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Expanding the Lexicon: At the crossroads of innovation, productivity, and ludicity

1 The dynamic lexicon

Traditionally, the creation of new lexical units and patterns – understood in a wide sense as not being necessarily limited to the word level – has been studied in different research frameworks. Whereas approaches focusing on morphological productivity are directed at system-internal (‘grammatical’) morphological processes, other approaches have aimed at identifying general types of lexical innovation and describing them in the larger context of lexical change, thus integrating system-external factors related to the historical background of the innovations and their diffusion. In this way, lexical change provides insights into general motives of language change and basic mechanisms of language processing.

The aim of this volume is to discuss fundamental aspects of dynamic processes in the lexicon, including recent and ongoing changes as well as historical processes of change, and to bring new evidence to bear on the traditional dividing line between approaches oriented towards system-internal and system-external aspects.

Current research in language change is marked by a renewed interest in the lexicon, as documented by recent international conferences and publications on structural, typological and cognitive approaches to the lexicon and on regularities of lexical change in the larger context of language change (see, among many others, Blank 1997; Ágel et al. 2002; Brinton and Traugott 2005; Haspelmath and Tadmor 2009; Libben et al. 2012; Zeschel 2012; Ostermann 2015). At the same time, within theoretical linguistics, recent years have seen an increase in more and more psycholinguistically informed work on morphological complexity and productivity, which explicitly relates issues of productivity and modularity in the lexicon to what we know about lexical processing (e.g. Hay 2003; Baayen et al. 2011; Pirelli et al., in press).

The strong interest in this topic was also documented by the high number of submissions we received for the call for papers for our international workshop *Expanding the lexicon / Extensions du lexique / Erweiterungen des Lexikons – Linguistic Innovation, Morphological Productivity, and the Role of Discourse-Related*

Factors / Innovation linguistique, productivité morphologique et le rôle de facteurs liés au discours / Sprachliche Innovation, morphologische Produktivität und die Rolle diskursbezogener Faktoren held at Trier University (17–18 November 2016). The workshop brought together participants with different theoretical backgrounds and permitted multilingual discussions and exchange on a wide variety of topics ranging from aspects of the lexicon in medieval times to current innovations in German, English and Romance.

The contributions in this volume go back to papers presented at the workshop as well as to papers presented at the newly created *Forum Sprache und Kommunikation Trier* (www.fsk.uni-trier.de), which aims to foster inter- and transdisciplinary linguistic exchange on a broad range of linguistic phenomena, taking into account the cultural, social and historical contexts in which they are embedded. At the workshop and in the discussions, three main aspects emerged as being of key interest: 1) lexical innovation and conventionalisation, 2) productivity in its interplay with speaker creativity, and 3) the role of ludicity in lexical innovation. These aspects are addressed from different perspectives by various papers in the volume, as will be shown below. It should be stressed that many of the papers touch upon several of the aspects mentioned, thus demonstrating how closely they are interwoven. The following discussion of the three aspects and the papers grouped in each of the main parts of this volume should therefore be interpreted as showing only some of the many links and common lines of investigation. The reader is invited to cross-read the volume and to discover further convergencies, complementary discussions and perspectives for further research.

2 Innovation and conventionalisation

Studying processes of lexical expansion, the notion of lexical innovation and the diachronic evolution of lexical innovations becoming conventionalised and possibly reused in new ways, represent first topics to be dealt with. These issues are addressed from a theoretical perspective in Filatkina's contribution, which is complemented by Kremer and Stricker's investigation of lexical innovation in Old High German and Stumpf's analysis of innovative free usage of unique components in contemporary German. Moreover, the contributions which will be discussed in sections 3 and 4 below also touch upon synchronic and diachronic aspects of specific subtypes of lexical innovations and their subsequent diachronic evolution.

