From collocations and patterns to constructions – an introduction

Linguistic usage patterns are not just coincidental phenomena on the textual surface but constitute a fundamental constructional principle of language. At the same time, however, linguistic patterns are highly idiosyncratic in the sense that they tend to be item-specific and unpredictable, thus defying all attempts at capturing them by general abstract rules. A range of linguistic approaches inspired by surprisingly different background assumptions and aims have acknowledged these insights and tried to come up with ways of emphasizing the importance of linguistic repetitiveness and regularity while doing justice to unpredictability and item-specificity. Their efforts are epitomized in the terms enshrined in the title of the present volume, whose aim is to provide a multifaceted view of *Constructions, Collocation and Patterns*. What all of these approaches share, in addition to their interest in recurrent patterns, is a strong commitment to the value of usage, be it in the wider sense of usage as an empirical basis for sound linguistic analysis and description or in the narrower sense of usage as constituting the basis for the emergence and consolidation of linguistic knowledge.

The first and presumably oldest (though to some perhaps not the most obvious) tradition takes the perspective of foreign language linguistics. Any reflection upon what is important in the learning – and, consequently, also in the teaching – of a foreign language will have to take into account the crucial role of conventionalized but unpredictable collocations. Any attempt by a learner to achieve some kind of near-nativeness will have to include facts of language such as the fact that it is *lay* or *set the table* in English, but *Tisch decken* in German, and *mettre la table* in French.[1] It is thus not at all surprising that foreign language linguistics has resulted in extensive research on collocations and how they can best be taught and learnt. In fact, the very origin of the term *collocation* can be traced back to the *Second Interim Report on English Collocations* by Harold E. Palmer published in 1933 (Cowie 2009: 391-393, Stubbs 2009).

Secondly, while the phenomenon of collocation concerns the associations between lexical items, verb complementation or valency patterns present learners with the same kind of difficulty, since a similar element of unpredictability can be observed in this area in that you can say *Sie erklärte*

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1. For a short history of the term collocation in linguistics and lexicography see Hausmann (2007: 218, 225–228), and Stubbs (2009).

mir das Problem in German but not **She explained me the problem* in English. Again, the foreign language context has inspired research on complementation – a lot of work on the development of valency theory, for instance, has been done in a foreign language context. The reason why both collocations and complementation patterns are central to foreign language learning is that they concern item-specific knowledge with respect to the co-occurrence of one word with another word or one word with a particular grammatical construction. It is thus perfectly natural that research on collocation and research on valency have resulted in extensive lexicographical descriptions not only in special dictionaries such as collocation dictionaries or valency dictionaries, but also in general learner's dictionaries: it was one of the outstanding features of the first major English learner's dictionary, A.S. Hornby's *Advanced Learner's Dictionary*, first published in the 1940s, that it described the syntactic constructions in which particular verbs can occur in terms of a system of 50 verb patterns. [2]

Thirdly, the advent of machine-readable corpora resulted in an enormous rise in interest for collocations and patterns, as a consequence of which "the analysis of language has developed out of all recognition", as John Sinclair (1991: 1) rightly put it. Even if the importance of collocation as an element of language description had been pushed by Harold E. Palmer (1933) and John Rupert Firth (1968), the fact that large-scale corpus analyses revealed the extent to which fixed or partially fixed multi-word units determine the character of everyday language use certainly gave new impetus to collocational research. These findings have given rise to different concepts – for instance, that of lexical bundles in the *Longman Grammar of Spoken and Written English* by Biber, Conrad, Leech, Johansson and Finegan or that of "extended units of meaning" in the writings of John Sinclair. Corpus linguistic investigations of lexicogrammatical patterns and attraction phenomena also motivated Sinclair's (1991: 110) suggestion that the idiom principle had to complement slot-and-filler type open-choice decisions in models of sentence structures. A huge body of research into collocations and lexicogrammatical associations was inspired by these insights and the new opportunities provided by computer corpora.

