at hand*, *in space*), temporal (*at night*) as well as those which indicate state (*in love*), objects (*by phone*, *by train*), and activity (*in battle*).

The suggested approach is exemplified by the analysis of locative constructions indicating four types of coordinates: somatic, referring to space around an individual's body (*in hand*); perceptual representing object perception with respect to the distance to the conceptualizer (*in part*); kinetic encompassing motion (*on course*) and vertical denoting upright coordinates (*on top*).

The absence of articles in the vertical construction *at national level* is explained by its representation of political hierarchy coordinates, constant for a wide range of situations, e.g. *The WHO FCTC conference decisions, designed for implementation* ***at national level*** *by signatories, have a direct bearing on the nearly $800 billion global tobacco industry* (Newsweek 01.11.2016). In the example the construction *at national level* locates the whole tobacco industry relative to the entire country, India, with the universality of the coordinate underscored by the adjective *global*.

The entrenched articleless constructions acquire the definite article to refer to the coordinates related to a particular event, e.g. *Advertising and marketing will be strictly regulated* ***at the national level****, as with tobacco. Trudeau's bill sets a minimum purchase age of 18* (Newsweek 23.04.2017). In the example above the definite construction *at the*

national level represents regulation implementation characteristic of Canada, triggered by the name of its prime minister (*Trudeau*).

The indefinite article points to new coordinates established by participants, e.g. *Co-operation between the three left-wing parties in Berlin has raised interest in German politics due to the possibility of their pursuing a coalition* ***at a national level*** *after federal elections in September* (Newsweek 20.06.2017). In the example the indefinite construction *at a national level* indicates the level at which German politics plan to build a coalition.

To conclude, English orientating constructions are stored in mind in their articleless form to represent constant referents for any situation. As the analysis of the locative constructions suggests, their meaning and structure derive from image schemas, the definite variants refer to the coordinates of a particular event, while the indefinite forms indicate the participants' view of the established coordinates.

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Posture and activity in Mainland Scandinavian pseudocoordinations

Pseudocoordination (PC) in Mainland Scandinavian (Danish, Norwegian, Swedish) involves asymmetric coordination of two verb phrases, headed by verbs V1 and V2. PC may be regarded as a constructional schema, with the best-known subschema (cf. Traugott & Trousdale 2013) being posture pseudocoordination with V1s meaning ‘lie', ‘sit', and ‘stand' (cf. Kuteva 2001):
Anne lå/sad/stod og ventede (Danish)
Anne lay/sat/stood and waited
‘Anne was (lying/sitting/standing) waiting'
PCs differ from canonical VP coordinations in exhibiting an informationally downtoned V1 (Teleman *et al.*1999; Hansen & Heltoft 2011). Especially in posture PCs, this and other asymmetries between V1 and V2 have been regarded as signs of V1 grammaticalization towards aspectual auxiliaries. Posture PCs are, however, just one of several PC subschemas (see Teleman *et al.* 1999). Few of the many possible V1s are in fact grammaticalized, and the range of V1 meanings is not subsumed under aspectual semantics. NN1 (2015) argues that the locative contribution of posture V1s is more central than their aspectuality, and NN3 & NN1 have a similar view of Swedish PCs of the ‘go and V2' type. The tendency of posture verbs for grammaticalization is well known typologically (Newman 2002) and is potentially a development in its early stages in Scandinavian. But the meaning of the posture PC subschema should be identified as a specification of the nonaspectual meaning of the PC schema. Kvist Darnell (2008) regards V1 in Swedish posture PC as forming a background for the activity/state of V2. Nielsen (2011) takes generalization a step further and claims that in all Danish PCs, the schema meaning is one of ‘possibilification': ‘V1 makes V2 possible'. NN2 (forthc.) suggests a schema meaning of ‘facilitation': ‘V1 facilitates V2'. Except for Kvist Darnell's corpus work on posture PCs, synchronic studies of PCs have been intuition-based.
Building on a comprehensive corpus-based study of more than 23,000 examples of Danish, Norwegian, and Swedish posture PCs, we employ the posture frame of frame semantics (cf. framenet.icsi.berkeley.edu) and the notion of facilitation to explain the posture-specific (i.e. microconstructional) patterns observed. Among the most frequent V2 collocates of V1 ‘lie'/'sit'/'stand' are verbs of looking and waiting, as well as verbs of sleeping and resting for V1 ‘lie' (cf. Lemmens (2005) for similar findings for Dutch). Distinctive collexeme analysis (Gries 2014) is used to bring out the affinities of different postures for different activities/states. For example, ‘sit' PCs tend more strongly than those with ‘lie' and ‘stand' to involve V2s denoting activities performed with one's hands in front of one (e.g. eating, reading, sewing) or speaking to someone close by . Our results exhibit close connections between postures and V2 activities/states. Many collexemes are easily related to the experiential correlation of the activity/state and the specific posture, but there are also some surprising collexemes. Our use of ‘facilitation' and frames helps us account for microconstructional patterns in the light of schematic constructional meaning, while simultaneously providing a basis for understanding the propensity for posture verbs to undergo auxiliation.

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Frame Semantics and Voice Choice: A Case Study of Passive Ditransitive Constructions with Verbs of Refusal and Allowing

Frame semantics plays an important role in identifying rich, complicated semantic structures of verbs and determining argument realization. The aim of this paper is to show that, in addition to argument realization, frame semantics may exert an influence over syntactic configuration, specifically, the choice between the active and the passive voice.

Iwata (2006), a review article of Croft (2001), conducts a case study of the ditransitive construction with the *refuse/deny* verb class to show what potential Croft's theoretical framework has, and, using the British National Corpus, examines the construction's preference of choice between the active and the passive voice. Although his data are limited to frequently found combinations of verbs and nouns, Iwata concludes that with the *refuse/deny* verb class, passive ditransitives are more frequent than their active counterparts. A question concerning his conclusion arises:

Q1: If we extend our observations to include verbs with similar senses and other nouns found on the BNC, is Iwata's conclusion still right?

Although he illustrates mechanisms for sanctioning passive ditransitive constructions, Iwata does not explain why the passive voice is preferred by the verb class. Thus, the second question to ask is:

Q2: If the answer to Q1 is yes, why is the passive voice chosen more often than the active voice?

To answer the first question, the author did a quantitative study on the BNC. The target data were comprised of *refuse* and *deny* and their semantically related verbs *allow, permit* and *grant*. These verbs were compared with 4,247 instances of ditransitive *give,* extracted from 10,000 randomly sampled instances of *give*. The data the author handled is summarized in the following:

verb (# in the active voice: # in the passive voice)

refuse (119: 322); *deny* (601: 617); *allow* (1084: 511); *permit* (79: 68); *grant* (510: 875); *give* (3471: 776)

The results of the chi-square test ($\chi2(5) = 1429.897$, $p = 4.579e-307$, Cramer's $V = 0.398$) and the test for the standardized residual data proved that all target verbs except *allow* were used in the passive voice significantly more often than *give*. This result probably supports Iwata's conclusion. (Note that the active form of *allow* occurs more times than the passive one probably because of its distinctive use with reflexive pronouns.)

A clue to the second question lies in the frame-semantic knowledge about the notion of permission. In a typical scenario of granting or refusing permission, the applicant has asked for permission to do something before gaining it. The applied permission already existed before being granted or refused. It is thus likely to assume that the referent of the applicant for permission is already introduced and thereby easily activated in a discourse. If this is right, we can say that ditransitive constructions with the verbs in question can be easily 'passivized' because of the applicant's activated status motivated by our frame-semantic knowledge of permission.

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Multimodal Constructions or Crossmodal Collostructions?

Construction Grammar has become the theoretical home of many gesture researchers over the past years, which is not least due to the fact that Construction Grammar is open to all sorts of cognitive phenomena – as long as they can be captured as pairings of form and function, the can be accommodated in the theory. From the point of view of such a "Multimodal Construction Grammar" (Steen/Turner 2013) it follows logically that "[c]rucially, the constructicon is multimodal" (Steen/Turner 2013).

It is much less clearer whether or to what extent we should treat co-speech gesture as part of multimodal constructions (see for instance the discussions in Ziem (2017) or Hoffmann (2017)). I will argue in this paper that many co-speech gestures may more profitably be anaylsed as constructions in their own right that enter into *crossmodal collostructions* with linguistic items. These crossmodal collostructions will be defined in analogy to Stefanowitsch/Gries (2003), but without their restriction to a lexical and a more abstract part (*collexeme* and *collostruct* in their terminology) and with the extension of being able to span multiple modalities. As with linguistic collostructions, where it is sometimes difficult to decide when they should stop being regarded as compositional and just be regarded as a stored construction due to their frequency (cf. Goldberg 2006, Bybee 2010) instead of a lexically filled instantiation of a more abstract construction, deciding whether a certain combination of linguistic and non-linguistic elements should be treated as multimodal constructions or crossmodal collostructions will not always be straightforward. Examples will be given in the presentation.

A very simple case study will be presented to illustrate the methodology both theoretically and in actual practice using a large English-language multimodal corpus with automatic annotations of head motion. In the case study, the relation between *yes + punctuation* mark and *no + punctuation mark* with vertical and horizontal head motion will be studied, where a naïve hypothesis would suggest that *yes + punctuation mark* is more strongly associated with vertical head motion (because people nod) whereas *no + punctuation mark* is more strongly associated with horizontal head motion (because people shake their head). The corpus statistics show that compared to the average of the automatic annotation tool, the hypothesis holds for *yes + punctuation mark*, but that *no + punctuation mark* is more strongly associated with both horizontal and vertical head motion. Possible reasons for this (maybe not entirely surprising) result will be illustrated with the help of short video snippets from the corpus.

To sum up, the paper aims to define crossmodal collostructions from a theoretical point of view and will present a case study on how to measure these in a large corpus of automatically annotated TV broadcasts.

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On the creativity of speakers

Very different approaches to language have attempted to provide an account of linguistic creativity. For instance, creativity is central to Chomsky's view of language — in *Aspects,* he speaks of “a universal grammar that accommodates the creative aspect of language use” (Chomsky 1965: 6) . Equally, creativity plays a central role in more recent constructionist and usage-based accounts of language (cf. Bybee 2010): the argument for the existence of constructions as meaningful units rests on the possibility on using them creatively — Goldberg's (2006) *sneezing the foam off the cappuccino* being a very famous case in point. It is relatively obvious that the notions of creativity underlying these theories are by no means the same. Whether we are dealing with two types of creativity, as argued by Sampson (2016), a more fine-grained cline, or whether all these phenomena can be unified in one more general concept of creativity with multiple facets will be discussed in the first part of the paper, using corpus evidence on a family of constructions of the type *go/get (all) X (on Y)*.

In the second part of the paper, while arguing that speakers are not terribly creative most of the time, we will be looking at different instances of what one could consider creative language use and investigate what it is that makes them creative:

– “Tonight at noon, Supermarkets will advertise 3d EXTRA on everything, Tonight at noon ... America will declare peace on Russia” (Adrian Henri)

– “He spoke with a certain what-is-it in his voice, and I could see that, if not actually disgruntled, he was far from being gruntled, so I tactfully changed the subject.” (P.G. Wodehouse)

It will be suggested that one type of linguistic creativity can be identified by looking at constructions such as argument structure constructions and the items that occur in them. The principle used is very similar to that of collostructional analysis as developed by Stefanowitsch and Gries (2003) and Gries and Stefanowitsch (2004ab), only that the analysis we suggest, which we call IT $\in$ CX (item in construction) analysis, is based on raw frequencies. Taking two different calculations of IT $\in$ CX-values into account, it will be argued that the use of words that are typically used in a construction is definitely not very creative, neither is the use of word in a construction in which it occurs very frequently a creative use. The claim is that the combination of a low IT $\in$ CX1-value and a low IT $\in$ CX2-value may be instrumental in identifying one type of linguistic creativity.

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Register as a predictor for grammatical choices: a corpus-based study of the Dutch om-alternation

Grammatical alternations constitute an intriguing topic for linguistic theory, as the identification of the parameters motivating the distribution of grammatical alternatives can provide unique insights into the relation between syntax, semantics, and pragmatics. In constructionist approaches to grammar, alternating grammatical patterns are seen as distinct "constructions"—i.e., conventionalized pairings of form and meaning/function—which do not only differ in their structural properties, but, by definition, also in their semantic and/or pragmatic properties (see e.g. Goldberg's 1995:67 *Principle of No Synonymy*). However, the stylistic dimensions of constructional meaning have not received much linguistic attention so far (Biber 2012). Some existing multifactorial investigations of grammatical alternations do include register among the explanatory variables (e.g. Stefanowitsch & Gries 2008, Szmrecsanyi 2010). The operationalization of this register variable, however, is usually rather broad (i.e., just a binary distinction written vs. spoken) and the discussion largely limited to the reporting of an (overall) effect – e.g., a stronger presence of one of the grammatical alternatives in written compared to spoken language – without much attention being devoted to the situational characteristics of the registers in question that might explain this contrast, nor for what such register contrasts imply for the constructional semantics. By distinguishing the written registers fiction, journalistic texts, instructive texts and legal texts besides the spoken register of spontaneous conversation, we opt for a more fine-grained operationalization of register in this case study because we want to investigate the effects of register on the language user's choice between alternating constructions in more detail.

The grammatical alternation under investigation is the variation between infinitival complements (=IC) with and without the prepositional complementizer *om* in Dutch, illustrated in (1) below, where the infinitival clause depends on a verb, a noun, and an adjective, respectively. When *om* is present, it functions as an explicit boundary signal. Some examples:

(1) a. *Ik beloof (om) op tijd te komen* 'I promise *to* be on time'

b. *zijn neiging (om) alles uit te stellen* 'his inclination *to* procrastinate everything'

c. *Ik ben blij (om) je te zien* 'I am glad *to* see you'

Existing research on the *om*-alternation suggests that the complementizer *om* can be added or omitted depending on different syntactic, semantic and pragmatic factors. We will investigate the effects of register next to thirteen other factors, such as the agentivity of the implied subject in the matrix sentence and the IC, the mode of the matrix verb, the type of constituent that serves as the head of the IC and so on (ANS 1997, Vliegen 2001, SoD 2015) through a mixed-effects logistic regression analysis applied to a dataset of real-language examples culled from the non-translated part of the Dutch Parallel Corpus and the Corpus Gesproken Nederlands. Preliminary results showed not only a significant difference between spoken and written language, but also within the selected written registers for the choice between alternating constructions. These differences enable us to shed important new light on the stylistic dimensions of constructional meaning.

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Concernee constructions

Constructions such as that in (1), where an item that could be construed as an attributive possessor is alternatively construed as an argument of the verb, are called external possessor or possessor raising constructions.

(1) Tswana (Bantu, Botswana, Creissels 2006: 108)

Ngwana o tlaa go j-el-a dinawa

1.child 1sm fut om2sg eat-appl-fv 8/10.bean

‘The child will eat your beans.' (lit. ‘The child will eat you the beans.')

The term *possessor raising* has been rejected by authors such as Creissels (2006), who correctly argue that there is no reason to consider the external possessor construction to be anyhow derived from the attributive construction. In contrast, the term *external possession* is still generally accepted, probably because it captures the generalisation that one of the complements in such a construction corresponds to an attributive possessor in a related construction.

In order to deal with the exuberant variety of so-called external possessor constructions in the Benue-Congo languages, this paper treats them as a family of constructions in their own right, renamed *Concernee constructions*. What the constructions of this family have in common is that they distribute the semantic role subcategorised for by the verb (e.g. Patient or Experiencer) over two semantic roles, which I tentatively call the Concernee and the Target.

This approach has two major advantages. The first is that it can account for examples such as (2), which are obviously related to (1), but for which no alternative attributive possession construction exists.

(2) Eton (Bantu, Cameroon; Van de Velde 2008)

àpám mâ kúgúlútú

à-H-pám mà kúgúlútú

sm1-pst-arrive 1sg.nppr ideo

‘He arrived unexpectedly.' (lit. ‘He arrived me unexpectedly.')

In (2) the 3sg subject marker is the Target. It expresses what comes closest to the semantic role assigned by the verb. The 1sg object pronoun is added to express that the speaker is somehow concerned by the situation, by being surprised or irritated, or simply by being related to the person who arrives.

The second advantage is that the great variation of Concernee constructions can easily be treated in terms of alternative mappings of the Concernee and Target roles on different syntactic relations. At least one of these syntactic relations, the Target object, is strictly construction specific. In the majority of Eastern Bantu languages, its behavioural potential is restricted as compared to that of other unflagged objects that do not require a transitivising verbal suffix.

I hope to show that the better approach to a syntactic phenomenon is (i) the one that is able to deal with languages or language families where the phenomenon is most complex and (ii) one that takes constructions to be basic and grammatical relations to be derived.

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Constructions That Work: A Computational Grammar for English in Fluid Construction Grammar

This paper presents the first computational construction grammar for English that works for both comprehension and production – implemented in the open-source formalism Fluid Construction Grammar (Steels 2011, Beuls and van Trijp, 2016, www.fcg-net.org). This implementation is important because it demonstrates that the many salient characteristics of the constructional approach can be scaled to fully operational, broad-coverage grammars, which has been a matter of concern for mainstream linguists because of the unrestricted expressive power of constructions. As such, it offers a major contribution to the growing body of formal and computational work in the CxG community (e.g. Steels 2004, 2011, Bergen and Chang 2005, Boas and Sag 2012).

The *Basic ENglish Grammar* (BENG) is conceived as a usage-based grammar in which constructions and their processing are intricately linked. The constructions themselves – partly hand-written and partly learned from data – range from highly schematic to highly specific constructions, which can be freely combined with each other as long as there are no conflicts (van Trijp 2016). The grammar includes a couple of dozen handwritten constructions for nominal and verbal phrases, for handling argument structure and information structure relations, and for handling basic speech acts. Other constructions are automatically extracted from lexical databases or acquired online through a set of learning operators. Language processing is implemented as a search process (Van Eecke and Beuls 2017) that tries to come up with the best possible verbalization of a given conceptualization (= production), or with the most plausible meaning for a given utterance (= comprehension). Crucially while processing, the FCG-system automatically builds constructional dependency graphs that show which constructions triggered the activation of which other constructions (see Figure 1).

Besides demonstrating that the constructional perspective can be scaled, the English grammar provides crucial insights into the computational properties of constructions, and

offers many potential applications such as information retrieval. Interested researchers can test the grammar online at http://www.fcg-net.org/fcg-interactive/.

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The Creation of Resultative Construction in Chinese: An Analysis from the Perspective ofGrammatical Metaphor

There have been many studies on construction in the last two decades. However, the question 'How did a form-meaning pairing created?' has not been successfully answered yet. This research attempts to account for the creation of a construction in Chinese on the basis of the theory of Grammatical Metaphor (GM). A corpus of ancient Chinese language is established for this purpose, which is composed of language materials across various dynasties in China history. This research focuses its analysis on Resultative Construction (RC), although the other three constructions are taken into account as reference.

