Andrej A. Kibrik *Reference in Discourse*. Oxford: Oxford University Press 2011, xxx + 651 pp. (ISBN 978-0-19-921580-5)

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The book under review is an outcome of almost three decades of work by Andrej Kibrik, one of the most prolific representatives of the Moscow school of theoretical and typological linguistics, founded by the author's father, the late Aleksandr Kibrik (1939–2012). The subject matter of the book — the types of linguistic means used for the expression of definite specific third-person discourse referents — might appear rather limited, but as the whole picture gradually unfolds before the reader, one becomes amazed at how many aspects there are to this problem and how closely it is tied to the core properties of grammars of languages and to various facets of human cognition. Kibrik feels equally at home discussing cross-linguistic variation in bound pronouns (having done fieldwork on languages like Abkhaz and Upper Kuskokwim), complex aspects of referential choice in English narrative prose or Russian Sign Language, as well as current approaches to attention and working memory, or neural networks. All this fascinating variety of issues is convincingly argued to be deeply interrelated and is successfully integrated into a comprehensive and all-encompassing theory of what the author justly calls one of the essential properties of language and cognition.

The starting point of the book is the observation that human languages possess two basic broad classes of referential devices, i.e. linguistic expressions used for mentioning discourse referents: full noun phrases like *Mary* or *the lady whom I saw yesterday*, and **reduced referential devices** (RRDs) such as third person pronouns like *she*. Two basic questions discussed in the book are the following: (1) What kinds of RRDs are used in the languages of the world? (2) What kinds of factors guide the choice between full and reduced referential devices in discourse? While answering these questions, Kibrik not only adduces data from a wide variety of languages, but also presents results of detailed and methodologically intricate studies of written and oral discourse, psycholinguistic and computational experiments, as well as evidence of sign languages and interaction of speech and gesture in spoken discourse. All this makes the book an important contribution to both morphosyntactic typology and discourse analysis, with important implications

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for such very different domains as language description, psycholinguistics, gesture studies, computational linguistics, and to cognitive science in general.

The approach taken by Kibrik is both cognitive and typological. 'Cognitive' means that properties of language and discourse are assumed to be determined by independently established features of cognition, and that in particular the linguistic encoding of referents crucially depends on such extralinguistic phenomena as memory, attention, consciousness etc. While most cognitive linguistic research has centered around semantics and paid little attention to discourse, Kibrik develops a more general cognitive linguistic approach to discourse, based on such work as Chafe (1994). Importantly, Kibrik does not just state, as some 'functional' linguists do, that linguistic form reflects cognitive organization and cognitive processes, but provides robust and independent evidence for his view from psychological and psycholinguistic research, and designs methods which help avoid the circularity of many 'cognitive' and 'functional' explanations in linguistics.

Another aspect of Kibrik's approach is its cross-linguistic orientation; two of the five parts of the book are classic typological studies which are based on data from very different languages and explore cross-linguistic diversity in the domain of referential expressions. In addition to first-hand data, Kibrik extensively uses existing linguistic descriptions and WALS (Haspelmath *et al.* 2005). Moreover, even those chapters which deal with in-depth analyses of individual languages contain cross-linguistic comparison and clear links to the typological findings elsewhere in the book. Last but not least, Kibrik enriches the metalanguage of linguistics with an array of notions necessary for the adequate description and classification of phenomena connected with reference in discourse, creating an original and coherent terminological system which can be used in subsequent research.

The book draws heavily on the author's previous research, going back as far as the mid-1980s, in particular to his PhD thesis (Kibrik 1988), and many parts of it are based on joint research conducted by Kibrik together with colleagues in Russia and abroad, as well as on the work of his numerous students.

The book consists of five parts comprising in all fifteen chapters, conclusions, appendices, a 65-pages long list of references, and indices. Each part and each chapter starts with a brief overview of the problems to be discussed and ends with a useful summary of main results. The table of contents comes in two versions, a concise one (p. vii–viii) and a detailed one (pp. ix–xvii). All this makes the book, which is huge both in size and in scope, quite reader-friendly.

