Introduction: Affix Ordering Across Languages and Frameworks
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Although affixation is the major morphological device for creating new words and word forms in the languages of the world there are heavy restrictions on the ordering of affixes, and of all phonologically possible and semantically conceivable affix combinations in a language, only a few exist. The question of affix ordering is an important one in linguistic theory and there has been much research on the topic from various perspectives. Nevertheless, the exact nature of the factors involved in affix ordering and the ways those factors interact with one another are still a matter of debate. This volume contributes novel data from various typologically diverse languages, including languages whose affix order has not been examined so far, as well as original analyses to the research on affix ordering.

The present book is related to the Vienna Workshops on Affix Order and is the last of a sequence of collections of papers on affix ordering that have appeared since 2010. The other collections include Manova and Aronoff (2010a), Affix Combinations, and Aronoff and Manova (2010), Affix Combinations, Part 2, both published by Springer, as well as Manova (2011a), Affixes and Bases, published by Edinburgh University Press. The goals of this publication are similar to those of the previous ones: to provide better understanding of the mechanisms governing affix ordering through putting together research on affix ordering in typologically diverse languages that is carried out within different theoretical frameworks, and

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to make the various analyses of affix ordering phenomena comparable and more easily accessible through unification of terminology and methodology.

As already mentioned, the present volume is related to the Vienna Workshops on Affix Order, a workshop series that was supported by the Austrian Science Fund and a few other institutions such as the Erste Bank Vienna, the Mayer of Vienna, and the University of Vienna. Specifically, this publication contains a selection of papers presented at the third workshop that had the topic of Advances in Affix Order Research and took place at the University of Vienna on January 15–16, 2011. All the papers but Kim's “Mobile Affixation Within a Modular Approach to the Morphology–Phonology Interface” were delivered at the workshop, which does not mean that Kim's contribution is not related to the Vienna workshops. Kim participated at the first workshop in 2008 and gave a talk on mobile affixation in Huave whose written version, “Phonological and Morphological Conditions on Affix Ordering in Huave,” was published in Manova and Aronoff (2010a). However, Kim's Huave data and their OT analysis that ranks phonology over morphology (P >> M), as in McCarthy and Prince's (1993) paper, have raised some questions in the literature on affix ordering, specifically about the existence of phonologically driven affixation (see Paster 2009). Following a theoretical framework that assumes a modular architecture of grammar—that is, phonology and morphology are two different modules and the latter always precedes the former, which makes any interranking of the two impossible—Paster claims that there is no phonologically driven morphology. In other words, Paster's theoretical assumptions are incompatible with affix ordering based on phonological principles and, therefore, she offers alternative analyses of various examples of phonological affix ordering from the literature (Paster 2009). Kim's (2010) analysis of Huave is not invalidated, but a proposal is put forward how Kim's data could be reanalyzed so that they are no more considered instances of phonological affix ordering. Therefore, Kim was invited to contribute to the present volume and comment on possible alternative analyses of her Huave data in particular and on phonological affix ordering in general. In this way, Kim's contribution turns into a symbolic tie that goes from the first through the last publication in the series of publications on affix order Mark Aronoff and I have had the pleasure to edit over the years.

Virtually all papers included in this volume contribute novel data to the affix order debate, and the reader will find examples from Adyghe (Caucasian); Athpare and Camling (Kiranti); Bulgarian, Russian, and Polish (Slavic); English and German (Germanic); Greek; French and Italian (Romance); Huave (language isolate, Huavean); Karachay-Balkar (Turkic); Kurmanji (Kurdish); and Lithuanian (Baltic), among other languages.

As regards the analyses, they are couched within various theoretical frameworks and present the generative and nongenerative research paradigms. Additionally, the volume includes a contribution on the emergence of affix order in child language, the first of this type in the literature, as well as a paper that
discusses affix ordering within the East European linguistic tradition. The latter, as the reader will see, significantly differs from what is known from the studies that follow West European and American linguistic traditions.

