

REVIEWS

JOHN J. GUMPERZ & STEPHEN C. LEVINSON (eds.), *Rethinking linguistic relativity*. (Studies in the social and cultural foundations of language.) Cambridge & New York: Cambridge University Press, 1996. Pp. viii, 488. Hb \$75.95, pb \$27.95

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Almost forty years ago, the “Whorf Hypothesis” was one of the things that attracted me to linguistic anthropology. George Orwell’s *1984*, with its dark vision of a world made safe for power by bureaucratic euphemism, was one of my favorite books, and Whorf’s claim that novel and valuable ways of understanding the world might be encoded in small stateless languages struck me as a particularly telling and precise statement of a large anthropological commitment. But my own Whorfianism, and everybody else’s as well, was soon to be seriously challenged. In the late 1960s and early 1970s, new scholarship on language universals and linguistic typology undercut the theory of linguistic relativity. Whorf’s own best-known descriptive claims, especially those about Hopi, were challenged by knowledgeable field workers (Voegelin et al. 1979, Malotki 1983). By the early 1990s, Steven Pinker could confidently write that Whorfianism was “wrong, all wrong” (1994:57), “outlandish” (63), and “bunk” (65) – and this is a mere subsample of Pinker’s characterizations.

However, at the very moment when Pinker must have been word-processing his entertaining caricature of linguistic relativity, a neo-Whorfian revival was already under way. Stimulated partly by careful rereadings of Whorf, especially by Silverstein 1979 and Lucy 1992 – the latter contributes an important summary of his own research in the volume under review – and partly by the increased methodological precision made possible by new findings in universals and typology, scholars began anew to undertake work that posed “Whorfian” questions, or to advance Whorfian interpretations of their findings (Kay & Kempton 1984 is an early example, building on advances in the typology of color terminologies that were supposed to consign linguistic relativity to eternal oblivion). Neo-Whorfian scholarship is more nuanced, probably more rigorous linguistically (although Whorf’s reputation as a linguist is undergoing re-evaluation), and certainly less romantic and sweeping than the original.

The articles in the volume under review, a landmark in the neo-Whorfian movement, exemplify these refinements. The several years between the original Wenner-Gren Symposium in 1991 and the publication of the papers in this vol-

ume meant that versions of some of the most important ones have long been available; nevertheless, the volume remains extremely valuable for its breadth of coverage, and especially for the probing and thoughtful introductory essays by Gumperz and Levinson. There are five of these – three co-authored, and one additional essay by each – and together they make a superb introduction to major questions and issues, as well as elucidating the various contributions in each section.

One of the most important refinements on which contemporary scholars of Whorf's work insist is that his concern was less with grammar itself (and certainly not with the lexicon, which he regarded as a trivial influence on thought) than with what he called "habitual ways of speaking." Dan Slobin's chapter exemplifies this point. For instance, in Spanish it is not "ungrammatical" to say something like *El niño subió el árbol*, a literal translation of "The boy climbed the tree" (for the event represented in the now-famous picture book, *Frog, where are you?*) However, the Spanish-speaking children in Slobin's sample usually said *El niño está subido en el árbol*. Slobin contrasts the habitual English way of expressing such an event as "assert trajectory, imply end-state" vs. a Spanish tendency to "assert end-state, imply trajectory." This distinction of "overall rhetorical style" between Spanish and English has real consequences: Spanish-speaking children use many verbal participles (e.g. *sub-ido* 'climb-part') at an early age. Furthermore, Slobin argues that this habit directs their "thinking for speaking" to different details of an event than those to which English-speaking children attend.

Several of the essays challenge claims about cognitive universals in spatial cognition. Melissa Bowerman finds that spatial descriptors differ in interesting ways even in very closely related languages. Thus Dutch has three prepositions (*aan*, *op*, and *om*) where English has only one, *on*, requiring a Dutch child to attend to precise details of spatial configurations that English-speaking children can neglect. English speakers characteristically express PATH with a system of particles, and they distinguish transitivity with action verbs like *put* vs. *go*. English-speaking children very early begin to use the rich repertoire of monosyllabic path expressions – *up*, *down*, *in*, *out*, *off* – and, at the one-word stage, they use them for both transitive and intransitive actions. By contrast, in Korean the verb root itself expresses PATH, with different roots for transitives like 'put in' vs. intransitives like 'go in'. Very young Korean children in Bowerman's sample never collapsed this distinction. There seems to be no difference in the age at which English and Korean children develop skills with their distinctive systems, which suggests that neither group has to defeat some kind of universal default system in order to acquire their language.

Levinson's paper is an early report on now well-known findings on languages with "absolute directionals." Students of spatial cognition, following Kant, had proposed as a universal what Levinson calls a "relative" system, in which the speaker's body is a deictic center, and directionals include expressions like "right,"

“left,” “ahead,” and “behind.” But speakers of languages like Guugu Yimithirr (Australia) and Tzeltal (Mexico) characteristically use expressions with absolute meanings, similar to English *north*, *south*, *east*, and *west*. Levinson reports early results that demonstrate important “Whorfian effects”: Speakers of Guugu Yimithirr are very good at orienting themselves in space, and speakers of Tzeltal use their absolute directionals even at the very local level of an array of objects on a table.

Again, it is the characteristic means of expression, not the full range of possibilities in the language, that is crucial. Certainly English speakers control lexical items that can be used as “absolute directionals.” But the question for neo-Whorfians is: How do people actually use these forms in everyday life? In my own city of Tucson, Arizona, people do use the lexicon of the compass grid, but in an interesting way: The quadrants of the city (defined by major streets) are morally loaded – hippies live on the west side, solid middle-class white citizens on the east side, and “Mexicans” on the south side. The result of this is that the reference for the directionals is locally skewed: A lily-white residential development in the southeastern part of the city is considered “east side,” while a Hispanic neighborhood miles to its absolute north will be “south side.” “North” is associated with wealth, but there are many very poor areas in the north quadrant, forcing the local newspapers to report crime in these areas as taking place in “near north-side” neighborhoods (the relatum of “near” is unclear); there is no such thing as the “near south/east/west side.” In other places, such a grid, morally relativized or not, may be very little used. I recall an incident in Salamanca, Spain, a couple of years ago, when my guidebook called attention to an interesting bas-relief above “the west door” of a church. It was high noon on a hazy day in early July, and I did not know which direction was west. I went into a shop across the street from the church and asked, with hilarious results – all three sales clerks and a passing purchaser gathered around, arguing, laughing, pointing here and there, and none of them had the slightest idea where “west” was in Salamanca!

The chapters by William Hanks (on Yucatec) and John Haviland (on Guugu Yimithirr) are exemplary in their rigorous attention to the ways in which deictic/directional systems are actually used in everyday talk. Central for both these papers is the classic question about how “transposition,” or tracking the meaning of these elements, is accomplished by interlocutors when “here” and “now” shift during a conversation. Such attention to contextualizing inference is an important theme of the volume; the chapters by Gumperz and by Herbert Clark give detailed consideration to the implications for “rethinking linguistic relativity” of our contemporary understanding of meaning as a collaborative construction among interlocutors – rather than as inhering, by arbitrary convention, in linguistic form.

Elinor Ochs’s article draws out this point, taking from her cross-cultural work on language socialization the idea that “local” cultures” emerge in the densely

detailed customary management and representation of situations. If we take this seriously, Gumperz and Levinson point out, then we cannot speak (as was common in earlier forms of Whorfianism) of a “world view” as inherent in a “language.” Instead, world views must emerge among particular local groups of interlocutors, and these might differ substantially across speakers of “the same” language. Paul Kay’s article points out that different expressions, even in the same language, may imply quite different views on the world. Furthermore, as shown in Elsa Gómez-Imbert’s article about the intricately multilingual communities of the northwestern Amazon, “world views” as instantiated in particular conventions of coding can spread and come to be shared even by speakers of genetically unrelated languages.

The volume is balanced by a variety of positions on the scope of linguistic relativity. All the articles are sensitive to the issue of universal constraints, and the authors are thoroughly familiar with the typological literature. Scholars with a strong commitment to universals are part of this dialogue; in addition to Kay’s article, which is anti-Whorfian, Pascal Boyer, a cognitive anthropologist with a basically anti-relativist perspective, contributes a strong essay on cross-cultural regularities in religious thought. Yet the general thrust of these papers is that global characterizations of universals need to be tested and refined by a renewed attention to difference – and particularly to the detailed ethnographic study of actual usage, accompanied by psycholinguistic experiments with speakers of diverse languages.

A second important conclusion that can be drawn from the volume is that “thought” is too global a term to be useful (as many a modularity theorist would agree). The authors generally concur with Slobin and Bowerman, who point out that “thinking for speaking” is not the same as “thinking” in general. To drive home this point, Charles and Janet Keller undertake the very difficult task of giving a rigorous account of kinds of thinking – in this case, a master knife-maker’s conceptualization of a new design – that seem to be fundamentally non-linguistic.

Within the broad cautionary frameworks of attention to universals, and to the refining of our understandings of “thought” and “culture,” these authors suggest that, even though Whorf may have been “wrong,” he was probably not, to borrow Pinker’s characterization, “all wrong.” This important volume reveals that the paradigm of relativism in linguistics and anthropology is by no means exhausted, and it lays out a framework for continued research within it.

REFERENCES

- Kay, Paul, & Kempton, Willett (1994). What is the Sapir-Whorf hypothesis? *American Anthropologist* 86:65–79.
- Lucy, John (1992). *Language diversity and thought*. Cambridge & New York: Cambridge University Press.
- Malotki, Ekkehart (1983). *Hopi time*. Berlin: Mouton.

- Pinker, Steven (1994). *The language instinct*. New York: Morrow.
- Silverstein, Michael (1979). Language structure and linguistic ideology. In Paul R. Clyne et al. (eds.), *The elements: A parasection on linguistic units and levels*, 193–247. Chicago: Chicago Linguistic Society.
- Voegelin, Carl F.; Voegelin, Florence H.; and Jeanne, LaVerne Masayesva (1979). Hopi semantics. In Alfonso Ortiz (ed.), *Handbook of North American Indians*, vol. 9, *Southwest*, 581–86. Washington, D.C.: Smithsonian Institution.

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JAN NUYTS & ERIC PEDERSON (eds.), *Language and conceptualization*. (Language, culture and cognition series, 1.) Cambridge & New York: Cambridge University Press, 1997. Pp. viii, 281. Hb \$59.95.

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This book is the first in a series, edited by Stephen Levinson, which (according to the dust jacket) “focuses on the role that language, in both its universal psychological aspects and its variable cultural aspects, plays in human cognition . . . [as well as] the relation of speech production and comprehension to other kinds of behavior in cultural context.” Each chapter focuses on one point of contact between linguistic and conceptual representation. Since the goal of the series is of central concern to readers of *LiS*, the first book in the series should be especially interesting, as a harbinger of relevant studies to come.

Chap. 1, Levinson’s “From outer to inner space: Linguistic categories and nonlinguistic thinking” (13–45), provides a useful framework, beginning with a discussion of different authors’ positions on whether Conceptual Representation (CR) is the same as Semantic Representation (SR). His own position is that CR – the concepts that a given speaker can represent mentally – is not “the same as” SR, the semantic choices available in a given language. L cites evidence that speakers conceptualize things most easily in a manner facilitated by their language; but even where a language lacks, say, a specific color term, speakers can conceptualize that color – although they must use elaborate locutions to express themselves clearly. L nevertheless proposes a taxonomy of ways of semantically representing space, citing evidence from studies of the conceptualization of space in different societies (primarily in Australia and Mesoamerica, but with reference to research being carried out on other spatial semantic/conceptualization systems at the Max Planck Institute). He thereby demonstrates that different cultures have non-overlapping ways for CONCEIVING spatial relations, because they have non-overlapping underlying SEMANTICS for them.

Chap. 2, “Spatial operations in deixis, cognition, and culture: Where to orient oneself in Belhare,” by Balthasar Bickel (46–83), presents an elaborated example of the spatial semantic system of a culture in eastern Nepal. The data focus on specific variables that are salient in this culture and that might therefore be rel-

evant for other studies of spatial conceptualization. (These results bring to mind that, just as many exotic phonological variables can be discovered close to home, exotic understandings of “up” and “down” like those used by Belhare speakers can also be found in the spatial semantics of, say, your native Philadelphian.)

Paul Werth’s “Remote worlds: The conceptual representation of linguistic *would*” (84–115) discusses the conceptual significance of Eng. *would*, using examples gleaned from the news media and literature. Werth lists diverse linguistic “meanings” of the word, with an analysis which synthesizes a “coherent model of temporal, psychological and locational proximity” (87). His point – as foreshadowed in the title, as well as in the work of Edward T. Hall (e.g. *The silent language*, 1981) – is that, in English, temporal, psychological, and locational distance are all conceptualized as aspects of remoteness, and can be verbalized with the remote use of tense: the conditional *would*.