The first part of the book, *Preliminaries* (pp. 1–69), consists of two chapters. Chapter 1 *Introduction* outlines the topic of the book and justifies the importance of the study of reference in linguistics. The bulk of the chapter is devoted to the motivation of the chosen approach, dwelling on the discourse nature of reference and the cognitive and cross-linguistic perspectives on the phenomena under study. In

Chapter 2 *Basics of reference in discourse* Kibrik sets the scene for the discussion of the phenomena covered in the book, introducing and exemplifying such notions as 'reference', 'referent', 'referential device' and 'referential choice', providing a preliminary classification of referential devices into full vs. reduced and of the latter into overt vs. zero, defining such less familiar notions as 'referential conflict' and 'referential aid', and outlining the basics of his original cognitive multi-factorial approach to reference in discourse elaborated in Part IV.

Parts II and III, constituting about half of the book, are entirely typological in their methodology and scope. In principle, despite their undisputable connection to the rest of the book, these two parts taken together could have formed a fully-fledged monograph on the cross-linguistic typology of referential devices and related problems. The typological findings are based on Kibrik's own research, but the tentative statistic generalizations mostly rely on WALS and are often only approximate due to the discrepancies between the terminologies used in the book and in WALS.

Part II *Typology of reduced referential devices* (pp. 71–285) deals with almost all possible cross-linguistic aspects of reduced referential devices, i.e. linguistic elements "inherently designed for specific definite reference in discourse", in contrast to full noun phrases which can in principle be used for many other kinds of reference. This part consists of five chapters. In Chapter 3 *Major types of reduced referential devices* Kibrik designs a comprehensive typology of RRDs. First comes the three-way division of RRDs into free pronouns, bound pronouns and referential zeroes. It must be noted that Kibrik draws the line between free and bound pronouns in such a way that pronominal clitics are grouped with free pronouns. Kibrik's main argument for such a decision is that in languages such as English, German and Russian, which lack a separate category of pronominal clitics, most free pronouns are prosodically weak and therefore, in his view, do not differ much from pronominal clitics in Romance and many other languages. This decision, in particular the statement that "[c]litics are as independent as other words, except for their prosodic behaviour" (p. 83), is clearly at odds with the terminology used in most studies of bound pronouns and does not seem to be really well-justified, see e.g. Haspelmath (2013) for additional arguments for the more traditional view that 'bound pronouns' comprise both affixal and clitic elements, while 'free pronouns' are only those which can occur in full isolation. Kibrik's terminological decision is still more controversial since, as he himself states on pp. 86–89, it is very difficult to reliably distinguish between affixes and clitics on the basis of language descriptions, which means that the classification of a particular language as using bound or free pronouns as its basic RRD may be in fact arbitrary.

Reflecting the basic distinction between the tree major types of RRDs just outlined, Chapter 3 has three main sections each dealing with major features of

the respective kind of RRD and describing their cross-linguistic distribution and possible correlations between the major type of RRD and other properties of languages. With respect to bound pronouns, which are the most frequent type of RRD attested cross-linguistically, Kibrik raises the well-known problem of 'pronominal arguments' in heavily head-marking languages like Navajo or Abkhaz (Jelinek 1984). This is connected to the frequent ability of bound pronouns to co-occur with coreferential full NPs in the same clause, referred to as 'tenacity'. The pronouns able to thus co-occur are 'tenacious', while those which cannot are called 'alternating'. Kibrik concludes that in languages with tenacious bound pronouns both the latter and full NPs, when they occur, share some properties of syntactic arguments; it is thus an oversimplification to claim that either only NPs or only bound pronouns can be arguments in a given language.

Zero pronouns raise an array of problems, first of all that of the justification of zeros in the first place and the way they are integrated into the model of linguistic structure. Kibrik is rather 'generous' in his postulation of referential zeroes, positing them virtually everywhere where "the specific referent … is implied but not overtly expressed" (pp. 104–105), even in such examples as English *He played and Ø sang*. As regards both languages with zero pronouns and with productive use of bound pronouns the familiar notion of 'pro-drop' is critically assessed (pp. 76–77) and rejected for its confusing implications and because it groups together very different languages, e.g. Japanese with zero reference and Navajo with extensive use of bound pronouns, contrasting them to just a small minority of the languages of the world.

