This book is the biggest of three to emerge from the second AILAA congress, the other two being *The Psychology of Second Language Learning*, ed. P. Pimsleur and T. Quinn, and *Papers in Contrastive Linguistics*, ed. G. Nickel. It contains all the papers from the plenary sessions of the congress together with another forty-six from specialized section meetings. Three books, containing in all 88 papers, is a lot to add to the literature of any field, and in view of the fact that with the present volume Cambridge University Press hit the £10 mark with their linguistics publications for the first time, one is entitled to ask whether it is not too much. Accordingly, I shall review this book with a rather sharp eye on questions of selectivity and value for money. My attitude to it will be somewhat harsh, in fact, because I feel that for a price as high as ten pounds one is entitled to ask for more than a reasonably well laid-out volume containing several articles of interest. The several articles of interest could, after all, have been left to find their outlets in the various specialized journals dealing with the many fields encompassed by this book, and ten pounds would when this book appeared have purchased a subscription to *Language Teaching Abstracts* for five years, which would seem to be a much better investment. (This is not the case any more, I should point out; the publishers of LTA, Cambridge University Press again, have since doubled its subscription price.)

Criticisms on such grounds could not be made of the official proceedings of a conference, committed to providing a comprehensive record of what went on; but this book is not in such a category. The Second International Congress of Applied Linguistics, which I attended, was a well-organised and highly successful gathering of linguists and workers in related fields; but it provides only a vague associating circumstance for the papers contained in this book, hardly less accidental than the fact that all the papers were presented in the year 1969. The book under review provides neither a comprehensive collection of the papers presented at the conference nor, in the case of the papers it does include, a transcription of what was actually delivered to the conference participants. I therefore see it merely as a collection of papers, to be reviewed as such.

To begin with, a word must be said about the proofreading of the book. Because no one, apparently, thought to engage a proofreader who was familiar with the Devanagari script, D.P.L. Dry's paper (189-192) is virtually unintelligible. Nearly every paragraph that contains Devanagari characters is marred by gross misprints, which is very serious since the article merely presents with comments a Devanagari phonemic notation for use in teaching English in India. The reader is forced to try and reconstruct Dry's system for himself, and he will need to be acquainted with the Devanagari script and the pronunciation of Khariboli Hindi to do this. I cannot, given the typographical resources of *YPL*, present here a detailed erratum. This task should surely devolve upon the publishers anyway; perhaps an amended reprint of the Dry paper could be prepared and sent on request to purchasers or users of the book. I can, however, give some impression of the kind of garbled nonsense that has been produced by
quoting a few lines with the Devanagari characters transliterated into
Roman letters in parentheses: "The voice stops (ś), (ṭ)" (189); "The voiceless aspirated dental stop (bh)..." (190); "The vowels (i), (i)..." (190); "The pure vowels (a) and (o)..." (190); "We may then use (ya) to represent /o/" (191); "/ʌ/, represented as...(aad)" (191); "we can use (u) for the voiceless affricate in sole releasing position in a stressed syllable, (y) for the voiceless affricate in any other position..." (191); "it is convenient to insert a glide ((p) or (w))..." (191); "One may therefore show 'finger' as (-aa-feltpar) but 'singer' as (-aa-segar), while 'ink' should always be shown as (dlik)" (192). Gibberish such as this overshadows the other misprints in the book. Those that catch the eye annoyingly include "des" for de (99, bottom line); "Benzt" for Bengt (147n); "catylist" for catalyst (276); and "quantic" for quantitative in the running head all the way through the Lindblom/Sundberg paper (327, 323, 325, 327); but I have made no systematic hunt for misprints.

The content of the book, as is to be expected in view of the fact that it contains all the plenary sessions from the congress, is not entirely free from the empty, nostalgic rambling about the state of the art and the status of the profession that people seem impelled to indulge in wherever a large body of people from a particular interest-group are gathered together. Fishman spends a few paragraphs mulling over "the lean, dry years" when sociolinguistics "seemed to be blocked by ignorance and apathy on every side" and how much better things are looking now that "the annual yield in articles and books is great enough and sufficiently sought after to prompt commercial publishers to plan specialized journals and series in sociolinguistics" (19–20) – one almost expects to read that the half-yearly dividend will be up a few percentage points. And Malmberg seems at one point to get totally carried away with the sheer majesty and glory of our Discipline: "Linguistics is not a humanistic science parallel to a series of others: history, sociology, literature, etc. It is superior to all of them, and to all sciences, it pervades them all, contributing to the way in which their problems are formulated, their results expressed, and their methods transmitted to later generations" (17). (As James Sledd has remarked of this kind of bragging, "Such elephantine trumpeting about the importance of one's subject merely irritates the other creatures in the academic jungle" (1964: 469.) But in general even the plenary session papers, designed originally to impart a warm glow of disciplinary solidarity and pride to a large hall of congress participants, are refreshingly free of such flag-waving.