Natalia Filatkina's contribution, *Expanding the lexicon through formulaic patterns: the emergence of formulaicity in language history and modern language use*,

approaches the topic of innovation from the perspective of formulaic language. As word-formations, formulaic patterns are considered an important means of lexicon expansion and innovation. Filatkina uncovers substantial differences and characteristics in the way formulaic patterns contribute to lexicon expansion. The differences are particularly clear if studied from a (diachronic) perspective of the emergence of formulaic patterns and against the background of theories of language change. The argument is made that the usual “driving forces” of language change such as regularity / irregularity, codification / normatisation, cultural and contextual / discourse traditions and frequency do not apply to formulaic patterns in the same way as they do, for example, to sound change, grammatical or even lexical change. The emergence of formulaic patterns can best be understood as a process of integration of sometimes controversial aspects, among which frequency and regularity seem to be important accompanying factors but not always driving forces. Irregular, idiosyncratic paths based on conflicts and violation of norms shape the development of formulaicity as well if they are sufficiently supported by the speakers’ / hearers’ communicative needs and / or embedded into discourse and cultural traditions.

A special dimension of the investigation of lexical expansion and innovation is tackled in the paper by Anette Kremer and Stefanie Stricker (*Selected Complex Words in the Early Medieval Leges Barbarorum and their Contribution to Expanding the Old High German Lexicon*), namely the challenges encountered by the exploration of the topic in historical stages of languages for which our textual records provide only a very limited inventory of texts and a very small literary vocabulary. This is the case with Old High German (AD 700–1050) where the exploration of the lexicon is especially complicated due to the fact that extensive monolingual sources are not available on a large scale over the relevant time axis. A larger quantity of complementary Old High German material can be found in vernacular glosses in Latin manuscripts and in the sources explored in the paper for this volume, namely vernacular lexical items present in Latin law codes of the Germanic peoples written in the Early Middle Ages, the so-called *Leges Barbarorum*.

In their paper, the authors analyse a selection of complex lexical items (compounds, derivatives) taken from the Upper German law codes (*Lex Baiuvariorum*, *Lex Alamannorum*, *Leges Langobardorum*), as these form a relatively homogeneous tradition. The investigation is carried out with the database of the LegIT project and analyses the formation and use of relevant lexical items in the selected corpus, depicting pathways of expansion of these items in the lexicon of Old High German. Furthermore, the paper focuses on the dynamics of word for-

mation in Old High German, with special attention to complex words not documented outside of the *Leges* tradition. In this context, specific relations between their first and second elements can be traced and related to the specific text genre where they occur. The analysis of derivation cases draws special attention to lexical items resulting from morphological word formation processes that can be considered typical for the law texts, but are no longer productive, and for which we have hardly any evidence in other Old High German sources. Overall the results of the study show the manifold potential of investigation on the lexical level offered by the *Leges* sources for the medieval vernaculars. For further research, the analysis of these sources not only opens a specific reservoir of lexical domains not recorded elsewhere, but will also enable crosslinked analysis with findings in the textual and glossographic domain in order to trace general pathways of lexical development through time.

Sören Stumpf's paper, *Free usage of German unique components: Corpus linguistics, psycholinguistics and lexicographical approaches*, investigates how unique components in phrasemes can be (re-)used outside their original phraseological context and thus contribute to linguistic innovation and expansion of the lexicon. Normally, such unique components can only occur within set phrasemes (e.g. German *ins Fettnäpfchen treten*; an example from English would be *happy as a sandboy*),¹ but as the author shows, they can be reactivated in language use and once usualised, eventually find their way into dictionaries. Exploring this type of lexical innovation through unique components has not yet been approached in a comprehensive way, and the author focuses in his study on findings from corpus studies on the German language and particularly the underlying debonding processes (Norde 2009). Furthermore, he addresses psycholinguistic issues exploring how phrasemes with unique components are processed in the mental lexicon, how their debonding can be grasped and how the motivation of the unique components plays a central role in this process. The author's findings point to the importance of further diachronic investigation of unique components as a source for lexical innovation and open methodological paths for crosslinguistic research. Furthermore, the topic investigated shows close links to aspects of productivity and creativity as well as ludicity in the expansion process, domains that are the subject of the following sections of the volume.