In Chapter 4 *Pronouns and related devices* various issues of the typology of pronouns (both free and bound) are discussed. The most important phenomena covered here include the functional analogues of pronouns, such as demonstratives, classifiers and social status nouns, typologically 'exotic' instances of double reference pronouns found e.g. in Mande and Athabaskan languages and evoking two referents at once (usually an agent and a patient), and of elements simultaneously expressing reference and some other grammatical information, e.g. tense, aspect or negation (such pronouns actually occur in many languages, including such familiar ones as Spanish, where bound pronouns referring to grammatical subject are fused with the tense and mood inflection, p. 147). A typology of languages based on the separate vs. combined expression of verbal lexical meaning, clausal categories and reference is proposed on pp. 144–146. A separate section is devoted to so-called strong pronouns, i.e. prosodically fully-fledged free pronouns used mostly for emphasis or disambiguation. Strong pronouns can occur in languages with both free and bound pronouns and in the former they can be segmentally either identical to or different from prosodically weak free pronouns. Zero reference languages are claimed not to "have any readily available morphological

material that could serve as the basis for strong pronouns" (p. 153) and thus to use other means, e.g. demonstratives.

In Chapter 5 *Sensitivities of reduced referential devices* the typology of RRDs is expanded by the systematic discussion of parameters guiding the choice between different kinds of RRDs in languages which do not limit their repertoire to a single type. The parameters of RRD sensitivity include discourse factors such as degree of activation, whereby e.g. in languages with both overt and zero pronouns more activated referents tend to be encoded by zeroes while overt pronouns are employed for less activated ones, and grammatical factors, the most important of which is the clause participant position (subject vs. object, or, in Kibrik's admittedly more semantic terms, Principal vs. Patientive). A typology of RRD sensitivities based on the participant's semantic or syntactic role is proposed on pp. 172–176. It is shown that consistent languages (i.e. those that use the same kind of RRD in both the Principal and the Patientive position) largely outnumber the inconsistent languages, and that among the latter almost all logically possible types are attested (though not all types exemplified by Kibrik are found in WALS). Finally, some more specific contexts affecting the choice between different kinds of RRDs are discussed, such as imperatives, coordination, serialization, and subordination, all of which favour zero reference even in languages generally preferring overt pronouns.

Chapters 6 and 7 are devoted almost exclusively to bound pronouns. In Chapter 6 *Challenges of bound pronouns* Kibrik first discusses the relation between boundness and tenacity, showing that these parameters are mutually independent. Indeed, though in most languages bound pronouns tend to be tenacious while free pronouns tend to be alternating, there exist languages both with free tenacious pronouns (e.g. Spanish — recall that Kibrik treats pronominal clitics as free pronouns; a different terminological decision would yield higher figures both for bound tenacious and bound alternating pronouns) and with bound alternating pronouns, e.g. Kabba (Central Sudanic), and even languages possessing bound alternating and free tenacious pronouns simultaneously, e.g. South Efate (Oceanic) and Godié (Kru). A detailed typology of languages according to the use of bound vs. free and tenacious vs. alternating pronouns in the positions of Principal and Patientive is outlined on pp. 201–204. The second issue discussed at length in this chapter is the phenomenon of 'person agreement' looked at from the perspective of bound pronouns. In Kibrik's view, purely syntactic verb agreement is found only in a minority of languages where person markers on the verb are strongly tenacious, i.e. cannot perform reference by themselves and must always (or at least by default) co-occur with a full NP or a free pronoun in the same clause. Such languages are, e.g. English, German, standard French and to a lesser degree standard Russian and Latvian, as well as a handful of languages "scattered in various parts of the world" (p. 217). Almost all other languages with bound pronouns usually use them as fully-fledged

referential devices, therefore, Kibrik argues, it would be a misinterpretation to call them agreement markers. Moreover, Kibrik shows that in specific discourse contexts even Germanic verb agreement markers may assume referential function without the accompanying overt NP or free pronoun, cf. English *Sounds good*.

