# Book reviews

Bernhard Hurch, editor: *Studies on Reduplication*. Empirical Approaches to Language Typology 28. Berlin and New York: Mouton de Gruyter, 2005. xi + 640 pp. ISBN 978-3-11-018119-7.

*Studies on Reduplication* is a compilation of articles presented at the *Graz Reduplication Conference*, which, as the editor Bernhard Hurch puts it, "reflects a series of different positions, different problems, different perspectives on one broad problem — reduplication" (p. 9). Although the word "problem" here probably means "topic", it becomes evident that for most of the scholars contributing to the volume, reduplication is truly a problem as far as theory is concerned. Indeed, the term "reduplication", which roughly refers to the nonaccidental reappearance of phonological material for various lexical and grammatical purposes, is applied to cover various, often quite dissimilar, phenomena. This is directly reflected in this book, where the writers seem to make use of their own individual picture of reduplication and are forced to solve the problems arising from it. Within this problem-solving atmosphere, most of the articles are concerned with theoretical issues, such as the differentiation of reduplication from repetition, phonology versus morphology competing for the status of the most explanatory/relevant field for reduplication, and the form-meaning interface as viewed through reduplicative constructions. The rest of the book can be divided into those articles dealing with reduplication and diachrony, those discussing reduplication in connection with first language acquisition, a small number of articles concerned with diminution as a special function of reduplication, and, finally, several articles addressing reduplication phenomena in sign languages.

Before entering the theory-oriented part of the book, Carl Rubino introduces the reader to the variety of forms and functions that reduplication can take in the languages of the globe. Although, as mentioned above, there is no agreed view on what reduplication is and what it is not, Rubino does a quite good job in anticipating all the different "reduplications"

that the authors will be writing on over the course of the book. However, his inclusion of ''imitative reduplication'' (p. 16), as he calls it — namely the repetition of a root with a vowel alternation, which is roughly equivalent to an English form like *zigzag* and is broadly known as sound symbolism — is not dealt with by any of the authors of the book and is generally not taken into consideration as an instance of reduplication in the literature. What is also not a particularly good candidate for reduplication is the type he calls ''automatic reduplication'', which is ''obligatory in combination with another affix, and which does not add meaning by itself to the overall construction'' (p. 18). He brings the example of Ilocano *agin<u>si</u>-singpet* 'to pretend to behave', whereby the reduplication of *si* is triggered by the prefix *aginCV*, which shows pretense. This construction certainly includes reduplication as far as the form is concerned, but the meaning of pretense is not brought about by reduplication, nor is it a meaning widely associated with reduplication. Thus, I find it crucial that a construction be characterized as reduplication if it fulfills both formal and semantic criteria. Finally, it is particularly striking that Modern Greek as well as Italian are marked with the label ''No Reduplication'' (white dot). This shows clear lack of data on the modern state of these languages, where a large number of instances of total reduplication are in use in colloquial speech (cf. Dressler and Barbaresi 1994; Stolz 2004).

Moving to the issue of the distinction between repetition and reduplication, David Gil argues that the two processes form a continuum, with repetition leading diachronically to reduplication. He also suggests a number of criteria for the recognition of various data from Riau Indonesian as either an instance of repetition, reduplication, or an in-between phenomenon. This approach is definitely realistic in that it allows the discussion of less clear-cut cases of iteration. However, to my mind, the trickiest question is how we can distinguish between repetition and *total* reduplication, since partial reduplication is relatively straightforward and easily discernible in languages with morphology. In contrast to Gil, who does not take a clear stance as to which field — phonology or morphology — reduplication belongs, Sharon Inkelas argues for her Morphological Doubling Theory (MDT), which takes in all types of reduplication as morphological operations, with the simple requirement that the two identical forms are generated simultaneously and related semantically with a mother node. In MDT, there is no derivation from the base or necessary phonological copying involved in reduplication. There is only obligatory semantic association between each of the daughter nodes and with the mother. Her theory beneficially accommodates marginal, or otherwise unexplained cases of iteration phenomena and, most importantly, it

treats cases where the two stems of the construction are phonologically nonidentical, such as antonym constructions. Nevertheless, Inkelas' use of terminology such as "morphological" or "morphosemantic identity" makes one wonder why — in her rejection of phonological identity between daughters — she does not simply use the term "semantic identity". Of course, I would not completely agree with the latter characterization either, since I believe that we should stick to the notion of copying, both phonological and semantic, because copying seems to me to be the essence of the term "reduplication". Complementary antonym constructions, such as *young old*, can be said to fulfill the requirement of semantic copying, in that the reduplicant copies all semantic features of the base minus one. For the other constructions, i.e., synonym compounds, the reader may assume that Inkelas and Zoll's (2005) book *Reduplication: Doubling in Morphology* provides more convincing arguments as to why these constructions fit into an operation that requires semantic identity and thus should be included as legitimate examples of reduplication.

MDT insists on the semantic, and not phonological, interdependence between the two stems of a reduplicative dyad and, therefore, it presupposes a view of the reduplicant as a relatively independent morphological entity. On the one hand, the autonomy of the reduplicant is supported by a number of optimality-theory-oriented articles in the book. More specifically, Laura Downing argues that the reduplicant has "potentially independent tonal properties" (p. 106), in order to account for the fact that in some African languages the reduplicant, instead of the base, is phonologically marked with an independent tone melody. Similarly to Downing, Fiona McLaughlin agrees that "the reduplicant is not derived from the base, but that both base and reduplicant are, themselves, stems" (p. 129). Evidence this time comes from consonant mutation in Northern Atlantic languages, which interacts with reduplication. On the other hand, other optimality-theory papers put more emphasis on the independence of competing phonological operations in support of the derivational-copying view of reduplication — Basic Reduplicant Correspondence Theory or BRCT, the major opponent of MDT. Nicole Nelson presents cases where the reduplicant appears to be copied on the wrong side in relation to the base, as, for instance, to the hypothetical base *badupi*: p̲i̲-badup̲i̲ (wrong side prefixing), b̲a̲dupi-b̲a̲ (wrong side suffixing) (p. 136). Nelson, following the main exponents of BRCT, claims that this violation of locality in copying is only apparent and that reduplication is total and local, but the reduplicant ends up truncated and, thus, on the "wrong side" on the surface. However, locality of copying as a component of the BRCT is not always supported. For example, Patricia Shaw's article on legitimate nonadjacency cases in reduplicative constructions of some Salish languages

provides counterevidence for claims insisting on locality. Also, the nature of the Base within BRCT appears problematic. Elinor Keane, who discusses lexical and phrasal echo reduplications in South Asian languages (roughly of the type *theory-schmeory*, but with smaller or larger bases), urges that the Base should be defined explicitly as either a morphological or a prosodic category, so that the size of the reduplicant can be calculated each time. The last optimality-theory paper, by Suzanne Urbanczyk, discusses unexpected phonological alternations accompanying reduplication, which are employed in order to enhance or maximize the distinctiveness of very similar reduplicative shapes that serve different meanings. Urbanczyk would like to argue, although not explicitly, that enhancement in the above sense is a general mechanism in language that has a clear purpose, i.e., to avoid homophony. Although such a hypothesis sounds plausible — albeit requiring further research — some questions might arise regarding her assumptions. Since, according to Urbanczyk, the notion of enhancement can be extended from phonological segments to "other morphophonological phenomena" (p. 211), one may wonder if the case of special intonation / pitch patterns on total reduplication is an instance of enhancement. And if it is so, one may also be forced to reconsider what the role of syntactic context is as a disambiguating mechanism. If we accept context as the indicator of particular meanings and functions, there is in fact no space for a theory of enhancement as a necessary disambiguating operation. Finally, one might be skeptical about her assumption that reduplicative expressions result from people's conscious copying of linguistic material, instead of retrieval from the lexicon (p. 232), especially since she does not provide experimental evidence. Rajendra Singh, in his article, argues that while the retrieval of expressions from the lexicon is more plausible, their on-the-fly construction can also happen "in moments of crisis" (p. 274). This, according to Singh, stands in support of a view of reduplication as a common morphological process, in the sense of subcomponents combined in line with general morphological resources people have. Singh rejects the insistence of both BRCT and MDT on inquiries about the *pattern* of reduplication (the pattern, he says, can even be discerned in a word like *tomato*) and on the matching of linguistic phenomena to a universal reduplicative pattern, be it phonological or semantic. Instead, he wishes to focus on the *process* of reduplication, which applies — in his view of morphology — to whole words. Although I think his distinction between pattern and process is quite right (recall also my objection to Rubino's inclusion of certain types of apparent reduplication as reduplication), I am inclined to believe that the pattern is the only concrete phenomenon we have at our disposal, in contrast to the process, which is, by necessity, a

theoretical construct and, ultimately, as subjective as our interpretation of the pattern.