¹ For more examples see Dobrovol'skij (1988) or the "List of English Bound Words": <https://www.english-linguistics.de/codii/codiibw/en/list-complete.xhtml> (accessed 13 September 2017).

3 Productivity

The discussion in section 2 has already indicated that one key means of lexical expansion which languages have at their disposal are productive word-formation processes. Such processes are traditionally defined as regular morphological mechanisms, and determinants of as well as constraints on their productivity have usually been described in terms of the components of the language system: phonology, morphology, syntax, semantics (and, to some extent, pragmatics). The articles that were discussed in section 2 above already point to a well-known delimitation issue here, as we have seen that word-formation in this sense is only one of several mechanisms of lexical expansion that can be productive (compare e.g. the processes described in Kremer and Stricker's paper with the productivity of unique components studied in Stumpf's article). In the present section, however, we limit the discussion of productivity issues to those arising in the synchronic study of word formation processes in the traditional sense.

With respect to traditional notions of productivity, the articles in this volume provide interesting insights in mainly two ways: One concerns the question of the level of description needed to characterize productive processes. There are two articles in this volume, one by Ingo Plag and Sonia Ben Hedia, and one by Marcel Schlechtweg, which essentially show that, if we look at how novel linguistic expressions are used in actual speech (albeit, in Schlechtweg's case, in an experimental setting), it is necessary to take into account more than the system-internal components that traditional analyses have studied. Plag and Ben Hedia's article, *The Phonetics of Newly Derived Words: Some Case Studies*, deals with how prefixed words are realised phonetically in a corpus of English natural speech. They find that the pronunciation of prefixed words reflects the segmentability of that word. Segmentability encompasses both measures of semantic transparency as well as frequency based measures of the competitive activation of morphologically complex words and their bases in language processing (cf. Hay 2003). The findings are highly relevant for the study of lexical innovation: A high degree of segmentability is a characteristic property of productive processes. Building on Plag and Ben Hedia's findings, we can thus expect newly derived words to be pronounced differently (i.e. with longer prefix durations) from older, more lexicalised, derived words. It is an open question whether this type of effect can be captured in terms of the level of granularity that can be formulated with the help of phonological feature systems. Also, Plag and Ben Hedia's findings suggest that the study of newly derived words benefits from integrating the perspective of the speaker and the speech event in the research paradigm. Segmentability and

productivity are properties of individual words, as processed by the individual speaker.

Marcel Schlechtweg's contribution, *How stress reflects meaning – The interplay of prosodic prominence and semantic (non-)compositionality in non-lexicalized English adjective-noun combinations*, is concerned with the function of prosodic prominence in novel English adjective-noun constructions. On the basis of acoustic data elicited in a small-scale experimental study, the paper presents evidence that prominence patterns are influenced by both the semantic compositionality of the construct itself and the immediate sentence context in which the adjective-noun construct occurs. Two types of context are tested in the experiment: In the first type, the construct is followed by a relative clause that not only paraphrases the non-compositional meaning but also uses a metalinguistic description to explicitly mark the paraphrase as a definition (*which is called so because...*). In the other type of context provided in the experiment, non-compositionality is merely implied. Unlike in constructs with a compositional semantics, where the noun tends to receive most prominence, in non-compositional constructs the adjective tends to be marked as more prominent. However, the difference between compositional and non-compositional items is only robust in sentence contexts in which the meaning relation between the adjective and the noun is not explicitly provided with the help of a paraphrase. Again, this has implications for the study of productive processes of lexical innovation, as it shows that system-external factors like context influence the formal realisation of newly coined morphological constructs.

