Book Review<br>Brian MacWhinney, Andrej Malchukov, and Edith Moravscik (Editors): Competing Motivations in Grammar and Usage, 2014, pp. 445, ISBN: 9780198709848, \$130.00.

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## 1 Introduction

There are few books related to competing motivations and no book has specifically focused on competing motivations in grammar and usage. Brian MacWhinney, Andrej Malchukov, and Edith Moravscik's edited volume Competing Motivations in Grammar and Usage is a new contribution that addresses this important issue. It covers a wide range of topics from synchronic research to diachronic research. Many questions about competing motivations are resolved. Some chapters discuss the competition in the online production and comprehension of grammatical dependencies from the perspective of syntactics, semantics, and pragmatics. Others focus on the means of resolving competitions in various grammatical domains and in various processes. Following the Introduction by Edith Moravscik, the volume presents twenty-one studies on competing motivation in language and comprises three parts. The first part focuses on competition in syntax and deals with grammatical relations and word order. The second part provides case studies of competition in morphosyntax and the lexicon. Finally, the third part considers the general issues brought to light and possible extensions of the research. The contributions are reviewed as follows.

## 2 Competition in Syntax: Grammatical Relations and Word Order

The first part of the volume, consisting of nine studies, considers competition in syntax with a focus on grammatical relations and word order. The topic of relative clause extraposition is also discussed with respect to English and in

German. In addition, there are some investigations on the influence of competition in children's language acquisition.
"Resolving alignment conflicts: A competing motivations approach" by Andrej Malchukov presents us with alignment conflicts in both monotransitive and ditransitive constructions. As to the monotransitive domain, the author illustrates some examples in imperative formation, control constructions, and nominalizations respectively. He summarizes the essentials to the resolution of alignment conflicts in the monotransitive domain as follows: certain constructions may have functionally determined Biases; when these Biases conform to the coding alignment (Harmony), more crosslinguistic consistency is found; when these Biases conflict with the coding alignment (Harmony), more crosslinguistic variation is found. In his second part he introduces ditransitive alignment from the following three perspectives: antipassives, incorporation, and reciprocal formation. Like the monotransitive domain, the ditransitive alignment is also determined by the interaction of Harmony and Bias constraints. Therefore, the author concludes that the alignment conflicts can be explained by the interaction of Harmony and Bias. Harmony embodies the analogical tendency for coding and Bias embodies intrinsic alignment preferences dictated by functional properties of individual constructions. He further concludes that crosslinguistic consistency will be observed when Harmony and Bias constraints converge on the same pattern, while the occurrence of crosslinguistic variation is the outcome of the conflict of Harmony and Bias constraints.

The second study, "Animate object fronting in Dutch: A production study" by Monique J. A. Lamers and Helen de Hoop, mainly addresses the competition between inanimate subject and animate object in Dutch. It is acknowledged that subject-before-object is the most widely used word order in the languages of the world and subjects are often animate noun phrases, while fronted objects are generally considered to be reasonable in Dutch. However, not all objects can be moved to the front: some phrases are easy to move while others are relatively difficult to move. Therefore, the authors adopted the Optimality Theory approach and carried out a sentence production study. These two tendencies - Subject First and Animate First coincide when the subject of the sentence is animate and the object is inanimate. The thesis focuses on the competition of the two principles when the subject of the sentence is inanimate and the object is animate. The authors investigated three types of verbs: agentive verbs, causative psych verbs, and unaccusative psych verbs. Each type includes three pairs of animate and inanimate definite DPs. They selected thirty participants of
native speakers of Dutch. Participants had to write a sentence using the words that were presented on the list. Then the authors depicted the percentage of produced subject-initial and object-initial sentences for each verb type. The results were analyzed by loglinear analyses. As expected, the majority of the sentences were subject-initial active sentences. However, object-before-subject sentences mainly exist in unaccusative psych verbs; because passive cannot be used in unaccusative psych verbs, speakers must choose whether they start with the subject first or with the animate first. Therefore, they give up using passive constructions and can only front the object to satisfy the preference to start the sentence with an animate noun phrase, motivated presumably by hearer comprehension. In this way, the hearer can understand it more easily.