RC in Chinese is a pattern of two adjacent verbal elements in which the second element signals the result of the action conveyed by the first element. The pattern is identified as a construction since its meaning is not strictly predictable from its components. RC in Chinese has been extensively studied in terms of form, categorization and change, because the use of RC is a critical step in the change of Chinese. The development of RC is ordinarily discussed in the framework of grammaticalization by using the mechanism of 'reanalysis' from syntactic perspectives. In this case, it is very difficult to explain the creation of unpredictable meaning of RC because the semantic change related to RC is largely ignored. The difficulty largely arises from the lack of a manageable framework for the analysis of semantic change and the interaction between meaning and form.

Halliday (1998: 192) defines GM as "a realignment between a pair of strata: a remapping of the semantics on to the lexicogrammar". GM theory provides us the mechanism of analyzing language change at both semantic and grammatical levels. New meanings are engendered by semantic 'junction' on the syntagmatic axis and semantic 'condensing' on the paradigmatic axis (Halliday & Matthiessen, 1999). New expressions are created through two kinds of grammatical movement: 'one in rank, the other in structural configuration' (Halliday, 1998: 192). This research investigates the creation of RC within the framework including these two sets of mechanisms.

The diachronic analysis of RC instances reveals that the form of RC was engendered by the downgrading movement from clause complex to clause. The elemental shift observed is from Process to Quality, which is closely related to the fact that 'adjectives' in Chinese share many characteristics of verbs. With respect to semantic condensing, the examination of RC

instances in the corpus shows that V1s has gradually concentrated to Behavior verbs, while V2s has steadily shifted to State verbs. In other words, the choice of V1 and V2 has been developed into a less delicate system, resulting in a more productive schema. The semantic junction of RCs has formed the joint meaning of 'process quality', creating an entry point for a metaphorical realization. Joint meaning can be modified and followed by other elements which are ordinarily not used together with V1 or V2, creating more grammatical slots to be filled. On the basis of these observations, this study argues that the unpredictable meaning of RCs are created through a cycle of language evolution in which the semantic condensing and junction are principal strategies whereby the meaning potential of a language is extended.

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Free alternation? A frame-semantic analysis of the denominal verb ko5 ‘to paste' in Hakka

The denominal verb *ko5* ‘a thick soft sticky substance > to paste' in Taiwanese Hakka, a major Chinese dialect, is basically associated with three arguments, viz. agent, locatum/theme, and location. This verb may participate the locative alternation, involving only the latter two arguments. The alternating patterns are used to indicate shifting of the verbal profile (cf. Goldberg 2001). The variant in (1) profiles a location subject and a locatum object, while the variant in (2) profiles a locatum subject and an oblique location object. The demotion of the direct object to the oblique phrase in (2), a process iconically motivated, co-relates with the de-profile of the patient in the transitive frame and hence downplays the transitivity (cf. Perek and Lemmens 2010). Since the participants of the same event are coded differently, the holistic/partitive effect manifested in the English *spray/load* alternation (Levin 1993: 50-51) does not hold for Hakka.

Note that an explicit type shift from activity to state triggered by the addition of the phase marker *to2*, which can be vaguely glossed as ‘succeed' and used to describe the situation that the verbal event has been carried out, can be observed in the location-subject variant (Michaelis 2004). A case in point is (3). Example (1) depicts a volitional act done by an agent, which is syntactic implicit, but such an activity reading is not available to (3), which only denotes an unintentional result stative reading. We argue that the two different grammatical packaging strategies are semantically driven (cf. Liu and Hu 2013). Each of the variants evokes a distinct semantic frame, namely, the Placing frame in (1) and the Attaching frame in (3) (Boas 2011). Though the two variants both profile the goal-item (= location-theme) relation, (1) focuses specifically on the agent's controlled placing of a theme at a location, but (3), the result state of a theme to be physically connected to something else. Given that (3) is stativized, (1) is said to describe a more dynamic, eventive scenario.

Another interesting thing to note is that *ko5* may occur in another syntactic pattern and evokes the Building frame, describing a situation where an agent joins components together to form a created entity, which is profiled, and hence the object of the verb, as shown in (4). The fact that such an alternation is not seen in the *spray/load* alternation has to do with the denominal origin of *ko5* and THE MATERIAL FOR THE PROCESS metonymy.

The case discussed above shows that the alternating behavior of a verb is closely related with the semantic frames it evokes.

(1) mien3 ko5 fun2 (face paste powder) ‘Apply face powder on the face.'

(2) liuŋ5tshoŋ5fun2 oi3 ko5 to3 mien3-hoŋ3 (a:kind:of:powder will paste to face-above) ‘(The kind of) powder will be applied on the face.'

(3) mien3 ko5 to2 fun2 (face paste PHASE powder) ‘Powder stuck to (his/her) face.'

(4) ki5 ko5 it4-tsak4 tsï2ieu5 (3SG paste one-CL kite) ‘He made a kite by pasting (the materials together).'

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The Effect of Structural Alignment on Comprehension of Foreign Language Constructions in Reading

Structural alignment is a general cognitive mechanism of non-linguistic categorization which could determine the commonalities and differences of two representations (Markman and Gentner, 1993). This concept can be applied in construction grammar and foreign language (FL) reading comprehension by hypothesizing that readers must first categorize the representations (or base meaning) of a new or even high distortion construction (HDC) and its exemplar as similar and then align representations of the linguistic arguments of the construction with those of its exemplar reference (cf. the exemplar model of categorization).

This hypothesis is tested using an adaptation of Markman and Gentner's (1993) methodology. This study involved 40 English as a Foreign Language (EFL) students from an undergraduate translation program, who were randomly assigned to two groups, the alignment training group and the familiarity control group. In the alignment training group, the participants were first told that they would be given 10 pairs of similar sentences. Each pair contained one exemplar construction and one HDC. They were required to align the argument(s) of the HDC to the arguments in the exemplar. They were also required to explain their mapping in their first language. If a participant could map the arguments AND explain the mapping correctly, the alignment or mapping was considered successful and would be scored. The familiarity group were given the construction pairs to look at in the first exposure, but they were not told that these sentences are similar. Subsequently, both the groups went through a comprehension test, in which participants were given the 10 construction pairs and were asked to explain or translate the HDCs into their first language. The participants' comprehension of the constructions was measured by the accuracy of the translation or explanation. Spearman's correlation test was used to ascertain the relationship between the alignment scores and the comprehension scores of the alignment training group. The medians of the comprehension scores of the two groups were compared using the Wilcoxon rank test.

The results indicate that there is a positive effect of structural alignment on FL comprehension of HDCs. The qualitative data (participants' explanations) is also analysed.

The results shed light on the process of one of the basic types of construction generalization and comprehension in FL context. From teaching and learning perspective, structural

alignment has to be factored into understanding FL reading comprehension and aptitude. The originality of this approach lies in the application of structural alignment concept in the field of construction grammar.

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The Bookended Narrow Pitch Construction in English Dialog

In spoken language, sound patterns of various types, both segmental and prosodic, help serve to convey meanings and advance speaker goals. Parsimony encourages us to use the same descriptive vocabulary for both, which impels us to explore how the notion of Construction, as developed for grammatical description, can help in the description of meaningful prosodic patterns. As a case study, this paper examines the form and function of one such pattern.

Empirically-minded linguists have long been aware of the existence of meaningful intonation contours, including the classic, albeit controversial, example of the Contradiction Contour in English (1,2). More recent work, both corpus-based and experimental, has confirmed the association between this meaning and this contour (3,4,5). Independent work, with unrelated aims and methods, has empirically confirmed that a very similar intonation pattern is associated with contrast (6), and has described a Prosodic Construction that includes this intonation and is associated with complaining (7).

To investigate further we used an unsupervised method --- Principal Components Analysis over a large set of prosodic features and 70 minutes of unscripted dialog data, following (8) --- to identify commonly-occurring temporal configurations of prosodic features. One of these configurations involved a region of narrow pitch typically lasting 400 milliseconds or more, delimited by brief regions of wide pitch. Commonly this took the form of a region of low narrow pitch delimited by two pitch peaks, the classic form of both the contradiction contour and the contrast contour, but the narrow-pitch region sometimes also occurs high in the speaker's pitch range, with low-pitch delimiters.

We next examined several dozen places in the dialogs where this configuration was clearly present. We found it most commonly used in expressing contrast and in complaining, and also sometimes for contradicting and for expressing grudging admiration. Across these diverse meanings there is a shared element of contrast: in complaining, contrast with how things should be; in contradiction, with what someone said, and in grudging admiration, with how things would be if done by the speaker. Thus as specific forms with specific meanings; we have a family of constructions: the “Bookended Narrow Pitch Construction,” with an

abstract meaning, and three daughters with more specific meanings (and additional prosodic properties).

Next, seeking to pin down the functional contribution of this construction in dialog, we compared alternative prosodic ways to express contrast, contradiction, and complaint. In cases where the Bookended Narrow Pitch Construction was present, compared to when it was absent, across these functions we found a commonality of use which can be characterized as involving 1) the speaker offering some information which the listener didn't know, 2) for the listener to consider, 3) for the sake of advancing the ongoing discussion.

This case study supports the idea that prosodic features can be not only essential elements of grammatical construction (9,10,11); they can constitute constructions in their own right, which, much like grammatical constructions, are form-function mappings that may involve families and hierarchies.

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Eye Tracking as a cognitive method in the field of variationist construction grammar

Although we know at least since Labov (1966) that variation is the normal state of languages and varieties, investigations with a focus on variationist sociolinguistics have only recently emerged in the framework of construction grammar (cf. Geeraerts/Kristiansen 2015 for an overview). Moreover, discussions about the advantages of psycholinguistic methods in accessing the cognitive processing of specific constructions and the linkage to theoretical issues in usage-based approaches became more important (cf. Bard et al. 2010; Blumenthal-Dramé 2012; Perek 2015). However, these investigations – like almost all psycholinguistic tests – mainly focus on standard languages and neglect the differences between diatopic varieties of the particular language.

The goal of our research project is to combine corpus linguistics and cognitive science, using a well-established method in psycholinguistics – the *Eye Tracking* method (cf. Rayner 1998). The phenomenon we investigate is the auxiliary variation in perfect constructions in the Westphalian and Emslandic Low-German area, where especially telic verbs such as *anfangen* (‘to begin') are used with the auxiliary *sein* (‘to be') in contrast to the standard construction with *haben* (‘to have') (cf. Saltveit 1983; Elspaß 2016).

We collected both spoken and written data to provide a mediality-specific view on the actual use of the telic auxiliary constructions with *sein* (‘to be'). For the spoken data, a corpus of approximately 55 hours (interviews and everyday talk) by 54 speakers of nine different locations in the Westphalian and Emslandic area were collected. The written data consists of more than 4000 issues from a daily regional newspaper. Based on the results from the usage-analysis, we developed a test design for the Eye Tracking study that includes 30 people from three regional areas: (1) speakers from the Westphalian area that show auxiliary variation in the perfect forms, (2) speakers from the south-Westphalian area where no variation but only the standard compliant forms are observable, and (3) speakers from a South-German dialect area as a comparison group.

Following the idea of the “corpus-to-cognition-principle” by Schmid (2000), we tested whether there is a connection between frequencies in the active use of regional auxiliary constructions and the cognitive processing time of these constructions. The results of the Eye Tracking study show that two parameters play an important role. First, as expected the regional background of the speaker determines the processing times of these constructions. Second, the geographical distance to the area of the regional specific use of these auxiliary

variants determines the reading times. Our findings complement the "corpus-to-cognition-principle", which only weakly reflects forms of passive knowledge and forms of familiarisation with regional specific constructions that are not part of the own language use.

The talk will show that it is important to take these parameters into account when conducting experiments within the scope of variationist construction grammar and cognitive science methods. This leads to a general discussion about forms of *top-down-coercion* and *entrenchment* (cf. Bybee 2010; Blumenthal-Dramé 2012) of regional specific constructions that are challenging theoretical assumptions until today.

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Romance-Germanic contact and constructions

In this contribution, we will present findings from an ongoing study on V + *para atrás*, based on web-accessible corpora of second-generation Spanish-English bilinguals in the USA:

(1) tenemos que **venir para atrás** antes de cierta hora (*Corpus del Español en Texas*, recording 24)

‘tenemos que volver antes de cierta hora/we have to come back by a certain time'

(2) luego **regresó para atrás** (*Corpus del Español en Texas*, recording 39)

‘luego regresó/later he went back'

(3) estoy esperando que ya **comience para atrás** (*Corpus del Español en Texas*, recording 2)

‘estoy esperando (a) que [la escuela] ya vuelva a comenzar/I am waiting for it [school] to restart soon'

This commonly cited phenomenon which also occurs in other Spanish-English bilingual communities (such as for example in Gibraltar) has generally been labeled as *loan translation* or *calque* of English V + *back* (Lipski 1987; Silva-Corvalán 1994; Ortigosa 2008), and, recently, also as *borrowed construction* “directly translating an existing English construction” (Lewis 2016:22). Villa (2010), however, refutes the idea of a language contact phenomenon, arguing instead for an internal development of the Spanish language.

Our study shows that a CxG oriented approach to V + *para atrás* as abstract form-meaning-pairing allows us to go beyond these opposing views, especially if we adopt a pan-Romance comparative perspective (Boas 2010). Firstly, V + *para atrás* can only carry the meaning of a physical backward movement in Standard Spanish and verb-adverb-like combinations are generally rare in most modern Romance Standard varieties, which rather rely on synthetic verbs and prefixes. However, instances of this type can already be found in spoken Latin (*exire foras* ‘to go out') or Old French (*cil vont arriere* ‘those get back') (Kramer 1981; Tremblay 2005). Moreover, our corpus data on US Spanish interestingly also reveals cases which have not been described in the extant research literature: In example 3, V + *para atrás* does not replicate V+ *back* and it may show what looks like semantic doubling (example 2). Verb-adverb-like combinations often increase in Romance varieties in contact with Germanic languages, though (see Kramer 1981 or Treffers-Daller 2012 for Europe and Perrot

2003 for Acadian French). V + *para atrás*, coding physical or abstract returning or iteration in US Spanish, has therefore to be studied as a potential result of constructional change (Traugott/Trousdale 2013) promoting a formally more analytic and semantically more transparent construction type which seems to admit a wide range of verbs. At the same time, this process may also lead to the emergence of a diaconstruction (Höder 2014) in certain bilingual communities. CxG now allows us to analyze the synchronic and diachronic inheritance links between the formal, semantic and collocational profile of the constructional subtypes as well as a potential general drift (Koch 2012) to this kind of verb-adverb-like construction in certain Romance varieties via parallel inheritance links.

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The get-passive as a multiple source construction

As argued in Van de Velde, De Smet & Ghesquière (2013), work on constructional change should, more than has previously been recognized, consider the possibility that innovations in language have several sources. Instead of constructional change consisting of altered replication of a single source construction, constructions can arise "as an intersection of a number of other pre-existing constructions" (Trousdale, 2013, p. 511). In this paper I argue that the English *get*-passive (*I got told off*) is profitably analysed as having multiple source constructions.

Fleisher (2006) presents an account of the development of the *get*-passive as arising out of the inchoative use of *get* as in *get ready*, relating to a change of state. Inchoative *get* could be used with adjectival past participles e.g. *get tired*. Such examples could then be reanalysed as involving a verbal past participle, and as such *get tired* was taken to be referring directly to an act of tiring, rather than just referring to someone entering the state of being tired.

Such a picture of its derivation can explain some features of the *get*-passive. Development out of inchoative *get* can explain the resultative/change-of-state semantics that has been associated with it (Vanrespaille, 1991) and also explain why the subject can be seen as in control of the event (Hatcher, 1949) as subject control is also quite possible with inchoative *get.* However, another feature of the *get*-passive that is often discussed is that it displays adversative semantics, where the subject (or someone invested in what happens to the subject) is negatively affected by the event (Chappell, 1980). This cannot easily be explained in reference to inchoative *get*, which does not obviously display such a tendency.

I propose that the source of this adversative semantics is *get* being used to introduce something experienced by the subject, as in *get a flogging*. On the basis of a corpus of WWI Australian soldiers' letters and diaries, I demonstrate that this *get* + experienced NP construction also demonstrates adversative semantics, and that there are also other suggestive links between it and the *get*-passive, such as the occurrence of pairs like *get bombarded* and *get a bombardment*.

Constructions like *get a flogging*, where the object encodes something undergone or experienced by the subject are thought to be especially used in Irish English and may represent transfer from similar constructions in Irish using *faigh*, a verb equivalent to *get* (Nolan, 2012). If the *get*-passive, in additional to having the inchoative *get* as a source, has another source construction that is Celtic in origin (Scottish Gaelic has similar constructions

with *faigh*), then this can also explain could explain why, as Hickey asserts (2004, p. 604), *get*-passives are stronger in Irish and Scottish English.

Overall, the case of the *get*-passive reaffirms the value of taking an approach that takes into account multiple potential sources. Not only can multiple sources help explain the semantics of the construction, it may offer insight into regional variation in the construction's use.

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A usage-based model of the accusative-instrumental alternation in Polish

In Polish, a verb set can be discerned containing items which can enter constructions with a direct object in the instrumental case. Primarily expressing meanings related to physical manipulation (*rzucać* – 'to throw', *targać* – 'to pull') or control (*administrować* – 'to administrate', *rządzić* – 'to rule') of the object, the verbs differ in whether they can be used with the instrumental objects exclusively or whether constructions with the accusative are available. Of particular interest for the present study are the verbs for which either the accusative or the instrumental can be used with seemingly no coarse-grained semantic shift. A number of factors influencing the accusative-instrumental alternation have been proposed: Holvoet (1991) discusses aimlessness of the action (cf. Buttler 1976), directedness of the action towards the object, object affectedness, explicit localisation of the impact and differences in the conceptualisation of the movement. However, the characteristic considered most important by him is that atelic character of the predicate is associated with the instrumental case.

While the direct analysis of the proposed features could be attempted, it may be argued that together they do not provide a means of systematic description of the phenomenon. Thus, a need emerge to adopt a more versatile approach which would at the same time be relevant to the characteristics indicated by previous research. A possible interpretation of the existing accounts is that the accusative-instrumental alternation can be analysed in terms of a deviance from the canonical expression of Transitivity in Polish. Following this line of research, the present study uses Hopper and Thompson's (1980) parameters of Transitivity as a basis for the variable selection which can both address the need to verify existing accounts and provide a structured approach to the analysis. **The aim of the study is to provide a systematic usage-based account of the alternation, founded on the analysis of Transitivity-relevant characteristics associated with the alternating constructions**.

The study can be divided into two major phases. The first one concentrates on the delineation and structuring of the group of verbs relevant to the domain of instrumental objects. Data from *Walenty*, a machine-readable valency dictionary of Polish (Przepiórkowski et al. 2014), is used in order to retrieve and analyse valency schemata with verbs for which both instrumental and accusative objects are attested. The resulting structuring and description of the verb group facilitate the assessment of the scope of the accusative-instrumental alternation in Polish and the selection of items for the next stage of the analysis. The second phase consists of a multifactorial corpus study (cf. e.g. Bresnan et al.

2007, Glynn and Robinson 2014, Gries and Divjak 2009) done on over 500 usage examples for each alternative, retrieved from the National Corpus of Polish (Przepiórkowski et al. 2012). The data will be coded for a number of variables, primarily corresponding to the parameters of Transitivity by Hopper and Thompson (1980). The obtained dataset will be subject to subsequent modelling, using conditional inference trees and random forest techniques (cf. e.g. Levshina 2015).