Chapter 7 *The rise and fall of bound tenacious pronouns* complements the synchronic typology of the previous chapters with a discussion of diachronic changes in the preferred type of RRD. Three different case studies are described in detail: Athabaskan, Romance and Slavic. In Athabaskan, as Kibrik shows on the basis of internal and comparative reconstruction, some languages, particularly Navajo, must have increased the degree of tenacity of their bound pronouns in line with the general process of accretion of morphological complexity. In Romance, different paths of development are attested in Spanish, where only the non-subject pronouns have increased their degree of tenacity and boundness, and in French, which "went further towards developing a fully-fledged and consistent bound … tenacious pronominal system" (p. 249), interestingly passing through a Germanic-like system with obligatory free pronouns which became tenacious and bound to the verb in the modern colloquial language. Conversely, in the history of Russian, the basic type of RRD in the Principal position has shifted from bound pronouns (= verbal personal endings) to free pronouns, though their use is not nearly as obligatory as in German or English. By contrast, the South Slavic languages Bulgarian and Macedonian have largely followed the path attested in Spanish. In the last section of the chapter, more general aspects of the possible diachronic developments of reduced referential devices are discussed based on their fine-grained synchronic typology. The diachrony of systems of referential devices is shown to be a fascinating though underinvestigated domain of research.

Part III *Typology of referential aids* (pp. 287–361) discusses linguistic means used in case of referential conflict, i.e. the situation when a given RRD may be attributed to more than one referent. In contrast to referential devices *per se*, referential aids have not figured in linguistic literature in any prominent way, so in this part of the book a whole system of novel terms is introduced. Chapter 8 provides a comprehensive typology of referential aids. The major division is between **ad hoc** and **conventional** referential aids; the former are based on the semantic compatibility of particular referents with the context, while the latter "somehow **sort** referents that are currently activated according to a certain distinctive feature" (p. 294, emphasis in the original). Such sortings of referents can be **stable**, i.e. pertain to inherent properties of referents, and **current**, i.e. based on the properties of the particular discourse. Stable sortings in turn can be **absolute**, i.e. reflecting the categorization of referents according, e.g. to noun class, or **relative**, i.e. established by comparing referents along some scale or hierarchy, e.g. that of animacy or honorificity. An orthogonal parameter cross-classifying referential aids is their locus

of marking, i.e. whether particular referent sorting is manifested on free or bound pronoun, on the verb etc. Current sortings come in various kinds and involve the proximate vs. obviative types of third person pronouns attested in Athabaskan and Algonquian languages, logophoric pronouns,[1] switch-reference and the use of different RRDs for referents of different degree of activation (e.g. in Russian the choice between the ordinary third person pronoun *on* and the demonstrative *tot* can serve as a referential aid whereby *tot* is used for referents with a lower degree of activation than those rendered by *on*). All these types of referential aids are discussed in much detail and exemplified by data from various languages.

Chapter 9 *How functional are referential aids?* addresses the problem of the functional load of referential aids of different kinds. Kibrik observes that languages differ widely as to the amount of conventional referential aids they possess, and, conversely, in the degree to which speakers and hearers rely on contextual clues for the resolution of referential conflicts. Further, Kibrik critically addresses the tradition stemming from Heath (1975) to assume that referential deconflicting is the rationale of such phenomena as switch-reference and noun class. With respect to switch-reference, Kibrik shows that this grammatical phenomenon often has a broader function of establishing discourse coherence and cannot be reduced to reference tracking. Similarly, the Russian demonstrative *tot*, though sometimes employed to preclude referential conflict, is shown to mostly occur in situations when no such conflict is envisaged, its use depending primarily on the degree of activation and animacy of the referent. Finally, noun classes are also shown to be only indirectly tied to the deconflicting function, their main rationale being rather "some kind of categorization of reality" (p. 347). Indeed, as the comparison of the functioning of noun classes in two Atlantic languages of Africa, Pulaar and Sereer, shows, a language may have a rich system of noun classes without employing it as a referential aid at all, like Sereer, and even when a language does use its system of noun classes as a referential aid, like Pulaar, its functional load may in fact be quite limited. Kibrik concludes the chapter by saying that "the concern for the preclusion of referential conflicts is of clearly subsidiary importance compared to the activation-related aspects of reduced referential devices" (p. 360).