Unlike previous research on affix ordering, most of the contributions in this collection consider more than one language. Discussed are, among other things, cases of affix ordering that pose problems to linguistic theory such as affix repetition, variable ordering, and interaction of prefixes and suffixes in terms of parasynthesis and mobile affixation. Novel examples of affix repetition and variable ordering are given, and the volume provides evidence that these phenomena are neither rare nor typical only of lesser-studied languages with unstable grammatical organization, as has been claimed in the literature so far.

This introductory article has the following structure. In section 1, the approaches to affix ordering known from the literature are presented and the organization of the volume explained. In section 2, brief descriptions of the papers are provided. Section 3 accommodates a short discussion and conclusions.

1. Approaches to Affix Order

In linguistic theory, overviews of the existing approaches to affix order are rare. This is maybe due to the challenging character of the task, since there are not really standardized approaches and linguists working on affix ordering just try to explain the patterns they are confronted with, any argument being eligible. On the other hand, this situation results in confusions regarding comparison and interpretation of findings and calls for postulation of approaches.

The following articles represent those rare attempts toward putting some order in the research on affix order: Muysken (1986), Manova and Aronoff (2010b), and Rice (2011). They all provide helpful information on what could be seen as existing approaches to affix ordering. However, it should be mentioned that Muysken’s work is also an argument against template morphology and draws on data from Quechua. Rice’s work is on affix ordering that is not word-class changing, and the data come primarily from understudied languages. Therefore, we will follow the classification in Manova and Aronoff (2010b), which is the most general one and covers well-studied and lesser-studied languages. It takes the type of information involved in affix ordering as a criterion for definition of approaches. Thus, Manova and Aronoff (2010b) differentiate between grammatical and extragrammatical factors and define eight different approaches to affix order, that is, eight different ordering types: (1) phonological, (2) morphological, (3) syntactic, (4) semantic, (5) statistical, (6) psycholinguistic, (7) cognitive, and (8) templatic.

A phonological approach, or phonological ordering, relies on phonological information such as termination of the derivational base in a vowel/consonant, including the exact types of those vowels/consonants, and so on. Thus an example of
a phonological-affix-ordering rule would be: ‘If the base terminates in a palatalized consonant, attach the suffix X to it.’ Purely phonologically ordered affixal systems are rare. Moreover, phonological affix ordering has been often reanalyzed as due to morphology and thus classified as morphological ordering, see the discussion in Kim, this volume.

A morphological approach uses rules of the type: ‘If affix A, then affix B.’ The approach is termed morphological since A and B are morphemes, be they classical morphemes that pair meaning and form or abstract morphemes in the sense of Distributed morphology (Halle and Marantz 1993). Abstract morphemes are usually presented in terms of morphosyntactic feature hierarchies or classes (see the analysis in Zimmermann, this volume).

The fact that in 58 languages with subject agreement the affixes that mark person and number usually attach in the order Person >> Number, i.e., person before number, (see the discussion in Trommer 2003) is a statistical observation, irrespective of how one accounts for it. Manova and Aronoff (2010b) term affix ordering based on statistical information statistical affix ordering. Constraints such as Person >> Number are also seen as hierarchical ordering in the literature as in an Optimality theory analysis Person >> Number reads “rank Person over Number.” Hierarchies such as Person >> Number combined with ALIGNMENT constraints allow for formulation of generalizations even in cases when the affixes that mark the respective features are not on the same side of the root. For example, Trommer (2003) observes that in the majority of the languages he scrutinizes person markers are usually prefixes while number markers are usually suffixes. He maintains that the order is Person >> Number as fused person/number markers share the position of the person marker. A hierarchical relationship between prefixes and suffixes in a single language (Greek), outside Optimality theory, is assumed in Efthymiou, this volume.