The adopted procedure is expected to result in a precise account of the alternation. Consequently, It may both provide an insight into the domain of Transitivity expression in Polish and contribute to the general research on grammatical alternation.

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From Theory to Practice: Cognitive Grammar and Concept-based Instruction for L2 Construction Teaching and Learning

This study investigates the effect of cognitive-grammar-based concepts for teaching and learning a particularly difficult construction for learners of L2 Chinese to master—what is generally referred to as “ba-construction”. The approach to instruction utilized in the study originated in Vygotsky's sociocultural theory(SCT). Focus is specifically on the development of the ability of intermediate-level Chinese as Foreign Language (CFL) learners to understand and use the Chinese ba construction. Cognitive grammar, as Taylor (2013) states, early on“occupied a very marginal place in the theoretical linguistic landscape”,although it has yet to find its proper place within applied linguistics and in particular L2 pedagogy, there has been growing interest in the pedagogical value of CG both by linguistics as well as sociocultural researchers.Specifically, a group of L2 researchers have been exploring the effects of marrying CG and SCT in the language classroom (e.g., Lantolf &Poehner, 2014; van Compernolle, 2014 & 2015; Tyler, 2012). CG linguists such as Langacker(1999) and Bybee(2013) provided a method for eliciting the theoretical concepts that are the form-meaning pairings from language in use (languaging). SCT L2 researchers have emphasized and demonstrated the importance of language concepts in the teaching and learning of languages. These researchers refer to the approach as concept-based instructionand offeran alternative method to teach and learn L2, through materializing and verbalizingthe concepts. This study adopts the SCT orientation to instruction that is known as concept-based instruction. The study uses CG to establish a theoretical account of the ba-construction; it will be brought into pedagogical focus through use of the SCOBA—a pedagogically useful visual image of a linguistic concept. The microgenetic development of CFL learners is analyzed through comparison of performance on apre-test and on a post-test. The overall study aims to show concept-based instruction is a feasible and effective approach to teach and learn L2 constructions derived from CG, which not only helps students'understandings of grammatical meanings, but also promotes learners' ability to use the relevant grammatical features effectively and creatively.

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Building a German Constructicon: exclamatives and the architecture of GCon

The talk aims at introducing objectives, methods and procedures guiding the German Constructicon Project (GCon) hosted at the University of Duesseldorf. Specifically, various exclamative constructions are discussed in detail in order to illustrate both the structure of constructional entries in GCon and the (illustration of) relations holding between constructions within and across constructional families.

Exclamative constructions, such as (1) – (3), constitute an interesting subtype of constructional idioms.

(1) *What a nice day!*

(2) *Nice day!*

(3) *Wow, such a nice day!*

Even though there is a good deal of literature addressing exclamatives in German (for an overview, cf. d'Avis 2013), surprisingly little is known about the semantic, pragmatic and syntactic constraints specific to each of the members of this construction family let alone the relations holding among them. Given this background, I first introduce the annotation categories required for fine-grained constructional analyses. Based on the Berkeley pilot project, the so-called FrameNet Constructicon (Fillmore et al. 2012), the annotation categories include (a) construction evoking elements (CEE), in (1) “what a”; (b) construction elements (CE), in (1) – (3) “nice day”; and (c) constructs licensed by the construction, in (1), for example, “what a nice day”. In addition, we also annotate so-called “correlated elements” (CorE), that is, strings of words enhancing, or supplementing, a (semantic, pragmatic, discourse-functional, syntactic) property of the target construction. In the case of exclamatives, co-occurring interjections are good candidates for CorE, such as “wow” in (3). Second, using exclamative constructions as examples, I illustrate the empirical procedure specifically developed for the constructicographic project; the procedure essentially comprises (a) subcorporation and a preliminary analysis; (b) syntactic parsing (using TreeTragger and the Berkeley Parser trained with German data); (c) semantic annotation with WebAnno; (d) semi-automatic constructional analysis (with the help of a tool called Construction Analyzer); and (e) compilation of construction entries in the GCon database. For illustration, I present the *Was für + NP* construction as a central member of the family of

exclamative constructions and discuss results of a corpus analysis. Third, based on the empirical results achieved, I demonstrate how to compile a sample construction entry for the *Was für + NP* construction.

Taking this construction as a starting point, I will finally broaden the perspective and take a closer look at the general architecture of the German Constructicon. The framework is designed to be in line with other ongoing constructicon projects, most prominently the Swedish Construction (Lyngfelt 2012), the Brasilian Portugese Constructicon (Torrent et al. 2014) and the Japanese Constructicon (Ohara et al. 2014).

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POSTERS

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Exemplars as speaker oriented modal constructions

The development of modal meaning has gain a lot of interest in the linguistic literature, from a wide range of theoretical perspectives. Most discussed is probable the rise of speaker-oriented meanings (epistemic, evidential) in modals such as *may*, *can* and *must* and equivalents in other languages. Formal approaches usually describe the rise of speaker oriented modals as the result of syntactic reconfiguration which creates functional material, i.e. modals become associated with higher syntactic positions (Abraham 2002, van Gelderen 2004), whereas functional-cognitive approaches mainly focus on conceptual metaphor (Sweetser 1990, Andersson 2009) or some kind of pragmatic strengthening (Traugott 1989, Papafragou 2000).

I will present an additional view based on exemplar representation of constructions (Bybee 2013). From out a comprehensive data set of approximately 1100 tokens (author 2007) from Old Swedish, I will show that constructions facilitating epistemic modal readings are represented by frequent tokens including *må* 'may' and cognitive main verbs in specific concessive and conditional contexts. Example (1) illustrates a common use of *må* 'may' in theological-argumentative dialogues from 14thC which paves the way for the Present-Day lexicalized pattern in (2), among others.

(1) Här **ma vnderlikt thykkia**/ hwi war herra skapadhe himiltungel fiärdha daghin Fore thässa skiäl/himiltunge äre liwsins iläte/än nw war liwsith skapath första daghen [...] Här swaras til thässa lund

It may seem strange that our lord (God) shaped heaven on the fourth day of creation and the light was shaped on the first day, as heaven is the storage room of the light, To this we will be respond that [...]

(2) Snart har vi varit skilda i ett år så **man kan tycka** att jag borde kommit längre.

'Soon we have been divorced for one year so one might think that I should have gone further'.

The examples in (1) and (2) may be subsumed under the same exemplar cluster, i.e. tokens of experience grouped together by similarity (in form and meaning). As pointed out by Hilpert (in press), it is most certain an open question how confidently we can make statements about the linguistic knowledge of earlier generations based on historical corpus data. However, I will argue that historical data of the kind presented here, may help us in understanding why and how inferences may stick to and become part of constructions. Furthermore, the exemplar model is based on domain general processes and provides "a linguistic theory with powerful explanatory possibilities" (Bybee 2013:69).

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A Construction Approach to Athabaskan Grammar

This paper focuses on verb composition in an indigenous polysynthetic language spoken in Alaska - Koyukon, an Athabaskan language. An examination of verb patterning and function in discourse supports a view of the complex Athabaskan verb itself as the locus for a grammar consisting of "a network of interrelated constructions"(Goldberg 1998: 205) Polysynthetic languages typically have a great deal of synthesis and a high degree of fusion. They tend to have multiple affixes which may express the bulk of the semantic content of a particular verb word, and a single verb can contain the meaning expressed by a full sentence in a non-polysythetic language. Example (1) below provides an example of a polysynthetic verb in Koyukon.

(1) Edeghoyeneegheleedeneek ede + gho # yenee # ghe + le + ee + de + neek self + towards # mind # akt + asp + 2sgSubj + valence + stem = touch, feel "Take care of yourself"

The level of complexity seen in Koyukon verbs raises the question of how a language like this might be learned. I discuss the research on construction grammar and verb learning (e.g., Goldeberg 1998, Tomasello 2003) and propose an application to languages with particularly rich morphologies. In previous discussions of the Athabaskan verb the string of prefixes preceding the verb root has been described as an ordered prefix template, an item and slot arrangement of inflection and conjugation markers as pictured in (1). In this paper, I propose analyzing the prefixes as comprising constructions. Looking at verb formation in Koyukon as a layering of constructions, provides a view of the polysynthetic verb that is more in line with our notions of cognitive functioning and with the principles of language acquisition. I describe three separate but linked kinds of constructions that layer together in the composition of the Koyukon verb. Specifically, I examine sequences associated with aspectual expression as formulaic constructions, arguing that I argue that the combinations of aspectual and aspect dependent temporal prefix strings are constructions, or prefabs, with "schematic positions that range over a number of lexical items" (Bybee 2010: 76) and are best understood as single unanalyzed units. This requires considering the importance of sequential chunking in exemplar representations of morphosyntactic structure. An examination of Athabaskan discourse, including folk stories, personal narrative, and conversation, shows two frequent patterns of aspectual strings occurring as chunks, or prefabs: 1) Repetition of a particular verb with alternating aspectual derivations, and 2) Repetition of a particular aspectual derivation with different verb roots. These patterns of repetition provide alternate construals on the events being reported on and by this means, serve to tie referents to the prior discourse and provide cohesion in the flow of information. The frequency of these patterns in discourse suggest an acquisition process and a cognitive representation that is based on constructional chunks rather than an ordered series of prefixes in a template.

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Conceptual contiguity of space particles: A quantitative corpus-based analysis of English prepositions

This study analyzed the conceptual contiguity of 13 space particles in English (after, before, in front of, behind, over, above, up, down, under, below, in, out, and out of), each of which encodes a spatial relation associated with varying spatial dimensions. All instances of these 13 particle constructions were retrieved from the British National Corpus (XML edition) and the head noun of the landmark (LM) was identified utilizing the regular expressions and the POS-tags. We then computed the collostrength between each LM type and the space particle, using statistical measures under the framework of collostructional analysis (Stefanowitsch & Gries, 2003). Our hypothesis is that if two space particles tend to co-occur with similar sets of LM, they are more conceptually contiguous. Given the distributional information of the space particles in relation to the LM, we analyzed their conceptual contiguity in three steps. First, we applied exploratory multivariate analyses (including Principal Component Analysis and Hierarchical Clustering) to explore the potential grouping of these particles by analyzing pairwise distance/similarity of the space particles. Second, based on the clusters from the multivariate analysis, for each particle cluster, following Gries and Stefanowitsch (2004), we conducted the distinctive collexeme analysis, which allowed us to tease apart distributional and semantic differences between semantically relevant constructions. Finally, to examine the semantic differences among each particle clusters, we analyzed the semantic coherence in the LMs of each particle cluster by looking at the animacy of the distinctive collexeme LM of each space particle in the cluster. As the conceptualization of space relations is often connected to the metaphorical extension of the spatial relation from a concrete human referent to an abstract inanimate reference point, we focused on the construct of Animacy for the LM in each particle cluster. Specifically, we followed the coding scheme of the animacy annotation defined in Zaenen et al. (2004) and manually annotated the top 400 co-occurring LM of each space particle, which were ordered according to their distinctive collostrength. We then used the Chi-square test to examine the association between particle clusters (Cluster) and the animacy of the distinctive collexemes in the cluster (Animacy).

Our results of multivariate analyses show consistent results of grouping, as illustrated in the dendrogram in Figure 1 and the three-dimensional plot of PCA in Figure 2.

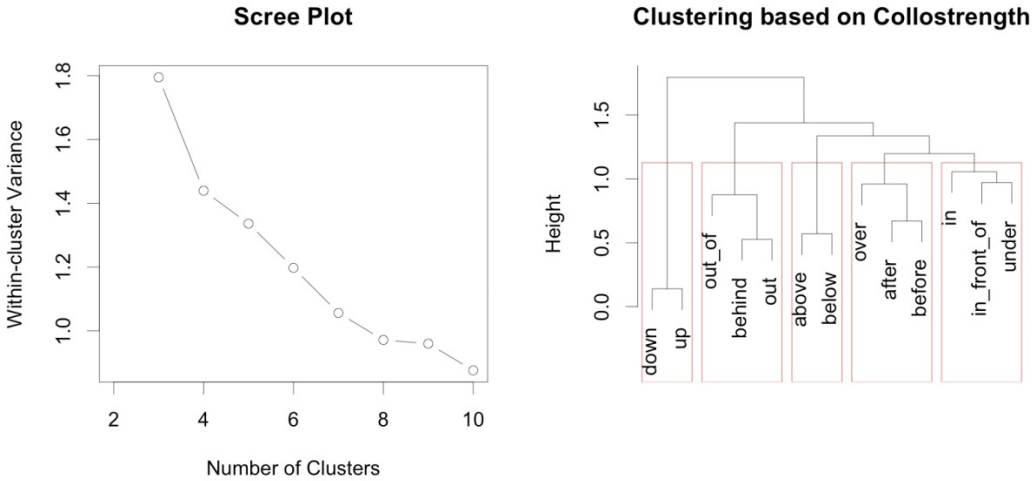

Figure 1

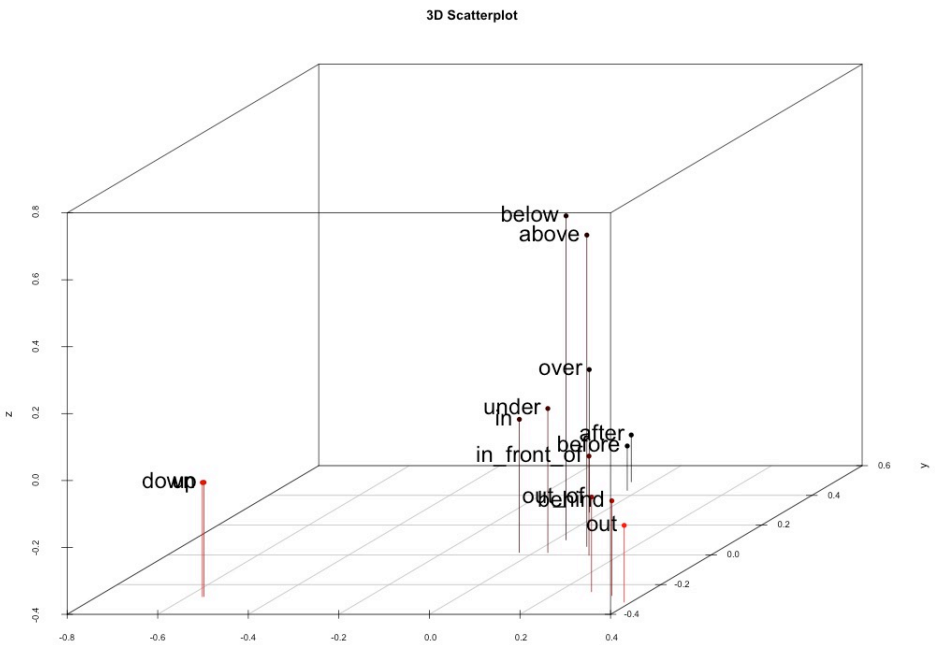

Figure 2

Our analyses suggest five conceptual clusters for space particles in English:

- Cluster 1: after/before/over
- Cluster 2: above/below
- Cluster 3: up/down
- Cluster 4: behind/out/out of
- Cluster 5: in/under/in front of

The chi-square test suggested a significant association between Animacy and Cluster. The correlation is very significant.

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The synchronic hierarchy and diachronic expansion of the Chinese middle construction

Chinese middle construction (Chinese MC) 'N+V+qilai+C' differentiates from both active sentences and passive sentences since it uses active form to express passive meaning. Scholars have examined Chinese MC in the framework of Structuralism (Cao, 2004a, 2004b, 2004c), Generative Grammar (Sung, 1994) and Cognitive Grammar (He, 2005, 2007a, 2007b). Since no attempt has been made to discuss Chinese MC from constructionist perspective, this study will provide a construction-based account to uncover its synchronic distribution and historical development.

This study firstly outlines the synchronic hierarchy of Chinese MC and proposes an assumption about its expansion path on the basis of the categorization of middle verbs' argument structure, semantics and eventuality type. Then differentiating the typical Chinese MC from peripheral Chinese MC, this study advocates including both of them as the research objective in order to uncover the whole picture of Chinese MC. Later, by exploring the historical development of Chinese MC and mapping it onto the synchronic hierarchy, this study discusses the expansion characteristics of Chinese MC. Finally, this study investigates three relationships involving Chinese MC's constructionalization.

To conclude, this study shows that Chinese MC's internal connections can be reflected clearly by its synchronic hierarchy. Chinese MC expands horizontally through argument structure and vertically through semantics and its expansion mechanism can be explained by varying abstraction model of categorization (VAM) which combines the prototype model and exemplar model. As for the interaction within Chinese MC's constructionalization, it refers to three aspects: 1) the relationship between typical members and peripheral members; 2) the relationship between central members and marginal members; 3) the combination of the radial set model and the overlapping sets model. These aspects reflect that Chinese MC is not a concept which has clear boundaries within its members. This can be attributed directly to the long history of Chinese MC and the wide range of its members. Then when looking from a broad picture, the constructionalization of Chinese MC is not an isolated process and is affected by patient-subject sentences. This demonstrates the core proposal of construction grammar: language is a network connected by different constructions. At last, Chinese MC's constructionalization has affinity with V-qilai's grammaticalizaion. In Chinese MC, some V- qilai act like parenthesis which can be placed to the head of the sentence or even be deleted. The conflation of qilai with certain verbs' syntactic representation as parenthesis can be attributed to qilai's grammaticalization.

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Gender shift in Norwegian: The ei litta-construction

A new construction is emerging in Norwegian. This construction - here referred to as the ei litta-construction, involves a morphological marker of feminine gender, ei, as well as a lexical expression of diminutive; litta or lita, ‘small'. The unmarked way of using this construction is with a noun with feminine gender, as in (1):

(1) ei litt-a jente
a.F small-F girl.F
‘A small girl'

In these constructions, the meaning is - predictably - that of diminution. However, the novelty of the construction lies in its ability to occur with nouns that are grammatically masculine or neuter (2); sometimes also biologically masculine, as in (3):

(2) ei litt-a hus
a.F small-F house.N
‘A small house'

(3) ei lit-a prins
a.F small-F prince.M
‘a small prince’

As we will show, the use in (2) and (3) generates a meaning beyond diminuition. In this presentation, we look at three aspects of the ei litta-construction, having extracted data from a 700 million word corpus of non-edited written language (NoWac, Guevara (2010)).
First, we address its use. What nouns can occur within the construction? We look at two aspects of the nouns that are found in the construction: firstly, at the distribution of abstract vs. concrete nouns, and find that both types of nouns may occur within the frames of the construction. Second, we look at the meaning of the nouns, using Wordnet's categories as point of departure (Princeton University, 2009), and find that nouns denoting time and event are most frequent. Thirdly, we address the meaning of the construction, with Jurafsky's radial category model as backdrop (Jurafsky, 1996), and find that the most salient meanings of the construction are size, affection, and hedge.

We also place the construction typologically and cross-linguistically within the frame of evaluative morphology, more specifically gender shift and diminuition used to express evaluative meaning (Di Garbo 2014; Scalise 1986). Typologically, we observe that the Norwegian construction is particular: it involves both a lexical marker of diminutive (litta), and a morphological marker of femininity (ei), and that it is the combination of the two, with masculine and neuter nouns, which triggers the specific meaning. Besides Opsahl's qualitative study (2017), this is the first systematic observation of "gender shift" in a Norwegian construction; the meaning of which may best be captured through a constructional lense.