John A. Hawkins in his "Patterns in competing motivations and the interaction of principles" investigates the ways in which different linguistic principles cooperate and compete in the data of language performance and the distribution of grammatical variants across languages. He analyzes three general patterns: Degree of preference (Pattern One), which means each principle P applies to predict a set of outputs $\{\mathrm{P}\}$, as opposed to a competing set $\left\{\mathrm{P}^{\prime}\right\}$ possibly empty, in proportion to the degree of preference defined by P for $\{\mathrm{P}\}$ over $\{\mathrm{P}\}$ within a theory of processing ease and efficiency; Cooperation (Pattern Two) is that the more principles there are that define a collective preference for a common set of outputs $\{\mathrm{P}\}$, as opposed to a proper subset or complement set $\{\mathrm{P} ’\}$ motivated by fewer principles, the greater will be the preference for and size of $\{\mathrm{P}\}$; and, lastly, A competition hypothesis (Pattern Three), which indicates when there is competition between two principles $A$ and $B$, where each predicts a different set of outputs in the competing structures to which both apply, $\{A\}$ versus $\{B\}$, then each continues to apply (a) in proportion to its intrinsic degree of preference, as in Pattern One, (b) each may be reinforced by supporting principles, as in Pattern Two, but (c) the relative strength of A over B will be in proportion to the relative degree of preference defined for $\{A\}>\{B\}$ within a theory of processing ease and efficiency, in performance, in grammars, and in learning stages in order to clarify how principles work together and why some principles should be stronger than others and should win more of the competitions. The author also emphasizes the basic idea that efficiency and ease are extremely significant in shaping all of performance, grammar, the interaction between principles, and the manner of their cooperation and their relative strength in competition.

Elaine J. Francis and Laura A. Michaelis’ study "Why move? How weight and discourse factors combine to predict relative clause extraposition in English" investigates the interplay between two factors - grammatical weight and discourse. Previous studies have already shown that both grammatical weight and discourse factors play a very important role in the use of relative clause extraposition (RCE). This study further explores the interaction between these two factors. In RCE, a subject-modifying relative clause is moved behind the VP rather than appear next to its head noun, as in Further research has been conducted on this that indicates this criticism may not be just. Using data from the International Corpus of English-Great Britain (ICE-GB) the authors undertook a quantitative and qualitative analysis of RCE and non-RCE sentences. The results supported findings from previous studies and showed that speakers have a strong preference for RCE when the relative clause is at least five times longer than the verb phrase. More precisely, grammatical weight plays the strongest role in using RCE when the ratio of VP length to RC length is less than 0.2 and greater than 0.8 . And when the ratio is between the two, discourse-related factors including definiteness of the subject NP and predicate type, primarily determine the use of extraposition. They conclude that sentences with an indefinite subject NP and a passive or presentative main verb are more likely to use RCE. As to the accessibility of the predicate, superset-mention predicates are more likely to use REC than new predicates. However, this study is limited in its discussion of the conditions regarding which discourse factors may prevail over grammatical weight.

Jan Strunk's study "A statistical model of competing motivations affecting relative clause extraposition in German" furthers the line of research in the preceding chapter by Francis and Michaelis. Strunk investigates RCE from functionalist, psycholinguistic, and generative perspectives. Six factors - the length of the relative clause, the (hypothetical) distance between antecedent and relative clause, the number of (potentially) intervening DPs, the depth of embedding of the antecedent (syntactic locality), its definiteness, and the restrictiveness of the relative clause - are proposed in his chapter. He concludes that the phenomenon of RCE can be accounted for by multivariate factors rather than by a single one. In addition, he shows that some strong constraints against RCE can be violated by increasing the antecedent's salience and the predictability of the RC.

Ina Bornkessel-Schlesewsky and Matthias Schlesewsky in their contribution "Competition in argument interpretation: Evidence from the neurobiology of language" undertake to account for argument interpretation
from a neurobiological perspective, utilizing the extended Argument Dependency Model. Contrary to a "wait-and-see" strategy, the authors adopt an incremental interpretation, proposing that sentences are processed incrementally; that is, each new incoming input element is integrated with the previous input and interpreted as deeply as possible. The authors introduce three cardinal categories: actor, subject, and topic. They claim that in real-time language processing, potential arguments compete with each other to be interpreted as one of the three cardinal categories. They hypothesize that actor is the most prominent argument, topic is the argument with the highest degree of aboutness, and subject is the argument with the highest degree of persistence. In fact, the three cardinal categories all focus on one particular argument, but they differ in temporal dimension. That is, actor serves to anchor an argument at present, subject the past, and topic the future. Finally, the authors provide an outline for a neurobiological framework for modeling competition between the three cardinal categories and present a contrastive study between their method and the Competition Model.