Moving now to the historical studies in the volume, most of the articles attempt to theorize about the (uni)directionality of the diachronic processes from full to partial reduplication, or other processes from and to reduplication. Reijirou Shibasaki takes up the grammaticalization process of reduplicative verbs in Japanese evolving into adverbs. His method based on corpora that show the frequency rates of the various changes is well-chosen. However, he could employ wider criteria of grammaticalization of verbal constructions to adverbial compounds (since the latter do not lose all their categorical features and their lack of mood marking does not by itself prove that they are frozen expressions). Jason Haugen, in his article about Uto-Aztecan reduplication, analyzes grammaticalized reduplicative operations in order to reconstruct the productive reduplication mechanisms of the Proto-language of the Uto-Aztecan family. He admits that more research is needed so that the correct grammaticalization paths can be deduced, but as Michael Maxwell (2006) points out, the reduplicative constructions that Haugen has reconstructed are too similar to the present ones, and, considering the great time depth of the Uto-Aztecan family, it is unlikely that they represent the ones of the Proto-language. One of the most persistent problems seems to be the lack of sufficient data on earlier stages of a language (family); at least this seems to be the case for Françoise Rose's inquiry on why Emerillon, a Tupi-Guarani language, does not show the same pattern of reduplication as the rest of the family. By contrast, Leonid Kulikov, who deals with the diachronic evolution of reduplication in Vedic verbs, is able to provide more convincing reconstructions as well as more detailed analyses and stabile hypotheses on both the phonological and semantic developments, partly because the Vedic language has been recorded and studied by generations of scholars.

Two more articles that deal with diachronic processes focus on Arabic. Both Dina El Zarka's paper and that by Utz Maas offer a balance between descriptive and theoretical analyses, even though they discuss very different and, in fact, nonprototypical, reduplicative constructions in Arabic. El Zarka supports the idea that consonant gemination (e.g., *kattab*) is an instance of reduplication, on the basis of the facts that i) it causes a change in meaning and ii) it is formed out of *ktb*, which is a root, i.e., it comprises a lexical/morphological entity. Repetition of a part of a root (*t* of *ktb*) agrees with the view of reduplication as a morphological process in which either the whole base or part of the base is copied. Maas deals with a construction that involves the appearance of a verb with its cognate object (e.g., *he strangled strangling* used for emphasis in Arabic)

and which he calls "syntactic reduplication" (p. 399). This equals what has been called "figura etymologica" or "paronomasia" in the traditional historical linguistics literature (e.g., Schwyzer and Debrunner in Nakas 1999), and would hardly be acknowledged as an instance of reduplication. However, it is not very clear whether Maas considers it a case of grammaticalized repetition (reduplication) or a stylistic device. What is more, Maas discards whole-word iteration as nongrammaticalized, free repetition, and this excludes total, lexical reduplication (of the *X-X* type, where *X* is full stem) as a legitimate case of reduplication. Finally, the interpretation he gives to the term "syntactic reduplication"[1] is added to the multiple and divergent meanings that this term has been given since the birth of reduplication studies and which might create confusion in the general readership.

Three articles deal with reduplication and child language, the first of which, by Wolfgang Dressler, Katarzyna Dziubalska-Kołaczyk, Natalia Gagarina and Marianne Kilani-Schloch, provides especially rich theoretical background. From their point of view, reduplication is part of morphology, separated into grammatical and extra-grammatical reduplication. Their idea is that since extra-grammatical reduplication is more iconic and child language is known for its iconicity, children employ extra-grammatical reduplication in contrast to the adult reduplicative system, which is integrated in the grammar. As for why children use reduplication, Dressler et al. assume that children replace difficult syllables in disyllabic words by reduplicative syllables to relieve some of the burden of their articulation. Children's use of reduplication for phonological convenience is a widespread and reasonable hypothesis and is also mentioned in the article by Marie Leroy and Aliyah Morgenstern. What these latter researchers add is three more possible explanations, at least for the particular case study they describe: i) the child draws adult attention, ii) it enumerates (in a preparatory fashion for the distributive use of reduplication) and iii) it refers to things through his own, self-made words. The pragmatic use of child reduplication, whereby the child imitates words of its own (commonly reduplicative) in order to keep the "conversation" going is highly likely. However, what Leroy and Morgenstern consider a referential function does not look truly referential, as the child seems to imitate adult words and not intentionally employ them to refer to things in a nonadult-initiated context. In contrast to the above theory-oriented papers, Hatice Sofu offers a descriptive presentation of the acquisition of a particular reduplicative construction in Turkish. This construction involves the addition of a prefix to a root, but this prefix does not have a fixed form and is only predicted from the base via complicated rules. The acquisition / learning of those rules proves difficult not only for

Turkish children but also for adults. Nevertheless, Sofu does not offer a clear hypothesis about the specific difficulty in acquisition, nor does she draw any conclusions from her study regarding the phenomenon in question and the whole acquisition process. In general, child language studies in the book do not manage (or attempt) to link child reduplication to the adult mechanism. On the contrary, they clearly differentiate child speakers from adult ones, and in this way, do not explain much about the origin / purpose of adult reduplication. The only connections established are by Dressler et al., between child reduplication and the meaning of diminution and that between child reduplication and motherese in the article by Leroy and Morgenstern.

Diminution and its relation to iconicity raise a hot issue. Silvia Kouwenberg and Darlene LaCharité (K and L) examine Caribbean Creoles in order to address the apparent paradox of iconic functions coexisting with noniconic meanings, such as the diminutive. They claim that diminution in cases such as *yellow yellow* 'yellowish' is in fact iconic, because it involves the principle MORE OF THE SAME FORM IS MORE OF THE SAME MEANING but in a discontinuous fashion (more scattered yellow instances dispersed in space result in less yellow overall). I find their distinction between continuous and discontinuous occurrences very insightful for discussions on reduplication semantics, but it would be nice if they showed exactly what triggers the extension from the discontinuous interpretation of reduplication to the diminutive one. Dressler et al. provide an explanation relating to pragmatics. They argue that the diminutive may have arisen in adult systems out of a reanalysis of language addressed to babies as language about small things: "the relatively more frequent use of reduplication in early child language and motherese may have been reinterpreted as implying a hypocoristic pragmatic use, and this implicature may have been reinterpreted as primary hypocoristic meaning" (p. 467). Werner Abraham makes his own suggestion on the issue of the nature of diminution, by replacing K and L's argumentation with an appeal to the semantic notions of intensional and extensional meaning. Increase happens, he says, when reduplication applies to the level of reference of objects (extension); decrease, on the other hand, occurs when reduplication operates on the level of the entirety of semantic features comprising the referential meaning (intension), and the increase of special meaning subcomponents leads to diminution and dispersivity (p. 548). In fact, Abraham's theory does not provide a generalizable calculus of when extension versus intension arises, nor can his theory be supported by all relevant data (as he admits). Furthermore, he provides obscure formalisms as representations for meaning extensions and replaces the notion of "dispersivity" in K and L's approach with the criterion of "(in)divisibility" (p. 559)

of grammatical categories, which makes no significant difference. More-over, his stance towards iconicity is less than clear, as he begins by en-dorsing the iconicity principle as generally valid, but by the end of the paper he appears deprecatory of the entire notion and its proponents. All in all, however, he is right in wondering why reduplication is the only grammatical operation whose iconic nature linguists tend to stress so much.