A second aspect that characterises discussions of productivity in this volume is the question if and how productive morphological processes are to be delimited from other, specifically creative or playful processes. The article *Expanding the lexicon by truncation: variability, recoverability, and productivity* by Sabine Arndt-Lappe presents an analysis of truncation patterns (mainly patterns of name truncation as in nickname and hypocoristic formation) in three languages (Italian, German, and English), with a focus on two aspects that have traditionally been used as criteria to delimit productive morphology from other processes. One is structural variability: outputs of truncation are shown to provide evidence of the existence of alternative forms, such that different patterns of truncation can be distinguished. Crucially, variability is systematic and determined by both universal and language-specific morphological factors. The other aspect is semantic transparency: it is argued that, even though in truncatory patterns compositionality of meaning does not correspond to compositionality of form, outputs of truncation may still be transparent, in the sense that the regularities that determine the shape of truncatory patterns as well as the way truncatory patterns are used

in context are optimally geared towards ensuring that the base forms are recoverable, despite the loss of segmental material. The case of truncations thus challenges traditional assumptions that take the degree of productivity of a morphological process to be correlated with formal predictability and semantic compositionality. Instead, like other articles in the present volume, the truncatory data seem to point towards an approach to productivity that relates this notion in a more integrative way to mechanisms of language processing and contextual factors.

4 Ludicity

The interplay of productivity and the speakers' creativity touched upon in the papers discussed in the preceding section as well as the central role of individual acts of innovation stressed in usage-based approaches to language change (see also Filatkina's contribution discussed in section 2) point to the active role of the speakers in processes of lexical expansion. One type of lexical innovation in which the active role of the speaker is particularly evident are ludic innovations. Although ludicity is obviously an important dimension in lexical expansion, its role has not yet been studied systematically in previous research. This aspect is also linked to the general topic of the book series in which this volume is included and which is dedicated to the dynamics of wordplay, the latter notion being understood in a broad sense, in order, among other things, to precisely include transitions between ludic and "serious" innovation and to explore degrees of ludicity in lexical innovation. In this way, the present volume also presents strong links to the upcoming volume on wordplay and creativity edited by Bettina Full and Michelle Lecolle (in press).

Among the papers of the present volume, the ludic dimension is directly addressed by Braun, Dal and Namer, Winter-Froemel, and Moulin, focusing on different aspects of ludic usage and on different levels of linguistic description.

Angelika Braun's contribution, *Approaching wordplay from the angle of phonology and phonetics – examples from German*, aims to outline the benefits and insights to be gained from a phonetically informed approach to wordplay studies. She argues that various types of wordplay and potentially ludic processes of lexical expansion can be described in a more fine-grained way from a phonetic / phonological perspective. Distinguishing between wordplay which is based on existing lexical items and wordplay involving the creation of new items (most importantly, blending), she proposes a classification of various subtypes of word-

play depending on which part of the syllable is involved and which phonetic processes can be observed. In this way, a fine-grained classification of various subtypes of wordplay and ludic processes of lexical expansion is obtained. This classification is tested by analysing more than 200 items collected by the author from TV shows, newspapers, posted advertisements and previous research papers. All of the examples studied are intended for a German audience, but the material also includes English items, which testifies to the importance of language contact in the domain of wordplay. Moreover, the survey confirms the manageability of the taxonomy proposed and provides first insights into the importance of specific patterns of wordplay. Although the contribution is dedicated to the analysis of specific speech events, the findings thus also shed light on lexical innovation and productive patterns of lexical expansion.

The complex interplay between creativity and productivity is also addressed in Georgette Dal's and Fiammetta Namer's contribution on *Playful nonce-formations in French: creativity and productivity*. While nonce-formations have been in the focus of current research on English and German, there is still a lack of studies on French. In order to fill this gap, the authors draw on corpus data available to identify recurring patterns of the emergence of nonce-formations and distinguish between different subtypes of nonce-formations according to structural features as well as different ways in which the nonce-formations are embedded in the utterance context. Adopting an approach which is based on the speakers' and hearers' perspective on nonce-formations, they argue that nonce-formations represent a micro-system of its own. According to the authors, studying this micro-system requires a complete methodological reversal, focusing on the forms themselves and adopting other criteria of identifying nonce-formations than the standard tools used in morphological studies. In this way, their contribution also provides important general insights into the possibilities and challenges of approaching productivity, combining structural analyses with pragmatic reflections on issues related to the use of the items in individual communication events.