The seventh contribution by Caroline F. Rowland, Claire Noble, and Angel Chan "Competition all the way down: How children learn word order cues to sentence meaning" claims that most prior studies have focused on cues competing within a construction rather than exploring how the constructions themselves compete. Therefore, the authors investigate child learners of English, Welsh, and Cantonese respectively. The English data show that the phenomenon of two syntactic options conveying the same semantic information with different word orders delays child language acquisition. The Welsh data more strongly support the competition model because the Welsh children acquire the prepositional datives construction earlier than English children. The final analysis of Cantonese data reveals that different word orders also influence children language acquisition. Their study demonstrates how the acquisition mechanism behaves when constructions compete and how the language learning mechanism works. They propose that additional research is needed with respect to child language acquisition of cross-verb and cross-structural generalizations on the basis of structural and semantic similarities, and the cues that are available to children in their language development and how these cues interact with each other.

In their contribution "Competing motivations in children's omission of subjects? The interaction between verb finiteness and referent accessibility" Mary E. Hughes and Shanley E. M. Allen investigate the phenomenon of
children's omission of subjects. They point to two main theories that provide two distinct explanations: (i) nativists claim that it is when their accompanying verb is non-finite that subjects are omitted, while (ii) usagebased theorists claim that it is when their referents are accessible in discourse that subjects are omitted. However, neither of these two explanations is sufficient. Following their experimentation and analysis, the authors conclude that these two explanations interact with each other rather than compete. Their data show that subjects are more likely to be omitted when their referents are accessible both in finite and non-finite verbs, and subjects are more likely to be omitted in non-finite verbs whether the referents are maximally accessible or not. They conclude that both finiteness and accessibility play a significant role in early subject omission.

Grzegorz Krajewski and Elena Lieven in their chapter "Competing cues in early syntactic development" review recent studies within the Cue Competition Model (Bates \& MacWhinney, 1989), focusing mainly on children's learning of the transitive construction. They aim to discover children's ability to understand the construction, i.e. their ability to discriminate agent and patient, the influence of word order and case marking in language processing in different languages, and further to investigate when and how children come to realize the abstract grammar and cues within constructions. The results show that children's ability to productively use inflections as syntactic cues guiding sentence comprehension develop gradually. At the beginning, children can understand only the sentences that have a prototype or gestalt, that is, sentences with an animate subject and inanimate object and familiar word order. As time goes on, they realize that case marking is more reliable than word order and can successfully deal with sentences in which the cues are in competition. That is to say, children first start with prototypical sentences and then single out individual cues and finally they can take in the relative reliability of those cues. They need quite a long time to learn those competing cues; acquiring them is achieved in a slow and gradual process and cognitive and pragmatic factors are also involved.

## 3 Competition in Morphosyntax and the Lexicon

The second section of the volume contains five studies that focus on competing motivations in morphosyntax and the lexicon. Competing
motivations explain why some particular phenomenon happens in a given language and they are the most forceful in language acquisition and language change.

The first chapter in this section titled "Conflicting vs. convergent vs. interdependent motivations in morphology" by Wolfgang U. Dressler, Gary Libben, and Katharina Korecky-Kroll introduces four different senses of 'competing motivations': conflicting motivations, convergent motivations, interdependent motivations, and sufficient and partial motivations. As for some phenomena, some generalizations are specific to some constructions in analyzing language and therefore they are independent. In some circumstances, there may be two or more generalizations that make the same prediction about the same construction and thus they converge. And there also may be a third case. That is, two or more generalizations make different predictions on the same construction and thus conflict with each other. The authors analyze the competition among motivations in morphology, grammar, lexicon, and discourse, which include affix order and markedness vs. frequency. They also investigate morphology from a psycholinguistic perspective. Their study focuses mainly on first language acquisition of phonotactics and morphonotactics and diminutives. In addition, the results of the work on the acquisition and processing of actual, potential, and unacceptable German plurals are involved.