The remaining papers deal with ''special'' linguistic systems, such as pidgins, creoles and sign languages. Peter Bakker and Mikael Parkvall pose the very interesting question of why pidgins do not employ much reduplication, that is, contrary to expectations on the basis of their prim-itive character and in opposition to creoles, which are supposed to be more conventionalized systems (''mature languages''). Their theoretical distinctions and arguments seem sound, but, although they give some plausible answers to why reduplication appears in creolization (avoidance of homophonous words, expansion of the lexicon etc.), they leave unan-swered the question of why pidgins DO NOT have reduplication in the first place. I would prefer to take the absence of reduplication in pidgins as an indication that reduplication is not just a primitive mechanism after all. The last two papers, one by Ronnie Wilbur and the other by Roland Pfau and Markus Steinbach, concern American Sign Language and Ger-man Sign Language respectively and provide ample information on and graphic illustration of reduplicative constructions in these two signing systems.

To conclude, the work presented in this book is generally convincing but less mature when it comes to theorizing from a broader, crosslinguis-tic perspective. This is perhaps the price for the advantage it offers: it covers a typologically wide scope in examining particular problems relat-ing to reduplication in many different languages. Furthermore, it seems that there is a disproportion between formal concerns and discussions about the semantics and pragmatics of reduplication, as if the latter have already been tackled. More specifically, too much energy, I believe, has gone into arguing about the phonology versus morphology issue or into solving formal problems. Instead, more discussion could be directed to the theoretical connection between reduplication and child language or historically older reduplicative phenomena. Also, the theoretical claims put forward could be based to a greater degree on experiments with natu-ral speakers. Even so, I think that the languages presented in the various articles are sufficiently described so as to offer information on both form and content of reduplication, to initiate research on pragmatics, and even offer ground for generalizations and explanations on a deeper level. The other path is to make generalizations aspiring only to particular languages

or language families, and, to this end, *Studies on Reduplication* offers a good start. As for the editorial work, there are a few typographical as well as language errors (the latter only being natural when authors and editors are non-native speakers of English), which are counterbalanced by a useful summary of the contents of the articles by Hurch in the beginning of the volume. Overall, and despite minor shortfalls, the book is not to be missed by those who wish to be updated on the latest advancements in the field of reduplication.

*Aristotle University of Thessaloniki*                      HARITINI KALLERGI

## Note

1.  Maas gives the name "syntactic reduplication" to the following two cases of repetition within the boundaries of a sentence: i) *I smurfed my smurfy smurf to a smurf* (p. 397) and ii) *tenebr-ae altissim-ae obort-ae sunt* (p. 398). The first is an instance of repetition of differently inflected lexical roots, whereas the second is a simple case of nominal agreement. To my mind, the term "syntactic" refers to (dependency) relationships between constituents of a sentence, not everything that has to do with the level of "words" or with the lexicon. Obviously, Maas (p. 397) uses this term because, as he puts it, "the domain of the iteration [. . .] is syntax (the sentence)", but this is, I think, too general. See Wierzbicka (1986) and Israeli (1997) for further different uses of the term "syntactic reduplication". One can consider all of these cases as legitimate cases of reduplication on the level of syntax. Still, they seem to me to be too different from each other to be covered by the same term.

## References

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Barbara Dancygier and Eve Sweetser: *Mental Spaces in Grammar: Conditional Constructions*. Cambridge Studies in Linguistics 108. Cambridge: Cambridge University Press, 2005. 295 pp. ISBN 0-521-84468-1.

In this volume, Barbara Dancygier and Eve Sweetser (henceforth ''BD and ES'') present a thorough and challenging analysis of conditional constructions in English. Their analysis offers a genuinely new approach not only to *if*-sentences, but to the whole range of conditional constructions. In their in-depth discussion of a broad range of attested English conditional constructions, they integrate concepts and theoretical tools from Mental Spaces Theory (MST) and Construction Grammar (CG) to construct a uniform framework that transcends the description of particular conditional forms such as *if*-sentences.

BD and ES use Sweetser's (1990) well-known distinction between ''content conditionals'' (1), ''epistemic conditionals'' (2) and ''speech-act conditionals'' (3). This tripartite distinction is supplemented by ''metalinguistic conditionals'' (4) as a fourth category (see Dancygier 1998: 93–109), in which the protasis expresses a comment on some aspect of the choice of words in the apodosis.

(1)   If he loves her, he'll type her thesis.
(2)   If he typed her thesis, he loves her.
(3)   If I don't see you before Thursday, have a good Thanksgiving!
(4)   The philosophy of life, if it could be defined by such a phrase, was beyond his grasp.

BD and ES start with an introductory chapter devoted to a discussion of semantic compositionality in CG and MST. In the next two chapters they introduce some form-function parameters that they will use to distinguish different conditional constructions. The first parameter is ''prediction''. ''Predictive conditionals'' (1) are considered prototypical for the class of conditionals: in these constructions, someone predicts something (the apodosis, $q$), but only conditionally upon some unrealized event (the protasis, $p$). Central to their meaning are ''prediction'' and ''alternativity''. In particular, in predictive conditionals the introduction of a conditional mental space by the protasis (i.e., a model of some situation in the world in which $p$ holds) is understood as a simultaneous introduction of an alternative mental space in which $p$ does not hold, and therefore $\sim q$ is expected to hold as a result (p. 41). Hence, BD and ES postulate that conditional perfection (CP, i.e., the natural tendency to perfect conditionals into their corresponding biconditionals '*if and only if p, q*') ''follows almost inevitably, not from conditionality per se, but from one central function of conditional constructions, namely conditional prediction, and

in particular the alternative space structure which underlies these conditional predictions'' (p. 39).

Another important parameter discussed in these chapters is Fillmore's concept of ''epistemic stance'', which, in conditionals, refers to the speaker's mental association with or dissociation from the situation described in the protasis. In English predictive conditionals, conjunctions are closely involved in marking epistemic distance; *when* commits the speaker to the reality of the situation described in the protasis, whereas *if* is a marker of neutral epistemic stance. The choice of verb forms may also signal epistemic stance: *distanced* verb forms are essentially one level more ''past'' than their nondistanced counterparts and occur in both protasis and apodosis.

(5)  a.  If you get me a cup of coffee, I will be very grateful.
     b.  If you got me a cup of coffee, I would be very grateful.
     c.  If you had given me a cup of coffee, I would have been very grateful.

Often, the conditionals in (5b) and (5c) are called ''subjunctive'' or ''counterfactual'' conditionals, but as Comrie (1986: 89–93) has convincingly argued, conditional constructions like (5b) and (5c) are not inherently counterfactual, but differ in degree of hypotheticality. BD and ES reinterpret Comrie's analysis in terms of epistemic distance. By uttering (5b), for instance, the speaker may choose to present herself as distanced from the belief that the addressee will get her a cup of coffee, e.g., for rules of politeness, but that does not mean that she commits herself to the falsity of the protasis. Counterfactuality, BD and ES argue, is a contextually prompted inference, which seems to be the default interpretation of negative-stance forms outside the actual textual context, as it represents the strongest case of epistemic distance.

A third constructional parameter involves the distinction between ''space evocation'' and ''space set-up''. While both *if* and causal *since* can be used to evoke a mental space accessible in the context, only the former can be used to construct a new one as well. That is, *since*, unlike *if*, marks positive epistemic distance in that it evokes or pretends to evoke factual information from the context.

The remaining Chapters 4 to 9 survey the full range of conditional constructions in English and the compositional contribution of different formal forms to the overall meaning of conditional constructions. We present a selective overview here.

In Chapter 4, BD and ES discuss the use of alternate verb forms instead of the canonical simple present in the protasis and *will*-future in the

apodosis of predictive conditionals. The overall conclusion is that in *if*-clauses "the right verb forms must also be present to express a predictive conditional. And a predictive conditional relationship can be expressed with those verb forms, even in the absence of any conjunction" (p. 108). True future *will*, e.g., is acceptable in epistemic or speech-act conditional protases, but is barred in protases of predictive conditionals (p. 88–89).

In Chapter 5, the authors elaborate on nonpredictive conditionals, and extensively discuss the special characteristics of the mental spaces set up by them. The verb-form patterns of nonpredictive conditionals are less restrictive than those of content conditionals. The systematic use of distanced verb forms, for instance, is essentially connected to predictive use and, linked with this, the building of alternative spaces, one of which is the rejected or distanced alternative (p. 115). Whereas epistemic and metalinguistic conditionals may occasionally engage in prediction and hence may display distanced verb forms, speech act conditionals hardly ever easily allow distanced verb forms, as there are no alternative scenarios in the speech-act world (but see Note 6, p. 114).