Syntactic approaches rely on the so-called Mirror Principle: “Morphological derivations must directly reflect syntactic derivations (and vice versa)” (Baker 1985, p. 375). Manova and Aronoff (2010b) make a clear distinction between syntactic and semantic affix ordering (contra Rice 2000), as syntactic ordering relies on syntactic information such as subject and object, whereas semantic ordering depends on information that involves semantic categories like ‘human,’ or ‘animate.’ The most frequently cited example of semantic ordering in the literature is the so-called scopal ordering, as illustrated for the whole language family, the Athapaskan, in Rice (2000). According to the principle of scopal semantic ordering, an affix with a broader scope follows an affix with a narrower scope in the word. This is, however, not always the case and scope can be overridden by other factors (see the examples in Rice 2000 and the discussion on scopal ordering in Letuchiy, this volume). Another popular instance of semantic ordering is the relevance principle postulated in Bybee (1985). According to this principle affixes that are more relevant to (affect stronger) the semantics of the root are closer to the root.
Psycholinguistic ordering reflects the degrees of ease/difficulty of processing of morphological structure; for example, more parsable affixes are outside less parsable ones because this order is easier to process by the human brain (Hay 2003, Plag & Hay 2004, Plag & Baayen 2009).

Cognitive affix ordering (cf. Manova 2011b) relies on information that is cognitive in nature; that is, it is based on the belief that general cognitive principles are also operative in grammar. Cognitive ordering, as the term implies, follows the assumptions of Cognitive grammar (Langacker 1987, Taylor 2002, among many others), where entrenchment of grammatical structure through frequency of use plays a major role; additionally, cognitive ordering can be linked to theories of cognitive (Fillmore 1982) and conceptual semantics (Jackendoff 1990), see Manova, this volume. Thus cognitive ordering can also be seen as related to semantic ordering, but the former differs from the latter as cognitive ordering does not control for scope or relevance but orders affixes in terms of (a limited number of) combinations of semantic concepts.

Templatic ordering means that the affixes in a language can be allotted to slots in a template that does not necessarily have a grammatical motivation. If only two affixes depend on each other the ordering is morphological; recall the definition of morphological ordering given above. In templatic morphology affixation should happen at once, while morphological ordering implies a step-by-step, layered derivation (see the explanation of templatic and layered morphology in Manova and Aronoff 2010b). In this volume, in order not to split the papers into too many sections, templates are under morphological ordering (see Gündoğdu’s paper), which is in line with research in affix order that does not differentiate between templatic and morphological ordering (see, e.g., Hyman 2003 and Rice 2011). However, it should also be mentioned that the template Gündoğdu postulates is not a prototypical instance of a template but exhibits some elements of layered morphology, as some of the affix combinations it accounts for can be seen as derived step-by-step.

Thus the majority of the papers in the present volume are distributed into three groups that form the first three parts of the book: Part I: Syntactic and Semantic Ordering, Part II: Phonological and Morphological Ordering, and Part III: Psycholinguistic and Cognitive Ordering. In this way, the volume covers the major approaches to affix order. The last part of the volume, Part IV, is titled Description and Acquisition of Affix Order, as the two papers it contains focus on issues related to the description and acquisition of the order of affixes (which does not mean that those papers do not use semantic and morphological information for the ordering of affixes they discuss).

Finally, as Manova and Aronoff (2010b) underline, it is seldom the case that the order of all affixes in a language depends on a single factor, so the assignment of a paper to a particular part of the book does not mean that it relies on a single type or on two types of information with respect to affix ordering but that the major argument is of a particular type.
2. The Papers in This Volume

In addition to this introductory article, the present volume includes ten papers that, as already mentioned, illustrate the major approaches to affix order. I provide short descriptions of the contributions to the volume here.

Three papers are included in Part I of the book that is on syntactic and semantic ordering. In “Recursive Passivization: A Causative Coercion Account,” Ekaterina Lyutikova and Sergei Tatevosov discuss double passivization, a phenomenon that is hard to account for in many theories of grammar. The data come from Karachay-Balkar (Altaic, Turkic). In this language the affixes associated with the expression of passive can be repeated. The authors explain this situation with covert causativization; that is, they maintain that in the course of derivation of double passives a new causing subevent and its individual participants are introduced to the event structure, which thus makes possible the derivation of what looks like a passivization of already passive predicates. Causativization that feeds passivization occurs covertly, as a coercion operation.