Part IV *The cognitive multi-factorial approach to referential choice* (pp. 363–498) deals with issues very different from those discussed in Parts II and III, and might constitute a whole monograph on its own. While the former two parts proposed a comprehensive cross-linguistic typology of referential devices and referential aids, with the main focus on morphosyntax and its interaction with discourse reference, part IV develops, on the basis of in-depth studies of just a couple of languages, a novel and insightful approach to what is referred to as *basic referential choice*, i.e. that between the use of a full NP and an RRD in contexts of specific definite reference.

Part IV consists of five chapters. Chapter 10 *The cognitive multi-factorial approach* discusses the achievements and shortcomings of previous approaches to referential choice. Among the drawbacks are attempts to explain referential choice by just one factor, the lack of real grounding in independently established knowledge available from psychology and neuroscience, and the circularity of arguments explaining referential choice by allegedly cognitive factors established on the basis of referential choice itself. In order to avoid all these 'stumbling blocks', Kibrik carefully reviews the current approaches to attention and working memory in cognitive psychology and neuroscience, arguing that attention to the referent determines its mention in discourse and that activation in working memory is the primary factor responsible for referential choice. With respect to a referent's activation in working memory, Kibrik proposes to measure it as a gradable variable and formulates the "main law of referential choice" as follows (p. 378): "If activation is **above a certain threshold**, the speaker chooses a reduced referential device … If activation level is **below such a threshold**, a full NP is used" (emphasis in the original). It must be noted that referential choice is often not categorical, i.e. at some intermediate activation levels both RRDs and full NPs are possible. As to other factors of referential choice proposed in the literature, such as 'focal attention', 'salience', 'recoverability' etc., their critical discussion on pp. 384–389 leads Kibrik to the conclusion that they are either misguided or confusing or ultimately reduce to activation. In order to avoid the abovementioned circularity of many cognitive approaches to referential choice, Kibrik proposes that referent activation "primarily results from the attention given to the referent at the immediately preceding moment in discourse" (p. 389), implying that degree of activation can be objectively computed on the basis of the linguistic analysis of the discourse context and its various properties called 'activation factors'.

Chapters 11 and 12 describe the application of the cognitive multi-factorial approach to referential choice in Russian and English narrative prose. In Chapter 11 *Referential choice in Russian narrative prose* the approach is spelled out in full detail. Different activation factors are identified and discussed, and weights are attributed to them on the basis of a trial-and-error experiment. Activation factors include rhetorical distance to antecedent (in terms of Mann & Thompson [1988] Rhetorical Structure Theory), which is shown to be the most important factor, linear distance to antecedent (a penalizing factor when such distance is more than one clause or, in Kibrik's terms, elementary discourse unit, EDU), syntactic and semantic role of the antecedent (it is shown that when the antecedent is subject or Principal, its activation score is higher), animacy and some others. Activation factor weights are added up to yield an 'activation score', which can range from below 0 to slightly above 1. Referential choice is modelled as a mapping between activation score intervals and potential referential devices; thus, for Russian an activation

score below 0.3 admits full NPs only, 1 and above is compatible with pronouns or zeroes only, while intermediate activation scores yield non-categorical preferences for either full NPs (0.4–0.6) or pronouns (0.7–0.9). A similar methodology is applied to English in Chapter 12 *Referential choice in English narrative prose*, where it is shown that the basic activation factors and their weights in English and Russian are similar, though not identical. Note that the model advanced in these chapters accounts not only for the actual referential choice attested in the written text, but also for the degree of its categoricity: possible referential alternatives are empirically deduced for each mention of the referent by means of rigorous large-scale native-speaker judgment tests, and activation scores are shown to predict whether a referent admits just one kind of encoding and whether both an NP and a pronoun are allowed. The methodology strikes one not only as fairly complex and grounded in such intricate theoretical notions as the hierarchical structure of discourse, but also by the rigorous and explicit way it is applied and presented. In principle, any linguist who has enough time and qualification can apply this procedure to any Russian or English text and thus test Kibrik's results, which is certainly a major advantage of the approach.