The worst of them (it must be said) is Malmberg's paper from the introductory session of the congress. True, it may be that Malmberg had an impossible job; no paper suitable for publication in a collection would have served for the vague, expansive lecture that was evidently felt to be appropriate for making all the participants feel at home on arrival in the congress hall, and no speech that would have successfully fulfilled the latter function would be worth re-reading later. The reader of Malmberg's paper will learn that applied linguistics has been around for a long time, that Malmberg doubts the validity of the "innate ideas" hypothesis, that there are important problems to be faced in educating the deaf, that children are disadvantaged by beginning their education in a dialect or language they do not understand, that the boundary between theoretical and applied science is blurred, that language is terribly important to everybody, and finally that "linguistic research is considerably more urgent than the conquest of the universe" (18). I shall say no more about his contribution.
Fishman's contribution, entitled 'The uses of sociolinguistics' (19-40), is a well-written and thoroughly documented examination of the need for sociolinguistic awareness in tackling practical linguistic problems. Fishman concentrates centrally on the creation and revision of writing systems, drawing on the literature of many different language groups to illustrate two main points: (1) in the creation of writing systems, the language planner disregards extralinguistic factors at his peril, for a linguistically impeccable orthography may be totally rejected by the speakers of the language involved if for some reason they do not like the look of it, or if culturally its face does not fit; and (2) in the revision of writing systems, while revolutionary social change may be accompanied by success with a programme of orthographic reform, there are many cases which show that the two are completely independent in general: there may be revolutionary social change with or without successful orthographic reform, and there may be successful orthographic reform with or without revolutionary social change. More briefly, Fishman touches on the relevance of a sociolinguistic perspective in language planning, language teaching, literacy programmes, and translation.

Osamu Fujimura discusses the unpromising subject of technological development for language learning (41-64) in a way that makes it eminently readable, relating his topic to the special problems of Japanese learners, who are born into a curiously isolated linguistic situation in that they find themselves in a highly industrialized modern state speaking a language that does not even have any close historical relatives spoken outside the chain of islands that makes up their country. Indeed, the country might be thought of as a laboratory for language laboratory development, for if the electronic sophistication that is within our grasp today can be harnessed to language teaching at all, Japan, with its vast economic and technological resources and its pressing need for speakers of European languages, is very likely to lead the way in showing how. The basic device discussed in Fujimura's contribution, which a team in Tokyo are trying to develop for practical use, is a method for computer control of tape recorders, utilizing a separate track of the tape to carry pulses that select the next stopping position and a facility for high-speed skipping in either direction. This permits the development of non-linear teaching programmes that give each student the amount of practice he needs in order to get it right, but allows the ones who catch on quickly to proceed immediately to the next stage. Some preliminary results are briefly reported, but with the warning that "we are not in the position to predict practical use of such programs in the near future" (64).

David G. Hays offers a comprehensive yet lively survey of all the activity that goes on under the name of applied computational linguistics (65-84). Many points of interest are brought out in his discussion, including the important one that (as Gorn, 1968, 341, puts it): "one can mechanize more than one can formalize", and thus systems for dealing with ordinary language purely through surface information, using statistics about frequency of forms and a hierarchical thesaurus of concepts but using none of the complex abstract systems of syntax that linguists have discovered, can function remarkably well in tasks such as surveying automatically indexed literature to retrieve documents relevant to a given topic. Hays cites the system developed by Gerard Salton, whose opinion is that "only surface phenomena are understood well enough to permit the design of efficacious procedures" (69). Apparently systems that incorporate generative grammars and analyse syntactic structure are little in evidence in computational linguistics.
today. Surprisingly, Hays does not even mention the work of Bratley, Dewar and Thorne (1967), which is oriented towards syntactic structural recognition in real time (and has, apparently, the distinction of being the first linguistic research paper ever to appear in the science journal *Nature*). The mood of computational linguistics seems to be much more in sympathy with projects such as Quillian's on the question of "What constitutes a reasonable view of how semantic information is organized within a person's memory" (78ff) than with deep syntactic analysis. Certainly Hays' own interests seem to be in the latter area, as is evident from his interesting speculations on human information processing, the *faculté de langage*, and the individual's life history (73ff). His references are sufficient to provide an entry into the technical literature of the field, though rather a lot of it is difficult of access — fifteen of his forty-odd references being to the preprints of a 1969 Stockholm conference, for example.