Usage-based cognitive-linguistic approaches represent a fourth important line of investigation. Not surprisingly, cognitive linguists have focused their attention on the cognitive underpinnings of linguistic

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2.   For the treatment of patterns and collocations in early English learner's dictionaries of H.E. Palmer and A.S. Hornby see Cowie (1999).

knowledge, asking questions as to how linguistic patterns and item-specific knowledge are stored and represented, how this knowledge emerges and what the cognitive processes involved in this emergence are. It is in this tradition that the terms *construction* and (*constructional*) *schema* have acquired fresh prominence. If the concept of construction is to include both unpredictable form-meaning pairings and highly frequent ones (Goldberg 2006), it easily accommodates collocations and valency as well as other types of lexical and lexicogrammatical patterns. Joan Bybee (2010: 28), for example, gives Firth's example of the collocation *dark night* as an example of what she calls "conventionalized instances or exemplars of constructions that are not unpredictable in meaning or form … but are known to speakers as expressions they have experienced before". Doing justice to the tension between repetitiveness and idiosyncrasy, it is especially the idea of item-based constructions (e.g. MacWhinney 2005: 53) which can be applied to collocations and also to valency patterns. In fact, the whole concept of construction grammar arose from the idea of integrating idiosyncratic elements such as idioms as central elements of the theory (see Croft and Cruse 2004: 225). This is apparent from a statement by Fillmore, Kay and O'Connor (1988: 534): "Those linguistic processes that are thought of as irregular cannot be accounted for by constructing lists of exceptions: the realm of idiomaticity in a language contains a great deal that is productive, highly structured, and worthy of serious grammatical investigation."

Fifthly, usage-based approaches of language learning have collected strong evidence that repeated lexically specific sequences in parents' and children's speech do not only play key role for the acquisition of early chunks such as *what's that*, *wanna* or *give me*, but also constitute the starting-point for the emergence of variable low-level schemas (*wanna* X, *give me* X) and even more flexible unfilled schemas such as the ditransitive or other argument-structure constructions (Tomasello 2003, Goldberg 2006).

The construction grammar approach has proved to be an attractive model not only for researchers interested in theoretical models of language, but also to those who are concerned with collocation and patterns in the context of foreign language linguistics. After all, generative transformational grammar had little to offer in terms of integrating such phenomena into a general theory of grammar, which had resulted in an unnecessary alienation of applied linguistics and theoretical linguistics. Similarly, of course, construction grammar has offered an appealing theoretical framework for accommodating many of the findings of less cognitively-minded corpus linguistics concerning the importance of recurrent patterns. In view of this

situation, Michael Stubbs (2009: 27) aptly remarks "… that, when scholars set out from different starting points within different traditions, use data of different kinds and independent arguments, but nevertheless arrive at similar conclusions, then the conclusions are worth studying closely, because the convergence of views is *prima facie* evidence that they are well founded."

However, despite this convergence of views, it would of course be wrong to assume that we are heading towards agreeing on a generally accepted theory of language. Firstly, although the approaches that can be summarized under the label *usage-based* all share certain basic assumptions concerning the nature of language, there are also considerable differences between them, for instance, concerning the degree of formalization and their commitment to providing a cognitively plausible model.[3] Secondly, the fact that cognitive linguists attribute an important place to collocation and other types of patterns does not necessarily mean that all corpus linguists and foreign language linguists would agree with the cognitive approach as a whole. And thirdly, while many usage-based researchers in cognitive linguistics have, of course, embraced the corpus method, it is still true to say that they have been more interested in arriving at generalizations than in reaching the level of descriptive granularity and specificity that is typical of more traditional corpus-based approaches, in particular those coming from a language teaching or lexicographical background.

In view of this divergence within convergence the present volume aims at providing general and readable surveys of different lines of usage-based investigations of constructions, collocations and patterns, some focusing on linguistic, some on psychological aspects, and some addressing the role attributed to linguistic patterns in different research traditions.

