The Joint Research Project

Patterns. Linguistic Creativity and Variation in Synchrony and Diachrony

Trier University

1. Objectives

The goal of the project is to systematically investigate different kinds of patterns in natural language, their historical evolution, and their relation to (linguistic) creativity and variation.

Patterns play an important role on different levels of language description. One recent example of a syntactic pattern is what has become of Angela Merkel's famous words *Wir schaffen das!* at a press conference about the so-called refugee crisis in 2015. The pattern has since resurfaced again and again in public discourse, where, in spite of undergoing multiple variation, the original reference is always clearly recoverable: *Wir schaffen das nicht.* - *Wir schaffen das?* - *Das hätten wir geschafft!* - etc. The word creation *Brexit* has become a pattern in a similar fashion - not a syntactic, but a morphological pattern: *Grexit* - *Öxit* (in German, from *Österreich* + *Exit*) - *Frexit* - *Nexit*. Patterns are also found on the level of discourse and texts, which often comprise both linguistic and non-linguistic elements (such as layout, pictures, etc.). Understanding linguistic patternings of these kinds is of central importance not only for understanding the nature of human language and language use; they also play an important role in human communication in general.

The research programme Patterns at Trier University starts out from a deliberately broad-based pattern concept. We study types of patterns that have traditionally been assigned a different status in linguistic theorising. For example, some patterns - especially those that arise in public discourse - are often considered to be 'creative' formations, where 'creative' is taken to imply that pertinent patterns are very different from what we find, for example, in patterns of word formation and sentence formation in everyday language. The latter are traditionally interpreted as the output of grammatical rules. One well-known challenge to linguistic theories embracing these dichotomy, however, is the fact that there are 'borderline patterns', which cannot be easily classified as either creative or grammatical. Thus, it is one of the key insights among more recent theoretical movements within linguistics that patterns in word-formation and syntax are more than the sum of their parts. Specifically, their meanings arise not only from their form, but also, for example, from the discourse context in which they have originated and in which they are used, as well as from the constructional family of the pattern, i.e. the existence of other expressions belonging to the same pattern. At the same time the existence and the frequency of usage of a pattern provide the necessary basis for a pattern to develop and change, a process which usually involves variation and creative modification.

Especially recent work has made it abundantly clear that an adequate theory of linguistic patterns needs to take all these aspects into account. Still, there is at present very little research that studies linguistic patterning in such comprehensive manner. One important reason is that different aspects of linguistic patterns have traditionally fallen into the domains of different disciplines and schools of thought both within and outside linguistics, and that there has traditionally been little communication between them.

On the basis of a quite deliberately broad-based pattern concept and in interdisciplinary cooperation, the Trier research programme *Patterns* is dedicated to conducting empirical research beyond established disciplinary boundaries into linguistic patterns and at the same time to developing an applicable theory of linguistic patterning. Our work is interdisciplinary in the sense that it involves close cooperation of linguists working in the different *Languages* Adepartments (Computational Linguistics, Digital Humanities, Phonetics), as well as departments that are concerned with patterns in text and media discourse (Media Studies), patterns in human cognition (Cognitive Psychology), and with statistical and computational methods of pattern detection in social groups (Survey Statistics). The programme also collaborates with several research centres at Trier University: the Trier Center for Digital Humanities (TCDH), the America-Romana Centrum, the Center for Canadian Studies.

2. Structure

The structure of the research project is illustrated in Fig. 1.



Figure 1. The Patterns project

The programme is structured into five *Research Areas* (RAs). RAs 1-3 build on research profiles that are already well-established within the contributing subjects, extending them beyond the boundaries of these subjects and developing them further, across different languages and modes of communication.

RA 1 builds on existing research foci in word-formation, the lexicon-syntax interface, the onomasticon, in discourse, and in text-knowledge interaction. RA 2 establishes links between existing profiles in diachrony, in language change, and in language contact. RA 3 unites linguistic research with relevant research in Cognitive Psychology (processing of linguistic and visual information, priming effects), in Media Studies (patterns in media discourse), the Digital

Humanities and Computational Linguistics (e.g. corpus-based methods of pattern identification and pattern extraction, machine learning), and Survey Statistics (applied statistics, with a focus on the study of social, areal, and cultural patterns, constituting an important aspect of the emergence of linguistic patterns in context).

RA 4 and RA 5 are superordinate research areas, which adopt a broader methodological and theoretical perspective. Based on the empirical work in RA 1 - 3, they are dedicated to developing them into a full-fledged theory of linguistic patterns and a comprehensive methodology of pattern research. With regard to the latter, the programme integrates a variety of different methods, adapted to the data under investigation. These methods comprise both qualitative, hermeneutic and quantitative methods.

3. Potential

The high potential of the research programme originates in the fact that it establishes a dense network of collaborating high-profile research from different disciplines. With regard to the linguistic community, this will enable us to transcend the old debate of the nature of established categories of linguistic patterns. Beyond the linguistic community, the programme's potential lies in the fact that the nature of patterns is studied not only in language, but also in other modes of human communication and in cognition. Especially with the increasing availability of large quantities of data which, unlike traditional corpora, is not restricted to written language but that encompasses both aural and visual modes, this has become a highly relevant hot topic for discipline-oriented research structures across research communities.