Eve Sweetser, in “Role and individual interpretations of change predicates” (116–36), presents a semantic analysis of English data to demonstrate that, given a mental-spaces semantic modeling, some change-of-state predicates can be used both iconically and in a role interpretation, while others can be used only iconically.

Mary Carroll, in “Changing place in English and German: Language-specific preferences in the conceptualization of spatial relations” (137–60), returns to the spatial cognition issue raised in the first two chapters. She finds that, in similar spatial-descriptive experimental tasks, English and German college students verbalize the information in systematically different ways: The English speakers focus more consistently on objects-to-describe, or on cardinal directions (north, south etc.), while the Germans rely more on deictic descriptors. Given recent work in cognitive science that found a cross-species tendency for males and the left-handed to conceptualize space deictically, while females and the right-handed organize space relative to specific objects (Bever 1992), it would be interesting to discover how sex and handedness interact with Carroll’s categories. Moreover, Bever reports that, within the English-speaking world, use of cardinal directions is clearly a geolinguistic and gender variable. Although Carroll’s description of her experiment is more thorough than those in other chapters, the reader is left ignorant of where her college students are from, or what the gender breakdown is. As Carroll admits, “Investigations of the extent to which different ways of conceptualizing states of affairs are actually acquired . . . will also provide valuable insights” (160).

Russell Tomlin’s “Mapping conceptual representations into linguistic representations: The role of attention in grammar” (162–89) presents evidence from well-designed experiments to show that, if one of two stimuli is visually (and therefore cognitively) salient, the likelihood is greatly increased that English speakers will put the salient stimulus in subject position. He concludes that conceptual representation precedes linguistic formulation and should be described independently.

“Growth points cross-linguistically,” by David McNeill (190–212), presents conclusions based on results of an experimental task in which speakers of different languages reported their viewing of a cartoon. (Unfortunately, McNeill leaves critical information unspecified, including even the number of speakers per cell.) He found great cross-speaker similarity in the story points enlivened by gestures, but also systematic differences in gestural presentation that appeared to coincide with the speakers’ verbal presentation – differences that he traced to the linguistic preferences of the languages for which the gestural counterparts were compared. He apparently assumes these to be evidence of conceptual rather than semantic differences.

“On the modularity of sentence processing: Semantical generality and the language of thought,” by Jay David Atlas (pp. 213–28), proposes that perception of specific visual stimuli is cognitively similar to the processing of linguistic information. Atlas believes that cognitive factors, like those discussed by Tomlin, can constrain the range of possible sentence formulations but cannot absolutely determine them.

The last two chapters return to the abstract theoretical issues first raised by Levinson in Chap. 1. Ronald Langacker’s “The contextual basis of cognitive semantics” (229–52) clarifies the relationship proposed in his theory for language, cognition, and culture. The final chapter, “Cognitive foundations of pragmatic principles,” by Edward A. Robinson (253–71), takes the opposite tack from Atlas; the point of departure is that we should not automatically ascribe psychological reality to linguistic/epistemological constructs. Robinson’s particular epistemological focus is on the importance of pragmatic information to our grasp of the complex reality of the mind/language interface. His model of cognition limits description of probabilistic associations derived from the interaction of speakers with their environment. He wants his model to depend not on individual mental representations and calculations, but on “the distributed operation of a cognitive organism” (260). Unfortunately for readers who are also interested in a generalized understanding of pragmatic knowledge, and of how it varies cross-linguistically and cross-culturally, Robinson’s theorizing brings us no nearer to grasping the connections among culture, language use, and cognition of pragmatics.

This volume leaves us with the image of a field with diverse theoretical positions, but with researchers who are sharing their insights to help converge on a common goal. Many chapters skirt Whorfian claims – although only Levinson discusses them specifically, and only the editors’ introduction specifically cites Whorf. What advice would I give to editors of future volumes in the series? Readers would benefit from a page of “Backgrounds of contributors,” especially in a volume like the present one, which brings together authors “working in a broad cross-section of disciplines” (to quote the dust jacket), whose individual names are not necessarily familiar to most readers. Similarly, even a bit of overt cross-referencing among chapters might clarify the points of contact among them.

Finally, although most of this book was written by scholars in fields that pride themselves on understanding that the research model can influence the corpus (and the results), most chapters neither clarify how (or where) data were gathered, nor cite relevant references. This may be forgivable (or even advisable) in articles for an audience who are well acquainted with a given author's work, but such parsimony is inappropriate in the present case. I hope that future texts in this series will be more generous in their allocation of space for such critical details. Despite these problems, the book is of interest to anthropological linguists interested in the relevance of our work to cognitive science.

REFERENCE

- Bever, Tom (1992). The logical and extrinsic sources of modularity. In Megan R. Gunnar & Michael Maratsos (eds.), *Modularity and constraints in language and cognition* (Minnesota symposia on child psychology, 25), 179–212. Hillsdale, N.J.: Erlbaum.

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ROBERT E. MACLAURY, *Color and cognition in Mesoamerica: Constructing categories as vantages*. Austin: University of Texas Press, 1997. Pp. xxviii, 616. Hb \$85.00.

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Simply put, MacLaury's new book on color terminology systems in a hundred Mexican and Central American languages is a groundbreaking study on how the human mind apprehends the physical universe; it is by far the most important work on color nomenclature theory to appear in the past thirty years. M's insights, which are the culmination of some two decades of fieldwork and analysis, will be of tremendous value to linguists, anthropologists, psychologists, and cognitive scientists of many different backgrounds and interests.

Color terminologies have been a source of fascination for anthropologists from at least since the turn of the twentieth century, when the early ethnographers on the seminal Torres Straits expedition noticed that "non-Western" peoples often have very different ways of dividing up the color spectrum. Some languages, it was found, would blend blue and green colors under a single term; others would break up, say, the English reds by using three or four separate names. Since the 1950s, a common way of systematically investigating colors has been to use an array of Munsell color chips, a commercially available set of accurate and consistently reproduced color standards commonly used by scientists, engineers, and artists (similar, in a way, to the paint samples found in hardware stores).

When such an array was presented to native speakers, it was found that almost any kind of configuration of color names was possible; and until the late 1960s, color was taken as the best, if not the only, empirically grounded evidence for linguistic relativism. That is, it was thought that languages and cultures could vary in their color nomenclature almost without constraint, and that there was no a-priori way of knowing how any particular color term system might be organized.

In 1969, however, Brent Berlin and Paul Kay presented evidence that there were rather severe restrictions on how color names – and apparently, then, color concepts – could be formed and used. If the notion of “color term” was restricted to certain productive single lexemes, then it seemed that any language might have only about a dozen terms, at most; indeed, a majority of the world’s languages probably have twelve or fewer of these basic terms. There also seemed to be a cross-culturally universal sequence in which a language would acquire new color categories. WHITE and BLACK were always the first terms found; RED always came next (before YELLOW or BLUE), and PINK or ORANGE was always added last. While the ranges of these terms could vary greatly on an array, certain color chips seemed to have universal psychological salience, even if the language in question had no actual term for those colors. For example, even though the Dani of New Guinea are said to have only two “basic” colors (WHITE, or all the light colors, and BLACK, or all the darks), Dani speakers recalled prototypical “fire-engine” RED chips much better than other less typical reds. Physiological and biopsychological explanations were proposed to account for these findings. In the thirty years since the original Berlin and Kay work (1969), several hundred studies have generally supported their original findings, albeit with some modifications. Today, this universalist account is probably considered to be the standard model of color nomenclature, against which all data and other models are evaluated – though there are, of course, some serious philosophical challenges (cf. Saunders 1992, Saunders & Brakel 1996).

M’s color research began in the 1970s at California, when he worked with Berlin and Kay on several studies in Latin America. Eventually, Berlin and Kay (along with researchers at the Summer Institute of Linguistics) finished the World Color Survey, a investigation of 111 “exotic” languages in Asia, Africa, the Americas, New Guinea and Australia; meanwhile, M and his co-workers finished the Mesoamerican Color Survey, an investigation of 116 languages in Mexico and Guatemala. These two vast studies, together with M’s later work in the Pacific Northwest, have now provided a sufficiently large and comparable set of data to permit very detailed analysis of the intricacies of color nomenclature. M’s new book is the first major attempt at such a broad synthesis; along with the interdisciplinary studies edited by Hardin & Maffi 1997, it carries color theory to its most theoretically sophisticated plateau to date.

M attempts to do many things in his Mesoamerican study, and only a few high points can be described here. Perhaps the most important discussion for linguists

and cognitive scientists – as well as for anthropologists, obviously – is his interpretation of the processes of human categorization. M examines in depth the semantic relation of “coextension,” an association “that did not fit our preconceptions of synonymy, near synonymy, inclusion, or complementation” (111). During the course of his field investigations, M and others found that respondents would often use different words to label the same color. That in itself, of course, is not surprising; but sometimes speakers would use these two terms in rather peculiar ways that would become apparent only in mapping tasks. As an example (and I do not mean to imply here that this analogy actually applies to the basic English color term system), suppose that a native English speaker labels the same several dozen color chips, presented individually, as either TAN or KHAKI, with KHAKI perhaps being also applied to a few more colors. From a naming point of view, then, it appears either that the two terms label the same category, with TAN or KHAKI being used in free variation; or that TAN is included within the KHAKI category. However, the mapping task (in which speakers are asked to delineate which colors in a whole array of chips belong to a given color term) might reveal that this individual places different attention on each term; thus KHAKI terms might center around a light yellowish chip and disseminate outward from it, and likewise, the TAN colors might be focused around some darker brown color and proceed from there. So the name of a particular color category is contingent, depending on the viewpoint or perspective taken by a respondent. If the speaker calls the category KHAKI, he or she is coming at it from the light or yellowish side, and extending it down into the darker brownish TANS. If it is called TAN, the category focuses around some ideal tannish color, and extends upward toward the yellows. This is not merely a case of two terms being applied to the same referents; presumably, the two experiences are, psychologically or experientially, somewhat different.

Although this type of phenomenon is found in many of the world’s languages, it is especially prevalent in the Mesoamerican WARM (red and yellow) category, where most of these colors are used coextensively. The ethnography and formal experiments clearly demonstrate that coextension in this case shows a “dominant-recessive” pattern, with one range generally larger and more centrally focused than the other. M interprets these results by what he terms “vantage theory,” which focuses on the method by which “a person makes sense of some part of his world by picking out specific points of reference and plotting their relation to his own position, a process that is spatial and temporal in the first order but INCIDENTALLY visual” (138–39; emphasis supplied). In other words, M claims (a) that the processes of categorization are constructed by analogy to space or time dimensions; and (b) that color categorization itself ultimately is predicated on various shifting figure-ground relations (as in the famous optical illusions where either a face or a table may appear to an onlooker, depending on which part of the picture is being attended to at any given time). Color categories arise, then, by alternating shifts of emphasis: At first, colors are grouped together with an elemental hue on

the basis of similarity; e.g., yellows are included in the category RED because many yellowish colors seem similar to some light reds. After that, the category YELLOW may be developed on the basis of how distinctly different these hues appear to be from the reds. Even though others (e.g., Stanlaw & Yoddumnern 1985) have argued that taxonomies and other methods of classification are based on spatial analogies, M's detailed linguistic and ethnographic data make the most compelling case to date.

Regardless of theoretical allegiance or geographic specialization, there is much in this book to offer to almost anyone with even a passing interest in human cognition, or in the relationships among language, thought, and culture. Vantage theory seems to have the potential to clear up a number of perplexing issues in color nomenclature, including the multiplicity of Russian BLUE terms, or the problems of the GRUE (green and blue) categories. The ancillary material in the eight appendices, glossary, and bibliography (395–591) make this a state-of-the-art summary on cognitive anthropology (or the current state of anthropological linguistics); they constitute not only an exhaustive literature review but also a philosophical treatise on how humans form categories.

Mesoamericanists, of course, will delight in the abundance of ethnographic and linguistic detail. That, however, is actually the least important part of this groundbreaking work. Here and elsewhere (MacLaury 1992, Taylor & MacLaury 1995), M reminds us that work on classification and color nomenclature belongs neither to universalists nor to relativists, but necessarily is a blend of the two approaches. Current research on color vocabulary is at a theoretical crossroads, giving advocates of both persuasions an opportunity finally to understand that no culture is limited only to biological or psychological universals, and at the same time to realize that no culture can vary without constraint. The wonders and mysteries of the human conceptual system will be more fully appreciated as more work such as MacLaury's is read.