Chapter 6 deals with the compositional contribution of *then* and *even* to the meaning of conditional constructions. The former deictically points to a particular mental space, and its basic compositional contribution is its unique reference to the situation described in the protasis. *Even if*, on the other hand, marks the protasis of a conditional construction as concessive. In concessive conditionals the apodosis is independently asserted, which, in terms of MST, means that no alternative scenario of the situation described in the apodosis is presented. Consequently, *then* and *even if* are normally incompatible in conditional constructions, since *then* is uniquely referring to a condition described in the protasis, whereas *even if* is a marker of an extreme of a scale of conditions.[1]

Chapter 7 tackles clause-order in conditionals and other constructions with an adverbial clause. There are four possible patterns, two with and two without comma intonation (p. 174).[2]

(6)  if p, q   If the home computer breaks down, I'll work in my office.
(7)  q, if p   I'll work in my office, if the home computer breaks down.
(8)  q if p    I'll work in my office if the home computer breaks down.
(9)  if p q    If the home computer breaks down I'll work in my office.

Pattern (6) is the most common sequence. It fits in well with the "space-building" function of *if* since it is "intuitively natural (...) that the space-builder clause should precede the contents which elaborate the space" (p. 173), and is typically used in content, epistemic, and speech-act conditionals. Pattern (7) is preferred with speech-act and metalinguistic

conditionals, in which the protasis justifies the communication of the apodosis as appropriate. The commaless patterns (8) and (9) are essentially restricted to predictive, causal constructions. Chapter 7 ends with an elaborate discussion of *unless*-clauses.

In Chapter 8, the authors discuss at length the compositional contribution of *only* to conditional constructions. In *only if p, q*-constructions *only* has scope over the entire *if*-clause. Its compositional meaning is that *q* holds *only in space p, not in other mental spaces* (p. 204). The focus of *only if p, q*-conditionals ''is on the exclusivity of one particular space as the one wherein Q holds, and not on the general building up of spatial content'' (p. 207), and this explains why the *only if p, q*-clause order is very rare in the attested examples. The unmarked order is with topical *q* first, and the new focal material in *p* afterwards. The markedness of the *only if p, q*-order is reflected in the inverted word order in the apodosis (''Only if you mow the lawn, *will I* give you 10 $''). The analysis of BD and ES predicts that comma intonation should not occur with *only if*-constructions (p. 207), and that *then* does not occur in the apodosis of such conditionals.

In Chapter 9, the authors give a detailed analysis of coordinate constructions with a conditional meaning, like (10), (11), and (12). Furthermore, other coordinate conditional constructions with nonclausal constituents and/or without a conjunction (e.g., *No pain, no gain*) are taken into account.

(10)    You pay us a trillion bucks and we'll take you to a Hoosegow. (p. 238)
(11)    Make the right choice and I'll see you through any trouble that may ensue. (p. 242)
(12)    Watch out or you'll get me crying. (p. 249)

The overall conclusion is that these noncentral conditional constructions inherit some of the characteristics of the central class, but need to be treated as specific constructions due to their own syntactic specificity.

The last chapter summarizes the main points argued in the book, and places the major findings in a broader cognitive context.

In their book, BD and ES demonstrate their familiarity with the lively debate about conditionals in various disciplines like linguistics, philosophical logic, and psychology. Within the realm of linguistics their study is complementary to that of Declerck and Reed (2001). Both studies extensively discuss conditional constructions in English, but whereas Declerck and Reed present a more exhaustive and purely linguistic account of conditionals, BD and ES elaborate an all-embracing analysis of conditionality per se. Furthermore, it is a major asset of the book that the

semantic, pragmatic and syntactic analysis of conditional constructions is based on a broad range of attested English examples.

Since we are not familiar with MST, we refrain from discussing this aspect of the book. Instead, we will discuss three empirical claims brought forward by BD and ES: (i) the claim that CP is built into the conventional meaning of predictive conditionals, (ii) the use of distanced verb forms in speech act conditionals, and (iii) the use of resumptive *then*. In our critique we use some observations about Dutch, since the authors express the hope that their analysis of conditionals in English "may be useful (...) in building up a crosslinguistic and comparative understanding of functionally and/or formally similar constructions in general" (p. 269).

First, BD and ES claim that predictive conditionals almost inevitably get a *q if and only if p* interpretation, and that conditionals that are not used predictively, have no *iff* inferences (p. 40). BD and ES support this claim with the analysis of different attested examples, e.g., (13).

(13)   If I'd been assaulted by men of my own race I would have been an object of pity ...
       But they weren't men of my own race. (p. 30)

(13) is a passage of Paul Scott's *The Jewel in the Crown*, and is part of a letter written by Daphne, a British woman living in India, who has been raped by Indian men. According to BD and ES, "Scott evidently intends an 'if-and-only-if' reading of this conditional. Precisely because the rapists were not white, Daphne is *not* being pitied but, instead, is a social outcast. But Scott surely does not mean this to be taken as a global statement that nothing else could have made her an object of pity [...]. A more plausible reading by far is that Daphne is not [...] considering other scenarios which might cause pity, but simply the influence of racial prejudice on her current situation" (p. 30). BD and ES defend the *iff*-reading of the conditional in (13) by what they call the "local nature of mental spaces". Mental spaces "are not objective in nature", but are "often concerned with local alternatives and local coherence" (p. 30). In this respect they are different from "possible worlds".

An *iff*-reading of (13) and of other text samples discussed by BD and ES seems acceptable, but this does not imply that an *iff*-interpretation always arises with predictive conditionals, or that in using a predictive conditional a speaker always suggests that an *iff*-interpretation is meant. Consider the following examples:

(14)   He gets angry if I leave the house. (p. 95)
(15)   If their car is parked in front of the house, they are at home.
(16)   If she awakens she will think a magician has been there. (p. 46)

Even though (14) and (15) could give rise to an *iff*-interpretation in particular contexts, we think that in other contexts such a strong implicature is not meant by the speaker (*if and only if I leave the house; if and only if their car is parked in front of the house*), and in (16) an *iff*-reading, if possible at all, only seems appropriate in a very specific context.

In Van Canegem-Ardijns and Van Belle (2006) we argue that three types of CP have to be distinguished: two specific ones (*only if p, q* and *only if not p, not q*) and a more general one (*if not p, not q*), and that these three types correlate with different speech act or utterance types. First, the *only if p, q* inference arises with conditional constructions in which the action described in the apodosis has a positive orientation and involves speaker control, and in which the protasis constitutes a "precondition" on the performance of the speech act about the apodosis. Typical instances are conditional promises. Second, the *only if not p, not q* inference is typically linked with conditional threats and conditional recommendations. It is consistent with the intended interpretation of both speech acts, i.e., *q unless not p*, to be read as *q; only if not p, not q*. That is, with a conditional threat the speaker threatens that *q* and indicates *not p* as the unique circumstance in which he will not perform the action named by *q*, and with a conditional recommendation the speaker recommends *q* in general, and indicates *not p* as the marginal circumstance in which the addressee need not do *q*. These two specific inference forms lead to an *iff*-interpretation. The third and more general form of CP, *if not p, then not q*, is linked with a greater variety of speech act types. Our analysis is based on the semantic characteristics of the utterance types, the substitutability of the protasis with specific questions about the apodosis, and differences in cancellability of the three inference types. We will not elaborate our arguments here, but only suggest that if BD and ES' claim is valid at all, it involves the weaker *if not-p, not-q* inference rather than the more specific *iff*-inferences.

In its stronger form, BD and ES' claim, also put forward in Dancygier and Sweetser (1997), has already been refuted in Horn (2000: 319) and Declerck and Reed (2001: 429–430) with various counterexamples. Horn and Declerck and Reed show that an *iff*-inference is also possible with conditional assertions about a past habitual action (17) and with conditional injunctions and pieces of advice (18). Moreover, in our view, even the weaker claim that predictive conditionals invite the (weaker) *if not-p, not-q* inference can be refuted by counterexamples like (19) which, even though they are predictive, do not invite the weaker *if not p, not q* reading.[3]

(17)   If the weather was fine, we went to the seaside.
       (Declerck and Reed 2001: 430)

(18)  If you can't stand the heat, get out of the kitchen.
      (Horn 2000: 319)
(19)  If he invites me, I will not go.