Martin Haspelmath in "On system pressure competing with economic motivation" discusses two motivating principles in competition - frequencybased form minimization (economic motivation) and class-based grammatical coding (system pressure). The former means more frequent forms tend to be shorter than rarer forms and the latter is that rules of grammar generally target large classes of items, rather than individual expressions or small classes. Though economical motivation seems to be highly accepted, the author maintains that we should not overlook the system pressure factor. Haspelmath illustrates some cases motivated by economical influences and system pressure respectively. He notes that these two motivations can be thought of as competing factors. Sometimes economical motivation cannot explain the tendency for entire lexeme classes or subclasses to behave alike.

In the chapter titled "Apparently competing motivations in morphosyntactic variation" Britta Mondorf pays attention to the competition between analytic variants and synthetic variants. She first investigates in which linguistic environments language users favor analytic variants over synthetic ones, taking the more-variant and the -er-variant as
examples. She explains the reason that analytic variants are easier to process. Finally she introduces the notion of analytic support. New information, abstract uses, negated contexts, low frequency words, and complements all are in favor of analytic variants.
"Formal vs. functional motivations for the structure of self-repair in German" by Martin Pfeiffer investigates self-repair in German from a syntactic perspective. Self-repair, which can be defined as repetitions, substitutions, insertions, or deletions of the utterance, is one of the main characteristics of spoken language. The study focuses solely on substitutions. The author proposes three phases in substitution: the original utterance, the editing phase, and the repair. The research discusses mainly the third phrase, especially the point of retracing, aiming to discover how the speaker chooses the point of retracing and what the motivations are that influence this selection process. Using the competing motivations model, Pfeiffer explains the organization of retractions in self-repair and develops a model that focuses only on one formal and one functional motivation within the prepositional phrase. The author collects eighty instances (only substitutions of the noun within a prepositional phrase) from audio-recorded everyday conversations, informal interviews and psychotherapeutic interaction in German. The data are divided into two groups: (i) semantic repair, which includes the three subgroups semantic elaboration, semantic error repair, and unclear semantic repair, and (ii) phonological repair. The majority of semantic repairs are retraced to the preposition, while there is a strong tendency to retrace to the noun in phonological repair. Pfeiffer finds that in semantic repair formal motivation is stronger, while in phonological repair functional motivation is much stronger. The strength of each motivation varies according to the type of problem that needs repair. Since the study is limited to a syntactic analysis of self-repair in prepositional phrases in German, there remains a need to explore other motivations that potentially influence the point of retracing.

Generally speaking, most of the studies in this volume focus on speech production and analyze data of speakers. Accordingly, researchers take the point of view of the speaker to analyze utterances. However, John Haiman in his chapter "Six competing motives for repetition" discusses competing motivations from the perspective of the hearer. Haiman tries to analyze what meanings could lie behind one specific linguistic production. He attempts to reveal possible motivations of repetition, one of the most frequent forms in language. That is to say, if a speaker produces some repetitive expressions, the hearer must determine which competing meanings could lie behind that
repetition and which meaning the speaker wanted to express. The author illustrates six different competing motivations: iconic repetition, decorative repetition, histrionic repetition, intertextual conformity, intertextual sycophancy, and the intertextual expression of contempt. In the orthography of the Khmer language, compensatory diacritics or additional labels distinguish these options from each other.

## 4 General Issues and the Extension of the Approach

The seven chapters of the third part of the volume discuss additional issues in competing motivations.

John W. Du Bois in "Motivating competition" discusses the relation among motivations, competitions, and resolutions. He maintains that the three cannot be separated from each other nor can they be understood in isolation. Motivation shapes the organization of grammar and competition arises between and among these motivations; resolution of these competitions comes about through the systematic and systematizing processes of grammaticization. Du Bois argues that competition first arises in the real-time decision-making of verbalization and interpretation and ultimately must be resolved. All of these are viewed in relation to how speakers use language to achieve their communicative goals. The author introduces the notions of competing strategies, fitness criteria, and the Functional Frequency Principle. Lastly, he characterizes the phenomena of competition.