REFERENCES

- Berlin, Brent, & Kay, Paul (1969). *Basic color terms: Their universality and growth*. Berkeley: University of California Press. [2nd edn., 1991.]
- Hardin, C. L., & Maffi, Luisa (1997), eds. *Color categories in thought and language*. Cambridge & New York: Cambridge University Press.
- MacLaury, Robert (1992). From brightness to hue: An explanatory model of color-category evolution. *Current Anthropology* 33:137–86.
- Saunders, Barbara A. C. (1992). *The invention of basic color terms*. Utrecht: Interdisciplinary Social Science Research Institute.
- , & Brakel, Jaap van (1988). Re-evaluating basic color terms. *Cultural Dynamics* 1:359–78.
- Stanlaw, James, & Yoddumnern, Bencha (1985). Thai spirits: A problem in the theory of folk classification. In Janet Dougherty (ed.), *Directions in cognitive anthropology*, 141–59. Urbana: University of Illinois Press.
- Taylor, John, & MacLaury, Robert (1995), eds. *Language and the cognitive construal of the world*. Berlin: Mouton de Gruyter.

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FLORIAN COULMAS, *The Blackwell encyclopedia of writing systems*. Oxford (UK) & Cambridge (Mass.): Blackwell, 1996. Pp. xxvii, 603. Hb £65.00, \$74.95.

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What is alloglottography? A diaeresis? A digamma? Whose writing system has kanamajiri writing and kokuji? How would you start to find any of these in a conventional writing system text/reference, unless you knew where (in the world) to start? What about opisthograph, ostracon, quoc-ngu, and tugra? None are in the index of Daniels & Bright 1996, which I consider the best book to date on the world's writing systems. But all are entries, cross-referenced to other entries, in Coulmas's *Encyclopedia*. The reader can also look up Bamum writing, Djuka syllabic writing, the Hatrene script, Hsi-hsia writing, the Loma syllabary, Peguan script, Tifinagh, Uartian writing, and the Wolof alphabet directly, without having first to know what set of writing systems, geographical or typological, they belong to. My personal favorite is Sogdian writing (471–74), an Aramaic-derived script used by Persian colonists in Chinese Turkestan; the cursive form of this writing system is attributed to Ahriman the devil, because it is so hard to distinguish the letters. What a pleasant surprise, for one satiated with discussions of the weaknesses and unnecessary complexities of Japanese writing!

Why do we need an encyclopedia on writing systems? A good work of this kind is an indispensable reference tool for the student or scholar of writing systems, who can look up references to writing systems and their various parts, to famous figures in the creation of scripts (including gods and devils), and to analytical terms developed for the explication of writing outside our own area of expertise. Unfamiliar terms can be accessed directly; and, if one is interested, they can be pursued through C's excellent and thorough cross-indexing, into the larger arenas – geographical, analytical, and theoretical – in which the terms are used. C's *Encyclopedia* does an excellent job of presenting hundreds of terms used in the analysis of writing systems, and of introducing and illustrating more than two hundred writing systems, alphabets, and scripts, from the very famous (Linear B) to the hardly known (Naxi writing). It does so, moreover, in prose of a clarity that makes each entry a pleasure to read.

An encyclopedic approach to writing systems has some limitations. Some entries make reference to ideas that are explicated incompletely, or only in a separate entry. Thus the entry on ideography (224–25) is excellent, but it is fully informative only for a reader who appreciates the conceptual distinction between ideograms and logograms. Again, the entry on spelling reform (479–80) focuses on English spelling issues, which are treated as sociopolitical rather than linguistic; a longer entry, and one not so exclusively focused on English, might have been able to address linguistic issues as well. Specifically, maximizing “sim-

plicity and systematic coherence” at the phonological level may detract from these very same functional criteria of “goodness” at the morphological or lexical levels – a point that C does not make, but which surely has consequences for spelling reform in some languages, such as Korean.

Another limitation of the encyclopedia format is in the ordering of information. There are six entries on Chinese scripts (74–84); and one becomes aware, despite the cross-referencing, that C’s choice of entries leaves some readers – not on the same wavelength as C – flipping around to find what they want. For example, a section on Pinyin and its relation to standard Chinese (Putonghua) is in the entry on Chinese writing reform (75–78), not in that on Pinyin (408). However, there is an excellent, remarkably clear account of the semantic/phonetic nature of the Chinese character (81–82), and a very nice summary characterization of Chinese writing:

The Chinese writing system has often been criticized as cumbersome and uneconomical, yet it has survived from antiquity to the present. Systemically it is a peculiar mixture of marking sound and meaning. Although it is hard to learn, its proficient users emphasize its efficiency and speed as well as the fact that it adds a dimension to the visual manifestation of language which has no counterpart in purely phonetic writing. (83–84)

C also provides a particularly clear description of the Hmong script, including its phonology (213–15). The section on Japanese writing (239–43) is good, if a little oversimplified and dry. Readers and writers are humans, doing human stuff with their writing systems, and this does not come through so well for Japanese. So it is a special pleasure, in the entry on Javanese writing (249), to come across “special graphemes for poetic purposes marking the beginning and the end of a poem.” Ya gotta love a script that makes a special accommodation for poetry.

Scattered throughout the volume, by the alphabetic-entry principle, are entries of theoretical significance for the study of writing systems and written language. One set tackles the relationship of written language to grammar: “Until recently there was never any doubt that grammar had to do with written language. The data of grammatical description were drawn from written texts, and for the most part this is still the case” (170–72). However, “No writing system is only a means of recoding language. Writing always both represents and imposes structure” (172). This is a very important point that deserves more highlighting, both for linguists and for analysts of writing systems.

The entry on the grapheme (174–75) is packed with information relevant to these points. C reviews two sets of arguments about the nature of the grapheme in ways that highlight the sense of confusion in our theoretical understanding of the “complex relationships between units of writing and units of speech” (175). Under SCRIPTISM, one finds a succinct recapping of this central problem. C defines the term as

the tendency of linguists to base their analyses on writing-induced concepts such as PHONEME, WORD, LITERAL MEANING and “sentence,” while at the same time subscribing to the principle of the primacy of speech for linguistic inquiry. Since most fundamental concepts of linguistics are derived from writing, linguists cannot quite do what they profess to do, that is, analyse spoken language without being influenced by writing. From its inception, grammar has been the science of letters, and in some ways it still is. (455)

In this set of entries, Coulmas makes the point that the effects of mutual influences between writing and grammatical models (“every writing system is based on and manifests an linguistic analysis”; see WORD, 550) must be a central problematic for linguistics. There is much in these entries to ponder, in terms both of how we think about writing and of how we think about language in general.

Other entries address issues of script typology. Thus, under ALPHABETIC HYPOTHESIS, C gives a short but excellent summary of the two sides of a debate concerning the pivotal role played by the Greeks in the development of a “qualitatively new and altogether different” writing system that was to be “a decisive force” in Western civilization (13–14). This hypothesis itself has been a decisive force in how we judge scripts and script cultures, and it deserves the clear and balanced treatment that C provides. The excellent entry on ECONOMY OF WRITING (137–38) also gives the reader clues to C’s own thinking about the nature and value of different kinds of writing systems. Under GRAPHEME–PHONEME CORRESPONDENCE (175–77), C continues along the same lines; but here he returns to questions of the relation of written to spoken language – noting the problems with representationalist theories of written language, which assume that a linear order of graphemes represents a temporal sequence of phonological elements. This is not always so, and where it is not, we need new evaluative criteria for ideal script type and “best” written language.

C’s thinking on these matters is summed up in the entry on the development of writing. There is no language-neutral writing system; furthermore, language change and writing change are asynchronous. Therefore, “The development of writing is not a steady progression aiming in a quasi-natural manner at optimal efficiency, but rather a meandering path where hard-gained advantages are sometimes lost along the way” (556–57) – and, one might add, where a seeming disadvantage from one perspective may be appreciated by language users as an advantage from another perspective (Smith 1991).

A final area of particular theoretical interest is represented by entries focused on literacy. C begins with the debates on the AUTONOMY OF WRITING, listing five central questions that outline the issues (28). Next, the entry on FUNCTIONS OF WRITING (158–61) is a good summary of the conventional thinking about the topic; but I wonder if it is not seriously out of date. With the ability to transmit recorded audiovisual messages through tape or cyberspace, don’t we have to rethink many of the hypothesized attributes of writing (vs. speech): memory,

distance, reification, social control, and aesthetic? The distance function of writing is clearly no longer so “special,” since we can send video messages across equal distance through time and space. The fate of the functions of memory and social control should be matters of immediate and interesting debate.

Under LITERACY (303–7), C goes on to describe the individual vs. social (autonomous vs. contextualist) approaches to defining literacy. Here he returns to a linguistic question:

It has been demonstrated that segmentation ability is greatly enhanced by, if not dependent on, written language skills. This insight has important consequences for the status of language as a reference system in models of mental operations. To what extent are such models influenced by the conception of language as suggested by written language? Arguably, the identification of thinking with manipulating discrete symbols is a by-product of literacy. (304)

C notes that linguists have themselves begun to realize that the primary units of analysis used in describing and theorizing about the spoken language – such as the phoneme, the word, and indeed the sentence – are in fact derivative of units of written language (305–6). He reiterates the need to reflect on the significance of writing for linguistic analysis in general, and to investigate more thoroughly the specific properties of spoken and written languages. Additional entries of relevance to literacy issues are those on memory (334–35), orality (375–76), universals of writing (531), and written language (562–63).

Presented with a volume so extensive in its coverage, it would be an unusual reviewer who could not come up with a few gripes. A sampling of mine includes the following. Some, but not all, writing/script entries contain text examples; e.g., Kiswahili does, but Khmer does not. There is, moreover, a lack of consistency in formatting the graphics; some text samples are transliterated and translated, and some are not. Uniformity of treatment would have made the information more comparable across entries.

There are two figures 6 on pp. 321 and 325, only one of which is related to the Mangyan script that Fig. 6 is said to illustrate. The entries on Native American systems make no mention of Micmac writing. The entry on *kanbun* ‘Chinese writing’ in Japan (256) is perfectly accurate and clear if you read Japanese; if not, you will not understand the terms *okurigana* or *kaeriten*, or the difference between *kundoku* and *hakubun* styles, even supplemented by Fig. 2 (257), which is a page from the *Kojiki*. Glosses of all Japanese terms, with schoolbook examples of each, would have been much more helpful to a nonreader of Japanese. Furthermore, criteria for inclusion of script elements as separate entries are not clear. Digamma gets its own entry, where we learn that it is the sixth letter of the archaic Greek alphabet, “corresponding to Semitic *waw*” (128) – which, however, is not an entry. Along the same lines, the letters *A*, *a* (etc., etc.) are entries; but *ka*, *ki*, *ku*, *ke*, *ko* and other elements of the Japanese syllabary aren’t, despite the fact that each has an important developmental history from Chinese characters. Finally,

the transliteration of the katakana example *merodoramu* (Fig. 4, 261) should be *merodorama*. All in all, though, these are small flaws in a well-produced reference tool.

REFERENCES

- Daniels, Peter T., & Bright, William (1996), eds. *The world's writing systems*. Oxford & New York: Oxford University Press.
 Smith, Janet S. (Shibamoto) (1991). From kanbun to comic book: Visual and “verbal” continuities in Japanese writing. Paper presented at the annual meeting of the American Anthropological Association, Chicago.

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RONALD K. S. MACAULAY, *Standards and variation in urban speech: Examples from Lowland Scots*. (Varieties of English around the world, 20). Amsterdam: Benjamins, 1997. Pp. x, 201. Hb \$65.00.

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The central idea that informs Macaulay’s book is aptly expressed in a passage he quotes from Sapir (1929:214):

Language is primarily a cultural or social product and must be understood as such ... It is peculiarly important that linguists, who are often accused, and accused justly, of failure to look beyond the pretty patterns of their subject-matter, should become aware of what their science may mean for the interpretation of human conduct in general. (138)

M approaches his subject – present-day lowland Scottish speech, especially that of the west of Scotland – with due regard both to “pretty patterns” and to the wider cultural context.

The book consists of ten chapters based on articles published between 1973 and 1996 (though the order is not chronological), together with a new introduction and conclusion. Most chapters take up familiar issues in variationist sociolinguistics, such as the status of concepts like “standard” and “vernacular” (Chaps. 2–3), the relationship between phonological variation and social class (Chap. 8), attitudes to nonstandard varieties (Chap. 5) and the question of consistency and variability in data (Chap. 9). However, if the questions are fairly conventional, the answers generally are less so: It is an important part of M’s argument that the framework pioneered by Labov in the US can be distorting when applied to very different local realities.