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Form-meaning pairings or action-construction relations?: Towards an understanding of the mutually constitutive nature of linguistic constructions and social actions in L2 talk.

Addressing the relationship between locally contextualized language use and long-term language learning, this talk is concerned with empirically delineating how certain linguistic expressions are coupled with certain practices of social interaction over time. From this empirical basis I distill the properties of emergent, constructed L2 grammars. I draw on usage-based linguistics (UBL) and ethnomethodological conversation analysis (EMCA) to capture development over time along two dimensions of L2 learning, namely development of interactional competence as evidenced through moment-to-moment microanalyses of interactions (EMCA) and development of L2 constructional inventories as seen through the lens of UBL.

The talk refines the usage-based understanding of language as constructions in an embrace of interactional competence (Pekarek Doehler & Pochon-Berger, 2015) by reconceptualizing the linguistic inventory as an array of semiotic resources for carrying out social action. I will show how meaningful language use presupposes an understanding of social practices and that the development of L2 grammars, conceptualized as a matter of appropriating embodied semiotic resources for social action, is subservient to this understanding.

I discuss L2 learning in terms of the following, sometimes overlapping, phenomena: 1) situated social action; 2) change in accomplishment of social actions; 3) establishment of a particular expression; 4) change in the deployment of a particular expression; 5) change in the composition of the expression through pattern expansion (e.g., verb variation); and 6) change in function through increased structural variation (e.g., emergence of interrogative, inversion etc.). In so doing, I also delineate concepts such "language", "social action", "cognition", and "learning" from an interactional, usage-based perspective. The result is a revised usage-based framework for conceptualizing semiotic resources in interactional terms: seeing as constructions are primarily designed and used for and learned as actions in situ, the emergent L2 grammar hinges as much, if not more, on embodied action-construction relations than on form-meaning pairings. Finally, I will discuss the implications for L2 teaching of this revised usage-based understanding of the linguistic inventory.

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From “NP1 de NP2” to “NP de VP” in Chinese: Inheritance and Coercion

Adopting the approach of Construction Grammar, this paper discusses the mechanism of inheritance of the structure of “NP *de* VP” from “NP1 *de* NP2” in Chinese by the force of coercion.

The NPs can normally be used as the modifiers with the particle *de* (的) to other NPs formulating the structure of “NP1 *de* NP2” in Chinese. For example:

(1) Zhe ben shu de zuozhe （这本书的作者）
this book of author
the author of this book

In (1), “*zhe ben shu*” is an NP which is a modifier with “*de*”, and “*zuozhe*” is another NP which is the head of the structure. There is not any disagreement among researchers about the formulation and grammatical features of “NP1 de NP2”. Its formulation and syntactic features coincide with the endocentric construction theory in that the syntactic function of the head of structure is the same as the whole NP. But there has been a lasting disputation on the structure of “NP *de* VP” in Chinese for last several decades. The structure of “NP *de* VP” can be shown as the following examples:

(2) Zhe ben shu de chuban （这本书的出版）
this book of publish
the publication of this book

(3) Ta de lai （他的来）
he of come
his coming

In (2) and (3), “*chuban*” and “*lai*” are the verbs, but each of the whole phrases is the nominal structure that can be used as subject or object but not predicate. The difference of syntactic feature between the head and the whole structure is considered to be in contradiction with the endocentric construction theory. Some researchers propose that the verbs in these structures undergo the nominalization. But some others oppose this proposal on the ground that it will cause the consequence that most verbs in Chinese are of the multiple class membership belonging to both verb and noun without any inflected difference. The analysis of this structure falls into a dilemma. Facing this dilemma, Shen (2009) argues that Chinese verbs and nouns are not two separate word classes. Instead, Chinese verbs are considered to be a subcategory of nouns. His proposal triggers another round of debate on classification of Chinese verbs and nouns.

From the view of Construction Grammar, constructions could be linked by some kinds of inheritances, especially the features of the typical construction are inherited by the atypical construction. The structure of “NP1*de* NP2” in Chinese is a typical endocentric structure, whereas “NP *de* VP” can be regarded as being atypical endocentric. Both are the nominals sharing some common syntactic features and constructional meaning while the latter

inherits the features of the former as a nominal and plays the same syntactic roles with the former. Coercion plays the key role in formulation of “NP *de* VP” in the process of inheritance from the structure of “NP1 *de* NP2”.

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Frame-and-slot patterns in the language of a Polish and English speaking child: evidence of input and output effects on the switch placement.

How does the bilingual child assemble her first multi-word constructions? Can switch placement in bilingual combinations such as ‘I don't want it MLEKO (milk)' or ‘TO JEST (this is) sheep' be explained by language usage? This study traces the emergence of frames and slots throughout the diary collection period (0;10.10-2;02.00) to document the acquisition of constructions. Subsequently the focus falls on most frequently produced bilingual combinations captured through 30 video recordings (1;10.16-2;5.11) which are analysed with reference to such frame and slot patterns. Of particular interest are four types of bilingual partially schematic units which are examined in light of parental input and the child's own usage. Two observations are made: a) 84% constructions can be explained by referring to the slot-and-frame model and b) frequency-driven unit-based recall plays a role in determining the switch placement in early bilingual combinations. These findings are used to explain the origins of early language dominance. Further experimental research is needed to confirm these findings on larger populations of bilingual children.

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Two grammars in the input – two different strategies to process the input. The usage-based perspective on the development of nominal inflections in a bilingual child.

Can early grammatical acquisition across languages be accounted for by one set of predictions about the grammatical patterns heard? This study examines the extent to which Radical Construction Grammar (Croft, 2001) and its central tenet, input frequency, can account for the emergence of grammar in the acquisition of Polish and English, two languages which offer typologically different stimuli for the child to work from. The study looks at the onset of grammatical acquisition in a bilingual toddler (aged 1;10.16-2;5.11) exposed to Polish and English from birth but dominant in the latter, examined through 30 half-hour recordings and a diary. The data reveal different effects of input on the acquisition paths in each language and variance in these effects depending on the stage of development. First of all, the order of acquisition of case markings attempted by the child corresponds with the proportions of these markings heard in the input in English but only to a limited degree in Polish. However, the early emergence of the Polish -i marking can be explained in terms of its analogy to existing exemplars and its potential to cover multiple grammatical contexts. Lastly, it is suggested that the infrequent use of Polish language is responsible for what appears to be ‘regression in acquisition' of the Polish plural/case marking system. These data call for a more dynamic understanding of frequency as a factor facilitating acquisition.

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Argument Structure Constructions in Portuguese as Foreign Language teaching: an Applied Construction Grammar project

Recent studies show that the linguistic knowledge of L2/foreign language learners consists in constructions (Manzanares; Lopes, 2008). However, actual proposals for applying constructions in language teaching are still rare (Gilquin; De Knop, 2016). This work shows partial results of a project of applying the notion of argument structure constructions (ASC) (Goldberg, 1995; 2006) in a Portuguese as Foreign Language (PFL) teaching method. The project's main goals are: to demonstrate the relevance of ASC in grammar teaching and to propose a pedagogical PFL material that incorporates the principles of Construction Grammar.

An analysis of available pedagogical PFL materials showed that argument structures are not present as explicit objects of teaching (Marques, 2016). But in current theoretical linguistics, these are seen as a fundamental part of a language's structure such as Portuguese. Therefore, PFL students may know Portuguese verbs' meanings and conjugations, but they may not know how to build sentences in this language. Also, there seems to be a gap between theoretical and applied Linguistics in relation to grammar: a preoccupation is seen regarding the inclusion of uptodated cultural themes and pragmatics, but, for teaching structure, even recent materials use the Traditional Grammars' old explanations, not the theoretical/descriptive Linguistics' ones.

The objects of teaching of the new method come from the broad study of the Brazilian Portuguese verbal lexicon and its many different “argument alternations”, available in the free online platform “VerboWeb” (Cançado et al, 2017). An adjustment was made, so to understand the “alternations” as ASCs. The ASCs selected were: the active-dynamic construction (João molhou o cachorrinho 'John wet the puppy'), the passive construction (O cachorrinho foi molhado 'The puppy was wet'), the inchoative construction (O cachorrinho molhou 'The puppy got wet') and the reflexive construction (O cachorrinho se molhou 'The puppy wet himself'). There are semantic-pragmatic features in the verbs that motivate possible and anomalous combinations between verb and construction (Cançado et al, 2017). For example, only verbs that allow an agent can instantiate the passive construction. Generalizations such as this should be directly taught to PFL learners, who do not receive the same amount of input as L1 learners (Gilquin & De Knop, 2016).

The material for teaching ASCs in PFL is being tested in actual PFL classes in Brazil, and the publication of its first edition is planned for the end of 2018. A sample of the material will be shown in the poster.

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Wolof verbal system: a holistic construction grammar approach

The aim of this paper is to propose a Construction Grammar analysis of the whole verbal constructions network of Wolof (Atlantic, Niger-Congo language spoken in Senegal). I consider that Wolof predicative constructions cannot be analyzed as a simple list of independent constructions. Some groupings are necessary to explain the formal similarities and differences that exist between these constructions. Besides, some apparent idiosyncrasies in Wolof conjugation can be explained in the light of diachronic elements. The framework provided by Construction Grammars allows a unified analysis of synchronic observations and diachronic phenomenons. Indeed, within the scope of a constructional approach, we may consider that Wolof predicative constructions form a construction network. Idiosyncrasies observed in synchrony can be analyzed as marks of grammaticalization processes having lead to a restructuring of the network.

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Argument Structure Constructions in Online Sentence Processing

Argument realization is a fundamental issue and a differentiating feature among syntactic models (Chomsky, 1965; Lakoff, 1970; Bresnan, 1982; Pollard & Sag, 1987; Langacker, 1987; Jackendoff, 1990; Goldberg, 1995). A powerful model should not only describe language grammaticality consistently and cross-linguistically, but also have explanatory power in terms of language acquisition and processing. This research thus examines the psycholinguistic reality of syntactic models by evaluating to what extent different analyses simulate the processing complexity of dative alternations and locative alternations.

Dative alternation refers to the alternation between preposition to sentences (e.g. Jane gave a dictionary to Bill) and double object sentences (e.g. Jane gave Bill a dictionary); locative alternation refers to the alternation between 'load-with' sentences (e.g. Lucy loaded the wagon with hay) and 'load-onto' sentences (e.g. Lucy loaded the hay onto the wagon). These four kinds of sentences are analyzed differently across models. In construction grammar, they are considered as instantiations of dative construction, ditransitive construction, causative construction and caused-motion (Goldberg, 1995, 2006). By contrast, in generative theories, such sentences are generated by rules and constraints: Larson (1988, 1990) poses VP-shells in dative and locative alternations, Pesetsky (1995) proposes a null preposition G for double object sentences, and Beck and Johnson (2004) suggest a small clause with a silent head X in double object sentences.

These analyses may lead to distinct predictions about the processing difficulties that these sentences pose. In construction grammar, processing difficulties can be estimated from the number of competing constructions along with the ongoing comprehension of the utterance. On the other hand, in generative grammar, according to dependency locality theory (Gibson, 1998, 2000) approximate processing loads can be calculated from linguistic integration cost. Therefore, processing complexity is predicted differently as follows:

(1) Dative alternations

a. CxG: preposition to sentences < double object sentences

b. Larson and Pesetsky: preposition to sentences > double object sentences

c. Beck and Johnson: preposition to sentences = double object sentences

(2) Locative alternations

a. CxG: load-with sentences = load-onto sentences

b. Larson: load-with sentences > load-onto sentences

An experiment was conducted using a cross-modal lexical decision task (Shapiro, Zurif, & Grimshaw, 1987, 1989). Twenty-two monolingual English speakers who are either college students or graduates participated the experiment. They were asked to listen to some sentences and decide whether a visual input was a word or a non-word immediately after each sentence. After some decision tasks, a comprehension question was asked to make sure that participants paid attention to the preceding sentence. It is assumed that due to

limitation in working memory, higher sentence processing complexity leads to increased reaction time in lexical decision.

The results show that double object sentences are significantly more complex to process than preposition to sentences, while there is no significant difference between the complexity of ‘load-with' sentences and ‘load-onto' sentences, which supports the constructional analyses.

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Que-constructions in Brazilian Portuguese: complex constructional meanings in interactional uses

This paper deals with a linguistic process which relates to the non-prototypical use of complex constructions: clauses used independently, without being connected to a main clause, even though they still present subordination features. This process has been called 'insubordination' (Evans, 2007, p. 367), and concerns "the main clause conventionalized use of what, on prima facie grounds, appear to be formally subordinate clauses". Many studies on this subject have been developed so far, either from a typological point of view, or in the description of a particular language (Evans, 2007; Mithun, 2008; Gras, 2011, 2016; Van Linden, Van de Velde, 2013; D'Hertefelt, 2015; Sansiñena, 2015, Hirata-Vale, 2015).

The aim of this paper is to present a synchronic account of Brazilian Portuguese (BP) insubordinate completive constructions (ICCs) in order to specify their discursive contexts as well as their formal and functional characteristics. We intend to reach a more systematic treatment of completive constructions in BP, and also to contribute to the typological works on insubordination. Spoken and written data were collected in Corpus do Portugues (Davies, Ferreira 2006; Davies, 2016), Corpus Brasileiro (Sardinha, 2010), Corpus C-Oral Brasil (Raso, Mello, 2012), and also, when necessary, in the Internet, and afterwards analyzed according to morphosyntactic, semantic and pragmatic criteria.

Following Sansiñena (2015), we consider that ICCs may be classified as imperative, exclamative and connective constructions, expressing, for example, wishes (1) or comments (2):

(1) Quando estiver pronto pra segurar Vinte e Cinco, eles não vão me encontrar fácil. Por isso quero tirar Janaína e a menina daqui. Que fiquem longe. (CdP)When I am ready to hold Twenty Five, they won't find me easily. That's why I want to take Janaina and the girl from here. That they stay away.

2) ERN: essa é a carta de aceite
this is the acceptance letter
MAR: No' / são tanto documentos
wow, there are so many documents
ERN: que nũ chegou a sua ainda (CORPUS C-ORAL)
that yours hasn't arrived yet

In (2), one may also notice the dialogical nature of ICCs, as one of the interlocutors completes his previous turn, after being interrupted by the other speaker. Our analysis shows that there is a functional extension in the use of ICCs, in the sense that they express relations beyond the clause level that should be evaluated discursively. This pattern, according to Fried (2010, p. 2), points to interactional frames which are "understood as pragmatically grounded schematizations of communicative and discourse structures conventions". Insubordination then, as predicted in Evans' (2007) cline, involves

constructionalization, in the sense that ICCs could be understood as a new pair of form-meaning, constituting then a new node within an "insubordinate constructions network".

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An exploratory data analysis of lexical frames in Chinese

A large number of constructions in Chinese are lexical frames, i.e. discontinuous word sequences with at least one variable slot. Most studies have focused on intuitively selected lexical frames in Chinese (e.g. Biq 2004), and some have identified recurrent frames in which a pre-compiled list of semantically related words often occur (e.g. Wang et al. 2010). However, few studies have attempted to identify a more comprehensive range of lexical frames in Chinese. The present study aims to fill this gap and provide an exploratory data analysis of lexical frames in Chinese.

Gray and Biber's (2013) purely bottom-up approach is adopted in this study. A massive amount of data is collected from the Chinese datasets underlying the Google Books Ngram Viewer.[1] The programming language R is used to transform three-grams into frame-like word sequences with a variable slot in the middle (i.e. word1 word3) and compute their frequencies. For each high-frequency frame, all its fillers, together with the frequencies of these fillers, are stored.

Three main types of lexical frames are identified: (i) frames that are instances of constructions at a higher level of abstraction (e.g. di ___ qi ‘di ___ session', in which the third word can be any classifier);[2] (ii) frames that function as single self-contained complex units (e.g. yue ___ ri ‘month ___ day'); and (iii) frames that are highly generalized patterns and have a clear meaning only when the slot is filled, just like in the ___ of (e.g. de ___ xia ‘nominalizer ___ under, under the ___ of'). Syntactically speaking, frames that end with an aspect marker are often part of a verb phrase, frames that end with a noun are often part of a noun phrase, and frames that end with de are often part of a modifier phrase.

With a more comprehensive set of three-word lexical frames in Chinese, this study presents a fuller picture. The results suggest that lexical frames are far from a homogenous linguistic construct but vary across different levels of abstraction and generalization. Besides, from a cross-linguistic perspective, since most lexical frames in Chinese are also found to have an identifiable meaning/function, their importance in language use is reconfirmed in this study. Finally, the list of lexical frames identified in this study will be a valuable reference for Chinese teachers/learners and a useful resource for natural language processing (e.g. segmentation tasks).

[1] The datasets underlying the Google Books Ngram Viewer are available at http://storage.googleapis.com/books/ngrams/books/datasetsv2.html. The first version of the Chinese datasets is used in this study.

[2] The word di is a function word placed in front of a cardinal number to form an ordinal number.

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Ellipsis of substantive elements in schematic constructions: From lian XP dou VP to XP dou VP construction in Chinese

Traugott (2014) mentions two types of reduction: for substantive construction, morphophonological reduction; for (partial) schemas, obsolescence of the schema or of elements within it. The former is common in traditional grammaticalization as well as constructionalization (for instance, Trousdale 2012, Traugott & Trousdale 2013:27); the latter, especially the ellipsis of substantive elements in schemas, is seldom studied further. This is observed only in some of but not all of partial schematic constructions, such as the Way-construction cannot omit way in any situation. The issues are explored by answering the following questions:

a. What are the conditions and constraints of element ellipsis in constructions?

b. Whether the elliptical construction belongs to the original construction or becomes a new construction? What are the differences between them?

In this article, I address these issues through an investigation of a particular construction in Chinese, the lian XP dou VP construction (Clian), characterized with comparison and emphasis meaning. This construction can omit lian but not dou in its later development. The elliptical construction is represented as XP dou VP (Cdou). There is a dispute on whether DOU develops comparison meaning earlier and makes a contribution to Clian (Xing 2004, Qiao 2007), or Cdou derives its meaning from Clian (Zhang 2005, Hu & Sh i2007). I agree with the latter. From the perspective of diachronic construction grammar, it is found that only after the appearance of Clian can Cdou express comparison alone. This explanation is similar to coercion or absorption of meaning from the construction (see Goldberg 1995, Croft 2001, Ziegeler 2004, Traugott 2008 and Bybee 2010).

Through the diachronic data analysis, the preliminary answers to the above questions are:

a. When Clian occurs with high frequency and expands to a high degree of schematicity, the construction meaning is entrenched and not be affected by omitting parts of the elements. Lian introduces XP as a reference item to compare with the implied set and plays an important role in the emergence of the construction; later, as it becomes bleached and XP becomes conventionalized to be compared, Lian is not that important and can be omitted. However, without dou, XP and VP become adjacent, then some micro-constructions are ill-formed and some change their meaning completely. Maybe dou can be omitted when XP VP developed to have conventional meaning, but it's not there yet.

b. Cdou becomes a new construction which is inherited but different from Clian in both form (syntactic, morphological, phonological) and meaning(semantic, pragmatic, discourse-functional) (see Croft 2001: 18). For example, one of the syntactic differences shows that Cdou can further co-occur with BA, JIANG, and BI construction, which indicates that it has a higher degree of subjectivity and modality. Other differences, such as the prototype of these two constructions, will also be discussed.