Chapter 13 *Cognitive inferences from the linguistic study of reference in discourse* discusses implications of the multi-factorial approach to referential choice for cognitive psychology, in particular for the studies of working memory. Kibrik shows that working memory capacity can be measured as "grand activation", i.e. "the summary activation of all the referents at the given point of discourse" (p. 449). Grand activation is shown to normally range from 1 to 4 for English, which converges with the results of psychological studies. In addition, the fact that the purely linguistic phenomenon of referential choice is determined by the properties of the previous referent mention confirms the hypothesis advanced in psychology that working memory is controlled by attention. Finally, the linguistic properties of referential choice suggest that deactivation of referents in working memory, i.e. forgetting, is a function of simple decay of information not attended to, and is not determined by the "interference or displacement by other incoming information" (p. 454), the latter being related to referential conflict convincingly argued to constitute "a separate component of the referential system" handled by referential filters and aids (p. 456).

Chapter 14 *Further studies on the cognitive multi-factorial approach* develops the approach to referential choice proposed in the previous chapters in several new directions. First of all, a more sophisticated mathematical apparatus based on the method of neural networks is discussed (see Grüning & Kibrik 2005 for more details); interestingly, it is shown that a more crude set of activation factors excluding complex factors related to rhetorical distance does not result in a serious deterioration of the model's predictive power. Next follows a presentation of the results

of a large-scale statistical corpus analysis of referential choice in English based on the RST Discourse Treebank (Carlson *et al*. 2003), mostly conducted by Kibrik's students under his supervision. Correlations between referential choice and such factors as animacy, noun vs. prepositional phrase, protagonisthood and their interaction with rhetorical distance are demonstrated. Third, Efimova's (2006) study of referential choice in a zero reference language, i.e. Japanese, is briefly discussed. Finally, the results of a psycholinguistic experiment demonstrating the relation between the independently established working memory capacity of an individual and his/her ability to correctly recover referents at varying rhetorical distances is shown to strongly support the proposed theory of referential choice.

Part V *Broadening the perspective* (pp. 499–549) consists of a single chapter, *Reference and visual aspects of discourse*, entirely devoted to non-verbal communication. The chapter starts with a discussion of pointing gestures and their relation to such linguistic phenomena as deixis, exophora and anaphora. According to Kibrik's terminology, deixis involves a pointing gesture towards a perceptually available referent not activated prior to the relevant communicative act, while exophora evokes perceptually available activated referents. Relations between different kinds of reference and pointing gestures are rather complex, and various deviations from the prototype of pointing are discussed, e.g. when the target of pointing is not the referent itself but the so-called demonstrandum (a perceptually available object or person construed as associated with the referent). Kibrik next discusses reference in sign languages, mostly on the basis of the data from Russian Sign Language (RSL). The role of pointing gestures in sign languages is assessed, and it is shown that despite their partial similarity to pronouns of spoken languages, pointing gestures do not in fact serve as the major referential device, the basic referential choice in RSL being that between full NPs and zeroes. Speakers of sign languages exploit the spatial modality by creating the so-called 'constructed space', where discourse referents are located and can be referred to by what is called 'virtual pointing'. The role of the latter phenomenon in verbal spoken discourse is also discussed; it is shown that virtual pointing is a salient though not too frequent feature of oral discourse, whose function is often not conveying referential information to the addressee, but "helping the speaker to organize his/her own cognitive representation" (p. 546).

In the Conclusions (pp. 550–563), Kibrik briefly recapitulates the main results of the book, enumerates various issues and approaches to reference which were disregarded in his study, and finally outlines some perspectives for future research. Two appendices provide an instructive questionnaire on referential systems for descriptive grammars and maps showing geographical locations of all the languages mentioned in the book.