Lowland Scotland is a case in point, where the sociolinguistic situation is complicated by the legacy of a once autonomous language, Scots. As M notes in

several places and discusses at length in “Determining linguistic insecurity” (Chap. 5), in Scotland it is questionable to describe spoken standard English, especially the RP accent, as the prestige norm, since this “norm” is perceived primarily as a marker of Englishness; and few Scots either do sound or would wish to sound English. Labov could remark, “We must assume that people in New York City want to talk as they do, yet this fact is not at all obvious in any overt response you can draw from interview subjects” (1966:108); yet M’s respondents in Glasgow did not hesitate to offer such comments as “I wouldn’t like to have an English accent. I think it’s a very daft one” (51). Although Glaswegian speech is often singled out for criticism by pedants and prescriptivists across the UK, on the grounds of its ugliness and unintelligibility, Glaswegians themselves reserve their criticism for the lowest-status “broad Glasgow”; overall, they do not seem to regard their city as the proverbial “sink of negative prestige.”

This point is followed up in one of several interesting chapters where M departs from the classic quantitative approach. “The sociolinguistic significance of dialect humour” (Chap. 6) is a discussion of how some well-known Glaswegian humorists use linguistic variation in their performances. M argues that the performer’s own Glaswegian variety acts as an implicit norm, and that comic effects are achieved by deviating both “up” (mimicking English upper-class speech) and “down” (mimicking the “broad” variety associated with the non-respectable elements of the urban working class).

Chap. 7, “Urbanity in an urban dialect,” focuses on the use of Glasgow vernacular in writing, and particularly on the poetry of Tom Leonard, who rejects not only standard English but also the traditional orthographic conventions for writing in (historical) Scots. Leonard’s work often deals directly with prejudices against the speech of his native city, including the prejudices of Scots purists who regard Glasgow speech as a corruption of past glories: “right inuff/ ma language is disgraceful/ ma maw tellt mi/ ma teacher tellt mi/ thi doactir tellt mi/ thi priest tellt mi/ . . . even the introduction tay the Scottish National Dictionary tellt mi” (Leonard 1984:120). What is interesting about Leonard’s writing (and the work of other Scottish vernacular writers like James Kelman and Irvine Welsh) is that it combines confidence in writing something other than standard English – which must surely owe something to the existence of a Scots literary tradition going back centuries – with a self-conscious modernity strongly influenced by American models, and often explicitly opposed to the conservative and parochial connotations of Scots and “dialect” writing.

Chap. 11, “Remarkably common eloquence: The aesthetics of urban dialect,” examines the spoken narratives produced by a number of speakers from different parts of lowland Scotland. Here M takes issue with a linguistic stereotype that is frequently invoked by Scots themselves, that of the “inarticulate Scot”; he argues, by close analysis of narrative structures and poetic devices, that the ordinary speech of ordinary people is “energetic, involved, entertaining and often moving” (162). This chapter is one in which M tries explicitly to bring together

the linguist's concern for uncovering "pretty patterns" with the ethnographer's concern for what people do with language and why.

M does the same thing in a more unusual way in Chap. 10, "The adverbs of authority." This begins by noticing an unexpected "pretty pattern" in a 120,000-word corpus of data collected from speakers in Ayr, in which middle-class speakers used *-ly* adverbs about three times as frequently as working-class speakers. Having pursued and rejected some obvious explanations (e.g., that this reflected a smaller range of vocabulary used by working-class speakers overall), M approached his corpus in a more qualitative manner; he related the middle-class use of adverbs to a more general tendency to express more opinions and to make more evaluations of other people. Thus respondents, prompted by the questions in the interview schedule, often told stories about the same life events, such as getting a first job; but working-class speakers were far more likely to use direct quotation when representing what others said. (Adverbs often occur in framing indirect quotation.) As M summarizes the situation, "The lower class speakers seem less anxious to provide an editorial comment on the interaction" (135). He goes on to suggest that this difference is not an arbitrary feature of discourse style, but reflects a basic difference of habitus (in the terms of Bourdieu 1991), whereby middle-class people assume the authority to pass judgment; by contrast, working-class life, lived in closer proximity to others, both demands and values a higher degree of tolerance.

For readers unfamiliar with varieties of present-day Scottish speech and the cultural contexts in which they are embedded, this book is a rich source of information and examples. But it is not primarily a work of description; it is more of an argument about the aims and methods of sociolinguistics, in which M uses his "examples from Lowland Scots" to challenge certain orthodox assumptions. The unifying theme of this volume seems to be Macaulay's desire, influenced by his reading of Bakhtin 1981, for a linguistics not merely of speaking (i.e., parole rather than langue), but of speakers. He suggests in his conclusion (169–70) that "sociolinguistic investigation . . . has tended to focus on the form of the language, mainly fine phonetic detail, and to ignore what the speakers are saying"; and he recommends "a focus on action [that] looks at individuals as agents rather than as conditioned organisms."

This is not to say that M has abandoned formalism and quantification; on the contrary, he sees rigorous analytic methods and replicable results as essential to combat what he disapprovingly calls "armchair hermeneutics" (170). But he wants to combine the advantages of formalism with a focus on what lies "beyond the pretty patterns": on what speakers are saying and doing, whether in their pronunciation of vowels, the frequency with which they use *-ly* adverbs, or the way they tell stories and jokes. Wide-ranging in subject matter and densely argued in places, this volume is not undemanding to read; and as might be expected from a work spanning more than twenty years of Macaulay's research, it does not form a seamless whole. But it does make you think.

REVIEWS

REFERENCES

- Bakhtin, Mikhail (1981). *The dialogic imagination*. Austin: University of Texas Press.
- Bourdieu, Pierre (1991). *Language and symbolic power*. Cambridge: Polity Press.
- Labov, William (1966). Hypercorrection by the lower middle class as a factor in linguistic change. In William Bright (ed.), *Sociolinguistics*, 84–113. The Hague: Mouton.
- Leonard, Tom (1984). *Intimate voices: Selected work 1965–83*. Newcastle: Galloping Dog Press.
- Sapir, Edward (1929). The status of linguistics as a science. *Language* 5:207–14.

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FREDERIC G. CASSIDY (chief editor), *Dictionary of American Regional English, volume III: I–O*. Cambridge, MA: Belknap Press of Harvard University Press, 1996. Pp. xv, 927.

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It's tough to review an interior volume of a continuing, multivolume work like DARE, especially when previous volumes (1, 1985; 2, 1991) have been so thoroughly reviewed and so well received – and when many readers of *LiS* may already be familiar with the series. Reviewers of the first volume could comment on the history of DARE, its goals and methodologies, the unique problems encountered during its development along with their solutions, and its innovations – such as the clever maps which still give a recognizable US, though skewed according to population density. Reviewers of the final volume will be able to look back over the entire series, casting a critical eye on the overall success of the endeavor and evaluating its success as a work of scholarship. Nevertheless, I will do my best to concentrate on the volume at hand, although some glances forward and backward are inevitable.

The format of Vol. 3 is familiar from the previous two volumes. The graphics on the cover have been updated and are not immediately obvious: I needed help from Luanne von Schneidemesser, at the DARE office, to identify mouse, nail, jar, oyster, inkpot, knife, and lobster. The useful list of abbreviations has been retained, but with some changes (I imagine, to include only those items cited in this volume). The entries begin with the pronoun *I* and end with *ozzy* ‘peculiar’ (marked with ‡ to indicate that the word is “of questionable genuineness,” p. xv).

The major substantive difference between this volume and those that went before is that here the information is more current and more complete: The entries have been updated, and new citations added, since Vol. 1 was published in 1985. Many of the citations in Vol. 3 are from the 1990s; thus, as with the publication of the individual volumes and with earlier fascicles of the OED, successive volumes are more complete than their predecessors. It would be very nice if – again like

the OED, and possibly on publication of the final volume – the set could be simultaneously reissued, with all volumes updated and current, perhaps on CD-ROM as well as in hard copy.

Of the many possible uses of DARE, I can point out two that are especially relevant to readers of *LiS*. Because these volumes are the most complete lexical record we have of the American experience, much of the history and contemporary condition of American society can be found in their pages. A large part of this experience is the relationships between and among cultures. Two of the more controversial words affecting society today are here: *Indian* and *Nigger*. (A third, *squaw*, has been recognized as derogatory by at least the Minnesota legislature, which has passed a law requiring that all geographic names in the state containing the word be changed; this word will be discussed in a future volume.)

Nigger occupies nearly three full pages and is especially well presented. The current debate over the inclusion, deletion, or modification of the word in school and general dictionaries is much better informed by these citations than by the polemics found on the op-ed pages of our major newspapers. Readers of this journal should find it especially illuminating.

There are about two hundred primary entries under *Indian*, and they characterize very well the nature and extent of European/Native contact, confirming what we probably knew all along: The contact reflected in these words has been extensive in some respects (the sheer number of items containing *Indian* is impressive), but it has been extremely shallow; in fact, it does not extend much beyond some words for native flora and fauna. There are no words reflecting Native culture, religion, medicine, cosmology, or the arts. The closest thing we find to a word reflecting Native knowledge is *Indian black tea*, a medicinal drink noted for its purgative powers.

It is also apparent from these entries that most words containing *Indian* as a component have been coined by Europeans, and generally have little if anything to do with Native Americans. Anything unusual, previously unknown, or exotic tended to be labeled with a familiar word prefixed with *Indian*: Indian clover, Indian carrot, Indian fig, Indian rice. This practice is in keeping with Europeans' apparent desire to keep the natives at arm's length. The words containing *Indian* that might be considered derogatory – even mildly or jocularly so – are few: *Indian sign* 'hex', *Indian alarm clock* 'several glasses of water taken at bedtime', *Indian side* 'the off-side, suggesting ineptness', *Indian time* 'relative punctuality, usually tardiness'. There are many others, of course (such as *Indian giver*), which have national rather than regional currency and are therefore not included here. DARE 3 also provides a rich source of words drawn from other social and ethnic relationships, such as the entries for *Irish* and *Italian*.

One problem in language variation that continues to intrigue me is the relationship (or lack of one) between the distribution of generics when they form part of geographic names, and when they are used as common nouns. Compare, for example, *marsh* as found in the geographic name *White Marsh* (Maryland), and

as used to refer in general to a swampy area – as in responses to DARE’s question C6, “What do you call a piece of land that’s often wet, and has grass and weeds growing on it?” where some of the possibilities listed for the fieldworker’s convenience are *swamp*, *bog*, *marsh*, and *swale*. Comparison of the two usages suggests that the ways of people with words may be more complex than we had imagined. The responses gathered by the DARE fieldworkers show a general national distribution of the common noun *marsh*: 30 percent of the Alabama responses were *marsh*, 22 percent in California, 30 percent in Illinois, 30 percent in Texas, 30 percent in Washington state; even in Utah, three of the seven respondents replied with *marsh*.

This distribution contrasts markedly with that of *marsh* used as a generic in geographic names. There are just over 7,100 named swamps in the US; and of these, about 10 percent have *marsh* as part of the name, but their uneven distribution suggests in particular one cultural and linguistic region that has not figured noticeably in past studies of language variation. Of the 710 swamps with *marsh* as part of the name, fully one-third are in Maryland, Virginia, or Delaware. Maryland leads the way, with 128 of its 202 named swamps containing *marsh* (63 percent), followed by Virginia (52 percent) and Delaware (43 percent). This area is unusually well defined; of the surrounding states, Pennsylvania has 1 percent, New Jersey 4 percent and North Carolina 6 percent. Thus this distribution shows one of the neatest isoglosses in American linguistic geography, and one that awaits explanation. (It bears some relationship to, but is not coterminous with, the Delmarva Peninsula.) Without the large databases of common nouns available through DARE, and that of geographic names available through the Geographic Names Information System, the identification of this isogloss would have been difficult. Still to be explained, of course, is why there is such a discrepancy between the distribution of *marsh* as a proper noun, on one hand, and as a common noun, on the other.

What is frustrating about DARE, of course, is the fact that several volumes are yet to be published. Thus, to continue with examples of geographic generics, the first three volumes provide information on such common nouns as *knob*, *knoll*, *mesa*, and *fen*, but not *ridge*, *ravine*, *tor*, or *valley*. However, I cannot miss this opportunity to express my thanks and appreciation to the DARE staff for their cheerful helpfulness over the years. Their resources in Madison, Wisconsin, have been available to researchers from the start; and this continues in the face of funding cutbacks and personnel recision during the past few years. Upon receiving my e-mail, Luanne von Schneidemesser promptly sent the entire response list to question C6, and to several others. Such cooperation is one of the many reasons the DARE project remains unique.