“Scope Versus Ordering of Operations: Causativization and Ordering of Valency-Changing Operations in Adyghe” by Alexander Letuchiy stays on the topic of causativization. The paper tackles the ordering of valency-changing operations in the verb of the North Caucasian language Adyghe. The author claims that the suffixal part of the Adyghe verb is a case of layered morphology, while the prefixal part appears templatically organized and thus hard to explain with the Mirror principle. As is typical of template morphology, the linear order of prefixes reflects neither their semantic scope nor the ordering of the valency-changing operations they mark, which may, as the author shows, give rise to ambiguity of reading. Nevertheless, there is a tendency for the causative operation to apply after all other valency-changing operations, which is, according to the author, explicable with the placement of the causative marker—a prefix that immediately precedes the verb root.

“Modern Greek Parasynthetic Verbs: A Hierarchical Relationship Between Prefixes and Suffixes?” by Angeliki Efthymiou contributes to the discussion of the role of prefixes and suffixes in affix ordering. The study is based on 308 parasynthetic verbs collected from the Reverse Dictionary of Modern Greek (2002). A parasynthetic verb possesses two affixes, a prefix and a suffix, and it is often hard to decide in which order the two affixes attach. The author claims that the linear ordering of prefixes and suffixes reflects the information content of each affix and its contribution to the morphological structure of the parasynthetic verb. Specifically, prefixes in parasynthetic verbs determine the core semantics of the verb. It is shown that affixation is also influenced by register and frequency.

Part II of the volume is on phonological and morphological ordering and consists of the following contributions: Kim’s paper “Mobile Affixation Within a Modular Approach to the Morphology–Phonology Interface” discusses a rare case of mobile affixation in Huave, a language isolate spoken in Oaxaca State,
Mexico. In this language affixes end up as either prefixes or suffixes, depending on the phonological properties of the base. The author discusses possible alternative analyses of the data such as: (1) epenthesis avoidance in an optimality theoretic approach that assumes a P >> M architecture of grammar with phonological epenthesis-avoidance constraints outranking morphological constraints that require mobile affixes to be suffixal, (2) feature-floating analysis, and (3) a suppletive allomorphy analysis with subcategorization frames. Comparing these three alternative solutions to the same problem, Kim also tries to answer the question of whether there is phonological affix ordering.

Like one of the alternative solutions in Kim’s paper, Eva Zimmermann’s “Hierarchy-Governed Affix Order in Eastern Kiranti” provides an Optimality theory analysis. However, Zimmermann claims to offer an analysis that is superior to the subcategorization approach (another alternative discussed in Kim), as Zimmermann’s analysis does not rely on affix-specific constraints in terms of subcategorization frames but instead uses morphosyntactic feature classes (i.e., abstract morphemes in the sense of Distributed morphology, Halle and Marantz 1993), which allows for generalizations and typological comparisons across languages. Zimmerman discusses the linear order of the inflectional suffixes in the Kiranti language Athpare and explains it with the help of a language-specific hierarchy of morphosyntactic feature classes, ALIGNMENT constraints, and a markedness constraint that requires an unambiguous marking of the agent argument. The analysis also involves a comparison with other closely related Eastern Kiranti languages. The Eastern Kiranti languages appear peculiar from a typological point of view, since they do not follow the established in Trommer (2003) Person >> Number ordering with respect to person and number agreement markers.

Songül Gündoğdu’s paper “Negation in Kurmanji” investigates the negation morphology of Kurmanji Kurdish verbs. The author, a Turkish-Kurmanji bilingual speaker, provides a fairly detailed description of that language’s verbal morphology and argues that Kurmanji is a case of templatic affix ordering as the affixes that occupy the same slot do not co-occur, which is also how negation functions in Kurmanji verbs: the attachment of a negation prefix to a verb stem blocks the appearance of certain tense/aspect/mood prefixes. However, the Kurmanji verb morphology also shows elements of layered morphological organization.

Part III of the book, on psycholinguistic and cognitive ordering, includes two papers: In “Suffix Combinations in Italian: Selectional Restrictions and Processing Constraints” Luigi Talamo discusses the combinations of some Italian derivational suffixes. The analysis tests whether the ordering of the suffixes follows psycholinguistic factors—that is, the so-called Complexity-Based Ordering (CBO). CBO assumes that affix ordering depends on processing constraints, and, based on the degrees of parsability of individual affixes, establishes a hierarchy of affixes. With the help of the hierarchy, one can predict possible
affix combinations and restrict the impossible ones. The paper also tackles the correlation between suffix productivity and suffix position in the CBO hierarchy. Additionally, the role of selectional restrictions in suffix combinations is discussed.