Since prototypical content conditionals (i.e., ''predictive'' conditionals) usually invite CP, it is not improbable that there is a link between CP and ''predictivity''. However, the empirical claim that ''predictivity'' counts as an explanation for CP is not corroborated by the facts.

The second issue we would like to discuss involves the use of distanced verb forms in conditional constructions. BD and ES argue that distancing in conditionals is connected to predictive use, especially to the building of alternative mental spaces. On these grounds they assert that speech act conditionals generally resist the possibility of distanced verb forms. We consider it a general shortcoming of the book that in this way the concept of ''distancing'' seems to be restricted to the presence of distanced verb forms in both *if*-clause and main clause. In our view, the protases of many if not all speech act conditionals in English are compatible with the distanced form of positive-interest distanced *will* (20a), and with at least some of what the authors call ''specialized constructions which use distanced verb forms in ways not found in more open-ended contexts'' (p. 105 [20b]–[20c]).

(20)  a.  I'll help you with the dishes, if that would be alright with
          you.
      b.  If you were to be hungry, there is a fairly decent restaurant
          across the street.
      c.  If you should be interested, I have edited a few items.

Admittedly, the distance involved in (20) applies only locally to the content of the protasis. It does not apply to the construction as a whole, ''and thus restricts the possibility of the whole reasoning being understood as distanced'' (p. 108).

Nevertheless, the question can be raised whether speech act conditionals are indeed incompatible with the use of distanced forms in both protasis and apodosis. Examples like (21) and (22), taken from the internet with Google, are counterexamples to BD and ES's presumably negative answer.

(21)  ''Perhaps, if you wouldn't mind, you could provide a synopsis of
      the article for those of us who do not speak Spanish.''
(22)  ''One more thing though: this is probably my bias showing, but
      if I might say so, I would say that the Catholic Church at least
      does a fairly good job at criticizing things other then sexual
      impurity.''

Social distance seems to be involved here. In (21), e.g., the speaker does not want to push the addressee too hard, and hence the use of positive-interest *would* in the protasis, and distanced *could* in the apodosis. Then again, BD and ES might argue that the use of two distanced verb forms in speech act conditionals requires the use of positive-interest *would* or modal *might* in the protasis, and does not allow a distanced past tense. But (23) indicates that speech act conditionals do allow two distanced past tense verb forms, both in the protasis and the apodosis.

(23)   "I am sorry to hear that your past experiences have been negative. But, if I were you, I would give it one more shot."

Examples like (23) are indeed abundant (*if I were the president of the US, if I were a rich man . . .*), and in our view they are not all straightforwardly "predictive". Thus, contrary to BD and ES's observation that genuinely predictive readings are possible in the extremely exceptional case in which a speech act conditional does allow two distanced past tense verb forms the conditional in (23) has two distanced past tense verb forms without an alternative-based predictive structure being built up. The objection that (23) is not a speech act conditional, but a content conditional, in which the predictive relation between protasis and apodosis is to be inter-preted in terms of enablement (compare Dancygier 1998: 83–84, Sweetser 1990: 114), has the problematic consequence — in BD and ES's presented account — that not all predictive conditionals naturally give rise to a CP implicature. By uttering (23), the speaker by no means implicates that "if I weren't you, I wouldn't give it one more shot", let alone that "only if I were you, I would give it one more shot."

   A third issue we would like to discuss concerns the use of *then*. BD and ES explain the incompatibility of *then* with *only-if* conditionals in English as a symptom of the semantics of *only if* conditionals: "(. . .) 'then' (. . .) marks reference back to a topical (and unique) P-space, while *only if*-conditionals occur only in cases where Q is more given than P, and where the uniqueness of P is new information relative to the content of Q" (p. 208). In Dutch and German, however, the counterparts of *only if* (*alleen als* respectively *nur wenn*) are easily compatible with *dan* or *so* (*then*) in the apodosis (24a)–(24b), which makes it doubtful that the in-compatibility of *then* and *only if* is semantic in nature.

(24)   a.   Alleen als je het gazon maait, (dan) geef ik je 10 euro.
       b.   Nur   wenn   du   den   Rasen   mähst,   (so)
            only   if      you   the   lawn      mow,      (then)
            gebe ich dir    10 euro.
            give I   you   10 euros
            'Only if you mow the lawn, will I give you 10 euros'

Finally, we end with two minor points concerning terminology. First, an explicit definition of what the authors regard as a ''predictive'' relation is lacking. The authors exhaustively — though, in our view, not convincingly — discuss the conditional utterance in (25), and attribute the presence of the distanced verb forms to the possibility of a predictive relationship between protasis and apodosis. But in what sense can this supposedly metalinguistic conditional (p. 127) be given a predictive interpretation, whereas the so-called speech act conditional in (26) cannot, at least in the view of the authors (p. 113)?

(25)   If we were speaking Spanish, he would be your uncle.
(26)   Don't do the crime if you can't do the time.

If the reason for this is that only (25) uses distanced past tense verbs, then the authors should be aware of the potential circularity in their argument.

Second, the authors use the term ''independently asserted'' in a rather loose way. In their discussion of the patterns in (6)–(9) above, it is said, for instance, that pattern (9) (*if p q*) ''should also involve less independent assertion of the conjuncts'' (p. 175), whereas pattern (6) (*if p, q*) ''gives the two clauses somewhat more independence'' (p. 176). It is hard to understand how the protasis or the apodosis of content conditionals is to some degree ''independently asserted''. After all, it is part of the definition of prototypical content conditionals that neither the protasis nor the apodosis is independently asserted since neither of them is entailed by the conditional utterance. For some reason — perhaps the concept of entailment does not fit in MST — the authors do not use entailment relations to establish the dependency or independency of the apodosis in different types of conditionals.

To conclude, we can say that *Mental Spaces in Grammar: Conditional Constructions* is an excellent and intriguing study about English conditionals and a must-read for linguists interested in conditionals in general. The points we have commented on were basically inspired by our attempt to apply the proposed descriptive parameters to analyze conditionality in Dutch. Our critical comments by no means imply, however, that we retract from our very positive evaluation of the book.

*University of Leuven*                        WILLIAM VAN BELLE and
                                         INGRID VAN CANEGEM-ARDIJNS

## Notes

1. See, however, the interesting discussion of "even if p, then" and "if p, even then q" conditionals on pp. 161–170.
2. Like the authors, we leave aside a fifth organization, namely placement of the *if*-clause inside the apodosis. This rather unusual clause-order sequence is restricted to metalinguistic conditionals (see p. 131), in which the *if*-clause takes a position as close as possible to the "text" commented on — "which may mean a position *within* the main clause rather than preceding or following it" (Dancygier 1998: 152).
3. Admittedly, the conditional in (19) may be interpreted as a concessive conditional. However, the Dutch counterpart of this conditional, *Als hij me uitnodigt, (dan) ga ik niet*, is clearly not concessive. As the authors' claim concerns the semantics-pragmatics of conditional constructions, we think these observations from Dutch are relevant.

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Alexandra Y. Aikhenvald and Robert M. W. Dixon: *Serial Verb Constructions — A Cross-Linguistic Typology*. New York: Oxford University Press, 2006. xxiv + 369 pp. Hardback ISBN 0199279152. USD 110.00.

The publication of Mark Durie's seminal paper on serial verb constructions in 1997 lead to a resurgence of interest in this kind of complex predicate. Serial verb constructions (from here onwards abbreviated as SVCs) were first described by Christaller (1875: 69–73, 143f.) in his grammar of

the African language Twi. Up to the end of the twentieth century, most research on SVCs had been done on African languages, as well as on pidgins and creoles. However, SVCs are also to be found in Hmong-Mien, Mon-Khmer, Sino-Tibetan, Tai-Kadai, Papuan, Austronesian, Semitic and Central-American languages as well as in Japanese. Recently, a number of excellent books have been published that contribute much to our knowledge on SVCs and their typology in Austronesian, especially in Oceanic languages (Crowley 2002; Bril and Ozanne-Rivierre 2004; Lynch et al. 2002; see also Senft 2004a, b). And now Alexandra Aikhenvald and Robert Dixon have published an edited volume that claims to present a crosslinguistic typology of this fascinating phenomenon. The book is the result of a workshop on SVCs that was held at the Research Centre for Linguistic Typology at La Trobe University in Melbourne in June 2003.