We are very fortunate to have DARE; it is not a dictionary; it is a national treasure.

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TARA GOLDSTEIN, *Two languages at work: Bilingual life on the production floor*.
Berlin: Mouton de Gruyter, 1997. Pp. xvi, 277. DM 198.00.

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For readers who are interested in learning how and why speakers select among competing language varieties, Goldstein's critical ethnography of immigrant factory workers in Toronto provides compelling documentation. She was employed as an on-site teacher of English as a Second Language (ESL) at Stone Specialties, a manufacturing company that hired large numbers of Portuguese-speaking workers from the Azores. The workplace ESL classes were less successful than expected, so she undertook an in-depth ethnographic study to determine why.

Between January 1988 and March 1990, Goldstein systematically observed and taped the language practices of the predominately female workers and line supervisors, and she carried out thirty-nine open-ended interviews to probe their language and cultural attitudes. With the help of a Portuguese/English bilingual research assistant, she mapped out the patterns of code selection. Her analysis challenged the assumption that English was vital to the factory workplace, and it questioned the very nature of the ESL curriculum.

According to Goldstein, the Portuguese Azorean workers are second only to the Aboriginal peoples of Canada in their low socio-economic status. As speakers of neither French nor English (which are protected by the Official Languages Act of 1969), they are linguistically subordinate. Despite well-intentioned government efforts to eliminate barriers to equal employment opportunities via workplace English classes, the Portuguese workers do not apply what they learn in class to the production floor, nor are they able to parlay their linguistic training into higher-paying jobs.

Certain Portuguese cultural beliefs regarding gender relations, family responsibilities, work ethic, material success, and the role of power brokers (*cunhas*) are crucial in understanding the use of language at Stone Specialties. The owners utilize Portuguese networks, churches, and media to recruit workers; this has fostered the creation of a pseudo-family at the factory, evoking all the cultural associations accorded biological families in Portugal. Unionization of the plant has failed because of the owners' able manipulation of the workers' loyalty to the "family."

The Portuguese language has social value as a symbol of distinctness and identification with others in the "family." It is the primary language of the assembly line and is used there even by Hispanic and Italian workers. A worker who does not speak Portuguese on the line runs the risk of verbal criticism (known as *falar mau*) and social isolation – a risk few are willing to take. By contrast, English is associated with discourse and roles that are not part of line work. Only the supervisors, managers, owners, and ESL teacher utilize it regularly. Although

English is linked to better-paying positions, it does not provide access to friendship and solidarity for the Portuguese. Workers who have English skills generally acquired them before coming to the factory. Knowing English does not usually facilitate job advancement, since there are other educational prerequisites that few of the immigrants possess. Only males (permitted by their culture to attend night classes), or young women who immigrated at an early age and completed high school in Canada, utilize English with regularity and attain better-paying jobs.

Although many of the line workers participate in the plant's lunch-hour ESL classes, most do so to socialize with their coworkers. Except for the two bilingual supervisors, the Portuguese do not use English outside the classroom. Most accept their subordinate positions because their salaries are comparatively higher than they were in Portugal; with hard work and sacrifice, these salaries permit them eventually to purchase a modest home, the paramount goal of the immigrant community. Whenever workers are forced to use English to ask for vacation time or to register a complaint with the owners, they utilize a bilingual supervisor as a language "broker" to translate for them.

The bilingual supervisors, though better paid, are a conflicted group. They have access to both cultures and languages, and are expected to show allegiance to both. To keep their jobs, they must sustain a management posture that is associated with English, but this very posture threatens their acceptance by the Portuguese "family." Their solution is to demonstrate their adherence to Portuguese work values by helping the workers to complete assembly-line tasks, something the other supervisors do not do.

There is little code-switching at Stone Specialties, given the strict role differentiation of the two languages. Goldstein's monolingual presence stimulated some English use. In addition, the bilingual supervisors code-switch among themselves, though rarely with the workers. The only English phrases used on the line are formulaic commands like "Okay, ladies," "Everything back on the skids," "Start the line," or "Thanks."

The major strength of Goldstein's study lies in the workers' life histories. These contextualize her comments and clarify how using English at work can actually threaten the workers' sense of well-being. For many Portuguese women, working at low wages in a factory near home – one run by amiable owners and filled with fellow Portuguese – may actually be preferable to learning English, getting a higher education, and seeking employment in a distant community where English would be required and no emotional support would be forthcoming.

Goldstein does not, however, abandon the idea of trying to teach English to this population. Though acutely conscious of the hegemonic role that she is forced to play in perpetuating existing power relations, she feels that it is possible for an ESL teacher to challenge the existing social order, and to obtain greater opportunities for her students. She admits that, at Stone Specialties, the management-provided English classes do not create economic opportunities for most of the

factory workers. However, she considers that the classes are empowering for a number of other reasons. They serve as an important source – and for most workers, the ONLY source – of exposure to English. In hard times, though all the factory workers are vulnerable to layoff, those with weak English skills are the least likely to find other jobs after being laid off. Thus the skills learned in class may help them find new employment. In addition, the dependence of the workers on language “brokers” to convey their grievances to management causes feelings of embarrassment, humiliation, and powerlessness. Finally, the workers’ English-language limitations have significant familial implications, since their Canadian-raised children have a good grasp of English and serve as family translators, thus undermining parental authority.

For Goldstein, the key to making the factory ESL classes serve as a liberating force is to utilize them to challenge the class, gender, and linguistic oppression facing the immigrant women working on the lines. She advocates a “critical pedagogy” (à la Paulo Freire) to provide working-class students with a framework for thinking about their social positions and the ways in which they can increase their economic, social, and personal power. Such classes would give students opportunities to question their self-perceptions, the roles they play, and the potential for changing their society. A dialogic approach in which teachers and students participate as co-learners, with the goal of critical thinking and personal transformation, can enable students to visualize better working and living conditions – and to act to achieve them.

Goldstein recommends an ESL curriculum that acknowledges and respects the language boundaries that construct and are constructed by the workers’ interpersonal interactions. Since using English with non-Portuguese-speaking personnel is not stigmatized by the “family,” she suggests organizing the curriculum around interactions with Canadian bosses, landlords, professionals, and bureaucrats, in order to provide the workers with the linguistic resources necessary for improving their lives. In Goldstein’s opinion, despite the many constraints of the Canadian political economy, “A critical pedagogy of ESL does, nevertheless, have the potential to encourage increased, more informed and perhaps even momentarily empowering participation in existing Canadian society” (241.). She does not indicate whether she is actually in a position to implement such an approach.

I was particularly interested in Goldstein’s work because of the parallels with the situation in Puerto Rico. Although English is required from first grade through college, there is considerable resistance to the language, accompanied by a fierce loyalty to the Spanish vernacular. Like the Azorean plant workers, many students in Puerto Rico argue that they do not require English in their daily lives, since Spanish fills virtually all their needs. Of course, a major difference between the Azoreans and Puerto Ricans is that the former represent an oppressed immigrant group within a large nation, while the latter are the majority group in a small nation dominated by an outside power. Nevertheless, the similarities are thought-provoking.

I recommend this book to readers involved in language planning, bilingualism, “liberation” pedagogy, or teaching English for Specific Purposes. The volume is theoretically and methodologically well grounded and substantiated. Goldstein’s analysis is cogently (though repetitively) argued; and she situates the case study within a thoroughly comparative framework, which facilitates its application to other settings. The only significant weakness (which she fully acknowledges) is her lack of proficiency in Portuguese, which forced her to depend on the interpersonal skills, diplomacy, and intuitions of a bilingual assistant.

(Received 8 May 1998)

ROBERT J. BAUMGARDNER (ed.), *South Asian English: Structure, use, and users*. (English in the global context.) Urbana: University of Illinois Press, 1996. Pp. xx, 286. Hb \$44.95, pb \$16.95.

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Fifty years after the nations of South Asia gained their independence from Britain, the language of the colonialists remains very much alive in the region. In fact, in some respects it is even more alive than at the time of departure – as witnessed by the efflorescence of South Asian writers in English of international stature, to the extent that the *New Yorker* has devoted the major part of an issue to them (June 23–30, 1997).

Given the omnipresence of English in the foreigner-local interface and its visibility in the media and signage, the casual visitor to South Asian countries might be forgiven for concluding that English was more widely and deeply situated there than it actually is. This surface visibility masks the fact that a significant command of English is very much a minority phenomenon, and that it is a first language for virtually no one. Actually, the exact percentage of the population that controls it significantly is not easy to determine. In his preface to this book, Braj Kachru claims that 6 percent is a conservative figure; but Baumgardner gives a figure of 3 percent, in line with many other estimates. One thing that is clear, however, is that English in the region has importance, visibility, and a range of functions that belie its small minority status. Also, as Sidney Greenbaum points out in his afterword (echoing Baumgardner and Kachru), even the 3 percent estimate translates into 33 million people. Thus users in India alone – 25 million at the time of writing – give India third rank among countries in which English is spoken (p. 242).

The present volume contains sixteen articles selected from fifty-eight presented at the First International Conference on English in South Asia, organized by Baumgardner and held in Pakistan in January 1989. One unusual aspect of that

meeting was that it included not only language specialists, but also literary scholars, represented here by Anita Desai (India) and Bapsi Sidhwa (Pakistan). Another aspect of the conference, also reflected in the volume, was that it did indeed cover South Asia, as opposed to the general tendency of such work to focus on India. Thus Baumgardner presents an article on English in the Pakistani political lexis, and he extends this to the occurrence or non-occurrence of some terms in India, Bangladesh, Nepal, and Sri Lanka. With Sidhwa's paper, this makes two centered on Pakistan. (One may also note another recent volume edited by Baumgardner, *The English language in Pakistan* [Karachi: Oxford University Press, 1993].) Two articles are devoted to Sri Lanka: Thiru Kandiah's on deletion phenomena, and Chitra Fernando's on the ideational function of English. Two, by Yugeshwar P. Verma and Beverly S. Hartford, address features of Nepali English, and there is an article by A. M. M. Hamidur Rahman that deals with the problem of acceptability and norm selection for English in the Bangladesh curriculum.

The subtitle of the volume, "Structure, use and users," is a fair reflection of both its central topics and its limitations. The articles appear under five heads: "Contexts and issues," "Structure and contact," "Functions and innovations," "The curriculum," and "English and the multilingual's creativity." The editor has done a creditable job in selecting the articles and maintaining quality. All the contributions are worth reading, but only a few points of special interest can be dealt with here.

The article by S. V. Shastri illustrates the use of computer corpora in analyzing the actual degree of use for some claimed characteristics of South Asian English. A familiar problem here is that of determining not only actual usage but also the extent to which a given feature is in fact characteristic of a specific variety. Shastri illustrates the usefulness of corpora in this regard by comparing his results with the LOB (Lancaster-Oslo/Bergen) British English corpus; he finds that five of the fourteen "deviant features of complementation" in Indian English are in fact replicated in the LOB corpus. This is a useful admonitory lesson, and Shastri's article has the added benefit of broadening the recognition of the Indian Kolhapur corpus. Although his specific investigation is of Indian texts, he compares his results with claims for Pakistani English which are not based on such corpora.

The other articles on structure and contact also contribute to our knowledge of features of specific South Asian Englishes; however, the interested reader will want to turn to other sources to place them in the framework of a more general characterization. Thus a paper by Yamuna Kachru deals with discourse structure in texts written by Indian B.A. students, compared with the Western (British and American) expository model, and in line with other work of hers that she cites. This essay is linked in an interesting way to one aspect of Kandiah's paper on Sri Lankan English "deletion" phenomena. Although Kandiah shows that the features he finds are not explicable by L1 interference in the usual sense, he notes that some of them – particularly the relatively high percentage of items that would be counted as missing from an "older English" perspective – do relate to similar

discourse-based and situationally based phenomena in the native languages (in his instance, Sinhala and Tamil). This is a field of comparative research that deserves more attention than it has received, and that promises to reveal important characteristics of both “Old” and “New” varieties. South Asia provides a natural laboratory for this in relation to English as well as specifically South Asian languages; and with increased attention to discourse by linguists, we may hope for important work in that direction.