Reference in Discourse is a book of great importance and very high quality. Its results make very significant contributions to language typology, discourse

analysis and cognitive linguistics, and lay the foundations of a cognitive cross-linguistic approach to discourse. The diversity of phenomena addressed in the book is indeed impressive, and no less striking is the degree of expertise shown by the author in almost every domain he discusses. Kibrik is a professional typologist and an experienced field linguist, a highly qualified discourse analyst not alien to sophisticated experimental and mathematical methods, and an expert in cognitive psychology and non-verbal aspects of communication. Last but not least, Kibrik is a theoretical linguist who constructs in his book a comprehensive, complex and highly original conceptual framework, formulated and applied in a precise and explicit way. Even in those rare cases where I cannot fully agree with Kibrik in his treatment of certain phenomena (e.g. clitics in Chapter 3), I cannot but admit that Kibrik's terminological and analytical choices are always logically motivated and consistently applied. Methodological rigour and explicitness of presentation put Kibrik's book among the best examples of how a really top-quality linguistic work should be done and written.

There are only a few places in the book which I find deserving of criticism. In his discussion of 'pronominal arguments' in Chapter 3, Kibrik writes that since Svan encodes cases on nominals "they are evidently argumental". This does not sound to me fully convincing, since in head-marking languages Principal and Patientive nominals can be either case-marked or not depending on the language (cf. Abkhaz vs. Adyghe; in the latter an elaborated system of bound pronominals in all respects similar to that of Abkhaz is coupled with ergative-absolutive case marking), and thus there is little reason to assume that presence or absence of case marking can have any bearing on their argumental status. Kibrik's statement that tenacious pronouns in Warlpiri, which attach to the auxiliary in the second position, are "very different from typical bound pronoun languages such as Abkhaz … in which bound pronouns are a part of the synthetic verb word" (p. 143) is too categorical. Cross-linguistically, there is little systematic functional difference between pronominals adjacent to the verb and occurring in some other dedicated position in the clause, so even if the distinction is relevant for the purposes of Kibrik's typology, it should not be taken as fundamental, especially if, as Kibrik does in the same section, phenomena as different as Warlpiri second-position clitics, Dan-Gwèètaa TAM-inflecting pronouns and Spanish inflectional desinences are "considered one broad category". The statement on p. 202 that "[s]yntax … is always more fluid and prone to various context factors. It is morphology … that forms the core of a language's grammar" makes sense in its context, but its formulation seems to be at variance with most of the current assumptions in linguistic theory, at least for the reason that syntax forms the universal core of the grammars of all languages, while morphology is much more language-specific and idiosyncratic. Among the existing approaches to referential choice, the one couched in

Game Theory and somewhat similar in spirit to Kibrik's multi-factorial model is not mentioned, see e.g. Clark & Parikh (2007). The statement on p. 424 that "[a]t any time a speaker knows the activation score for each referent" is too simplistic and mixes up the properties of the model (activation score) and the modelled phenomenon (degree of activation of referents in working memory). Finally, despite Kibrik's misgivings about the syntactic terms 'subject' and 'object' and their replacement by Principal and Patientive (see e.g. Kibrik 2012), the traditional terms are applied to Russian Sign Language in Chapter 15 without any discussion and justification.

Both the author and the publisher can be praised for very good editorial work, leaving just a few typos in the whole almost seven hundred pages book. However, some of the extant typos are rather unfortunate, e.g. on p. 129 a whole example (4.5) from Jakaltek is missing, and the link to the Russian National Corpus on p. 329 is incorrect (http://ruscorpora.ru/).

Despite some minor shortcomings and a few editorial inaccuracies, Andrej Kibrik's *Reference in Discourse* is a book of great merits and enormous importance for the whole field of linguistics. It should be carefully read by typologists, descriptive linguists, specialists in discourse analysis, as well as psychologists, each of whom can find there novel data and important theoretical and methodological insights. Last but not least, the book is a fascinating, albeit certainly not an easy read, written by a scholar not only very much interested in what he is doing but also able to make the reader share this interest.

Note

1. To the list of languages with logophoric pronouns found 'outside Africa' on p. 319, the Baltic language Latgalian can be added, see Nau (2006).

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