After the table of contents, the preface, the notes on the contributors and a long list of abbreviations (seven pages!), Alexandra Aikhenvald presents an introduction in the first chapter entitled "Serial Verb Constructions in Typological Perspective" (pp. 1–68). This chapter sets the scene for the next fourteen chapters. In the last chapter, "Serial Verb Constructions: Conspectus and Coda" (pp. 338–350) Robert Dixon presents a summary of "some of the main properties, and some of the main parameters of variation, of [...] SVCs" (p. 338) and inquires in a final section whether Dyirbal verb-plus-adverbal constructions should be regarded as SVCs.

A first version of Aikhenvald's introductory paper "had been circulated to the contributors, to ensure that the detailed studies of serial verb constructions in individual languages were cast in terms of a common set of typological parameters" (p. xi). Because this chapter is so crucial for the structure of the volume as a whole and, because of the summarizing character of the last chapter, I will put the emphasis of this review on these two contributions to the volume.

The second sentence of Aikhenvald's introduction already presents the readers with a highly problematic and hotly debated issue, namely the claim that SVCs "describe what is conceptualized as a single event" (p. 1). This claim is also made by Durie (1997: 291) and many other researchers interested in SVCs (including myself; see Senft 2004c). Terry Crowley (2002: 263) points out that "[t]he problem with any claim relating to 'eventhood' is that it is difficult — or perhaps even impossible — to verify empirically with our current state of knowledge precisely what an event is". William Foley (in press) also takes up this problem in his paper "The notion of 'event' and serial verb constructions: arguments from New Guinea" which he presented at the 14th Annual Meeting of the

Southeast Asian Linguistics Society. In a rather provocative vein, he "put[s] to bed permanently the old chestnut that SVCs express a single event" because "our knowledge in this area is woefully insufficient to allow us to read off from the formal crosslinguistic variation in the data, semantic and perhaps ultimately conceptual notions like single or multiple eventhood" (Foley: in press). Moreover, more than ten years ago Bernard Comrie already pointed out the following: "The claim that serial verb constructions encode a single event is made with great regularity in the literature on serial verbs but is a claim that I find difficult to test in critical cases" (Comrie 1995: 36). In connection with SVCs Bohnemeyer and others have introduced the notion "macro-event property (MEP)"; they argue that "an expression has the MEP iff any time-positional operator denoted by a time-positional adverbial, temporal clause, or tense which 'locates' a subevent entailed by the expression in time also locates all other subevents in time" (Bohnemeyer et al. 2005). They claim that this "measure of event segmentation" can be used to decide whether a "serial verb" or "multiverb construction" can be regarded as a construction that has the property of a "macro-event". This is an interesting proposal that may help us decide whether or not it is true that the verbs in SVCs are interpreted as expressing a single event. However, it seems that for the time being it is still an open question whether this claim is true or not. Aikhenvald does not mention at all that this claim is controversial, and, actually — with the exception of Anthony Diller (see p. 174) — neither do any of the other contributors to this volume. The author continues to define SVCs as "a sequence of verbs which act together as a single predicate" and mentions that "[t]hey are monoclausal; their intonational properties are the same as those of a monoverbal clause and they have just one tense, aspect and polarity value. Many SVCs also share core and other arguments. Each component of an SVC must be able to occur on its own. Within an SVC, the individual verbs may have same, or different, transitivity values" (p. 1). These general remarks are almost identical with Durie's (1997: 291) "key characteristics" of SVCs. In a footnote Aikhenvald claims that "[t]his definition consolidates the existing terminological consensus" — and there she refers to Durie (1997) and other important publications in the field.

After a few further remarks on the functions and meanings of SVCs Aikhenvald presents "an overview of SVCs covering cross-linguistically attested parameters of variation, formulating generalizations as to the types of SVCs and their expected behaviour, so as to provide a unified framework for the analysis and interpretation of verb serialization in its full density" (p. 3). In Sections 2–9 SVCs are classified on the following parameters (see p. 3):

- Composition: Aikhenvald distinguishes "symmetrical" SVCs, which "consist of two or more verbs each chosen from a semantically and grammatically unrestricted class" from "asymmetrical" SVCs, which "include a verb from a grammatically and semantically restricted class" (p. 3). (This is discussed in Section 3).
- Contiguity versus noncontiguity: We find SVCs where verbs "may have to be next to each other" and SVCs where "another constituent may be allowed to intervene between them" (p. 3). (This is discussed in Section 4).
- Wordhood of component: "components of a [...] [SVC] may or may not form independent grammatical or phonological words" (p. 3). (This is discussed in Section 4).
- Marking of grammatical categories in SVC: "verbal categories [...] may be marked just once per construction [...] or can be marked on every component ..." (p. 3f.). (This is also discussed in Section 4).

In Section 2 of the paper, she surveys properties of SVCs and defines them on the basis of these properties, then she discusses argument sharing in SVCs and gives an outline of additional properties of SVCs. Section 3 deals with composition and semantics of SVCs, Section 4 discusses formal properties of SVCs, Section 5 deals with productivity of serialization and functions of SVCs, Section 6 attempts to answer the question which verbs are likely to occur in SVCs, Section 7 discusses why we find several kinds of SVCs in one language, Section 8 presents the properties of serializing languages and the diffusion of serial verb constructions, and Section 9 summarizes the arguments made so far and offers prospects for further study. Finally, Section 10 gives an overview of the volume and the chapter ends with an appendix that presents approaches to SVCs and terminological issues.

Any positive or negative assessment of this volume depends on whether or not the reader accepts the framework for the analysis and interpretation of verb serialization as outlined in this chapter. I am sure that not every linguist will agree with each and every argument that is put forward here, however, I think this chapter provides an excellent starting point for further discussion of more or less controversial issues in the analysis and description of SVCs, and I agree with Foley, who points out that "whatever they are, their continued detailed study will pay rich dividends in unraveling the role of lexical, semantic and pragmatic constraints on the formal structure of language" (Foley in press).

The following fourteen chapters aim "at a cross-linguistic account of SVCs in typological perspective, in terms of the parameters outlined in [Aikhenvald's] introductory chapter" (p. 57).

In Chapter 2 (pp. 69–87) Stephen Matthews writes "On Serial Verb Constructions in Cantonese", a Sinitic language. Birgit Hellwig discusses "Serial Verb Constructions in Goemai", a West Chadic language (spoken in Nigeria) with isolating tendencies, in Chapter 3 (pp. 88–107). In Chapter 4 (pp. 108–123) Christa Kilian-Hatz presents her analyses of "Serial Verb Constructions in Khwe (Central Khoisan)"; Khwe is spoken in Southern Africa. Chapter 5, "Serial Verb Constructions in their grammatical context", presents Felix Ameka's analyses of SVCs in Ewe, a Kwa language spoken in Ghana (pp. 124–143). David B. Solnit discusses "Verb Serialization in Eastern Kayah Li", a language from the Karen group of the Tibeto Burman family, in Chapter 6 (pp. 144–159). Kayah Li is spoken in Burma and in Thailand. Anthony V. N. Diller presents his analyses on "Thai Serial Verbs: Cohesion and Culture" in Chapter 7 (pp. 160–177); Thai belongs to the Tai-Kadai language family. Alexandra Aikhenvald presents her analyses on "Serial Verb Constructions in Tariana", an Arawak language from northwest Amazonia, in Chapter 8 (pp. 178–201). In Chapter 9 (pp. 202–222) Andrew Ingram discusses "Serial Verb Constructions in Dumo", a language of the Sko language family spoken on the north coast of the island of New Guinea; it is also known as "Vanimo". All the languages presented in these eight chapters have "productive SVCs of a variety of structural and semantic types" (p. 57). Alexandre François presents his analyses of "Serial Verb Constructions in Mwotlap", an Oceanic language, in Chapter 10 (pp. 223–238). Mwotlap is spoken on a small island of the Banks group north of Vanuatu. It has a large array of productive SVCs. François is the only one of the contributors to this volume who quotes Isabelle Bril's and Françoise Ozanne-Rivierre's (2004) important contribution to the research on SVCs in Oceanic languages. In Chapter 11 (pp. 239–253) John Hajek discusses "Serial Verb Constructions in Tetun Dili", an Austronesian language spoken in Dili, the capital of East Timor. Tetun Dili is undergoing "deserialization". In Chapter 12 (pp. 254–272) Frantisek Lichtenberk discusses "Serial Verb Constructions in Toqabaqita", an Oceanic language spoken on the island of Malaita in the Solomon Islands. Roberto Zavala presents his analyses on "Serial Verbs in Olutec (Mixean)" in Chapter 13 (pp. 273–300). Olutec is spoken in Mexico and has one-word SVCs. Willem J. de Reuse discusses "Serial Verbs in Lakota (Siouan)" in Chapter 14 (pp. 301–318). Lakota is also known as "Teton Dakota"; it is spoken on reservations in North and South Dakota in the USA. The structural and semantic properties of SVCs in Lakota are very idiosyncratic. In Chapter 15 (pp. 319–337) Azeb Amha and Gerrit J. Dimmendaal present their analyses of "Verbal Compounding in Wolaitta". Wolaitta is a language from the Omotic branch of the Afroasiatic language family and is spoken