One particularly interesting aspect of the situation of English in South Asia is the aura of colonialism that still clings to it, in some cases transmuted into a view of it as a foreign or elitist intruder into the language scene. As Baumgardner points out in his introduction, “Nationalist sentiments in South Asia have often vehemently favored the promotion of regional languages in place of English” (p. 2). This led to such legislation as the Ceylon Official Language Act (1956), the 1987 Bangladesh Bengali Implementation Act, and of course the 1950 Indian Constitution, which envisioned the replacement of English by Hindi. Although a number of factors eventually led to the modification of such legislation, the sentiments that underlie it and the movements to implement those sentiments are by no means dead. While this issue lurks in the background of the present volume, it is not a central concern receiving extensive treatment. However, Braj Kachru’s essay, devoted largely to a survey of work on the question of the identity and legitimacy (as independent varieties) of South Asian Englishes, in fact includes a relevant section on “Linguistic schizophrenia.” This issue, and the question of the future of English in the region, are also raised in Baumgardner’s introduction, and they are touched on in Greenbaum’s afterword (which could be regarded as a valuable additional introduction to the volume and the relevant issues). The article by Hamidur Rahman, though focused on the proper place and variety of English in the Bangladesh curriculum, also touches on the question of Bengali vs. English.

However, the issue of English vs. local language is treated as central by only a few of the writers – most notably by Richard W. Bailey in “Attitudes toward English: The future of English in South Asia.” He argues that English is diminishing in use, shrinking to a smaller share of the world population, and that it is “becoming the language of the powerful few at the expense of the powerless many,” so that “whether English learning and democracy are compatible in South Asia remains to be seen” (p. 51). This contrasts with the positive tone of the essay by Charles Ferguson, which outlines the value and utility of English in several South Asian spheres, not least as a language of interregional communication and development. Ferguson also places English as only the last of a sequence of “imperial” languages that began with the Indo-Aryan parent of Sanskrit, extended through the modern IA languages (including Hindi), and included Persian and Portuguese. This is an interesting and unusual perspective that might startle some of the more committed proponents of “indigenous” languages like Hindi.

Fernando's article, "The ideational function of English in Sri Lanka," goes even further. She argues (p. 217) that "in the transformation from a traditional agrarian society, the majority (in the academic domain) will need to control the kind of literacy skills" favored by the "western form of CALP" ("cognitive academic language proficiency," as opposed to BICS "basic interpersonal communication skills," citing a 1980 paper by Jim Cummins), since "the higher forms of creativity – the generation of theoretically significant knowledge – can arise only when the foreign knowledge paradigm has taken deep root in native soil." This implies also promoting adherence to an international standard, and thus it runs somewhat counter to other parts of the volume, which deal in a generally approving fashion with nativization and the legitimate identities of South Asian English(es). It also stands in clear opposition to Bailey's essay. Unfortunately, the nature of the volume does not allow for direct debate or discussion on these conflicting views, but the articles are stimulating in themselves.

Braj Kachru uses the term "diaspora" to refer to the spread of English, but this volume exemplifies a different kind of diaspora enabled by English: that of scholars, authors, and others. Of the twelve authors of South Asian origin, only three were, at the time of publication, fully resident in the region. The two creative writers divided their time between South Asia and the US, and the remaining seven were scattered from the US to Hong Kong, Singapore, or Australia. In his introduction, Baumgardner notes briefly the LACK of a language problem as an enabling element in Indian immigrants' success, and as a factor in the resurgence of teaching and learning of English (p. 2). This could be added to Ferguson's list of functions, but probably as an international rather than a regional asset, since it has led to the cultural enrichment of the receiving societies.

The two essays by creative writers provide some valuable insights, in a refreshingly different style, into the interaction of author with language and the search for a personal voice. In this regard, Sidhwa draws a needed distinction between novelists who "like myself use English as a Pakistani vernacular" (other national designations could be substituted), and those South Asian authors who "have spent most of their lives in England and its educational institutions and have absorbed the traditions of the language along with the thought patterns of the British" (p. 239). Nevertheless, one aspect of South Asian English – into which this volume gives us only limited insight – brings us full circle here: the identification and understanding of whatever factors have led to the truly large number of South Asian literary authors of international status – including the two here, as well as probably the most famous exemplar, Salman Rushdie – who write creatively in English a full half-century after independence, with outstanding competence in both the language and the literary craft. We should not overlook their forebears, such as R. K. Narayan; but the present-day florescence is a phenomenon that calls for explanation. It goes beyond the literary historian and calls for further interdisciplinary research into the relevant factors in South Asia (and

in the wider world) that fostered the acceptance of these writers. Perhaps that calls for another conference of similar quality.

On the whole, the volume is a valuable and generally well-executed addition to the literature on South Asian Englishes and “other Englishes” in general. It provides a kind of general survey and sampler, and the interested reader will find ample bibliographical clues to pursue.

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MIWA NISHIMURA, *Japanese/English code-switching: Syntax and pragmatics*. (Berkeley insights in linguistics and semiotics, 24.) New York: Peter Lang, 1997. Pp. xx, 176. Hb \$43.95.

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This book reminds us that code-switching is not only a classic topic, but also an important and highly challenging one. In distinction from previous studies, this work reveals that a bilingual community of second-generation Japanese Canadians (Niseis), in Toronto, has three distinct types of bilingual speech: a basically Japanese variety, a basically English variety, and a mixed variety. Nishimura analyzes these three bilingual speech varieties and provides an answer to the fundamental question in code-switching: “Who speaks what language to whom, and on what occasions?” That is, this research ascribes the motivation of this variability to the “intended audience.” These Niseis choose the basically Japanese variety when they speak to native Japanese people; when they speak to fellow Niseis who have always lived in Canada, they choose the basically English variety; and when they speak to a group comprising both native Japanese and Niseis, they use the mixed variety, oscillating between Japanese and English. They switch among these codes even in the middle of storytelling. What is important here, for the bilingual speakers, is to address two questions: “Who is present in the audience of the ongoing conversational situation?”; and more specifically, “To whom is the current production of this utterance directed?”

In this extensive empirical study, we see reflected the viewpoints of two other disciplines in discourse analysis: interactional sociolinguistics (Gumperz 1982, Tannen 1992) and ethnomethodology (Goodwin 1981, among others). On the one hand, interactional sociolinguistics analyzes everyday discourse, focusing particularly on the interactive aspect of our language by looking closely at the interaction of speaker and hearer. Its goal is to capture the socio-interactive meaning of language. The suggestive claim of ethnomethodological studies, with respect to the future of linguistics, is that we all, as speakers, need “others” in our presence in order to produce a sentence and to achieve the completion of such production.

Here the three seemingly independent approaches to code-switching – Nishimura’s study, interactional sociolinguistics, and ethnomethodology – all point to one thing: The act of producing a sentence is itself SOMETHING SOCIAL. Sentence production is not a product of the mere operation of grammar, based on the *langue* of the ideal speaker/hearer. Rather, when we produce a sentence, we are constantly designing its construction and continuously modifying its design, depending on our interlocutors’ reactions, and on our consideration of the addressee to whom we want to convey our point most effectively. The strong suggestion made by these three disciplines for the future of our field seems, in sum, that language is originally and fundamentally designed for communication.

As N’s “combined syntax-function approach” suggests, this book contributes to both linguistics and sociolinguistics. Chaps. 1–3 clearly provide the background of this study, preceding the analyses of code-switching data in Chaps. 4–6.

Chap. 1 makes explicit what N’s problem and focus are, by contrasting them with prior studies. Chap. 2 refers to the present study’s method and data: field-work in Toronto, which provided the main data set, and supplementary San Francisco data, which corroborate that the findings in Toronto are not community-specific. This chapter also provides historical background to help us understand the immigration to Canada, from 1885 to 1924, of the first-generation Japanese-Canadians, the parents of the Niseis who are the main subjects of the present research. Here the community situation when the respondents were born, as well as N’s close relationship with the community, is lucidly and vividly described. However, no specific information is given on the dates of data collection, which makes it impossible to guess the speakers’ ages at the time of research. If the chronological information were made available, readers could more easily enjoy experiencing the conversations, by considering such factors as the appropriateness of the Niseis’ speech style and the level of formality used by them.

Chap. 3 lays the base for the analyses that follow, by classifying the language choices of N’s respondents into the basically Japanese, the basically English, and the mixed varieties. Chap. 4 looks at WHAT is switched in the three bilingual varieties, and then identifies the syntactic categories of the switched items. For example, in the basically Japanese variety, 52 percent of the switched items are single English nouns. By contrast, in the mixed variety, we see an English sentence environment with typical Japanese topic-comment structure (i.e., Japanese noun + *wa* [topic] + English predicate [comment]). In the same environment, portmanteau sentences appear in which an English sentence and its Japanese equivalent are combined with a shared constituent; e.g.:

We bought about two pounds *gurai kattedeita no*.
about bought PARTICLE
 S V O V

The combination of English SVO and Japanese SOV word orders produces SVOV, in which an English noun (O) is shared by an English sentence (in the first part)

and a Japanese sentence (in the second part). This structure is possible because word order is reversed in English and Japanese predicates, and because of the phenomenon of subject deletion common in Japanese.

Chap. 4 is also highly suggestive in its distinction between borrowing and code-switching. N identifies the case of switching of nouns (when there is a base language) as borrowing, and the case of switching of other word categories as code-switching. Then she offers the reasonable proposition that such code-switching occurs even when two languages in contact are typologically different (with opposite word order); this is contrary to prior work (Poplack et al. 1989). Chap. 5 goes on to discuss code-switching purely in the framework of Chomskyan linguistic theory.

Chap. 6 discusses the “functions” of code-switching; its analyses of code-switching as discourse will be particularly familiar to those who use the interactional sociolinguistic approach. Three functions, among those analyzed by N, will be summarized here. First, in the interviews, a Nisei speaker uses English discourse markers (*Yeah, I think so*) while speaking in Japanese to the interviewer (Nishimura, who is a native Japanese). N suggests that the speaker uses the English markers in speech for himself (e.g. showing his response, trying to figure out what to say), but chooses the Japanese language in the interview speech (addressing the Japanese interviewer). Thus such markers indicate the boundaries of discourse. Second, the Niseis use Japanese sentence-final particles (*ne* and *yo ne*) and tag-like auxiliary forms (*deshoo*) in sentence-final position, even when they are speaking English. N suggests that the use of such expressions in an English environment adds an interpersonal dimension to the statements. The overall function of *ne*, *yo ne*, and *deshoo* is to “involve” the hearer; this interpersonal or expressive function has often been pointed out in studies of Japanese discourse (Maynard 1988, Onodera 1993). Third, the Niseis usually talk to each other in English, in which short Japanese phrases occur sporadically, e.g. *chotto* showing hesitation, or *nanchuu no?* “what shall I say?” The presence of such elements in the discourse can be explained by the symbolic effects of language: Here the Niseis’ unique ethnic and social identity is symbolized by interspersing Japanese. Thus this chapter shows the multi-functionality of code-switching at the discourse-organizational, interactional, and symbolic levels.

In sum, Nishimura’s book on code-switching seems to be the first that has shed light on the combined sociolinguistic and linguistic aspects of this interesting speech phenomenon. Her approach fulfills the interests of two types of linguists: those who pursue the systematics of language use in real human communication, and those who look mainly at the internal structure of language.

REFERENCES

Goodwin, Charles (1981). *Conversational organization: Interaction between speakers and hearers*. New York: Academic Press.

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- Gumperz, John (1982). *Discourse strategies*. Cambridge & New York: Cambridge University Press.
- Maynard, Senko K. (1988). *Japanese conversation*. Norwood, N.J.: Ablex.
- Onodera, Noriko O. (1993). *Pragmatic change in Japanese: Conjunctions and interjections as discourse markers*. Dissertation, Georgetown University.
- Poplack, Shana; Wheeler, S.; and Westwood, A. (1989). Distinguishing language contact phenomena: Evidence from Finnish–English bilingualism. In Kenneth Hyltenstam & Loraine K. Obler (eds.), *Bilingualism across the life span*, 132–54. Cambridge & New York: Cambridge University Press.
- Tannen, Deborah (1992). Interactional sociolinguistics. In William Bright (ed.), *International encyclopedia of linguistics* 4:9–12. Oxford & New York: Oxford University Press.

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GERRIT VAN ENK & LOURENS DE VRIES, *The Korowai of Irian Jaya*. (Oxford studies in anthropological linguistics, 9). New York: Oxford University Press, 1997. Pp. xiv, 321. Hb \$95.00.

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One mainstay of the Boasian tradition in anthropological linguistics is the notion that adequate documentation of a language must consist of at least three volumes: a grammar, a dictionary, and a collection of texts. This convention grew out of Boas's dogged insistence on the collection of copious texts in the native languages as a way of documenting the cultures of Native North Americans, which he believed were breaking down and disappearing. Obviously, if one were actually to make use of such texts, a grammar and a dictionary were also needed; so this practice of a necessary trilogy was established, a tradition that has continued in academic departments which carry on the Boasian heritage (illustrated by the postgraduate work and resulting publications of the editor of this journal).