The previous studies pay attention mainly to competing motivations in synchronic structure. In fact, competition, a process that takes place in real time, is dynamic. Because the immediate process of synchronic structure is historical change, Sonia Cristofaro in her study "Competing motivation models and diachrony: What evidence for what motivations?" investigates competitions of motivations in diachrony. She notes that competing motivation models and functionally oriented explanations in general, are routinely proposed on synchronic grounds. However, she argues, it cannot explain some hypotheses of some constructions that have been proposed based on synchronic distributional patterns. The development of different alignment systems and that of overt as opposed to zero marking for number best exemplify his view that any model of the principles that lead to the use
of particular constructions should take into account the diachronic development of these constructions, rather than just their synchronic distribution.

Frederick J. Newmeyer in his "Where do motivations compete?" explores two approaches to competing motivations within grammatical theory, namely, Direct Competition and Indirect Competition. Direct Competition means that there is a direct linkage between properties of particular grammars and the competing functional motivations that account for those properties, while Indirect Competition indicates that there is no direct linkage. According to his analysis, Newmeyer maintains that the Direct Competition approach is indefensible. He endeavors to discover the locus of competing motivations. And he concludes that we can characterize the general, typological influence of function on form, but it is impossible for us to know how the various competing factors affect a particular property of a particular language.

Politeness distinctions in personal pronouns are widely used in some particular areas that indicate the social hierarchy between the speaker and the referent of the pronoun. Johannes Helmbrecht in "Politeness distinctions in personal pronouns: A case study on competing motivations" presents politeness distinctions in pronouns as depicted in The World Atlas of Language Structures. She finds three special phenomena: Firstly, almost all languages that acquired a second-person polite pronoun at some point in their history began with a 2PL pronoun used as a polite 2 SG.HON form. Secondly, the areal spread of this distinction was not arbitrary. Thirdly, this type of pattern is often borrowed. Later, she provides a functional analysis of emergence and diffusion of politeness distinctions in personal pronouns in Europe by means of the competing motivations approach. In so doing, she shows that economy, politeness, and prestige are particularly important motivations in spreading the use of 2PL pronouns as 2SG.HON pronouns.

In the chapter titled "Or constructions: Monosemy vs. polysemy" Mira Ariel chooses the or construction in order to exemplify the variation between construction polysemy accompanied by heavy inferencing and construction monosemy, which requires only minimal inferencing. She first introduces the characteristics of the forms without dedicated disjunctions. She goes on to propose five types of basic polysemous disjunctive construction: inclusive, exclusive, equivalence, repair, and the creation of an ad hoc higher-level category. Lastly, some specialized disjunction sub-constructions are listed. Her analysis indicates that inferences and polysemic codes compete not only at the language level but also in real-time interactions. The author finds that
the polysemous construction ( X or Y ) enables speakers to express disjunctive ideas and the monosemous construction can encode a specific understanding. If the context lacks contextual clues, monosemy wins. Otherwise, it presents polysemy. The listener can make inferences to understand what s/he has heard. The author concludes that different conditions favor different interpretations: monosemy or polysemy.

The chapter by Gunther Kaltenböck and Bernd Heine titled "Sentence grammar vs. thetical grammar: Two competing domains?" considers the relationship between the two models of grammar - Sentence Grammar (SG) and Thetical Grammar (TG) - posing the question: Do they compete with each other or cooperate with each other? The authors introduce the characteristics and catalogs of theticals and then analyze the relationship between the two domains. It is concluded that SG is ideal for presenting conceptual-propositional information, while TG lends itself particularly well to expressing speaker attitude and relates to the social interaction or the situation in which discourse takes place. Therefore, they conclude, the activation of each domain depends on the specific type of communicative event.

The final chapter of the volume, Brian Mac Whinney's "Conclusions: Competition across time", discusses the mechanism behind competing motivations. It focuses on the elaboration of general motivations like Easiness, Faithfulness Bias, and Harmony, and of the competition between specific linguistic forms in real time. MacWhinney argues that language is the result of the interaction of competing motivations in online processing. Every motivation corresponds to one time frame involved in dynamic neural processing, memory storage, social interaction, and environmental changes.

## 5 Conclusion

In summary, the collection of chapters in this edited volume constitutes a major advance in the study of motivation competition in grammar and usage. The work provides not only theoretical contributions and abundant empirical results but also sheds light on other fields of study and stimulates additional related research.

## References

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