in Ethiopia. Wolaitta does not have SVCs, but converb constructions that show interesting similarities with SVCs.

These fourteen chapters provide incredibly rich and fascinating data from languages "of varied genetic affiliation and typological profile" that are spoken in "heavily-serializing areas" (p. 57). The editors decided against featuring a creole language in the volume because creoles and their SVCs "have been extensively described".

As already mentioned above, Robert Dixon gives a summarizing typological overview of the findings presented in the preceding chapters in the first part of the last chapter, Chapter 16 (pp. 338–350). After a brief characterization of the construction type Dixon presents "approximate percentages of textual clauses" (p. 338) with SVCs for the languages presented and discussed in this volume. He does not provide any information with respect to the text genres that he — or the contributors? — used for counting the SVCs in the respective languages to come up with these percentages, despite the fact that Hajek (p. 252f.) emphasizes the interdependence of the frequency of SVCs and the text genres in which they are produced. Then Dixon points out that "SVCs are not restricted to languages of a particular typological profile" (p. 338) and presents his summarizing remarks on their relevant semantic property and the grammatical properties and parameters under the following headings (printed in bold, pp. 339–344):

A.  An SVC consists of more than one verb, but the SVC is conceived of as describing a single action.
B.  There is no mark of linkage or subordination in an SVC.
C.  Each verb in an SVC may also occur as the sole verb in a clause.
D.  An SVC functions like a single predicate.
E.  An SVC will generally have its own transitive value.
F.  There must always be (at least) one argument shared by all verbs in an SVC.
G.  The verbs in an SVC may make up one word, or may remain separate words.
H.  The components of an SVC may be contiguous or non-contiguous.
I.  There must be some general rules for what makes up an SVC.
J.  Asymmetrical SVCs tend to become grammaticalized, and symmetrical SVCs tend to become lexicalized.
K.  Although most SVCs in a language involve just two verbs, in most languages there can be three or more verbs involved.

Some of these rather generally formulated (and discussed) topics are controversial — and I can only agree with the author that "[f]urther

work is needed (on a large sample of languages) to see whether any cross-linguistic generalizations are possible ..." (p. 344); however, this holds for SVCs in general and not only for "generalizations [...] concerning the details of inclusion of SVCs within a higher SVC" (p. 344), as Dixon restricts his statement here. Such further research will also enable us to finally decide whether Crowley (2002: 18) was right or wrong in emphasizing that "it may in fact be wishful thinking to assume that we can come up with a universally applicable definition of verb serialization". Nevertheless, the summary presented by Dixon in the first part of the last chapter of this volume provides an excellent starting point for further research on SVCs; but I am afraid that so far we have to take some of these properties and parameters that are relevant for the description and analysis of SVCs as hypotheses that must be either verified or proven false in future studies and that may see "many happy restatements" as we know more about this fascinating phenomenon. This future research must consider text categories in which SVCs are used (see Hajek's contribution, p. 252f.); it must include "cultural and sociolinguistic factors" and their influence on SVCs as well as their actual usage, as Diller (p. 175) points out in his contribution to this volume (see also Ingram's remark in footnote 4 on p. 218 and Zavala's final remarks on p. 298; see also Senft 2004c: 61); and, as Crowley (2002: 262ff.) emphasized, it must also discuss cognitive implications of SVCs. It is a pity that these aspects of research on SVCs are rather neglected in this volume.

Dixon's chapter ends with a discussion of whether Dyirbal verb-plus-adverbal constructions should be regarded as SVCs. Dixon presented his data and the arguments that speak for and against such an analysis to the participants of the 2003 workshop on SVCs in Melbourne and took a vote. He states that "[e]very participant voted 'yes', that the verb-plus-adverbal construction in Dyirbal should be regarded as a bona fide SVC". This is rather strange — results of linguistic research are not a matter of majority vote but of convincing data analyses — as Dixon himself has been showing us for many years now!

The book ends with an index of authors (pp. 351–354), an index of subjects (pp. 355–364) and an index of languages, language families, and areas (pp. 365–369).

The anthology is clearly structured, relatively easy to read and presents excellent data on and analyses of SVCs in 15 languages (with Dyirbal included). There are a few typos (e.g., p. 108, third to last line, read: Verbs may be ... (for: Verbs maybe ...), p. 111, last line, read: ... are underlined ... (for: ... are marked in bold), p. 113, line 14: read: ... to express ... (for: ... to expresses ...), p. 216: II. 'Switch-function' SVCs — this heading is not printed in bold, p. 269 example (60): the SVC "riki

thatoqoma-na'' is not underlined, p. 276: there is no reference to Table 3 in the text, p. 328: there is no reference to Table 2 in the text). However, all this criticism is carping.

  In general, this anthology provides the reader with rich and fascinating data on and sound analyses of SVCs and contributes decisively to the slowly but gradually growing literature towards a crosslinguistic typology of SVCs.

*Max Planck Institute for Psycholinguistics,*                GUNTER SENFT
*Nijmegen*

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Anderson, Gregory D. S. (2006): *Auxiliary Verb Constructions*. Oxford Studies in Typology and Linguistic Theory. Oxford: Oxford University Press. xviii + 473 pp. ISBN 0-19-928031-2.

Anderson's book is a typological study of auxiliary verb constructions based on a large sample of 800 languages. The author shows the various ways in which inflectional morphology is realized on either the lexical verb or the auxiliary, or on both. Rather than investigating the functional range associated with auxiliary verb constructions, the focus of this study is on the variation of morphological coding of verbal categories in analytic verb constructions and its historic relation to other complex verb constructions such as serial verbs. The first chapter defines auxiliaries and auxiliary verb constructions, thereby pointing out the gradient nature of the phenomenon and the corresponding difficulties that await the typologist in identifying and classifying a given complex verb construction. He points out the vagueness of the notion ''auxiliary'', briefly surveys the history of its treatment in the literature, and lists some definitional criteria for the distinction of auxiliary verb constructions from other types of complex predicate constructions. The first chapter provides a definition of ''head'' as the central element of the construction. Anderson identifies three types of head: the inflectional head is that element that bears obligatory inflections, the phrasal or syntactic head, and the semantic head, which determines the argument structure of the predicate in an auxiliary verb construction. The proposed typology of inflectional patterns is based on the concept of inflectional head and consists of five macrotypes. The first two types are the AUX-headed pattern, in which inflections appear on the auxiliary and the lexical verb is nonfinite, and its reverse counterpart, the LEX-headed pattern, in which inflections are realized on the lexical verb, while the auxiliary is unmarked. The remaining types are the doubled pattern, with inflections on both elements of the construction, the split pattern with different inflectional categories realized on the component elements, and the doubled/split pattern, which combines properties of the latter two types. Although auxiliary verb constructions are likewise possible in which both component elements are unmarked; these are not discussed in much detail in the book. According to Anderson, the proposed types represent the logically possible distribution of inflectional elements in predicate constructions that contain a lexical verb and an auxiliary as potential hosts for these elements. The first chapter furthermore provides a brief functional typology of auxiliary verb constructions in that it lists the inflectional categories typically encoded in auxiliary verb constructions. Chapter 2 presents what is the perhaps most prototypical and familiar kind of inflectional pattern encountered in auxiliary verb