The present book is a single-volume contribution to this tradition in anthropological linguistics. The culture of the Korowai (of western New Guinea, in the Irian Jaya province of Indonesia) is in no danger of disappearing soon; their earliest sustained contact with the modern world – in the form of the Indonesian nation-state and Christian missions – occurred only in 1978, and some clans still remain uncontacted. So this is indeed a welcome description of a Papuan culture and language in as a traditional form as can be found anywhere in New Guinea today. The authors provide a short ethnography, which includes a detailed analysis of the Omaha-type kinship system typical of Papuan peoples (65 pages), and the expected Boasian trilogy for a description of the language: a grammar, including phonology, morphology, basic syntax, and discourse patterns (84 pages); a vocabulary, Korowai–English and English–Korowai (40 pages); and a collection of nine texts (66 pages). In view of their brevity, the grammar and dictionary are little more than sketches; but in combination with the copious

footnotes, they do provide the necessary entrée to the fascinating worlds contained in the texts.

The Korowai language belongs to the Awyu-Dumut family of Papuan languages, a probable sub-family of the large Trans-New Guinea family which stretches across the island, largely in the highlands and highland fringe areas. The Korowai language is, in most respects, a rather typical language of the TNG family, the typological properties of which are often taken as diagnostic of Papuan languages as a whole; however, this is a rather unfortunate oversimplification of what is in fact a highly complex and diverse situation. Korowai is quite unusual among Papuan languages in having a three-way contrast in stops: voiceless (*pol* 'two'), plain voiced (*bol* 'hole', *ban* 'chest'), and prenasalized voiced (*mbam* 'child'); the only other Papuan languages known to have such a contrast belong to the Lower Ramu family in the Sepik-Ramu basin, about 750 kilometers distant. Like most TNG languages, Korowai is verb-final and right-headed, with unmarked SOV word order. Verbal morphology is somewhat complex, with pronominal agreement suffixes for subject, as well as tense and aspect suffixes; but it is less complex than that of many other TNG languages, in that there are no pronominal agreement affixes for object or indirect object. As in many other TNG languages, the contrast between 2nd and 3rd person in non-singular number is neutralized in the subject agreement suffixes in most tense-aspect combinations; but Korowai goes further by neutralizing it also in the singular – a relatively unusual development in TNG languages.

Korowai also exhibits the typical TNG discourse pattern of clause chaining, in which dependent, morphologically stripped-down verbs precede a final, independent, fully inflected verb. The whole complex forms a single sentence, with the dependent verbs taking the specifications for inflectional categories (like tense-aspect) from the fully inflected final verb. Commonly, too, dependent verbs are inflected for switch-reference to indicate whether the referent of their subject is the same as that of the following verb or different. Korowai dependent verbs are significantly less complex than those of many TNG languages. There is only one true stripped-down form, consisting of the root plus an optional *-ne*, and this always indicates sharing the same subject as the following verb. Fully inflected verbs, morphologically identical to final verbs, can be used sentence-medially, in which case they are neutral as to switch-reference; but these can be overtly inflected for different subject through the use of suffixes like *-do(n)*. Clause-chaining is a typical TNG means of coordinating clauses, and this is undoubtedly the primary mechanism of clause combining in these languages. Still, they do possess means of subordinating clauses as well, and Korowai is no exception in this regard: Subordination of a clause is accomplished by suffixing *-xa* to a fully inflected clause-final verb.

Interestingly, Korowai suggests that some revision of current theories about forms of clause linkage and discourse cohesion may be needed. It is often claimed that subordinated clauses typically express backgrounded, presupposed informa-

tion; but that coordinated clauses as main clauses represent asserted, foregrounded information – the main event line of the narrative, as it were. These correlations partially hold for Korowai, but they are not watertight: Coordinating clause-chaining as the unmarked linkage type is often used in cases where the first clause expresses presupposed backgrounded information:

bume-ma-té. *bume-ma-té-dakhu* *ol di fe-nè*
 slaughter-HAB-3PL.REAL slaughter-HAB-3PL.REAL-SS feces cut remove-SS
fū-ma-té-do . . .
 put-HAB-3PL.REAL-DS
 ‘They slaughtered (it). After they slaughtered (it), they cut and removed the guts and put (it) down
 and . . .’ (pp. 118–19)

Note that the second mention of *bume-* ‘slaughter’ is presupposed, and is now background information; yet it occurs as a coordinated clause-chained verb, not a subordinated one. Clearly, the correlations of clause linkage type and discourse-cohesive meanings depend on the overall typology of the language.

The nine texts provide a very useful source for study of the indigenous Korowai tradition of ethnopoetics and verbal art – one which, because of the shortness and sporadic nature of contact, is still largely unaffected by outside or westernized norms of discourse building. It appears that a crucial ethnopoetic unit in this tradition is the Papuan notion of extended sentence. The chained clauses within these extended sentences are sub-units, which typically seem to be made up of the same measured verse structure: an XP constituent, a noun phrase or adverbial, followed by the fully inflected verb or linked verb roots, with or without *-na*. Typically, the extended sentence seems to consist of not less than four of these clause-chained sub-units. Further, the Korowai magic number for plot structure may be four, as in some Native North American ethnopoetic traditions. For example, when one of the procreators of the world has intercourse with his mutilated younger brother to create its beings, he does so four times before he is satisfied with the result. More research is needed to verify this claim and to determine how widespread it is among TNG-speaking cultures. It clearly is not pan-Papuan, since it is not true of Sepik-Ramu peoples like Watam, for whom the magic number is three.

All in all, this is an excellent work for people seeking information about the languages and cultures of peoples of southern Irian Jaya, and a useful source of information on Papuan language structures and oral traditions more generally. My only quibble is the lack of any conversational texts in the volume. In this, the book is squarely within the Boasian tradition; but in my view, this should be seen as a serious shortcoming of the tradition. Certainly one of the most robust and outstanding findings of anthropological linguistics in the past three decades is the extent to which culture is inscribed and created in ongoing conversational interactions. A couple of conversational texts would really have rounded out the contributions of this valuable work.

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HERMAN WEKKER (ed.), *Creole languages and language acquisition*. (Trends in linguistics: Studies and monographs, 86.) Berlin: Mouton de Gruyter, 1996. Pp. vi, 205. Hb DM118.00.

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This slender, neatly typeset volume contains a selection of the papers presented at an international three-day workshop on creole languages and language acquisition, held at the University of Leiden in 1990. Entitled “The logical problem of language acquisition,” the workshop set out to investigate the acquisition of parts of the grammar by children and adults. The purpose of the Leiden gathering was to bring together linguists from essentially two fields (language acquisition theory and pidgin/creole studies) in order to “solve the ‘logical problem of language acquisition’ from as many perspectives as possible” (p. 6).¹ The central issue examined during the workshop was whether the specific circumstances of the genesis of a creole language have implications for theories of language acquisition in general. Conversely, the organizers and participants hoped that their discussions would shed new light on the early history of existing creole languages.

As Wekker points out (p. 2), a great many questions are shared by creolists, historical linguists, and acquisition researchers – and, we might add, scholars from several other disciplines (including evolutionary biology, anthropology, neuroscience, artificial intelligence, and primatology). For example, does creolology recapitulate ontogeny? That is, do creole grammars resemble child grammars in certain respects? If so, how does creole language development proceed? To what extent is acquisition input-driven, and to what extent is it governed by innate and therefore universal mechanisms? How does language development proceed in creole-speaking communities, where the language situation is often unusually heterogeneous (massive multilingualism, multiple and complex layers of registers etc.)? Is creolization in significant ways analogous to second (rather than first) language acquisition? Is creolization perhaps a combination of both L1 and L2 acquisition? Does relexification indeed play a far more central role in creoles than in other languages, as some linguists have claimed? If so, what makes the histories of creole languages special, so as to favor such a different evolutionary path? Do language acquisition and creolization both proceed via small steps (undergeneralization) or via large leaps (overgeneralization)? Is it perhaps the case that overgeneralization and undergeneralization occur simultaneously during language acquisition and/or creole formation? Can current acquisition theory “explain” the existence of creole languages? Do creole parameters show settings similar to those exhibited by the child’s grammar in the initial stages of language acquisition? Can L1 acquisition studies and creolistics offer us significant insights into Universal Grammar? Is UG still

actively operative in L2 acquisition and creolization? Or have adult L2 learners (including those acquiring pidgins or creoles) lost the child's supposed knowledge of UG?

Such questions are addressed in the volume under review, which is divided into three parts: "Creolization as first-language acquisition," "Creolization as second-language acquisition," and "Creolization as relexification." The book contains a total of ten essays almost all of which are authored by scholars likely to describe themselves as "creolists" (rather than L2 acquisition specialists). Hence this book (like the workshop that formed its basis) is not really a forum in which L2 acquisition researchers and creolists present their latest findings, in order to learn from one another. Rather, it is mostly a forum in which creolists speak to creolists. For me, this limits the scope of the discussion in ways that more recent workshops on related topics have sought to avoid; witness, for instance, the advanced seminar held in 1996 at the School of American Research, Santa Fe, which had as its title "The evolution of language: Assessing the evidence from non-human primates," and which brought together specialists from a wide range of disciplines.² Readers should bear in mind, however, that the 1990 Leiden workshop was visionary in that it sought to foster the cooperation of researchers interested in the "logical problem of language acquisition," and therefore language genesis at large, just prior to the recent explosion of interest in language origins; witness the flurry of publications on the topic, by psychologists and archeologists (Noble & Davidson 1996), by neuroscientists (Deacon 1997), and by linguists (Aitchison 1996, Bickerton 1995, Fauconnier 1997:190; Haiman 1997).³

Creole languages and language acquisition opens with a six-page Introduction by Wekker, in which he states the major aims of the project and offers contextualized summaries of the ten articles that follow. He is careful not to overstate the results of the workshop ("There is still a great deal that workers in different fields can learn from one another", p. 6). Perhaps missing here is an explanation of why the volume appeared more than five years after the workshop was held. Occasional postscripts in the articles (e.g. p. 29, n. 1, and p. 93) suggest that vagaries of publication contributed to delaying the printing of the volume, thereby rendering the contributions slightly dated.

Part I features five articles, of considerably different lengths, on creolization as first language acquisition. In "Small steps or large leaps? Undergeneralization and overgeneralization in creole acquisition," Jean Aitchison examines the so-called "predicate marker" *i* in Tok Pisin, as spoken by a group of first-generation creole speakers. Her general conclusion is rather surprising: Overgeneralization and undergeneralization are both found to have taken place. Therefore, the answer to the question of whether creoles evolve in small steps or large leaps seems to be "both." This finding shows that, with regard to questions about creole development, "there are no blanket answers, merely a need to focus more closely on the interacting" (p. 29).

Derek Bickerton is of course a “heavyweight” among both creolists and language evolution researchers (cf. Bickerton 1995, 1990, 1981, and his additional works cited therein). His “Creoles and the bankruptcy of current acquisition theory” argues that the very existence of creole languages poses a challenge to acquisition theory. In most parts of the world, we have no direct evidence of the input from which creole languages were formed; but in Hawaii, creolization took place relatively recently and hence is documented far better than other contact languages. According to Bickerton, in Hawaii the pidginized input was, in a sense, “primitive,” i.e. radically ill-formed in several ways. Structural restrictions, radical variability, and morphological impoverishment made it a means of communication which, in Bickerton’s view, could not possibly have been the direct model for the complex and fully functional Hawaiian Creole. Put differently, Hawaiian Creole is a natural language that is somehow connected with, yet goes far beyond, the pidgin – which was characterized, above all, by complete anarchy. Bickerton argues that “if syntax can be acquired from input of this level of impoverishment, then no theory that requires well-formed data as input can be an adequate theory of language acquisition” (p. 41). All current and past theories of acquisition contain this requirement; hence, a satisfactory theory is still needed to explain the Hawaiian situation.

Thomas Roeper, in a brief but stimulating follow-up (pp. 45–49) says (*pace* Bickerton) that the claim that creole languages provide us with a radically new view of acquisition theory is “entertainingly flamboyant . . . but little more than that” (p. 45). In his view, the notion that input must be “well-formed” is an idealization (by Bickerton) which we know not to be true for any language.

Part 1 concludes with two articles that use Caribbean Creole data as their primary evidence. In “Ambient language and learner output in a creole environment” (pp. 51–64), Lawrence Carrington stresses the need to create a corpus obtained in the learning environment by the learners, as well as the participants in their environment. Discussing the situation in Trinidad, he offers insights that help one understand why, within the Caribbean sociolinguistic complex of Creole English, individual learners may have quite different targets, even though they may grow up in an environment for which available descriptions suggest considerable uniformity. Michel DeGraff’s “Creole languages and parameter setting: A case study using Haitian Creole and the pro-drop parameter” (pp. 65–105) is the longest and most technical article of the volume. He provides evidence for his argument that Haitian Creole is a null-subject language and thus coincides with the child’s initial grammar, which is presumed also to be pro-drop. According to him, the pro-drop setting of Haitian Creole (and possibly other creole languages) may, therefore, “be due exclusively to creolization qua language acquisition” (p. 92).