This paper contributes to the relationship between the original construction and the elliptical one. It is claimed that the latter is inherited but different from the former, which is due to the differences in form, meaning and prototype. The conclusion is based on an examination of Cdou which is derived from the original Clian from the perspective of diachronic construction grammar.

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Applying the Notion ‘Constructional Schema' to the Classification of Chinese Separable Constructions

It is well known that there are separable verbs in Chinese (Lu Zhiwei, 1957; Zhao Yuanren, 1968; Lv Shuxiang, 1979; Shi Youwei, 1983; Zhao Jinming, 1984; Zhao Shuhua, 1996) , the separability of which naturally leads to discussions of their grammatical status. Taking the words in (1) as examples, despite their formal similarity, they have traditionally been regarded as three kinds of different linguistic units.
(1) a. Chi-kui (Separable Verb)
To suffer losses
b. Chi-fan (Phrase)
To eat a meal
c. Chi-li (Adjective)
Laborious

Researchers differentiate separable verbs from phrases mostly because that one of the two morphemes in such a word cannot be used alone, indicating that it is not totally free, and their combination could generate new idiomatic meaning. Meanwhile, the two morphemes can be separated and other linguistic units could be inserted into as in (2).

(2) a. Chi-kui: To suffer losses
Da: Big
Chi-da-kui: To suffer big losses
*Da-kui: *Big losses
b. Chi-kui: To suffer losses
Dian – A bit
Chi-dian-kui: To suffer a little losses
*Dian-kui: *a little losses

For Construction Grammarians, the main objects of description in language are constructions. Constructions related to separable verbs also perfectly fit in the definition by Goldberg (1995), i.e. pairings of forms and meanings, each of which cannot be fully predicted. Unlike other constructions, however, in the case of separable verbs, the unpredictability mainly resides in their forms. Within the framework of Construction Grammar, lexicon and grammar form a continuum; viewed from this approach, the ambiguous grammatical status of separable verbs is far from a problem. On the contrary, it serves as further evidence of this continuum, as this talk will demonstrate.
Regarding structures related to Chinese separable verbs as constructions, the present research aims at finding a unified explanation for their separability. Under the perspective of

Construction Grammar, we divided separable constructions into several different classifications. In the process, we find the notion “Constructional Schema” from Cognitive Grammar (Langacker, 2003a; 2003b; 2009a; 2009b) could best describe and explain the commonalities shared by distinct separable constructions. The difference between constructions and constructional Schemas is ultimately a difference of schematicity versus specificity (Langacker, 2003a).

By saying that constructions are pairings of forms and meanings, Construction grammarians mainly focus on visual forms, (phonological form, as per Langacker or grammatical form, following Goldberg). However, Goldberg (2006) pointed out that highly frequently used expressions (even predictable ones) should also be accounted as constructions, Langacker (1987) also expressed similar opinion, emphasizing the importance of psychological entrenchment. Even if it cannot easily be given a visual representation in CxG formalisms, a constructional schema could be abstracted from commonalities in the process of repetitions of language uses as long as there are a certain number of related constructions.

Specifically, a constructional schema of Chinese separable constructions shares all their underlying commonalities: The form of such a constructional schema is separability itself; linearity in time in terms of production or comprehension can be attributed to the meaning pole, even if both of these processes are extremely abstract.

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Verbs of prevention: A revised force-dynamic account

Verbs of prevention are known to occur in the syntactic frame [NP V NP from VP-ing].

(1) a. I prevented Jack from kissing the gorilla.

b. They stopped him from embarking. (Postal 1974: 154)

In contrast to causative verbs (make, get), prevent-type verbs have been relatively understudied in the lexical semantics literature. A notable exception is Talmy (2000), of course.

Talmy (2000: 415) suggests a very insightful, force-dynamic account of the fundamental difference between causative verbs and prevent-type verbs: With causative verbs, an Agonist has a tendency toward rest that is opposed by a stronger Antagonist. With prevent-type verbs, on the other hand, an Agonist has a tendency toward motion, which is blocked by a stronger Antagonist.

Unfortunately, Talmy then goes on to combine the two types of representation into a single one, thereby neutralizing the difference between causative verbs and prevent-type verbs (Talmy 2000: 422). Still another problem with Talmy's analysis is that nothing is said about why from is used at all. In this presentation, I will propose a revised force-dynamic account.

In order to properly distinguish prevent-type verbs from causative verbs, reference to the relative strength between the force entities (i.e. Agonist and Antagonist) is not sufficient: In both cases, the Antagonist is stronger than the Agonist. Rather, while the force exerted by the Antagonist is stronger than that by the Agonist in the case of causative verbs, the force exerted by the Antagonist is equal to that by the Agonist in the case of prevent-type verbs. Further, I follow Pullum and Huddleston (2002) in arguing that the from marks an intended Goal.

Consequently, in the proposed analysis, (1) not only force entities but also the forces exerted by those force entities are represented, and (2) from marks an intended Goal, so we have now three participants in the scene: an Agonist, an Antagonist, and an intended Goal.

Remarkably, the proposed analysis allows us to account for the following cases, which do not strictly match Talmy's (2000) analysis.

(2) I dissuaded Jack from kissing the gorilla. (Postal 1974: 154)

(3) Such attacks will not deflect the Government or the security forces from doing their duty in seeing off those evil men who want to destroy all that is best in our community. (BNC)

(4) Thus, among South American hunters and gatherers, women are actively excluded from hunting large animals ... (BNC)

In (2) dissuade means that the subject entity removes the intention to do something from the direct object entity's mind (Wierzbicka 1988). This can be taken to indicate that the Antagonist removes the Agonist's tendency to move. Next, in (3) deflect means that despite the Agonist's intention to move to a Goal, the Antagonist steers the Agonist on a different path. And in (4), the Antagonist excludes the Agonist from the set of people entitled to move

to a Goal. In short, all these verbs somehow ensure that the Agonist ends up not being at the intended Goal.

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A Cognitive Linguistic Study on Dative Construction in Lanzhou Mandarin Dialect : gei1.....gei2gei3.....

Grammaticization is characterized as the evolution of grammatical elements from lexical sources, which are determined by an encompassing construction. Thus, a complete account of grammaticization must include a description of the construction at various evolutionary stages (Langacker 2003). For instance, a unique dative construction, “gei1.....gei2gei3.....” in north western China's Lanzhou Mandarin dialect is used to exemplify the process of grammaticization in Chinese with a repetition of gei, which means GIVE, for three times to convey the meaning of giving something to somebody. This construction has long been recognized as a key to pore into the conceptual integration of the dative construction in Mandarin as “gei1.....gei2gei3.....” construction of Lanzhou dialect is regarded as a prototype of delivering an object from one place to another one.Though concept overlapping among gei1, gei2 and gei3 exists, each one conveys its specific meaning of the event of giving. It is argued that gei1 shares certain similarities with English preposition to in grammatical function. However, this does not necessarily mean that gei1 in Lanzhou Mandarin dialect describes a event structure as simple as the English preposition to does. The combination of gei2 and gei3 tells that a constructional schema with a sanctioning function would distinguish more rich aspects of the event of giving. More researchers argued that the construction of gei2gei3 is unique one to convey the meaning of giving in Chinese, which is widely used across north west China and part of central Asia. It is examined that gei2 is used to describe a process of transmitting one thing from one person to another and gei3 is an aspect marker. The further investigations on their conceptual integration offers a more dynamic process of grammaticization in Chinese.

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Resonance in the co-constructed interaction and its application in the L2 learning context

This study explores cognitive aspects of L2 multi-person discourse, using the concept of resonance in the theory of dialogic syntax (Du Bois 2014). Recent studies on L2 oral performance have been analyzing discourse features in paired/group oral test from qualitative and statistical approaches (Galaczi 2004, Nakatsuhara 2013). However, little has been known about cognitive features in L2 discourse. To bring the complexities of naturally occurring spoken language use, including L2 discourse, inside the scope of inquiry in Cognitive Linguistics, this study tries to elucidate the connection between the expressions in a discourse, and their structures as described in Cognitive Grammar (Langacker 2001: 144).

The collected data was an out-of-class discussion engaged by ten college student volunteers (nine EFL learners and one native speaker): a Malayan, a Hong-Konger, a Japanese-American, two Taiwanese, five Japanese students. The discussion proceeded based on a debate style, without any rehearsal. The prompt was "Online higher education is as effective as brink-and-mortar higher education classroom education," and the ten participants were divided into two groups, pro and con teams. Each participant represented a stakeholder that they selected for themselves and argued from the perspective of their own stakeholder. As a result of an utterance-by-utterance analysis, it was observed that the three students, made the following structural resonance, based on a priming utterance structured just as (1a-d).

(1) a. [acknowledge to a previous speaker]
b. [mention a previous argument that the previous speaker provoked]
c. [initiate and extend own argument]
d. "This is my point."

First of all, each of the three briefly acknowledged to a previous speaker and mentioned a previous argument that the previous speaker provoked. Then each of them developed their own argument and ended their turn, saying "This is my point." The three resonances would suggest that the three participants instantly abstracted a schema consisted of (1a-d) from a priming utterance (Sakita 2006: 494), and that they reproduced a parallel utterance. From a perspective of Construction Grammar, the schematized information structure (1) can be counted as a construction (Goldberg 2003:221). It would be safe to say that the construction (1) was categorized and used for improvising a resonated utterance during the discussion by the three participants. Moreover, such a collaborative interaction repeated in multi-person discourse (minimal acknowledgement → topic extension → topic initiation, Galaczi 2004) can be an instance of co-construction (Langacker 2008: 479) in a broad sense. By analyzing the conceptual complexities of the resonated construction in discourse, we might be able to give a systematic explanation on the relation with engagement and intersubjectivity.

There were more resonances, parallel expressions, observed in this discussion, but the construction (1) was the most conceptually complicated. Since cognitive skills of

interlocutors could affect any level of language, dialogic syntax could be one of the effective ways to identify a new level of structural organization of language (Du Bois 2014) even in L2 discourse.

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A Diachronic Construction Grammar Analysis of the Focus Construction (Kakarimusubi) in Japanese

This paper proposes a diachronic construction grammar analysis of Kakarimusubi (KM), one of the long-standing issues in Japanese grammar. KM is a kind of correspondence between a focus marker (Kakari) and the form of a predicate (Musubi) observed from Old Japanese (OJ) through Early Middle Japanese (EMJ) (8C-12C). The decline of KM apparently coincides with a major change in the syntax of Japanese. Traditional philological studies have uncovered numerous syntactic peculiarities, including the fact the focus marker must occur before the subject marker no/ga and after the topic marker in OJ (Nomura 1993), but they have not attained a coherent picture of KM. In recent years Generative Grammar has introduced a UG-based perspective. Based on the observed word order, Watanabe (2002) equates KM in OJ with wh-movement, and Musubi with wh-agreement. This claim has a profound syntactic implication that Japanese was once a wh-movement language, and the wh-parameter was switched off in EMJ. The UG-based analysis not only has managed to compare KM to general phenomena of the natural language, which was never attempted in traditional studies, but also solves various problems with one stroke: the reason for the special predicate form, and the word order restriction and its loss, among others.

The apparent appeal notwithstanding, the wh-movement analysis has several drawbacks. First of all, it is questionable if the left-dislocation of the focus phrase and wh-movement are really the same thing. Secondly, data suggest that the KM word order restriction may actually be part of a more general restriction: the accusative marker also precedes the subject marker with or without KM in OJ (Yanagida 2005). In fact, the Musubi predicate takes the attributive (Rentai) form, and the word order restriction seems to apply to all clauses headed by the attributive predicate.

This paper argues for a multiple construction analysis of KM. KM consists of at least two constructions, each of which has its own symbolic structure and follows its own path of change. There are two main ingredients of the analysis. First, KM is a type of cleft constructions, or information-packaging constructions (Lehmann 2008, Hilpert 2014), involving the focus phrase and the extrafocal clause. Secondly, the extrafocal clause is a subtype of another construction: the nominal clause construction (NC), which occurs in several different contexts with different functions, including KM. The subtypes of NC form a paradigmatic construction network. In Japanese the nominal clause developed into a dependent clause and an independent clause, and the OJ word order restriction reflects the nominal remnant of NC (cf. Heine 2009). The disappearance of the restriction and the ultimate decline of KM were brought about by the interplay of two factors; the inherent ambiguity of the information packaging construction (Lehmann 2008, Patten 2012), and the gradual loss of nominality and increase of clausality of NC (Heine 2009, Fried 2013). The multiple construction approach thus successfully analyzes KM, at the same time as

accommodating other contemporary syntactic properties of the language, and shows a cognitive-functional way to capture KM in the cross-linguistic perspective.

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Aspectual modelling in English and Polish: The Integrated Model of Aspect

So far aspectual distinctions made between English and Polish have been treated as incompatible. The former makes a distinction between Progressive and Non-progressive aspect, whereas the latter between Perfective and Imperfective aspect. Additionally, an aspectual distinction made with regard to aspectual classes, also known as Aktionsarten or situation aspects, bearing "on inherent features of the verb" (de Swart 2012: 753) proposed by Vendler (1957), and elaborated on by other linguists, but most recently by Croft (2012), has added to the complexity of the aspectual picture. Although Croft's (2012) typology aims to be applicable cross-linguistically, a question remains how languages so different in aspect distinction as English and Polish can implement it. Janda's (2015: 166) observation that "[w]ith some modifications, Croft's model of aspectual contours is a useful means for visualizing the Russian aspectual system" and that it is "flexible enough to account even for creative and marginal uses of Russian aspectual morphology" suggests that it could also be applied to other Slavic languages, such as Polish, but still leaves the question of how situation aspect interacts with grammatical aspect unanswered.

The author of this paper compares aspectual classification of English and Polish, and shows how it is related to categorisation proposed by cognitive linguists (e.g. Langacker 1987). The two types of aspectual distinctions can be analysed in an integrated manner by means of a model proposed by the author. The Integrated Model of Aspect is based on Comrie's (1976) classification of aspect, used as the point of departure, and is extended by Croft's (2012) aspectual types, with Janda's (2015) modifications. Also, Langacker's (1987), Kochańska's (2002) as well as Janda's (2004) explications of aspectual features are included in the model to account for finer-grained distinctions. These features are further implemented in the quantitative part of the research. As shown in the model, the two types of aspectual distinctions nicely fit together, and are conceptually motivated. As a result, a top-bottom aspectual analysis is presented revealing close interaction of grammatical and situation aspect.

The model is analysed on the example of mental predicates whose aspectual potential has been considered "controversial" by Croft (2012: 98-99, 154) and an analysis of which he has left for further investigation. For this purpose, the English mental predicate think together with its phrasal verb forms are scrutinised, and they are compared with the Polish equivalent myśleć and its prefixed forms.

The model is also tested empirically on corpus data. For this purpose two corpora have been applied. For English, the Corpus of Contemporary American (COCA) has been used, and for Polish - the National Corpus of Polish Language (NKJP). The collected data have been annotated with a number of 'usage features' (e.g. Glynn and Robinson 2014) relevant to the proposed model and they have analysed statistically by means of multivariate statistical methods. In sum, the model shows that both English and Polish have developed grammatical

means to reflect a gradual change in the internal temporal constituency of a situation, while the corpus-driven statistical analysis supports the model.

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The definite and indefinite articles asymmetry in adult Chinese speakers' L2 English

This study investigates the acquisition of L2 English articles in relation to two hypotheses, namely the Fluctuation Hypothesis (Ionin et al. 2004) and the Interpretability Hypothesis (Tsimpli and Dimitrakopoulou, 2007). Eighty-eight adult L1 speakers of Chinese (a language that lacks articles) of different English proficiency levels were asked to interpret articles in various contexts in two elicitation tasks. Their responses were compared with those of fifteen native English speakers. Contrary to predictions made by the Fluctuation Hypothesis, which stipulates that speakers of article-less L1s have access to UG but will fluctuate between definiteness and specificity, learners in the current study overwhelming preferred the definite article in all contexts, including in the indefinite specific and the indefinite non-specific contexts. It is argued that the asymmetrical treatment of definite and indefinite articles in learners' interlanguage can be accounted for following the Interpretability Hypothesis. In particular, we propose that the observed L2 behaviour results from an inaccessibility of an uninterpretable syntactic [u-Num] feature, which is subject to a critical period. The L2 interlanguage grammar involves the use of alternative resources made available by UG.

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Korean -ca Hortative Construction and Its Directive Speech Act Continuum: A Usage-Based Approach

The hortative construction in Korean is marked by the utterance-final marker -ca. The use of hortative prototypically induces both the speaker's and the addressee's commitment to the course of action in question as shown in (1) (cohortative).

sayngkak-ha-y-po-ca.
thought-do-CON-try-HORT
“Let's think (about it).”

It is well known, however, that hortative constructions often have non-canonical uses cross-linguistically: for instance, (1) is also licensed as an imperative, although it sounds more addressee-friendly than its typical imperative counterpart sayngkak-ha-y-po-ala! “Think about it!” (For similar instances in other languages, Aikhenvald 2016, Mauri and Sansò 2011, Traugott and Dasher 2002, Lim 2011 inter alia) This paper aims to revisit the hortative -ca construction in Korean from a usage-based perspective, by examining naturally occurring spoken Korean corpus data (the 21st Century Sejong Corpus). The corpus data shows that there are varied functions of the -ca construction depending on whom the speaker expects to perform the focal event spelled out in the construction. The performer could be the speaker (S) (as shown in (2) below), the addressee (H) (in (3)), both S and H (in (1) above), or a third person (in (4)).

[After finishing all the household chores, the wife finds her husband resting on the sofa. When she complains why the husband isn't helping, he responds:]

na-to com swuy-ca.
I-also a.bit have.a.rest-HORT
“Let me have some rest, ok?”

[A teacher says to her students,]

onul yeki-kkaci-man ha-ca.
today here-to-FOC do-HORT
“That's it for today.”

wuli syes cwung-eyse ha-ca-ko?
we three among-LOC do-HORT-COMP
“Are you saying, “let one of us three do it?'”

The corpus data reveal that the -ca construction is also frequently found in conventionalized expressions such as in chi-ca [count-HORT] (the verb chita literally means ‘to assume, to calculate') or as in or -ca-myen [HORT-COND] (the conditional connective -myen functions as ‘if' in English).

ssikuma ceykop-i-lako chi-ca.
sigma square-COP-COMP assume-HORT

“Let's assume that (it's) a sigma square.”
malha-ca-myen kuke-n ani-lanun ke-ya.
say-HORT-COND it-TOP not.be-COMP thing-IND
“In other words, that's not it.”
The predicate chi-ca is frequently used, when the speaker hypothesizes a situation, just as shown in (5), and the conventionalized expression -ca-myen is often used to mean ‘in other words' as shown in (6).
Based on the observation of these varied functions, this paper argues that the functions of the -ca hortative construction are not clear-cut, but rather form a directive speech-act continuum from cohortative to imperative. The discussion also addresses collocational uses of the -ca hortative construction and argues that whether the performer of the action is explicitly mentioned in utterance or not (e.g., wuli ‘we', kathi ‘together' etc.) can have an effect on the construction's functional properties.