The first three chapters of this book outline why usage-based approaches seem to open up a very promising framework for accounts of language acquisition. '**First language learning from a usage-based approach**' by **Elena Lieven** gives an account of how children learn constructions on the basis of the input they receive, discussing experimental evidence as well as

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3.   For an outline of different strands of construction grammar – such as Berkeley Construction Grammar, Sign-Based Construction Grammar, Radical Construction Grammar, Cognitive Construction Grammar, Fluid Construction Grammar, Embodied Construction Grammar – see Fischer and Stefanowitsch (2006: 3–4) and especially Hoffmann and Trousdale (2013).

the role or errors in language development. Lieven outlines how a network of constructions can be imagined to develop.

Brian MacWhinney stresses the role of '**Item-based patterns in early syntactic development**' and provides a detailed outline of the properties of such patterns, which involves a discussion of factors such as errors, conservatism or correlational evidence. After a short discussion of feature-based patterns, MacWhinney goes on to throw light on the role of item-based patterns in second language acquisition before providing a comparison of his model and other approaches, also touching upon questions of computational models.

In '**Construction learning as category learning**', Nick Ellis and Matthew Brook O'Donnell focus on the frequency distribution of verbs in verb-argument constructions as a determinant of second-language learning. Analysing the distribution of the verbal fillers of 23 verb-argument constructions in a large corpus they show that the frequencies, functions and forms of the input that learners are exposed to provide ideal conditions for construction learning by means of inductive statistical learning from the input. Zipfian type-token distribution, selective verb-construction relations and coherent meanings of verb-argument constructions are identified as key variables favouring the learning of schematic constructions.

The four contributions that follow all deal with issues of syntactic patterning and meaning. **Susan Hunston**, in '**Pattern Grammar in Context**' illustrates how syntactic patterns were identified on the basis of research using the Bank of English. She then goes on to discussing similarities and differences between her own pattern grammar approach and construction grammar.

Charles Fillmore's contribution **'Frames, constructions, and FrameNet**' combines lexicographical and theoretical issues. It describes the original set-up of the FrameNet project and shows how FrameNet descriptions can be adapted to suit the approach of Berkeley construction grammar. As an illustration, a large sample of text is analyzed in the framework developed before an outline of important research issues for the future is given.

Similarly, **Thomas Herbst**'s chapter '**The valency approach to argument structure constructions**', outlines a framework for the application of valency theory to English and shows how valency can be described in terms of a network of item-based constructions. It is argued, however, that, in the light of the enormous amount of item-specific knowledge to be accounted for, Goldberg's (2006) theory of argument structure constructions should be complemented by a valency realization principle.

To what extent lexical material and constructions interact is also shown by **Anatol Stefanowitsch** in the chapter entitled '**Collostructional analysis: A case study of the English *into*-causative**'. Stefanowitsch outlines the basic principles of collostructional analysis, which reveals the extent to which particular lexical items are attracted by a certain construction, and shows how this in turn can be used to reveal the meaning of the construction. Stefanowitsch concludes with general methodological considerations on the use of corpus data and interpretation of the data.

In the final contribution entitled '**Lexico-grammatical patterns, pragmatic associations and discourse frequency**', **Hans-Jörg Schmid** begins by developing a usage-based emergentist model of language which consists of a limited number of cognitive and socio-pragmatic processes. The paper then focusses on effects of pragmatic associations on the emergence and syntagmatic chunking of different types of lexicogrammatical patterns, ranging from frozen expressions to collocations, collostructions, valency patterns and argument-structure constructions. Pragmatic associations are then put into relation to discourse frequency as partly competing and partly cooperating determinants of chunking.

The different chapters of this book throw light on different types of patterning to be observed in the analysis of language. The label of construction – vague as it may sometimes still be – can thus be seen as representing a general concept under which many linguistic phenomena that hitherto have been studied under different labels in different approaches (such as valency or collocation) can be subsumed. We hope that this volume offers an attractive introduction to various approaches in the field and an illustration of the fact that different theoretical frameworks such as frame semantics or valency theory, for example, are definitely moving towards construction grammar.

All of the chapters of this volume are based on papers given in a series of talks held at the Interdisciplinary Centre for Research on Lexicography, Valency and Collocation at the Friedrich-Alexander-Universität Erlangen-Nürnberg and the Interdisciplinary Centre for Cognitive Language Research at Ludwig Maximilians University Munich.

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