Part 2 contains the following articles: “Does creology really recapitulate ontogeny?” by Mervyn Alleyne (pp. 109–18); “The making of a language from a lexical point of view,” by Geert Koefoed & Jacqueline Tarenskeen (pp. 119–38);

and “Creolization and the acquisition of English as a second language” by Herman Wekker (pp. 139–49). In the first of these, Alleyne is critical of a number of assumptions about creoles and about language acquisition in general. In asking whether creolization indeed recapitulates ontogeny, he casts doubt on innatist claims about human language. He also questions the validity of some of the claims regarding UG. Using data from French-based creoles, and more specifically from within the verbal system of these languages, he seeks to show that a number of commonplace facts remain inadequately accounted for. In so doing, he reaches conclusions that do not support or complement explanations based on cognitive or linguistic blueprints. In Wekker’s article, creolization is discussed in terms of L2 acquisition by adults. He considers creolization as a gradual, multi-generational process of imperfect L2 acquisition by successive cohorts of adult slaves (this view is radically different from that of Bickerton, who has always stressed the role of children in the formation of creoles). Koefoed & Tarenskeen, like Wekker, utilize data from Sranan to bolster their major claims. Sranan is unusual in that a large segment of its vocabulary is due to autonomous innovation. In other words, its lexicon consists to a large extent of self-made linguistic expressions, rather than loans from sub- or superstrate languages. The authors conclude that vocabulary is not created by some innate language-acquisition device.

Part 3 offers articles on relexification by two Canadian researchers, Claire Lefebvre and John Lumsden, who for several years have joined their efforts to substantiate the heavy African input in the genesis of Haitian Creole. Lefebvre’s essay, “The functional category ‘agreement’ and creole genesis” (pp. 153–83), reports on a large-scale project which seeks to demonstrate that relexification was a key ingredient in the genesis of Haitian creole.⁴ She shows that, in the formation of Haitian Creole, the AGR of Fon (a West African language) has been relexified. In her view, this explains the remarkable parallelism between the structure of the clause in Haitian and in Fon as its major African substrate. These findings are then examined in regard to their relevance to theories of creole genesis and to acquisition theory.

Lumsden’s concluding article, “On the acquisition of nominal structure in the genesis of Haitian Creole” (pp. 185–205), begins by stressing the point – on which all the contributors of this volume seem to agree – that a synchronic study of a creole language in itself has no properties that distinguish it from studies of non-creole languages. Creoles differ importantly from other languages, however, in that they develop relatively quickly, and in particular social contexts. For that reason, the comparison of creole grammars with those of their source languages is of special interest. Concentrating on the nominal phrase in Haitian Creole, Lumsden argues that at least one aspect of this phrase must be considered a marked option in the repertoire of UG; hence, it is a problematic case for UG theory. The impasse is resolved, however, through his appeal to relexification theory. Substratal forces (mainly Fon) must therefore have

conditioned the Haitian nominal phrase far more than has previously been admitted.

As may be evident, contributors to the volume under review approach “the logical problem of language acquisition” in many different ways. The data they use to bolster their claims are multifaceted and predominantly atomistic, coming from widely dispersed languages (Sranan, Hawaiian Creole, Trinidad Creole, Tok Pisin areas, Haitian and other French creoles). The Leiden workshop and the present book clearly were not conceived in terms of a large-scale research program that would lead to clear-cut, uniform answers. The studies do yield several stimulating insights, but many of the conclusions reached by the contributors are contradictory; and no consensus seems to have emerged as to exactly how the logical problem of language acquisition may ultimately be resolved. The volume thus raises many more questions than it answers. In so doing, it has probably amply satisfied the expectations and hopes of those who organized and participated in the Leiden workshop.

NOTES

¹ It is curious that neither the Introduction nor any of the ten articles in the book explicitly defines this “logical problem of language acquisition.”

² For details on the Santa Fe meeting, see Davidson 1997.

³ Further evidence of serious commitment by scholars to the study of the evolution of language is seen in the recent launching of the journal *Evolution of Communication* (Benjamins, 1997–), which is dedicated to the interdisciplinary investigation of issues related to the evolution of the human language and mind.

⁴ Further results of this large-scale project can be found in Lefebvre 1998, and other relevant publications cited therein.

REFERENCES

- Aitchison, Jean (1996). *The seeds of speech: Language origin and evolution*. Cambridge & New York: Cambridge University Press.
- Bickerton, Derek (1981). *Roots of language*. Ann Arbor: Karoma.
- (1990). *Language and species*. Chicago: University of Chicago Press.
- (1995). *Language and human behavior*. Seattle: University of Washington Press.
- Davidson, Iain. 1997. The evolution of language: Assessing the evidence from nonhuman primates. *Evolution of Communication* 1:133–52.
- Deacon, Terrence W. 1997. *The symbolic species: The co-evolution of language and the brain*. New York: Norton.
- Fauconnier, Gilles (1997). *Mappings in thought and language*. Cambridge & New York: Cambridge University Press.
- Haiman, John (1997). *Talk is cheap: An essay on sarcasm, alienation, and the evolution of language*. Oxford & New York: Oxford University Press.
- Lefebvre, Claire (1998). *Cognitive processes and parameter setting in creole genesis: The emergence and development of Haitian Creole*. Cambridge & New York: Cambridge University Press.
- Noble, William, & Davidson, Iain (1996). *Human evolution, language and mind*. Cambridge & New York: Cambridge University Press.

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ROBERT BAYLEY & DENNIS R. PRESTON (eds.), *Second language acquisition and linguistic variation*. (Studies in bilingualism, 10.) Amsterdam & Philadelphia: Benjamins, 1996. Pp. xviii, 317. Hb \$79.00.

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Preston's Preface identifies a gaping hole in the domain of SLA research: a "relative neglect . . . of the insights to be gained from the quantitative study of interlanguage variation" (p. xiv). The book is intended to remedy that defect by providing (a) a clear rationale for the use of quantitative sociolinguistic methods to study interlanguage variation; (b) seven exemplary studies which use multivariate analysis of linguistic variation for this purpose; and (c) a practical, step-by-step manual on how to use VARBRUL computer programs to analyze variable interlanguage data. Readers of this book should come away with a very clear idea of why and when this sort of analysis should be done, and how to use this powerful tool in analyzing their own data.

Preston begins in Chap. 1 with a tightly composed argument that there should be a closer relationship between sociolinguistic work on variation and SLA research attempting to deal with interlanguage variation. He begins the chapter, therefore, by providing SLA researchers with an overview of two sociolinguistic models of variation: (i) the "Labovian paradigm," and its development of variable rule analysis using VARBRUL; and (ii) the "dynamic paradigm" and wave theory. He shows how SLA researchers have used both paradigms in past studies, and discusses the relationship between the two. (His description of VARBRUL analysis – what it is, and how one reads the output – is valuable reading for anyone interested in research in this area, whether or not they want to do such research themselves.) With that history as a backdrop, Preston argues that there are four impediments in applying this sociolinguistic work to variable interlanguage data. SLA researchers, he says, (a) lack plausible psycholinguistic models for interlanguage variation; (b) confuse sociolinguistic aims with sociological, social psychological, or ethnomethodological aims; (c) misunderstand concepts, findings, and tools developed in variation linguistics; and (d) have been overpreoccupied with the generative program in SLA research. Preston argues that, in spite of these impediments, quantitative work in SLA should be pursued, because it has direct implications for our understanding of such topics as language universals in SLA, language transfer, and acquisition through exposure. (Later in the book, Labov offers an additional argument for using quantitative analysis in SLA research: to examine the way in which language transfer may cause misperceptions which, in turn, result in ongoing interlanguage variation in both perception and production.) Preston concludes by proposing a variable psycholinguistic model that might account for SLA data – one based on the analogy of weighted coins

being flipped. Some may argue that this model begs the competence/performance question which has nagged SLA researchers for some time now (some coins get flipped in competence, and some in performance); but it is still thought-provoking.

The wide range of topics covered in the studies included in the book is both a strength and a problem. The volume focuses more on providing examples of quantitative methodology than on shedding light on the concept of “variation” itself: Does the term “variation” refer to differences in an individual’s performance from one social context to another, or to individual differences in performance, or to differences in performance of a group over time? Perhaps, in their desire to show the power of quantitative analysis in general (and VARBRUL in particular) over a wide variety of SLA studies, the editors may have cast their net broadly to include all these sorts of variation. However, this kind of eclecticism in the content of the studies could lead to some lack of “clarity on the concept” on the part of the reader, in thinking about what the term “variation” refers to exactly.

For instance, the first study, by James Flege et al., uses multiple regression analysis to focus on inter-subject variability (or individual differences), relating age and age of arrival of different learners to those learners’ voice-onset times for two voiceless stops and two interdental fricatives in English; there are no data here on task variation, or on variation related to linguistic context. The article does show how multiple regression analysis allows the researchers to sort out the relative influence of various background factors on the differential success of different individuals in producing those English consonants.

Roy Major’s study, a longitudinal analysis of the acquisition of initial and final consonant clusters by Brazilian Portuguese learners of English, illustrates the use of VARBRUL in sorting out the relative influences of time, style, and cluster type in producing differences in the learners’ production of developmental errors, transfer errors, and target forms at different stages in the acquisition process. Two other studies use VARBRUL to analyze past tense marking in English interlanguages. Robert Bayley examines past tense marking of regular verbs, and consonant cluster reduction in the speech of adult Chinese learners of English. He shows how variable rule analysis allows him to distinguish between the effects of phonological and grammatical processes, and to contrast L2 learner behavior with native speaker behavior in this regard. Unlike native speakers, his Chinese learners were more likely to omit *-t/d* from past tense forms than from monomorphemes. H. D. Adamson et al. use data from seven adolescent Spanish-speaking learners of English to examine Walt Wolfram’s saliency hypothesis for tense marking (1985). Their results are complex but are generally supportive of his hypothesis; e.g., although discourse, lexical, and phonological constraints all affected tense marking, there were subtle differences in behavior at different proficiency levels.

Richard Young examines the production of English articles by three native speakers of Czech and three native speakers of Slovak in interviews conducted by a native speaker of English. He uses VARBRUL to model the learners’ use of

articles in relation to a defined set of co-occurring features of context. Dividing the subjects into two proficiency levels (using TOEFL scores), Young examines their accuracy of article use in terms of the impact of NP countability, semantic and discourse marking, and NP function in the sentence. He shows how learners in the different proficiency groupings differ in the way they map L1 meanings onto L2 forms, and he argues that the use of VARBRUL allows him to make important inferences about the developing cognitive processes of L2 learners.

Vera Regan offers a longitudinal study, using VARBRUL to document the acquisition of sociolinguistic norms for *ne* deletion by seven advanced Irish learners of French. She shows how learners living for a period in the native-speaker community are able to acquire native-like constraint hierarchies for *ne* deletion that have not been acquired in classrooms.

Finally, Robert Berdan uses VARBRUL to offer a very interesting reanalysis of John Schumann's "Alberto" data (1978). (This was a longitudinal study of an adult Spanish speaker's failure to acquire negation in English L2; the study has often been cited as an example of "fossilization" in SLA.) Using logistic regression, Berdan shows that Alberto's system of negation in fact was not totally fossilized, but rather did change over time; logistic regression allows the researcher to separate out the influences of lexicon and time as factors that independently affected Alberto's use of negation.

The book concludes with a long appendix consisting of Young and Bayley's detailed guide to the use of both DOS and Macintosh versions of VARBRUL. They use their own data sets to illustrate, step by step, all the steps in conducting a VARBRUL analysis. This "how-to" manual serves as a much-needed complement to the instructions that come with the VARBRUL computer programs now available on the Web. It is an absolute requirement for the toolbox of the SLA researcher who has been persuaded, by this book's arguments, that quantitative approaches to the analysis of interlanguage data must be added to the array of research tools used in the study of second-language acquisition.

This book should be required reading for graduate students in any research methods course on L2 acquisition; I used it as a course text in a course on interlanguage variation at the 1997 LSA Summer Institute, and I found that several chapters were accessible even to relative beginners in the field.

REFERENCES

- Schumann, John (1978). *The pidginization process: A model for second language learning*. Rowley, MA: Newbury.
- Wolfram, Walt (1985). Variability in tense marking: A case for the obvious. *Language Learning* 35:229–53.

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