constructions, the AUX-headed construction. Here obligatory inflections are realized on the auxiliary, while the lexical verb is either unmarked or marked as nonfinite, gerundive, or participial. This pattern displays a clear split between the domain of the ''functional'' and that of the ''lexical''. In Chapter 3 the inverse pattern is presented, i.e., one in which the lexical verb functions as the inflectional head and the auxiliary is unmarked, bearing some resemblance to a verbal particle. This pattern shows a regular divergence of phrasal or syntactic head and inflectional head. In constructions of this type the auxiliary can mostly be identified as the syntactic head on grounds of syntactic position and dependent marking on the lexical verb. Chapter 4 deals with cases where obligatory inflectional categories are encoded on both elements of the auxiliary verb constructions, so that both elements function as the inflectional head. Subject is identified as the most common doubly encoded category, followed by tense and aspect. In Chapter 5 Anderson discusses auxiliary verb constructions in which some categories are marked on the lexical verb, while others are marked on the auxiliary, including some cases of doubly marked categories as well. Again data from a remarkable range of languages is provided to illustrate this inflectional type. Chapter 6 discusses univerbations, i.e., phonologically fused structures that can nevertheless be identified as auxiliary verb constructions. Anderson shows formal and functional similarity with the inflectional patterns defined and illustrated in Chapters 2–5 and on these grounds argues for an analysis of fused structures as former auxiliary verb constructions. An important claim of this chapter is that TAM-marking pronouns that are encountered in numerous languages are the result of fusion of auxiliary and subject markers. This in turn is viewed as an intermediate stage on the way to fully fused complex verb forms. In Chapter 7 Anderson takes each of his macrotypes of inflectional patterns and discusses the range of likely diachronic source patterns encompassing biclausal as well as monoclausal structures. He presents at a number of source patterns and sketches paths of development, thereby pointing out that there is a correspondence between certain source structures and certain types of inflectional patterns in auxiliary verb constructions. The inflectional properties of the types are thus explained in terms of transparent diachronic developments from originally nonauxiliary constructions.

Anderson's monograph is, to my knowledge, the most comprehensive study of inflectional patterns of auxiliary verb constructions to date. The study is based on a convenience sample that tries to ensure maximal diversity by taking into account languages not only from major language families, but also from microfamilies as well as language isolates. The sheer size of the sample is impressive and, bearing in mind that 800

languages make up a considerable percentage of the world's total number of languages, the generalizations arrived at in this study may well be treated as universally valid. Anderson manages to boil down the enormous morphosyntactic diversity encountered in the study of auxiliary verb constructions to a small number of inflectional types, each defined in terms of formal patterns and sufficiently illustrated by an abundance of crosslinguistic data. There are, however, a few points of criticism that I would like to address. Types are established on the basis of the patterning of morphosyntactic material on the component parts of auxiliary verb constructions. The realization of an inflectional element as prefix or suffix is therefore crucially relevant for the identification of an element's status as inflectional head, which is the basis for the proposed typology. The phenomenon of univerbation is particularly problematic for such a classification of structures, since material occurring between auxiliary and lexical verb may be analyzed as suffixed to one or affixed to the other, which in terms of Anderson's classification would result in assignment to a different type. Furthermore, cases are mentioned where an auxiliary verb construction contains more than one auxiliary (see for instance the Sukuma example on page 216 or the Jarawara example on page 373). This calls for a more detailed evaluation of the proposed inflectional types, since more obligatory elements in the construction necessarily widen the spectrum of possible inflectional patterns. At various points in the book Anderson points out that there is a considerable degree of overlap, that is to say that an auxiliary verb construction in a given language may be classified one way or another in his inflectional typology, thereby illustrating the problem of crosslinguistic identification (cf. Croft 1990: 11ff). The accuracy of the assignment of a given structure to a constructional type and the reduction of the number of borderline cases to a minimum crucially depends on the definitional criteria that exist for such types.

In Chapter 1 Anderson introduces a number of complex predicate constructions that resemble auxiliary verb constructions, but there is comparatively little data to illustrate these types and their resemblance to auxiliary verb constructions. A more detailed discussion of, for instance, light verb constructions, and a more extensive list of definitional criteria would have made possible a clearer distinction between the constructional types. However, Anderson correctly points out the vagueness that obtains in the relevant literature and consequently reanalyzes some structures as auxiliary verb constructions, particularly those that have been classified as instances of verb serialization by others. In this respect, he claims that once the lexical meaning of one of the lexical verbs in a serial construction becomes somewhat obscure and shifts from the lexical domain to that of functional elements, the construction must be considered an auxiliary

construction. Furthermore, he claims that serial verb constructions and auxiliary verb constructions may exist side by side within a single given language involving the same element interpretable as verb or auxiliary, respectively. While there are examples of single language sentence pairs that show the formal similarity between serial verb constructions and auxiliary verb constructions, these mostly involve different auxiliary elements. This interesting aspect of grammaticalization is not clearly demonstrated until page 334, where the same element, in this case English *go*, is shown to enter into constructions of various degrees of grammaticalization within a single language and synchronic state. In Chapter 1 Anderson points out that the same element may occur in a single language and synchronic state as bound element, auxiliary and lexical verb, thus indicating a clear diachronic relationship between present auxiliaries and former verbs. Furthermore, in Section 1.2. he defines ''auxiliary verb'' as an item on the lexical verb-functional affix scale expressing verbal categories, thus emphasizing the former verbal character of the elements in question. Even though he discusses lexical sources of auxiliaries in the final chapter of the book and nicely lists a number of common lexical source verbs and their function in their synchronic use as auxiliaries in some of the languages of the sample in Table 7.7 on page 369, the massive amount of data presented in the preceding chapters would have benefited greatly from consideration of these sources in the interlinear glosses throughout the book, wherever possible. This would have given a clearer idea of what the distribution of lexical sources is across the languages in the sample. Instead in the majority of cases the auxiliary is simply glossed as AUX, providing no clues to the lexical origin. The final chapter provides a thorough account of the historical development of the various types of auxiliary verb constructions, demonstrated by a wide range of crosslinguistic data as in the preceding chapters. In contrast to the other chapters, however, the point of discussion here is diachronic processes. Perhaps the investigation would have benefited from a more detailed discussion of grammatical change in a small number of selected languages that exhibit synchronic co-existence of various degrees of grammaticalization. The diachronic claims made in Chapter 7 could have been backed up with an even greater number of source- and target patterns from a small number of single languages, which would have meant a divergence from the presentational approach adhered to throughout previous chapters, i.e., provision of broad crosslinguistic data for the illustration observed patterns. On page 368, Anderson remarks that there is a ''general typological pressure'' for more marked structures to be replaced by less marked ones. As an example he states the doubled pattern and the AUX-headed pattern. This tendency is extremely crucial and it would have been worth

elaborating on perhaps in a separate subsection, considering that an entire chapter has been devoted to the doubled pattern. Although the book is generally organized very well, there are a few presentational shortcomings that may cause some inconvenience for the reader. Some of the tables do not appear in their appropriate sections (Tables 7.2 and 7.3). Also the circumstance that interlinear glosses are not aligned throughout the book is not helpful, particularly if the reader is presented with such a large amount of language data and a broad spectrum of grammatical systems.

Despite these minor points of criticism the book is an excellent contribution to linguistic typology. It provides a good overview of this often discussed topic and at the same time provides new insights into the nature of auxiliary verb constructions, the limits of inflectional variation thereof and common paths of grammatical change based on an enormous corpus of data. Moreover Anderson opens up new avenues of research in his monograph in that it calls for further investigation of the relationship between formal grammaticalization paths, i.e., the development of inflectional patterns on the one hand and grammaticalization of certain verbal elements in auxiliary function on the other hand. The book is structured in a clear and convenient fashion and serves as a valuable resource for all researchers working in the field of typology.

*University of Manchester*                             ANDREAS JÄGER

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