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Abbreviations

COMP: complementizer CON: connective COND: conditional COP: copular FOC: focus HORT: hortative IND: indicative LOC: locative TOP: topic

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Construction Patterns on Onset and Extended Causation in Mandarin

Based on different possible temporal relationships between a cause and its effect within more fine-grained semantic domains of causal chains, Talmy (1976; 2000:473) divides causation into two subtypes: onset causation (also called sequential/ successive/ precedent causation, launching effect, ballistic causation) and extended causation (or simultaneous causation, entraining effect, controlled/continuous causation) (Hume 1888; Kant 1781; Dummett 1954; Kline 1980; Ehring 1985; Michotte 1946/1963; Shibatani 1973; Pinker 1989). A number of scholars have investigated the semantics of onset and extended causation and their linguistic representation in written English texts (Shibatani 1973; Talmy 1976; 2000; McCawley 1976; Pinker 1989; Rappaport Havav 2008; Copley & Harley 2014). However, while special attention has been paid to onset causation, there is little literature on extended causation (with Bélanger & Desrochers 2001, White 2011, and Hubbard 2013 being notable exceptions). Furthermore, there is not much of a tradition of research on onset and extended causation in spoken language use and little research has been done on their linguistic encoding in Mandarin.

Talmy (2000:308) and Copley & Harley (2014) propose that onset causation corresponds to telicity, because it occurs at the boundary marking the end of a causing event and the start of a caused event, and extended causation corresponds to atelicity. In order to test their hypotheses, this work first studied the conceptual difference between onset and extended causation, and then explored the construction patterns and their morphosyntactic features on onset and extended causation in Mandarin by a video-elicitation method. The stimuli were 18 videos involving onset causation and 18 videos involving extended causation on the level of one single causal chain. The participants were 30 college juniors of different majors, native Chinese speakers, ranging from 20 to 23 years old, consisting of 11 males and 19 females.

Results show that both onset and extended causation can be represented by simple sentences, e.g., involving the BA construction + verbal resultatives, JIANG construction + verbal resultatives, BEI construction + verbal resultatives, verbal resultatives by themselves, yi + verbal classifier + verbal resultatives, the serial verb construction, and coordinate sentences involving 'Yi (-)' constructions, such as (i) 'VP1+ yi (-) + verbal classifierVP2', (ii) 'yi (-) + verbal classifier + VP1-VP2', (iii) 'yi (-) +VP1 jiu/bian/φ + VP2'. However, some can represent onset causative situations only and other constructions can represent extended causative situations only. The empirical research has proved the validity of Talmy, Copley & Harley's proposal.

The present study is expected to extend and deepen the scope of causation theories, which is meaningful for the investigation of causality across languages.

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The Processing of Chinese Ba constructions: A Usage-based approach

Following the usage-based paradigm of language acquisition research, we explored statistical features of 5 sets Ba constructions in BCC (BLCU Corpus Center) corpus. These features include: whether the distributions of verbs in constructions follow Zipf's law, whether the constructions are selective with verbs, and what the association is between constructions and verbs. We found that verbs in all the five sets Ba constructions follow Zipfian distributions, and that the constructions show relatively strong selectiveness with verbs. The association between constructions and verbs was estimated through faithfulness, directional MI (Mutual Information), and ΔP. We also investigated the effect of the aforementioned statistical features on the processing of Ba constructions through a free association experiment and a word fluency experiment. In both experiments, we analyzed the relation between frequencies of verbs produced by participants, and verb frequencies, ΔPcw (ΔP from constructions to words), and semantic centrality of constructions found in the BCC. We found that ΔPcw and semantic centrality were significant predictors of the verb frequencies produced; the effect of verb frequencies in constructions in BCC was not statistically significant.

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The Constructional Changes of English Discourse Marker Constructions: a DCxG Approach

With COHA corpus data, this research aims to explore the constructional changes of English discourse marker construction *withal* from a Diachronic Construction Grammar perspective. The results show that *withal* underwent a process of constructionalization similar to another discourse marker construction *after all*, both of which experienced a gradual change from preposition/prepositional phrase to the adverbial use of discourse markers, and became more flexible in the position of the clause. At earlier stages, *withal* is often combined with other explicit discourse markers such as *and*, *but, yet*; gradually, it merges with the latter semantically and finally develops into a discourse marker that can be used independently to denote some new pragmatic meanings such as "concession" "justification" "at the same time" "along with the rest", via a partial inheritance from other macro-level discourse marker constructions. In addition, judging from the dendrograms, it is estimated that this constructionalization process predates and thus may well influence the constructional changes of *after all*. Finally, on the basis of Van de Velde's (2016) "constructional contamination effect" and Torrent's (2015) "constructional convergence hypothesis", the author predicts that other constructions that are formally similar to *withal* and *after all* (such as *for all, above all, in all, at all, and all*) may experience similar constructionalization process in the near future, and may partially inherit the pragmatic meanings of these two discourse marker constructions as well.

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Cognitive schema BOND of the Russian discourse about relationships

Schemas are formed in cultural practices (Hutchins 2014), have a status of conceptual archetypes (Langacker 2008). According to the theory of embodied mind (Lakoff, Johnson 1999), after image schemes are formed as the generalisation of sensory motor presentations (Mandler 1992, Johnson 1987), they become a cognitive schema for constructing a discourse.

The Russian discourse about interpersonal relationships has a schema BOND as a cognitive context with functional elements **subject – object of bond – subject** *завязать знакомство, узы дружбы.* Presentations are imbedded in Russian communicative conscience that two interacting personalities certainly have something in common that holds them together and about natural conformity of this statement. An asymmetry is established: two independent personalities and the limitation. This gestalt is determined by grammar preferences.

The study was conducted on the basis of a large corpus (interviews, family stories, forums) using the method of determining points of cognitive prominence (Langacker 2008).

The object of bond implies two (or more) subjects of relationships, which determines templates:

a plural noun *наши отношения*

a singular noun + preposition of connection *его отношение ко мне*

a singular noun + predicate with the image of bond + preposition of connection *уцепиться за мужика*.

The limitation of the subject's independence is expressed in

preference to passive constructions: *меня к нему тянет.*

the subject of relationship is rarely an agent of action, the action is usually directed at the subject: *он меня бесит, у меня есть семья.*

reflexive verbs neutralise subjects, their ability to control *отношения развиваются, строятся.*

In schema BOND, subjects are the integrated organic whole, which is expressed through interconnectedness to another subject, namely:

intensification of possessiveness: *папа у нас,* of correlating oneself to another subject *мы с мужем*

emphasis on blood relation *родная дочь мне такое говорит!!*, on duties based on the status of affinity: *я же мать!*

Suppression of individual interests in favour of others due to the schema BOND is presented as a natural world order, therefore the discourse has constructions where the impact of a mystical force is implied:

impersonal constructions: *так получилось*.

the will of the subject is excluded *судьба свела*.

template not + something real: *нереальная история*

Grammar constructions automate scripts of dependence, interconnectedness, belonging to another person by nature. This results in stereotypes of sacrifice, positive assessment of the rejection from the individual, as well as the prevalence of moral obligation.

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A corpus-based approach to synonyms: A case study of *begin* and *start*

Background information & quick review of previous works

Generally speaking, the more abstract and general meanings synonyms have, the more difficult it is to pin down their differences in use. One of such cases is a pair of start and begin. They are frequently interchangeable and virtually seem to produce no apparent semantic changes. However, if the principle of no synonymy (Goldberg 1995) is correct as construction grammar assumes, there must be some motivation(s) for speakers to use them differently however similar they seem intuitively. The aim of the present research is analyse the two English aspectual synonyms. The present paper argues that their differences appear not in any single examples but in (1) the register varieties and (2) the collocational tendencies with their following complement verbs.

There has been numerous studies conducted on this topic with corpus methods including Schmid (1996), which deals with start and begin followed by two complementation patterns, i.e. the to-infinitive and the present participle, i.e. -ing. So, there are four constructions to be analyzed as follows.

(1) begin TO infinitive, begin -ING, start TO infinitive, start -ING

Concerning register variation, he argues that the default preference in the spoken register is start whereas begin is the default in the the written register. He also devides events into three types; Activity (e.g. talk), Process (e.g. improve) and Private state (e.g. understand) describing which of the patterns in (1) is preferred in each of the types.

The significance of this study is to offer more comprehensive and finer analysis with a larger corpus data. Corpus of Contemporary American English (hereafter, COCA) privides more registers than just spoken and written registers: spoken, fiction, magazine, newspaper and academic. Moreover, its large size (approx. 5.7 billion tokens) enables researchers to conduct more finer analyses.

Methodology

As aforementioned, the data are collected from COCA. The methodology taken here is as follows: (i) retrieving examples with key sequences (e.g. START to _v*i, BEGIN _v*g), (ii)conducting the residual analysis in order to see whether the frequency of each of (1) is above or below its expected value and (iii) conducting distinctive collexeme analysis (see, Levshina 2005, ch.11) in order to see the preferred collocates with each of (1).

Result1: Register variation

First, on register variation, the result basically agrees with Schmid (1996) in that start in spoken media. However, in fiction while begin is preferred in written media. TO infinitive is more preferred regardless of verb selection. Moreover, start is rather avoided in the academic register, probably because start is more informal than begin. Interestingly, begin TO infinitive is more selectively used in magazines and newspaper than the other constructions.

Results 2:

Collocations with verbs I see verbs which are collocated with the target constructions at two levels; verbs and verbal groups according to Levin (1993). The result of the latter level suggests that start is likely to be used with verbs of human-related (mental) activities while begin prefers searching and change-of-state events. This is just a tendency but still suggests that the two verbs select different types of patterns.

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Interactional Construction Grammar Perspective on Zero-Subject and Nominal/Pronominal-Subject Constructions in Vietnamese Spoken Discourse

Research on Vietnamese grammar to date has mainly followed a structural or systemic functional approach (e.g., Burusphat, 2002; Cao, 1993; Clark, 1971, 1991, 1992; Daley, 1998; Duffield, 1998, 1999; Hole & Löbel, 2013; Luong, 1990; Thái, 2004). To my knowledge, no previous study has investigated Vietnamese language with the framework of Interactional Construction Grammar?a branch of Construction Grammar that incorporates Conversation Analysis to understand the meanings and functions of constructions in spoken discourse (Imo, 2015; see also Auer, 2006; Bergs & Diewald, 2009; Bücker, 2014; Deppermann, 2006; Günthner, 2011; Linell, 2009).

In particular, while Vietnamese allows zero or nominal/pronominal subject, the functions of these constructions in actual language use is not well understood. Vietnamese subject constructions have only been described from a formal perspective (e.g., Rosén's (1996) study on interpretations of zero subjects) and touched on in some conversation analytic studies (e.g., Nguyen's (2015) analysis of subject omission in reported speech and Sidnell and Shonet' (2013) survey of address term choices in conversations). This paper aims to analyze in-depth the functions of zero-subject and nominal/pronominal-subject constructions in Vietnamese conversations.

Mainly, this study asks: Given the choices afforded by the language to use zero or nominal/pronominal subject, when do speakers use which type of construction? More specifically, what are the interactional contexts for zero subject versus nominal or pronominal subject? What actions do speakers accomplish with each construction type?

To answer these questions, I analyzed 8 hours of audio-recorded naturally occurring family gatherings in Northern Vietnam. The recorded conversations were transcribed in conversation analytic conventions (Jefferson, 2004). The analysis focuses on the sequential and functional context of instances of zero-subject construction and contrasts them with instances of pronominal/nominal-subject construction.

The findings reveal that subject constructions have two main functions: discourse structuring and stance marking.

First, zero subjects are used in narratives to tie new turns back to a common referent at the story's beginning, thus forwarding the same storyline while sustaining discourse continuity. This confirms Givón's (1983, 2017) claim that zero subjects signal topic continuity. In contrast, nominal/pronominal-subject construction is used in discourse departures such as action initiations, topic shifts, and side sequences or side comments that focus away from the ongoing action. This further elaborates Givón's (1983, 2017) observation that noun phrases signal the least topic continuity in languages and Lee and Yonezawa's (2008) finding that overt subjects signal topic shift in Japanese.

Second, subject constructions are employed to mark the speaker's stance (cf. Park, 2009; Nguyen, 2015). Zero-subject construction are often used to construct mutual affiliation and shared understanding, such as in assessment of a third party. In contrast, nominal/pronominal-subjects referring to the first and second persons are used in non-alignment and adversarial turns such as challenges, threats, blames, and accusations. Speakers also use nominal/pronominal subjects to invoke their specific relationship as background and account for impositions such as advice-giving and requests.

These findings shed light on the functional patterns of different subject constructions in Vietnamese and advocate the application of interactional construction grammar on non-Western languages.

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La grammaire dans l'esprit du locuteur: de la construction d'un modèle aux références de la vie quotidienne. Une étude sur la perception de la grammaire italienne

Les problèmes de construction du modèle linguistique et les critiques de la norme ne concernent pas seulement le débat académique (Lepschy 1989), mais ils jouent aussi un rôle important dans la vie de tous les locuteurs. Surtout lorsqu'ils ont atteint une autonomie métalinguistique, ils souhaitent résoudre le moindre doute linguistique ou bien éliminer l'insécurité liée à la production linguistique (Svalberg 2012).
La contribution étudie une recherche réalisée en 2017 sur l'évaluation des normes linguistiques et sur la construction et le choix des modèles, en cas de doutes, par un échantillon représentatif de locuteurs.
L'enquête consiste en une batterie de 30 questions à choix multiples (QCM), avec des espaces pour les commentaires libres, proposés à un échantillon de 600 informateurs, sélectionnés sur la base de l'âge, du sexe, de la profession et des diplômes.
Le questionnaire se compose de deux parties, la première à caractère socioculturel et sociolinguistique, alors que la seconde concerne les choix des informateurs par rapport à la sélection des modèles linguistiques (Campbell-Kibler 2009).
Les informateurs ont été invités à remplir le questionnaire anonyme, en indiquant leurs préférences pour choisir un modèle linguistique (Masini 2016), dès qu'ils ne sont pas sûrs des types de productions en langue italienne.
Par ailleurs, la représentation mentale de la norme linguistique a été évaluée par les locuteurs (Bettoni 2008).
Les résultats montrent que la sélection d'un modèle de référence est liée à certains facteurs socioculturels (Berruto 2004) et que la sensibilité à la variation linguistique est encore très faible (Serianni 2004), alors que la grammaire continue à jouer un rôle réglementaire-prescriptif (Serianni 2006).

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Compositional or constructional? Teaching motion expressions in L2 Swedish

Leading on from the ground-breaking work of Fillmore (e.g. Fillmore et al. 1988; Kay & Fillmore 1999), the construction, as a form-meaning pairing, has now become a central concept of grammatical analysis. As a consequence, there is a growing body of literature in which it is argued that not only linguistic research but also language teaching would benefit from taking a constructional approach (cf. De Knop & Gilquin 2016). In relation to this body of literature, a relevant question to ask is whether the assumption that our linguistic knowledge is stored in the form of constructions necessarily means that the most effective way of teaching grammar is using a constructional approach. Consider the following two examples of Swedish motion expressions:

(1) Siri gick till bussen (‘Siri walked to the bus')

(2) Siri älgade iväg till bussen (‘Siri moved away in a moose-like manner to the bus')

The sentence in (1) exemplifies a motion expression with the verb gå ‘walk' and the preposition till ?to', while the sentence in (2) contains the verb älga ‘move in a moose-like manner', the adverb iväg ?off' and the preposition till. The question asked in the present study is whether a more traditional compositional approach to language teaching, in which the meaning and form of each word is presented separately, would be more or less effective than an approach in which the learners are presented with phrasal expressions with open and filled slots, such as [verb-tillnp] ‘verb to somewhere' and [verb-iväg-tillnp] ‘verb off to somewhere' (cf. Author 2014, 2017).

A small study was carried out in which learners of Swedish as a second language were asked to describe motion scene pictures (cf. Özçalişkan 2015). The learners were divided into two groups and were given two different lectures before they described the pictures. The members of the first group were given a lecture focusing on the traditional grammar of prepositions and adverbs, while the members of the second group were given a lecture focusing on motion events as (productive) constructions.

The results of the study give indications as to the differences between a constructional approach and a traditional compositional approach when teaching motion expressions to Swedish L2-speakers.

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Media text constructions in teaching English: Differentiation and combination

As our work with advanced students suggests, teaching English with the help of constructions treated as form-meaning pairings (Goldberg 2006: 209) poses three main challenges: sources, differentiation and combination.

The most construction-rich and easily available source is media discourse pinned on units constantly repeated in different textual environments which create infinite usage events (Kemmer & Barlow 2000) leading to the entrenchment and abstraction (Tomasello 2000: 62) of the studied structures. Media texts are also convenient for construction-based teaching since all the structures are subordinated to one theme which provides for their easy understanding and memorizing by the learners.

The differentiation of constructions requires teaching students to discriminate them within the coordinates of paradigmatics and syntagmatics. The paradigmatic dimension requires distinguishing mainly predicative item-based, lexicalized and grammaticalized constructions (Tomasello 2000: 63) while syntagmatic dimension requires teaching students to distinguish constructions placed in a linear order: immediate, modified and extended. The immediate encompass combination of words with dependent units placed either on the left or on the right, e.g. at Chernobyl; exclusion zone; the modified enlarge the immediate constructions with additional units, e.g. the 30km exclusion zone; the extended combine two or more immediate constructions, e.g. the exclusion zone at Chernobyl. The differentiation procedure is supplemented by comparing the constructions singled out in one text with those occurring in other texts on the same topic.

The combination of constructions is represented in skeleton texts which contain only utterances with immediate constructions preserving their order in the initial news story. Those skeleton texts are published in an online reference book posted on the university site (http://www.ndu.edu.ua/index.php/ua/kafedra-germanskoji-filologiji/reference-book) to be used by junior students to speak and write on particular topics designated by the constructions in the headline.

To conclude, a new means of teaching English is offered by constructions singled out from the media texts. Their constant textual occurrence contributes to their entrenchment in the learners' memory while their inclusion into skeleton texts contributes to their use by other students for speaking and writing on particular topics.

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Generating Polarity Sensitivity

As traditionally understood, a polarity-sensitive item (PSI) is an expression with a distribution limited to either affirmative or negative contexts (Giannakidou [2011]). Recent work such as Israel [2011] has emphasized that PSIs like *lift a finger* and *all the time in the world* sub-serve discourse routines like understatement and emphasis and that lexical-semantic classes need to be invoked when analyzing the properties of PSIs.

Ruppenhofer and Michaelis [2016] sharpened this approach by demonstrating the utility of frame and construction-based analysis in extending and sub-analyzing Israel's collection of PSIs. We pick up on the idea that we can discover new PSIs using frames and constructions. In distinction to Ruppenhofer and Michaelis [2016], we are not looking to extend a set of known PSIs by new items related via frame similarity. Instead, we look at constructional contexts that evoke scalar models and scan the constructional slots for novel PSIs.