The Hécaen/Dubois contribution on neurolinguistics is strictly on clinical neurolinguistics, defining the field as "l'application des méthodes et des modèles de la linguistique, à l'étude des perturbations des réalisations du langage entraînées par des lésions corticales" (85), rather than more generally as the study of the neurophysiological mechanisms underlying speech and of the representation of language in the human brain, as I think some would wish to define it. They allow, however, that after dealing with (1) "classement et description...des désordres" and (2) "recherche de corrélations entre les types ainsi isolés et les topographies lésionelles", it will be time for the field to turn to "tentatives d'interprétation du rôle des mécanismes nerveux dans les réalisations du langage et essai de vérification [à] ces hypothèses" (99). As an otherwise fairly useful, brief introduction to research in clinical neurolinguistics the paper is unfortunately deprived of most of its value through lacking a list of references. The reader who knew the linguistic and aphasiological literatures well enough to assign the relevant publication details to the sprinkling of surnames and odd dates in the paper would presumably be just the kind of reader who did not need this kind of introductory survey anyway.

Finally, Kenneth Stevens' chapter on linguistic factors in communications engineering (101-112), naturally biased heavily towards phonetics, contains an interesting summary of work on the relations between acoustic and articulatory parameters of the speech signal, and some revealing insights into what the communications engineer's task is like now that he has "learned...slowly and painfully, that there [is] not a one-to-one relation between the units the linguist talks about and the properties of the sound wave" (102).

My impression of the plenary session papers, then, is generally favourable. Regrettably, I cannot say this of the much larger section containing the papers from the specialist sections that constitutes the bulk of this book (364 pages of a total 576, or seventy per cent of the contents). Out of 117 papers read at the Congress the editors have selected 46 for inclusion. All records of the plenary session discussions have been omitted to make room for this many section papers. Yet in paper after paper one looks in vain for anything that could be called an application of linguistics, which is what the book's title leads us to expect.

There is straightforward sociolinguistic description (Ayer, 113-120; Ornstein, 349-362); but if this is applied sociolinguistics,
what is sociolinguistics? There are papers on the use of computers in lexicography (Duro, 193-200; Lenders, 313-318 — in which see page 514 for a classic piece of totally vacuous pseudo-formalization, incidentally; Vienney, 453-462); but if this work is within the purview of an applied linguistics conference, what would an applied computer science conference discuss? And there are of course dozens of papers on every conceivable aspect of language teaching (except how linguistics itself might actually be of use), as might be expected in view of the fact that the very notion of applying in practice concepts deriving from the discipline of linguistics has long been smothered under the all-embracing definition of 'applied linguistics' that makes anything a teacher may try out for the purpose of language teaching, be it with a screwdriver and tape splicer or a frequency dictionary and adding machine, classifiable as an 'application of linguistics'. It may well be that linguistics in its present state has not got enough to offer in the way of practically useful findings to fill a book as big as this; but to make the implicit claim that it has by titling the book Applications of Linguistics, and then to present the heterogeneous contents of this book as if they actually were examples of such applications, is not quite honest.

Let me try to offer one clear example of what application of pure research in the human sciences would be like. Suppose pure research in human neurophysiology has discovered that it takes about fifteen thousandths of a second or more for an auditory stimulus of any kind to be translated into a command for action and transmitted as a nerve impulse to the appropriate body musculature. Suppose that the organisers of an athletics meeting use this finding as the basis for an electronic race starting system which counts any start sooner than ten thousandths of a second after the gun as an anticipation of the gun and thus as a false start. We could certainly say that in such a case a scientific research finding had been applied in the solution of a practical problem in human affairs. (Indeed, it has, for I have described roughly what was done for the starting of the track events at the Munich Olympics in 1972.) Now, what analogous application of findings has there ever been in linguistics? Consider the kind of statements that are to be found in linguistics research reports as putative 'findings' about the nature of language: if a language employs the category 'dual' in its grammar, then it also employs the category 'plural' (Greenberg 1963, 94); no language having SOV order in deep structure can have a rule moving verbs to the left (Ross, 1970, 258); wherever Standard English permits contraction of the copula, 'Nonstandard' Negro English permits deletion of the copula (Labov 1969, 722); Standard High German shows three degrees of vowel length at the phonetic level (Dinnsen and Garcia-Zamor, 1971). It is, in the first place, rather hard to think of any situation that could arise in which these facts of linguistic interest might become of practical value. But in the second place, note that this selection of four average linguistic claims are quite typical in being either vague, or based on insufficient observations, or of doubtful empirical status, or arguably false, or several of these at the same time. The subject matter of linguistics is vast and complex, and the discipline itself is in a fairly primitive stage; no one who takes the goal of understanding language at all seriously will feel that Postal is exaggerating when he says (1971, viii) that despite four hundred years of grammatical description of English "the principles of English sentence formation and interpretation (grammar) remain essentially unknown."
The only way to maintain the pretence that there is a field appropriately named "applied linguistics" is, it appears, to abandon the attempt to relate it to what is normally called linguistics, and simply allow any tinkering with computers and texts, any effort to improve (or even just discuss) language pedagogy, any discussion of multilingual diversity, or any technical or therapeutic work touching on speech phenomena, to count as part of the field. A policy like this, applied to the compilation of a collection of articles, will naturally produce a huge jumble of bits and pieces from a score of different disciplines and professions; and that is roughly what has happened in the case of this book.