Stela Manova’s paper “Affix Order and the Structure of the Slavic Word” investigates the structural properties of the Slavic word in terms of affix ordering. The data come from Bulgarian (South Slavic), Russian (East Slavic), and Polish (West Slavic), and thus cover all three subgroups of the Slavic family. After a brief discussion of why CBO fails to account for Slavic data, an alternative approach is applied. The latter is domain-specific and cognitively oriented. It is argued that the Slavic word consists of different domains and subdomains defined through the affix-order peculiarities they exhibit. There are prefixational and suffixational domains; the suffixational domain is further divided into derivational and inflectional domains, and within the derivational domain there are evaluative and nonevaluative subdomains. The paper focuses on the order of the suffixes in the nonevaluative derivational domain where the lexical-category specification of a suffix, suffix-particular semantics, and the notion of default are the factors governing suffix combinability. All suffix combinations are either fixed or predictable and entrenchment, in the sense of Cognitive grammar, plays an important role in suffixation. The structure of the Slavic word is also compared with that of the English word.

The Part IV of the book is devoted to issues related to the description and first language acquisition of affix order and comprises two papers: “Suffix Sets in Polish De-nominal Derivatives” by Iwona Burkacka discusses suffix sequences in denominal derivations in contemporary Polish. The analysis relies on the data of the newest resource on Polish word-formation Słownik gniazd słowotwórczych współczesnego języka ogólnopolskiego, which is a dictionary of word-formation nests. The author also follows the methodology of this dictionary. The article shows that most suffix sequences in Polish tend to be short (i.e., they usually involve two suffixes) and homogenous (i.e., addition of suffixes is seldom interrupted by other derivation techniques such as conversion).

In “Reduplication, Repetition, Hypercharacterization, and Other AffixDoubling in Child Language,” Dressler, Dziubalska-Kolaczyk, Gagarina, and Kilani-Schoch deal with cases of affix ordering in first language acquisition that entail repetition. According to the authors, a repetition in the ordering of affixes may be total or partial, and may affect both form and meaning or only meaning. Repetitions are classified into subtypes such as traditional onomatopoetic repetitions, innovative onomatopoetic repetitions, and repetitions of specific suffixes, especially those involved in the formation of diminutives and plurals. The article shows the importance of early language acquisition for the better understanding of affix order and recursivity, since early repetitive operations seem to serve as trainings for morphological (de)composition and affix stacking.
3. Discussion and Conclusions

As already mentioned, this volume comprises original recent papers that explore different approaches to affix ordering and provide analyses within various theoretical frameworks. The data come from well-studied and lesser-studied languages alike. Thus the volume appears indicative about the recent developments in the research on affix ordering.

The papers in the present book reveal a number of novel, positive tendencies in the current research on affix ordering:

- **Looking for facts in more than one language:** While in the previous collections (Manova & Aronoff 2010a, Aronoff & Manova 2010, and Manova 2011) almost all papers were on affix ordering in a single language, six out of the ten contributions in this volume compare their findings with affix ordering in other languages (Efthymiou, Kim, Zimmermann, Talamo, Manova, and Dressler et al.).

- **Consideration of complete inflectional paradigms:** The analyses of affix order patterns in lesser-studied languages no longer involve only pieces of data, but the whole inflectional paradigms (Zimmermann and Gündoğdu). Moreover, there is already research on affix order in lesser-studied languages done by native speakers (Gündoğdu).