Our test case are predications involving sufficiency of a cause to achieve an effect. When sufficiency is negated, as in (1–2), scalar nouns such as *amount* or *degree* fit into the causal subject slot as NPIs. When it is asserted, as in (3–5), the same nouns fit into the same subject slot as PPIs, usually in combination with free-choice *any*. The combination of the constructional context and free-choice *any* also induces a scalar construal for nouns that are not inherently scale-related (4), similar to the coercion effects observed for NP-complement exclamatives by Michaelis and Lambrecht [1996]. Other PPIs fitting this context include superlative forms such as *slightest*, which in parallel have NPI uses as modifiers in minimizer NPs occurring as (incremental) objects (cf. 6).

(1) Since these roadblocks operate without our conscious awareness . . . no level of conscious will power can overcome them

(2) I feel the tireds running through my veins yet no amount of yawning or stretching seems to make it begin to work .

(3) Any level of inducer suffices to determine that the activity of the catalyst (X) will be constrained to one side.

(4) Any old glass will do.

(5) The slightest/tiniest/. . . imperfection drives me up a wall! .

(6) I could not eat the tiniest/most minute/. . . trace without relapse

Importantly, the relevant sufficiency predications are special instances of the Subject-Predicate construction: they are generic-habitual sentences with non-topical subjects. Purely episodic predications are rare in corpus data, and maybe infelicitous (e.g. ?The tiniest amount of poison from a box jellyfish killed my brother.). Ruppenhofer and Michaelis [2016] had previously only pointed out instances where the dual uses of an expression (e.g. *a king's ransom*) as PPI or NPI occur in different grammatical slots (with different semantic roles). The sufficiency predications even accommodate opposed uses of the same item in the same grammatical slot and with the same semantic role, i.e. Cause (cf. level in 1 vs. 3).

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La construction avec ‘ind « chez » en arabe de Benghazi

‘ind, un équivalent d'avoir en français, a un emploi fréquent et varié en arabe de Benghazi et n'a pas été assez étudié dans la littérature linguistique. Il s'agit d'un adverbe locatif marquant la notion de présence et de proximité « chez ». Dans cette communication, basée sur des données collectées oralement, nous présentons une étude descriptive sur l'usage de ‘ind. Nous avons pour objectif, par ailleurs, de mettre en évidence la prédication possessive en arabe de Benghazi.

Dans la construction possessive, le situatif ‘ind suit une stratégie structurelle lui permettant d'assurer une fonction possessive. Il accepte la suffixation et joue le rôle de verbe dans un énoncé non verbal. Il est considéré alors selon la dialectologie arabe comme un pseudo-verbe (Cohen 1975) ainsi nommé un prédicatoïde. C'est un élément prédicatif qui sélectionne les arguments Arg1, Arg2... Le changement de l'ordre des mots et la détermination sont des facteurs importants pour que la construction avec ?ind exprime la possession. Comparons ces deux exemples :

Ø l-əktāb ‘ind - ī → ‘ind - ī əktāb

ART-livre chez-1SG chez-1SG livre

« Le livre (est) chez moi » « J'ai un livre »

La construction possessive serait envisagée, dans le cadre cognitif suivant les schèmes conceptuels de Heine (1997) comme un schème locatif : Chez X (est) Y. (Naïm 2003)

Dans son emploi non locatif, ‘ind présente beaucoup d'autres valeurs : il est expérientiel, existentiel, modal, empathique (Saad 2017) et support (Ibrahim 2002) selon la nature du substantif qu'il accompagne sous cette forme : ‘ind + un substantif.

Cependant, étant associé à un nom abstrait, la construction avec ‘ind peut être de multi-usage : elle peut servir à exprimer soit une expression considérée figée ou bien une construction à support. Il est à noter que dans la construction possessive, ‘ind est considéré comme prédicatoïde alors que dans des autres emplois il est tantôt considéré comme un pseudo-verbe d'état (état expérientiel, dans la possession abstraite) tantôt considéré comme support qui actualise un prédicat nominal. Dans ce dernier cas, c'est le nom qui porte le prédicat et sélectionne les arguments, Arg1, Arg2...

La construction avec ‘ind présente un usage modal assez large. La modalité avec ses types déontique, subjectif, aléthique est attestée à travers des structures différentes. La construction avec ‘ind est modale à la forme affirmative aussi bien que négative. La structure que nous allons mettre en exergue suit cet ordre : ‘ind + NEG+ Interrogatif+ Verbe.

En effet, dans son emploi pseudo-verbal, ‘ind présente des valeurs multiples en étant soumis à des contraintes sémantico-syntaxiques qui méritent d'être détaillées et étudiées dans un cadre grammatical.

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Identifying Multimodal Constructions: Evidence from a Corpus Study of Iconic Gestures

Gestures display a complex semantic interplay with speech and contribute to the semantics of verbal expressions and/or the whole utterance (e.g. Kendon 2004; McNeill 1992/2005). Gestures can also be integrated into the syntactic structure of an utterance (c.f. Enfield 2009; Fricke 2012/2013; Harrison 2009; Ladewig 2014; McNeill 2005), they can fulfill the function of syntactic constituents both, with aligned speech or even instead of a verbal unit (Ladewig 2012/2014). Furthermore, they take over attributive functions in expending noun phrases over several deictics like son (‘such a'), for instance (Fricke 2012/2013).

In terms of CxG, research shows that gestures may systematically accompany particular linguistic constructions, become entrenched and thus form a multimodal construction, a pairing of a complex form (at least a verbal and a kinetic element) with a specific meaning or function (e.g. Andrén 2010; Zima/Bergs 2017). Existing accounts arguing for multimodal constructions thereby face, among others, three essential questions: How frequent and entrenched are these patterns? How is the relation of both modalities, both structurally and functionally?

In my talk, I will address this issue by providing empirical evidence based on a corpus study of iconic gestures. Using a particular type of directional adverbials in (colloquial) German (cf. (1)), I will show how a verbo-gestural corpus has to be built to investigate the specific interplay of gesture and speech and discuss whether we deal with a multimodal construction or just multimodal instantiations.

(1) a. durch das Loch durch (‘through the hole')
through the hole through
b. in das Holz rein (‘into the wood')
into the wood in

The data were collected in a semi-experimental dyadic setting, in which 18 subjects described and explained working processes of a carpenter (video) and the construction of an Ikea shelf (paper manual) to an interlocutor. The study focused on the production of the explanatory subject, so the captured video material is about 67 min. of pure explanation time (9,935 words; 1,048 iconic gestures with nearly 70% of analyzed data). Using ELAN (Wittenburg et al. 2006), a specific annotation schema was developed to transcribe, POS-tag and lemmatize speech and also several form parameters of gesture (cf. Bressem 2013). The audio was segmented with MAUS (Schiel 1999) to ensure to co-analyze both modalities over time and to query mono-modal patterns as well as multimodal ones.

The types of AdvPs given in (1) are particularly interesting due to the following three reasons: First, certain PPs precede another directional preposition or adverb, if they have the same directional dimension. Thus, different modifications occur locally as well as domain-related. Secondly, because these AdvPs function as directional complements, the data shows that gestures also fill slots modifying the main verb. These modification patterns are distributed over all subjects. Thirdly, the subjects show planning difficulties and have to

reformulate their utterance instantiating it with both modalities. Considering these characteristics, it will be argued that these verbo-gestural patterns are candidates for multimodal constructions.
With this focus, the talk contributes to research investigating constructions from a multimodal perspective by providing corpus-based evidence.

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Sign language in a box

In this poster, I show how construction grammar is a valid method for describing the structure and functions of sign languages and more precisely how a numeral sign is used for cohesive purpose. Studies on applying construction grammar to sign language has barely started (cf. Lepic 2015) and the topic of cohesion in relation to construction grammar across the signed and spoken modalities is clearly in need of further study.

My material is based on signed discourses in Finland-Swedish Sign Language, FinSSL, an endangered SL with only 90 native speakers in Finland (Andersson-Koski 2015), both in free discussion and in translations and I analyze how the language users use a numeral sign to create cohesion. The numeral sign is in these situations performed with the weaker hand of the signer, referred to by the preferred hand and eye gaze, and it has several other functions too (e.g. Siltaloppi 2016; Kimmelman, Sáfár & Crasborn 2016; Hansen & Heßmann 2015). I compare the construction for the cohesive functions with other functions in the case of eye gaze during the numeral sign. In their cohesive functions, there is valency between the gaze and the concrete reference on the numeral sign while in other functions for the numeral sign there is no valence between the eye gaze and reference marking.

The material has been annotated in the Elan annotation program, then transferred to Excel where corpus searches have been made to find the cohesive and other functions. These different functions are then looked at the light of attributes and values used in spoken language (Fried & Östman 2004).

I propose a couple of new attributes to cover the form of the numeral sign that is used in these constructions for cohesive purposes and the valency. Also, I show how sign language can be put into a box – how the simultaneities that occur in the production of this numerical sign can be depicted.

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Syntactic Amalgams in English: A Construction-Based Perspective

The so-called wh-syntactic amalgamation construction (Wh-Syn-Amal), involving an interrupting amalgam clause (AC), can occur in various syntactic positions, as illustrated by the corpus examples:

(1) a. A project will cost millions and take [AC who knows how many years] to implement. (COCA: 2008 NEWS)

b. He goes into his computer mailbox and re-opens the file he'd received from [AC you know who]. (COCA: 2002 FIC)

c. Afra was [AC who knew how old]. (COCA: 1994 FIC)

d. Within days, Grauso paid the kidnappers [AC he won't say how much] and Silvia was free. (COCA: 1998 SPOK CBS)

One key property of the construction involves the (boldfaced) ‘content kernel' expression of the amalgam clause: it is linked to a head expression in the main clause. For instance, the object of knows in (1a), how many years, is also selected by the matrix verb take. In addition to such a transparent effect, the construction induces an exclamative meaning: for instance, (1a) means the project will take ‘x' many years to implement, and the value of ‘x' is unknown to the listener but the degree is unexpectedly high.

The prevailing account for the generation of such amalgam construction relies on the movement-and-deletion operations. For example, (1c) is derived from the combination two clauses, ellipsis of the empty element, and then sluicing the clause:

(2) [Afra was [~~a lot old~~]] [who knew how old ~~Afra was~~] (AP-ellipsis and clausal-sluicing)

Appealing it may sound, such a deletion-based analysis leaves many peculiar properties of the construction unaccounted for. This paper offers a constructionist approach serving a feasible alternative with wider coverage of data. To do so, we first investigate the authentic uses of the construction using corpora such as COCA. We extracted total 649 instances of the construction from the corpus COCA and identified its grammatical properties. The first observation we have made is that the construction is dominantly used in spoken-based registers (total 78.9%) including fiction (368 tokens) and spoken (144 tokens). The construction most frequently occurs in the prepositional object (498 tokens) followed by the verb object position, predicative, and adjunct. The construction typically consists of the pronoun subject, a factive verb, and a (sluiced) fragment. The highly frequent pronoun-like subject is who (244), god (233), you (69), I (50). The corpus also yields expressions like lord, heaven, no one, goodness as the subject of the AC. The most frequently used verb is the factive verb know (95%) followed by verbs like tell, remember, forget, say, care, remember, etc. The content kernel, occurring as a fragment, involves not only the simple wh-word (who, where, what, which, why), but also allows more complex wh-expressions as seen in (2). In terms of meaning, the construction is classified into two sub-types: an exclamative one (e.g., who/god/heaven/knows...) and a non-exclamative one (e.g., you know...). Based on such an empirical investigation, we suggest that a constructionist approach can offer us a more feasible analysis than a deletion-based analysis. The general properties as well as

peculiarities of the construction support the idea that grammar consists of the inheritance network of ‘constructions'. By factoring out generalizations and idiosyncracies of the construction, we can account for its intricacy.

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A Corpus-based Study on Chinese Middle Constructions of “NP+V-qilai +AP”

Middle Construction is characterized by an active form in syntax, but a passive meaning in semantics. So middle Construction remains to be one of the hottest issues in linguistic studies because of the complex interaction between its syntactic structure and semantic features. It widely exists in English,West Germanic languages and Indo European languages,etc. In recent years,Chinese verbal MC research has also aroused great interest among scholars.However,there are many hot controversies about the features of middle constructions in Chinese, and even great disputes over whether there are any middle constructions in Chinese.

The thesis tries to reanalyze a typical middle construction in Chinese, “V+qilai+AP”, within the framework of Goldberg's construction grammar (1995, 2006). The research is based on the CCL Corpus of Chinese Texts, which built up by Peking University covers about 700 million Chinese Characters from the 11th Century B.C. to present. It aims to discuss by combining the qualitative and quantitative research methods, the Chinese middle construction “V+qilai+AP” and its syntactic and semantic features. Moreover, the relationship between the constructional meaning and the verb meaning is discussed. The findings show that the Chinese middle construction has three types.

(i) Object as Subject: N(object)+V+AP; (ii) Instrument as Subject: N(instrument)+V+AP; (iii) Location as Subject: N(location)+V+AP.

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Construction-Based Instruction of English Verb-Particle Constructions

Recent works in cognitive linguistics (Goldberg, 2015; Gorlach, 2004) posit that English verb-particle constructions (e.g., figure out; VPCs) inherit their formal and functional properties from major English argument structure constructions (ASCs) and thus determine overall form and meaning of sentences. The present study applied this novel idea to the development of construction-based instruction of VPCs for Korean middle school English learners. The instruction is constructional in that overall forms and meanings of VPC sentences were accounted for using constructional properties of motion and resultative constructions (e.g., Sub V Obj RP; X causes Y to become Z).
The effectiveness of the construction-based instruction was examined through three testing sessions (i.e., a pretest, an immediate posttest, and a delayed posttest). Each test session administered two fill-in-blank tasks examining production of VPCs: sentence completion and scene description. Results of the tasks revealed that the construction-based instruction was effective in improving the correct production of VPCs. More specifically, the learners showed significant improvements in their use of figurative VPCs, which are known to be more difficult than literal VPCs. Moreover, the mean scores of uninstructed VPCs also significantly increased, which may indicate that the construction-based instruction was helpful for the learners to generalize formal and functional properties of VPCs and apply the linguistic generalization to unfamiliar instances of VPCs. These findings appear to suggest important pedagogical implications for principled and effective foreign language learning and teaching based on the framework of construction grammar.

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Deontic and Volitional Modality – Constructions and Paradigms in the Kartvelian Languages

The aim of the present paper is to describe syntactic constructions, morphological models and verbal paradigms related to the deontic and volitional modality in the Kartvelian Languages (Georgian, Svan, Megrelian and Laz); the paper focuses on desemantization of the modal particles and on their transformation into functional elements in the given language family.

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Une étude constructiviste sur les usages et les perceptions des constructions avec le verbe support DAR dans PB

Le travail concerne le fonctionnement des constructions basées sur le verbe DAR en tant qu'opérateur d'éléments non verbaux du type « X-(a/i)da(s), X-adela(s), X-(a/i)dinha(s) ou X-(z)inh[o,a](s) ». Par exemple, « dar uma olhadinha », « dar uma escapada », « dar um risinho », « dar uma convencida », « dar uma piscadela ».
Les objectifs du travail sont de décrire les caractéristiques formelles et fonctionnelles de ces périphrases verbales-nominales, en tenant compte du cotext (environnement linguistique), ainsi que du contexte sémantique, discursif, pragmatique, social et/ou cognitif ; vérifier les différentes lectures de l'événement par les utilisateurs du portugais brésilien (PB) obtenus par des recherches expérimentales; observer le degré de stabilité et d'instabilité de ces périphrases verbales-nominales pour les utilisateurs du PB et rechercher des signes de variation (coexistence ou compétition), de changement constructionnel et/ou de constructionalisation (grammaticale ou lexicale).
La contribution du travail et son originalité sont justifiées, puisqu'il s'agit d'une étude de structures avec un certain degré de schématicité et de non-compositionnalité (idiomité) ; pour le thème du changement par la constructionalisation; pour la quasi-rareté, dans cette approche constructioniste, des études de l'alternance des formes et de la discussion actuelle du lieu de variation dans une représentation qui a jusqu'ici privilégié soit la stabilité, soit le changement; pour l'absence de description des structures à l'étude et pour la réitération du fait que telles périphrases verbales-nominales constituent l'une des stratégies/ressources disponibles dans le langage qui permet une vaste production de significations et de valeurs.
En ce qui concerne les matériaux, les données proviennent du PB, tiré d'une source écrite (journal en ligne) et de différents genres. Sera faite une analyse (quantitative et qualitative) de l'utilisation (tirée des contextes réels d'interaction communicative) et des perceptions subjectives, des attitudes et des évaluations des utilisateurs du PB, en utilisant une méthodologie de recherche expérimentale qui cherche à observer la reconnaissance de certaines constructions, ainsi que la polyfonctionnalité.
Les résultats ont montré qu'il existe des modèles de construction avec le verbe support pour le marquage d'aspect non-duratif (VENDLER, 1967; RAPOSO et al., 2013) et que, dans ces appariements, outre l'aspect non duratif, la modalité et la (inter)subjectivité ont une place prépondérante; de plus, cette construction est au service d'une multifonctionnalité. Les résultats ont également révélé que différentes constructions s'alignent dans une situation de variation, en raison de leur comparabilité fonctionnelle, et d'autres donnent des indications de changement constructionnel, dans lesquelles l'indication d'aspect non-duratif donne lieu au marquage d'une attitude de politesse et/ou de préoccupation avec l'interlocuteur.
Les problèmes décrits sont importants, car ce thème est peu exploré dans les descriptions de langues. En outre, il est également très intéressant d'analyser comment cette catégorie est

incorporée dans l'utilisation, ainsi que l'extension de la signification présentée par celle-ci. Ce travail a pour but d'explorer les potentialités des constructions avec le verbe support basé sur l'approche de la Grammair de Construction. Le travail offrira des contributions d'ordre théorique-explicatif et descriptif, qui pourraient donner de nouvelles orientations aux lignes directrices actuelles en matière d'enseignement et de recherche en langue portugaise, en contribuant notamment à la description du système verbal portugais.

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The Fuzziness in Categorization of A Constructional Family: A Case of Causative Animate Construction, Setting-Subject Construction, and Inanimate-Subject Construction in English

The goal of this paper is to explore categorization of a constructional family. The paper utilizes a qualitative approach in the framework of Cognitive Grammar and deals with linguistic phenomena below.

(1) a. In the daytimes I made the flat secure against all creatures. (BNC)[CAC]
b. The list below will give you some idea of what you can do. (BNC)[ISC1]
c. Perhaps the cold weather makes his old bones harder to move. (COCA)[ISC2]
(c'. ?His old bones were made harder to move by the cold weather.)(Author 2016: 247)
d. Hard work made Ross Perot a millionaire.
(d'. *Ross Perot was made a millionaire by hard work.)(Rice 1987: 194)[ISC2]
e. Tuesday saw yet another startling development.
(e'. *Yet another startling development was seen by Tuesday.)(Langacker 1990: 243)[SSC]

Sentence (1a) is a causative construction with a human agent, whose causation is prototypically construed as “direct manipulations.”(Lakoff and Johnson 1980).