A number of the papers simply report on particular courses, plans for courses, or installations of language teaching technology. Roeming (377-382), for instance, describes the plans for a daunting 80,000 computer-supervised language laboratory complex to be built at the University of Wisconsin-Milwaukee, in which a computer would record and print out data on correct or incorrect responses for the information of the teaching staff, and report as absent any student who failed to show up at the language lab within a certain period of time. (One does not know whether to feel more sorry for the frightened students pressing their identification cards into the slot to tell the computer they have arrived for their cyberneticized instruction, or for the staff wading through mountains of computer print-outs every morning to check on the progress of their students.) Other papers of this type have the same repellent fascination. Jalling (301-307) offers a boring report on an apparently vacuous research project on language laboratories in Sweden; as he solemnly proposes, with the air of one making a substantive contribution to the field, "that the term language learning laboratory be used for the place where the actual learning takes place, irrespective of equipment..." (307), one longs for the common sense of a David Abercrombie, who was muttering long ago about "the rather regrettable use of the term 'language laboratory' to mean a room with some tape recorders in it" (1965, 119). Eric Hawkins' paper (275-278) is simply a few words of introduction and explanation used to preface the showing at the Congress of three short videotapes of children learning French and German; no justification for the use of the TV equipment in terms of improved language teaching is offered. Anthony Peck presents what is little more than a plug for the Nuffield/School Council Language Teaching Materials Project at York, dressed up with some fine examples of the kind of pointless jargon that makes getting people to say things into eliciting situationally appropriate speech intentions. G. Carsaniga reviews the success of a phone-call feedback scheme in connection with a Radio Brighton course in Italian. A.E.H. Tonkens evaluates the success of a French television course. And so on, and so on. The reader is left wondering how such papers fit into any academic field at all, let alone one with some connection with the study of language. They do not, surely, fall into the category of scientific conference papers at all. They are reports on the way business is going, presented to an audience of fellow members of the profession.

Only one person makes this latter point entirely explicit: Peter Strevens asks, "Where has all the money gone?" (399-405) and pleads for straightforward cost-effectiveness studies in language teaching such as any other large industry would undertake. The question he poses is a sobering one, and the industry that has grown up on the enormous sums that have been handed out for language teaching research and development may find a certain embarrassment in attempting to answer it.
Looking through the book for the papers I could really recommend as saying something about the use of linguistic research findings for practical ends, I find I am counting them on one hand. There is Kellogg Hunt's report on some remarkably successful work applying transformational syntax to the improving of high-school prose composition (287-300); there is the Lindblom-Sundberg paper speculating on how a quantitatively based theory of vowel quality might be employed in teaching pronunciation by means of an oscilloscope display of formant patterns (319-348); there is Eugene Nida's (somewhat anecdotal) discussion of componential semantic analysis in bible translation (341-348); and there are one or two others. Otherwise, the peculiarly mixed bag of papers in this collection ranges all the way from those that lack linguistic subject matter completely (J. Cremona on the tensions of the profession of television course scriptwriter, 173-175) to those that report linguistic study having only the flimsiest connection with applied work (Melanie Mikes on contrasts between noun phrase structures in Hungarian and Serbian-Croat (335-339), which on no evidence whatsoever she declares "will serve to improve...teaching...and to promote the practice of bilinguality"), yet the book hardly ever manages to forge a genuine link between the two extremes.

Because Applications of Linguistics will presumably be purchased by nearly every library that keeps a linguistics stock, the publishers may well come to believe that they rightly judged there to be a market for it. In fact, its uneven quality will probably make it of considerably less value to libraries than might be guessed from its bulk. I would be surprised if it became an oft-cited work of reference as some books of conference papers do. I would certainly be astonished if its overpricing did not discourage most individuals from investing in it.

G.K. Pullum

FOOTNOTE

1 I admit to looking at least one gift horse in the mouth here. One of the most interesting papers in the book, to me, is one that says nothing at all about the applications of the subject. I refer to Gunnar Fant's paper on phonetic theory, 'Distinctive features and phonetic dimensions' (219-239), which is an excellent critical review of the distinctive feature system proposed by Chomsky and Halle, dealing with many crucial theoretical issues (universality, uniqueness, binarity, independence, phonetic distance, psychological reality, phonetic-phonological relations) and including an interim report on the phonetic classification of the notoriously troublesome Swedish vowel system. Though strikingly similar in content and organization to Fant (1967), it is in fact considerably revised and expanded from that paper.

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