- **Discussion of virtually the same affix ordering phenomena:**
  - The behavior of prefixes and suffixes and where these two types of affixes should be analyzed as staying in some relationship or as two different domains of affixation (Letuchiy, Efthymiou, Kim, and Manova). In this book both perspectives are taken: Letuchiy and Manova argue for two separate domains, because prefixes and suffixes exhibit two different types of ordering, while Kim's and Efthymiou's analyses rely on specific interactions between the prefixes and suffixes in a particular language.
  - Repetition and permutation of affixes (Lyutikova & Tatevosov, Zimmermann, Talamo, Manova, Burkacka, and Dressler et al.). These two types of peculiar affix order patterns are not only typical of lesser-studied languages but quite normal in well-studied languages as well; they challenge many theories of grammar but are much more frequent in the languages of the world than it has been assumed so far.
  - Hierarchical ordering of affixes, features, or modules, depending on the theory (Lyutikova & Tatevosov, Efthymiou, Kim, Zimmermann, Gündoğdu, Talamo, and Manova).
  - Length of affix sequences (Manova and Burkacka). This issue is still underrated in the literature on affix ordering, but it is directly related, for example, to hierarchical ordering. It raises the important question of what should be described in terms of a hierarchy: that is, whether...
a theory should put into a hierarchical relationship all elements of a system, be they real or abstract morphemes, if they all never co-occur in a word.

- **Facts from first language acquisition:** Affix ordering phenomena involving repetition of affixes, which are a real challenge to linguistic theories (Lyutikova and Tatevosov, Manova, and Burkacka), are most probably used by children as training strategies in the early stages of the first language acquisition (Dressler et al.).

Although there has been much interest in affix ordering in recent years and every paper on the topic advances our understanding of the mechanisms behind affix ordering, there are still issues that call for explanation. In what follows, I briefly discuss the difficult issues in the current research on affix ordering.

- **Relation between data and theory:** With respect to this issue, papers on affix ordering are of two types: from-theory-to-data (i.e., top-down) and from-data-to-theory (i.e., bottom-up), which does not mean that the second type of papers does not formulate hypotheses. The belonging of a paper to one of the two groups seems to depend mostly on the language analyzed and contributions on lesser-studied languages are, as a rule, top-down. This is perhaps due to the fact that researchers of lesser-studied languages do not have access to resources such as electronic corpora, to which researchers of well-studied languages do. Consequently, research on lesser-studied languages is based on selected examples and concentrates on peculiar phenomena that challenge a particular theory. This situation, however, seems to heavily influence the way affix ordering is analyzed as well as the conclusions drawn. For example, while syntactic categories such as subject and object are quite common in the description of affix order patterns of lesser-studied languages, they are not used for the description of well-studied languages, though such an analysis is possible. Let me exemplify syntactic ordering with data from English:

(1) *employ-er*
    employ-subject

(2) *employ-ee*
    employ-object

Moreover, affixes that attach to verbal stems and mark subjects and objects are classified as verbal in the analyses of lesser-studied languages and as nominal in the analysis of well-studied languages: that is, *-er* in *employer* (1) and *-ee* in *employee* (2) are nominalizing suffixes in English, but they would have been word-class-preserving verbal affixes if English were a
lesser-studied language (see the papers in the first part of the volume). In general, research on affix ordering in verbs usually involves argument structure (i.e., syntactic ordering) whereas the derivation of nouns is, as a rule, explained as due to other factors. The overall picture blurs even more if one considers that research on lesser-studied languages accounts for affix ordering in verbs, whereas affix ordering in well-known languages such as Germanic, Romance, and Slavic (see Talamo, Manova, Burkacka, Dressler et al. in this volume) pays more attention to the derivation of nouns, since in Germanic, Romance, and Slavic the majority of suffixes are nominalizing. Additionally, while Manova argues that lexical categories such as nouns, adjectives, and verbs play important roles in affix order in Slavic languages and English, Letuchiy (this volume), based on data from Adyghe (North Caucasian), claims that there is no principle difference between nouns and verbs. Letuchiy writes that he uses the term ‘verb’ to refer to forms that typically bear predicative markers, such as tense/aspect/mood markers or markers of valency change, but actually in Adyghe both nouns and verbs can take tense/aspect/mood markers. Note that in well-studied languages we also have instances where markers of categories that are prototypically verbal occur on nouns (Manova 2011c: Chapter 1). Nominalizations from secondary imperfective verbs in Slavic illustrate the point as they exhibit an aspectual suffix. However, Slavic deverbal nominalizations are not considered bearing verbal markers but are seen as derived from verbal stems.