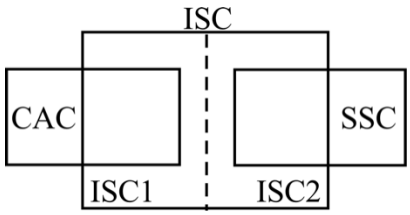
On the other hands, sentence (1b) refers to a construction having objective participant. Lakoff and Johnson (ibid.) suggests that the subject of the latter construction is recategorized as an agent through the process of “personification”. Therefore, both the constructions are interpreted as causative constructions. In fact, they are analyzed from the action-chain model in Cognitive Grammar (Langacker 1987); that is, they are construed as force-dynamic relationship. So, they can be passivized. This paper calls the former “Causative Animate Construction (CAC)” and the latter “Inanimate-Subject Construction (ISC, accurately ISC1)”.

On the other hand, sentence (1e) is called a “setting-subject construction (SSC)” by Langacker (2009, among others) (cf. Dowty 2000). The subject entity represents a setting, which is prototypically corded by an adverbial expression. Langacker (ibid.) analyzes the construction as the container-content relationship, rather than the force-dynamic one. Therefore, the construction cannot be passivized.

This study suggests the existence of marginal expressions between causative constructions (i.e., CACs and ISC1s) and SSCs. Although sentences (1c, d) are still one of the ISCs, and their predicative verbs refer to “make”, the subject referent represents a setting (cf. Author 2016). Rice (1987) suggests that sentence (1d) is classified into one of the constructions with “non-agentive agents and causers”. Moreover, Author (2016) points out that since sentence (1c) is less likely to be passivized, similar to the SSC in (1e), it is categorized as one type of the SSCs (i.e., ICS2). Langacker (1990) insists that status as participant (e.g. agent) or setting

is intrinsic to an entity, but to our construal (e.g. prominence). This paper would, therefore, claim that our cognitive operation dynamically leads to the natural interpretation of the subject referent of ISCs as an agentive participant (ISC1) or a setting (ISC2).

Based on the linguistic observation above, this paper would originally argue that the categorical boundaries of CAC, ISC1, 2, and SSC are fuzzy, and, therefore, that these constructions form a constructional family. The paper would conclude that ISCs are a bridge construction connecting CACs to SSCs, as shown in the figure.



Figure

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A Constructional Approach to Chinese Flip-Flop Sentences

There is a special sentence in Chinese, i.e, flip-flop sentence, subject and object in such sentences can be freely changed their positions without any inflectional change. The following is Zhu Dexi's example:

- 十个人吃一锅饭。 (shi ge ren chi yi guo fan)

Ten people eat a pot of rice.

- 一锅饭吃十个人。(yi guo fan chi shi ge ren)

*A pot of rice eats ten people.

From the above example we can find sentence b) is quite natural in Chinese but it is unnatural in English. In Chinese, such sentences can be reversed freely without any inflectional change, especially the form of the verb is just the same in the two sentences. Many Chinese linguists have studied such sentences but little progress has been made to this kind of sentences. There still remain some disputes among different scholars. Some claim it is a flip-flop sentence, some say it is a subject-object reversed sentence, some take it as a sentence showing a relation of material supply, etc.

With the emergence of construction grammar, a new approach has been offered to solve such problems. Goldberg's construction grammar claims that a construction is a form-meaning correspondence which exists independently of particular verb.Such simple construction is associated directly with semantic structures which reflect scenes basic to **human experience**. The meaning of such an expression is the result of integrating the meanings of the lexical items into the meanings of constructions. This paper, based on the basic idea of Goldberg's CG, studies the constructional features of such sentences in Chinese from the following aspects: the overall meaning, the constructional profiling, the metaphorical extension links, and the human experiential basis of such sentences, with an aim to provide some useful implications for the study of Chinese sentence-level constructions.

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How do L2 Learners Interpret the Unconventional Expressions?: An experimental study of the construction-based processing

This study aims to investigate how we make use of construction schemas to interpret an unconventional expression considering the degree of entrenchment of them.

In usage-based linguistics, it is widely acknowledged that construction schemas are exploited to comprehend a sentence as well as to produce. Taylor (1992, 2012) puts forward that when interpreting unconventional expressions, we set up analogies between the expression and already established uses. In other words, linguistic interpretation can be analyzed as finding construction schemas applicable to the expression we are trying to understand.

In this paper, through a case study of the unconventional expression CUT THE X, we demonstrate how one makes use of conventional expressions entrenched in his/her knowledge to interpret unconventional ones.

We conducted two experiments. In Experiment 1, 75 Japanese learners of English were asked to describe the situations represented by 13 conventional English sentences, and to indicate the certainty about their answers, because we would like to distinguish whether each sentence is stronger- or weaker-entrenched. In Experiment 2, reading seven unconventional sentences, the participants were asked to choose, from the conventional sentences used in Experiment 1, what they felt to be the most similar to each unconventional sentence and to explain the reason. Since conventional expressions should be stronger-entrenched in native speakers' knowledge, we chose non-native speakers as our participants.

The results show that when the participants interpret the unconventional expressions, they use not only higher-level construction schema but lower-level construction schema and frame knowledge.

When the participants chose weaker-entrenched conventional expressions (e.g., He cut the scene) as the similar expression to unconventional expressions (e.g., He cut the name), they should use the higher-level CUT THE X construction schema. From the reasons of the judgment they gave in the experiment, it can be said that they tried to understand the expression through the higher-level “shorten”construction schema which has already established.

On the other hand, when the participants judged unconventional expressions were similar to stronger-entrenched conventional expressions, the process of analogy should be different. Many participants answered that an unconventional expression “He cut the name” was similar to the stronger-entrenched conventional expression “He cut the rope” because they thought the action of cutting something short was metaphorically close in meaning of cutting the name.In this case, they dynamically extend the conventional expression ad hoc.

In contrast with the said results, there were some cases where the participants should access to their frame knowledge. Some unconventional expressions are interpreted through

the similarity between the objects in unconventional and conventional expressions. For instance, “He cut the family/house/education” are judged as similar expressions to “He cut the tie.” Although the objects of the unconventional expressions should have many aspects, the “relation” frame would be conjured up when they try to set up the analogy to “tie” (cf. Kövecses, 2017).

Our study provides an empirical evidence to illustrate the comprehension process, which has been hypothesized in cognitive linguistics.

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Usage-based Theory and Constructions Corpus for a second language teaching

At present, there are two problems in the application of construction grammar to foreign language teaching**:**
Firstly, the different opinions on connotation and extension of the construction. Which structures can be classified constructions? Which are the typical constructions? Are there any differences between teaching-oriented constructions and researching-oriented constructions?
Secondly, in the field of teaching Chinse as a second language, texts in textbook usually revolves around a topic. Topics represent the core contents of each lesson and has close relationship with syntax and lexicon. At present, there are some research on texts topics and topic word lists. However, the topic bank and word list cannot satisfy the need of international students' grouping sentences into texts.
On the basis of these questions, we intend to make further explosion:
（**1**） Represent the frequency effect, the typical contexts, and the degree of entrenchment of the constructions in a quantitative way. Constructions, with their direct pairing of form to meaning without intermediate structures, are particularly appropriate for usage-based models. We use ‘attraction' and ‘reliance' (Schmid 2010) to simplify and more intuitive to calculate the lexemes and type frequency of constructions.
（**2**） Develop a constructions corpus that is suitable for the second language learners. As Goldberg(2006) said construction is the basic unit of language and exists in every level of language, which is the object and core of second language acquisition.
（**3**） Through the studies of frequency effect to constructions, we control the length of the lexical item of schema, classify constructions by topics and extract specific teaching-oriented constructions, so that learners can learn the structure in an orderly way.

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A study of the distinction between grammaticalization and constructionalization: the Chinese comparative correlative construction

The paper provides an updated overview of some of the fundamental principles of the constructionalization research paradigm as conceived in Traugott and Trousdale (2013) and adds to the growing body of work distinguishing constructionalization from grammaticalization. With a case study on the Chinese comparative constructions (CrC), we show how the two approaches may lead to somewhat different analyses of the development of a particular grammatical expression. Previous studies of the CrC taking a grammaticalization approach (e.g. Long 2013) mainly focus on morphosyntax rather than investigating syntax and semantics in an integrated way. However the architecture of construction grammar requires approaching linguistic analysis with both form and meaning equally in mind. This perspective suggests that what have been considered to be different formal expressions of the CrC are in fact two different constructions, one correlative, and the other incremental. We identify the critical contexts (see Diewald and Smirnova 2010) that may have enabled the constructionalization of the CrC, and point to the importance of considering multiple sources for the incremental construction (see Van de Velde 2014).

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Aspectual constructions in Mandarin Chinese: a comparative case study with French

In French, grammatical aspect is often expressed by verbal periphrases (Gougenheim 1929, Gosselin 1996, 2010). Chinese is considered as an aspectual language. « Chinese has a number of verbal suffixes with aspectual; or combines aspectual and temporal, value; for instance Progressive –zhe, Perfective –le (the latter combining perfective meaning and relative past time reference) » (Comrie, 1976: 128). « The Mandarin language has a rich view point component with three perfectives, three imperfectives, and a neutral viewpoint. » (Smith 1991: 263).
The constructions which express phasal aspects, prospective aspects are much less studied.
We analyse the aspectual constructions corresponding to aspectual periphrases within two Chinese and French corpora, five Chinese novels written by Mo Yan (about 1 million words) and five French novels written by Patrick Modiano (700,000 words), both Nobel Prizes authors, and their translation.
We propose that although French and Chinese are two very different languages, the way to express several aspects, such as the prospective aspect, or the phasal aspects in the two languages are quite similar. Three following constructions are described:

A) [auxiliary + verb]:
Ex : YAO [要]

- 我说:“<u>双脊要死了</u>，很可能马上就要死了.....” (-《牛》第七章第 350 页)

1a. ‘Shuangji yao si le' (Mo Yan, 牛 *Le veau*, CH7, p.350)
1b. ‘Shuangji be going to die particle- accomplished aspect'
1c . ‘ Shuangji is going to die'

B) [adverb + verb] :
Ex : JIJIANG [即将]
2. <u>在我即将步入成年那遥远的日子里</u>，一天深夜，我穿过方尖碑广场，向协 和广场走去，这时，一辆轿车突然从黑暗中冒了出来。-《夜半撞车》第 3 页
2a. ‘Zai Wo Jijiang Buru Chengnian Na Yaoyuande Rizi Li' (Traduction chinoise de Patrick Modiano, *Accident nocturne*, p.3)
2b. ‘at I be about to reach majority the distant date in'
2c. 'At some distant date when I was about to reach the age of majority'

C) [full verb whose meaning expresses aspect + full verb]:
Ex : ZHUNBEU [准备]
<u>3. 我准备把书款给他时</u>，他抬起了手：-《青春咖啡馆》第 80 页

3a. ‘Wo Zhunbei Ba Shu Kuan Gei Ta Shi' (Traduction de Patrick Modiano, *Dans le Café de la jeunesse perdue*, p .80)
3b. ‘I prepare preposition-direct object book money give him when'
3c. ‘I was going to pay him the price of the book'
We analyze the more or less grammaticalized forms, questioning the notion of aspectual auxiliarity in both languages and the notions of periphrasal verbs, co-verbs, serial verbs in Chinese based on works done in French (Gosselin 2012) and in Chinese (Peyraube 2001, Paris 2010). Focusing on a lexicon-grammar continuum illustrated in Construction Grammar (Michaelis 2017), we study periphrasal aspectual constructions from a grammaticalization point of view.

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Diachronic Remarks on Chinese Marked and Unmarked Passive Constructions

According to Chinese linguistic research, passive expressions can be marked or unmarked. 被 *Bei*, 叫*jiao* and 让*rang* are commonly recognized passive markers in Chinese, and their frequency is much lower than the so-called ‘unmarked/notional passive construction', which takes a simple form ‘theme + verb'.

Set under the framework of cognitive construction grammar and assuming there is a nontrivial interaction between verbal semantics and the function of the construction, the present study is particularly interested in the real functions of the被*Bei* construction (BEIC) and the (unmarked) notional passive construction (NPC). Taking a bottom-up corpus-based approach, the historical evolvements of BEIC and NPC are investigated respectively through the verb-construction contingency analysis. The notion of passive constructions is thereby revisited in Chinese.

Results show that dating back to oracle bone scripts, NPC is extremely stable in Chinese. The verbs that occur in NPC preponderantly have a change-of-state sense. Within the group of change-of-state verbs, the more likely the event occurs spontaneously, the more faithful it is to the ‘subject + verb' structure, and the less theme-like its subject is. It can be noticed that the definition of NPC is problematic in two senses. First, it is hard to determine whether 他醒了‘he woke up' can be categorized as passive or not as the subject is not a prototypical theme. Second, it is paradoxical that prototypical transitive verbs such as 杀*sha* ‘kill' seldom occur in the passive construction. Therefore, ‘change of state' is a better summary for the function of the form ‘theme + verb' than ‘passive'.

When it comes to BEIC, its marker 被*bei* actually went through a complex process of grammaticalization. The form of BEIC was derived directly from the ‘be covered/receive' sense of 被*bei*: initially it could only take a noun as its object (pre-Qin period), and gradually developed the ability to take an event expressed by VP, agent + VP, or a complete clause. Considering this process and the polysemous network of 被*bei*, BEIC is obviously distinct from the conventional passive construction depicted as the outcome of the syntactic operation of passivization. Moreover, verb-construction contingency analysis shows a significant type frequency of designation/appointment verbs (e.g., 黜*chu* ‘dismiss', 评为... *ping-wei...* ‘elect as...') in BEIC, indicating a relationship with its original ‘receive' sense.

To conclude, the concept of ‘passive construction' can only be understood as a cognitive analogy but not a syntactic notion in Chinese.

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When a Mismatched Verbal Classifier Construction Meets the 'Lian' Construction in Mandarin

This paper claims that Verbal Classifiers (VCls) deserves more attention than Noun Classifiers (NCls) in Mandarin, since linguistic representations for classifying actions are not common in many languages. For example, "a cup of tea" in English is expressed in Mandarin as "一杯茶" (*yi bei cha*, a cup tea. Both "cup" and "*bei*" are NCls. However, "give a kick" in English is expressed as "踢一脚" (*ti yi jiao*, kick a foot) . "Foot" is a VCl here. Such words like "mouth", "knife" and "fist" in Mandarin are also in the category of VCls. While both "V+ Num. +VCl" and "Num. + NCl +NP" are unmarked uses of VCls and NCls, "Num. +VCl +NP" is marked. It is considered and termed by this paper as a mismatched VCl construction. On the basis of the exploration of its conceptual foundation, the present study analyzes the way of how this construction interacts with a bigger construction, i.e. the "*Lian*" construction, from the perspective of construction grammar and cognitive grammar.

An NP conceptually profiles a bounded region, but the region is not always isolated and static. When interacting with human and the physical world, the region participates in events and presents its dynamic feature. In this case, the NP turns out to be an Event NP. "Num. + VCl" classifies an action or an event by both the number and an action/event parameter. It thereof has an internal feature of dynamicity relating to an action/event. When it allows an NP to fill in the slot for a VP, it also transmits this feature to the NP and activates the NP's dynamicity by coercion.

The conceptual foundation of this mismatched construction constitutes the motivation for it to enter the "*Lian*" construction, in which the "Num." is not limited to "one", and the proposition can be negative or positive. It has been widely accepted that this construction implies "emphasis" and "being contrary to the expectation". For example,

张三连一脚球也没踢过, 更别提上场比赛了。

Zhangsan (***lian***) **one foot soccer** also not kicked, even not mention on field match.

Zhangsan has never given a kick to a soccer, not to mention attending a match.

How are these syntactic and semantic features interpreted in the interaction of the "*Lian*" construction and the mismatched VCl construction? Three aspects have been found: first, the VCl in the "*Lian*" construction activates the mental scanning of an event scene represented by the "Num. + VCl + NP". With the sequential scanning in accordance with the time flow, all the individual states in the event are negated, the "Num." being the smallest one; with the sequential scanning against the time flow in a contrary direction, all the individual states are affirmed, the "Num." being the largest one. Second, there is a note of subjectivity in the quantity conveyed by "Num. + VCl". Third, when "Num. =1", the proposition must be negative; when "Num. >= 1", the proposition must be positive.

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The semantics of nominal predicate construction in Mandarin Chinese

Different from English which requires that each sentence has a verb to denote the energy transmission or the event that takes place, a Mandarin sentence can take a nominal phrase as its predicate, as shown in (1-5):

(1) 他 就 （是） 一 老师， 你们 不 要 为难 他 了。

Ta jiu (shi) NUM laoshi, nimen bu yao weinan ta particle

He just be one teacher you not want bother him

He is just a teacher, don't bother him with such things.

(2) 他都 教授 了，你还讲师。

Ta dou jiaoshou le ni hai jiangshi

He already professor you still lecturer.

He is already a professor now, but you are still a lecturer.

(3) 老 王 急 性子。

Lao Wang ji xingzhi

Lao Wang quick temper

Lao Wang is a quick-tempered man (is quick-tempered).

(4) 新 来 的 领导（是） 上海人、 年轻 漂亮。

Xin lai de lingdao (shi) Shanghainese, nianqing piaoliang

New come *de* head (be) Shanghainese, young pretty

The new head is a Shanghainese, young and pretty.

(5) 她（上） 清华， 小吴 （上） 北大。

Ta (shang) Qinghua, Xiao Wu (shang) Beida

she (goes to) Tsinghua University, Xiao Wu (goes to) Peking University

She is (was) enrolled by Tsinghua University, while Xiao Wu (is (was) enrolled) by Peking University.

All the above examples exhibit a common feature, that is, they don't express a temporal relationship, which English sentences do. Rather, they express a state or property of the subject. Although the constructional meaning of the nominal predicate constructions in Mandarin is state or property, they will further abide by the semantic requirements of “degree” or “rank” or “order”. In (1), a *teacher*, in Chinese traditional culture, does not enjoy high social status in the social ranking, although respected by the society. In (2), *professor and lecturer* denote the identity of their respective subject, and they themselves form a professional social rank. In (3), *quick-temper* denotes a strong negative sense of temper. As for (4), it seems that it does not carry the meaning of degree or rank or order. However, taken geographically, we can derive a sense of order or something similar. Each place or city has a longitude and latitude on the globe. The position denoted by the longitude and latitude will fill a point in the whole network of longitude and latitude of the globe. In this sense, Shanghai is indicative of the sense of order. In (5), the corresponding predicate verb in English is *enroll*, but the whole sentence, forming a contrast, more denotes the identity of

“ta” and “Xiao Wu”, which means *she is a student of Tsinghua University and Xiao Wu is a student of Peking University*.

Nominal predicate construction in Mandarin is quite normal and its use can account for many other features of Mandarin. The nominal phrase in the construction changes from referential to stative and in some way become decategorized. Sentences with nominal predicates usually denote a weak sense of temporality, which paves the way for Mandarin to express attitudinal or evaluative meaning, or the subjectivity of the speaker. Further, the lessening effect on the temporality of the predicate may, in some way, suggests a fusion of time and space, since nouns are taken to denote objectness and verbs process. A further point worthy of note is that the nominal predicate construction conforms to the typical topic-comment-construction feature of Mandarin.