Finally, the contributions by Esme Winter-Froemel and Claudine Moulin, *Ludicity in lexical innovation (I / II) – French / German*, are dedicated to ludicity in the lexicon, taking into account ludic usage and lexicalised items that can convey ludic effects. Lexicographic sources, including contemporary dictionaries as well as historical dictionaries of both languages, are explored to investigate the importance of ludicity across different types of innovations, languages, periods, and contexts of use. Complementing each other, the two contributions argue that ludicity should be recognised as a basic aspect motivating lexical innovation alongside other factors of lexical expansion. At the same time, the authors show

that the current lexicographic practice of marking ludic items is still in part unsatisfactory, as labelling of pertinent items is still only unsystematic and not exhaustive.

Moreover, Esme Winter-Froemel's paper focuses on the question of how the lexicographic data can be reinterpreted from a usage-based perspective. These reflections point to basic methodological challenges that need to be dealt with when studying ludicity in the lexicon. In addition, she analyses how the speakers and hearers produce and perceive ludic items, taking into account structural, semantic and pragmatic patterns that emerge from the data provided by the *Petit Robert 2016* as well as historical dictionaries from the ARTFL database. From the basic features of ludicity identified, markedness emerges as a common denominator that enables speakers and hearers to use the items as a joint action, where both interlocutors demonstrate their linguistic mastery and engage in a game of complicity. A diachronic survey based on the historical dictionaries of French, most importantly different editions of the *Dictionnaire de l'Académie française*, reveals basic patterns of evolution, including the emergence of ludic items from citational uses and from a reinterpretation of obsolete items, patterns of relative stability as well as wearout effects by which the lexical items are retained, but lose their ludic dimension. In this way, ludic items are identified as a highly dynamic domain of the lexicon.

These findings are equally confirmed by Claudine Moulin's paper. Before studying ludic innovations in German, the author presents general methodological reflections on the difficulties of tracing ludic items in lexicographic sources across the history of German, and argues that sources of metalinguistic reflection provide helpful additional information on the ways ludic items are used and perceived in different historical contexts. Particularly interesting in this context are the extensive reflections on wordplay and related phenomena during the Baroque period in linguistic societies such as the *Fruchtbringende Gesellschaft*, with the main actors Justus Georg Schottelius, Georg Philipp Harsdörffer, Philipp von Zesen, and Kaspar Stieler. Historical dictionaries (Kramer, Adelung) and contemporary reference works (most importantly *Duden online 2017*) are analysed with respect to the ways in which ludic items are described and to diachronic patterns that can be observed in the creation and subsequent evolution of ludic items. The author shows that nominal compounds and diminutives play a predominant role in this context. Finally, certain pathways for the evolution of ludic items from the 18th century to current use are identified (+ludic > -ludic [+neutral]; +dialectal > -dialectal > +obsolete; -archaic -ludic > +archaic -ludic > +archaic +ludic). These pathways tie in with some of the pathways identified for French and confirm the strong dynamics that can be observed for ludic items in the lexicon.

In addition to the phenomena studied in the papers summarised here, certain effects of ludicity also appear in other domains, e.g. in the formulaic patterns studied by Natalia Filatkina, which also exhibit playful modifications. It can thus be argued that ludicity represents an important dimension of lexical expansion. At the same time, various contributions highlight the transitions between ludic and non-ludic usage and the necessity to assume a continuum between creative usage and conventionalised items of the lexicon conveying certain stylistic or pragmatic effects. This can be seen as an additional justification for a deliberately broad understanding of wordplay and ludicity, which also takes into account what could be labelled “borderline cases” of wordplay and ludicity. Studying these “marginal” phenomena thus also allows us to gain general insights into the dynamics of the lexicon.

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