The above facts seem to imply that we are used to approach well-studied and lesser-studied languages in two different ways, which favors more establishing of differences than of commonalities.

- **Alternative analyses are still seldom:** Contributions focused on theoretical issues seldom try alternative analyses, and if they do, it seems that the theoretical framework selected could influence the conclusions drawn. See Kim's paper for an explicit discussion of this issue with respect to morphology-phonology interface and the (non)existence of phonological affix ordering.

- **Form–meaning relations:** Following different theoretical frameworks, the papers also assume different relations between form and meaning in affix ordering. Such issues are seldom explicitly discussed in a paper on affix ordering, but according to the form–meaning relation assumed, there are three types of papers. The first type follows the traditional view that an affix, since a morpheme, is a pairing of meaning and form (see Gündoğdu's, Talamo's, and Burkacka's papers). However, in word- and lexeme-based generative morphology (e.g., Realizational morphology, Anderson 1992, Aronoff 1994, Stump 2001; and Construction

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2 Rice (2011) is on word-class-preserving affix ordering in verbs in lesser-studied languages, and can be used as another source of examples.
morphology, Booij 2010) affixes do not have semantics but only phonological form, and receive semantic interpretation in words and constructions of words. Put differently, form and meaning are treated separately and then linked; the best illustration of this approach is the principle of paradigm linkage in Stump (2001). For various reasons, including traditional education, it is hard to imagine that affixes are semantically empty, but an analysis that sees affixes as just markings also appears difficult from a technical point of view, if one does not adopt Stump’s formalisms. This could be the explanation for why none of the papers in this volume explicitly relates to Stump (2001), though Gündoğdu’s analysis of Kurmanji could be seen as being in this direction, and Zimmermann’s analysis of Athpare also has some such elements.

The third type of papers follows Distributed morphology, where affix is an abstract unit and refers to a syntactic terminal node and its content, not to the phonological expression of that terminal. Thus in Distributed morphology, affixes with the same meaning, such as the plural -s in books and -en in oxen, are the same affix because they both express the same feature [pl] (Embick and Noyer 2007). Because of the late insertion of phonological material (realization), which means separation of meaning and form, Distributed morphology is also considered an instance of Realizational morphology. Zimmermann’s paper is an illustration of a Distributed morphology analysis. It should be noted that the majority of the papers in this volume seem to provide evidence in favor of form–meaning correspondence as that in Distributed morphology, but not all of the papers are compatible with an organization of grammar as the one assumed in Distributed morphology (see the discussion in Manova’s paper). Additionally, the alternative analyses of the phonology–morphology interface in Kim’s paper could also be related to the meaning–form issue: If in the adopted model of grammar vocabulary insertion—that is, assignment of phonological form or exponence—takes place as the last operation, then morphologically driven phonology is the only possibility; if phonology is not the last in a series of operations, phonologically driven morphology is an eligible alternative option.

In conclusion, due to the above listed problems, it is hard to say what exactly the existing research on affix ordering tells us about the general architecture of grammar. It is still not clear how much of what we believe to know from affix ordering studies about the architecture of grammar represents its real architecture, and how much is just the side effects of our theoretical assumptions. Further research is necessary to assess the role of lexical categories such as nouns and verbs as well as the role of entrenchment of grammatical structure in affix ordering. Plag and Baayen (2009) refer to the latter issue as the role of memory. Nevertheless, this volume provides clear evidence against the most recent proposal for affix
ordering in English, the CBO (cf. Hay 2003, Hay & Plag 2004, Plag & Baayen 2009, among others). The majority of the affix order patterns discussed in the different papers of the volume involve permutation and repetition of affixes and are thus incompatible with a hierarchy of affixes of the CBO type. (For an illustration of a hierarchy of the CBO type, see Talamo, this volume.)

As the papers in this volume apply different approaches and provide analyses within different theoretical frameworks, including the East European linguistic tradition, virtually every linguist could find a contribution that would appeal to his or her own theoretical persuasion. This book also has things to offer to linguists interested in the particular languages and language families that provide the data for the analyses in the different papers. Last but not least, as the volume illustrates all major approaches to affix order, it is a good starting point for anybody interested in the topic of affix ordering.

References


