quences of literacy'. Historical analyses such as Eisenstein's could be combined with Winchester's (34–49) ingenious thought experiments to show the relations between literacy and the complexity of organization that humans can manage. Such work could provide the historical and conceptual analyses of institutions within which linguistic forms and functions can be interpreted. Several articles attempt analyses of the connections between the social relations within which language is used and speakers' attitudes towards the language, and therefore attempt theories of spoken–written language variation, and how this variation is related to teaching and learning. Both texts and teaching/learning are functions of social and institutional settings. Despite Eisenstein's clear demonstration that concepts of literacy are constantly changing and depend on specific historical and social circumstances, Winchester's is the only other article to take up this theme directly. And apart from Wells's article, there are no ethnographic data which show how concepts of literacy are socially constructed in interaction at home and at school. And the studies of views about language are unrelated to Winchester's discussion (46) of the symbolic, culture-dependent views on the value of literacy. A view and definition of literacy reflects a theory of pedagogy and of the transmission of knowledge, and of which skills are socially valuable. These ideological issues are raised in the earlier articles in the book, but never explicitly related to the later experimental and/or descriptive studies.

(Received 5 September 1986)

Reviewed by Michael Stubbs,
Joint Department of English and Media Studies,
Institute of Education,
University of London,
20 Bedford Way,
London WC1H OAL.


Language processing in children and language processing in adults are rarely considered together. Introductory textbooks are the exception: most introductory textbooks of psycholinguistics allot one or two chapters to the development of language. This introductory textbook goes further: *Language processing in children and adults* assigns equal billing to developmental and mature psycholinguistic processes.

Both authors are distinguished in psycholinguistics, and it is only to be expected that their survey of the current state of this field should be highly accurate. Their accuracy extends also to the title they chose: the book is certainly about the processing of language. It is not about the structure of language – unlike most introductions to psycholinguistics, it contains no potted linguistic theory (there is an opening chapter, which introduces a few
linguistic concepts, but 15 of its 22 pages are devoted to orthography). Nor is it about the processing of speech—the processes of production and perception of spoken language specifically are not covered at all. The language acquisition chapters are significantly headed not ‘learning to speak’, but ‘learning to talk’.

On the other hand, certain topics are covered in considerably greater detail than some comparable volumes offer; unsurprisingly, these are those topics in which the two authors are expert. Thus among the particular strengths of the book are thorough discussions of the reading process and of disorders of language processing.

One is probably justified in assuming that Part 2 of the book (the brief opening chapter constitutes Part 1), which contains four chapters on language development, was written largely by the first author, while Part 3, containing four chapters on adult processing, is the work of the second author. Harris’s part, then, begins with a good review of the literature on the process of learning to talk, which competently covers all the important work on the acquisition of syntax, and the major theoretical approaches to language acquisition, including the relations between linguistic and other cognitive abilities. Harris lays particular emphasis on communicative competence; she shows how much of adult language use is tailored to the perceived convenience of the listener, and how even at very early stages of acquisition the young user can be seen to be developing ever-finer sensitivities to communicative successes and failures.

The chapter on learning to read describes the process within a particular theoretical framework, and concentrates on examples which illustrate the framework rather than on competing theories. Four phases are identified: sight-word reading, the discrimination-net phase (in which fragmentary features serve as crutches for whole-word recognition), a phonological recoding phase and, finally, attainment of a wholly orthographic pattern-recognition strategy.

The final chapter of Part 2, on developmental language disorders, is notably integrative. There is, firstly, a systematic attempt to distinguish the characteristics of developmental disorders from those of adult disorders of language processing. Second, the discussion of particular disorders is cast in the framework of the preceding chapters—thus developmental dysaphasia is discussed in the light of the chapters on learning to talk, while the section on dyslexia refers back for comparison to the chapter on learning to read. This chapter is particularly informative.

In general, Part 2 of the book describes children’s language processing in terms of their performance and its inferred underlying structure (e.g. whether or not readers at a particular stage of development are exploiting grapheme–phoneme correspondence). The emphasis is on description; there is little abstract modelling or prediction, little testing of general theory.
Part 3, Language Processing in Adults, is quite different in this respect. Each chapter presents one or more models of language processing and discusses their predictions in the light of experimental evidence. Thus the chapter on word recognition presents Morton's logogen model, Rumelhart and McClelland's interactive activation model of visual word recognition, and Marslen-Wilson and Tyler's cohort model of auditory word recognition. The next chapter, on sentence recognition, discusses serial autonomous versus interactive approaches to the syntactic and semantic levels of sentence processing. The chapter on language production is cast in terms of Garrett's (serial autonomous) model of production, while the final chapter on acquired language disorders returns to an information-processing model in the style of Morton.

It will be obvious that Coltheart has not set out to present every competing processing model, but rather to give the flavour of the general approach of experimental psycholinguistics to the study of adult language processing. Trying to describe the whole of this field in four chapters inevitably leads to an approach based on judicious sampling rather than exhaustive coverage. Inevitably, too, some samples will be more representative, some less. Thus the chapter on production includes one or two arguments based on speech-error evidence, but none of the classic arguments which have made speech errors such a powerful and attractive source of production data. For instance, there is no mention of the phonological accommodation of shifted affixes to their new environments, which offers simple but strong evidence that affixes can be processed separately in word production, i.e. that inflected words are not necessarily processed as unitary wholes. Similarly the sentence-recognition chapter does not include early work on perceptual strategies in syntax processing or the large body of recent work on parsing by Frazier, Clifton and others (see Frazier & Rayner 1982, Frazier, Clifton, & Randall 1983, Clifton, Frazier, & Connine 1984). However, the overall flavour of the field is certainly conveyed with the same accuracy with which Part 2 portrayed the general characteristics of language acquisition research.

So, for instance, it is clear from the word-recognition chapter that the major bone of contention in this area is whether effects of context can influence the lexical access process itself (e.g. by 'priming' certain lexical entries so that they become easier to access), or whether such effects come into play only after a lexical entry has been accessed. Similarly the sentence-recognition chapter makes clear that the relation (or independence) of syntactic and semantic processing is at the centre of most sentence-level research, while the production chapter accurately points to the planning process as the subject of much production research, both experimental and observational.

Finally, the chapter on acquired disorders is, as one would expect from this author, comprehensive and highly informative, especially with respect to the varieties of acquired dyslexias.
What, then, does this book tell us about the nature of the relationship between language processing in children and language processing in adults? Is children’s processing merely a half-formed version of adult processing, or are there perhaps qualitative differences? Does the language re-acquisition process after impairment in adulthood share features with the acquisition process in childhood?

Harris and Coltheart do not really offer an answer. Right at the end of the book they plead for an information-processing approach to all aspects of language processing, in order that there might be a basis for comparison between different forms of language use, immature and mature, skilled and impaired. It is perhaps regrettable that they did not allow themselves an extra chapter in which they could themselves have drawn such comparisons and elucidated the relationships, in particular the relationship of child to adult processing.

By offering a reliable overview of work in both areas, however, they provide readers with the wherewithal to construct their own answers to such questions. Moreover, one comparison which they do draw, and very clearly, is the comparison between the psycholinguistic study of children’s and of adults’ language processing. It is not even necessary for them to spell it out – the difference leaps from their pages. Psycholinguistic work on adult processing is largely theory-driven; language acquisition work is largely descriptive.

As long as this state of affairs continues, with the two areas being approached from fundamentally different scientific perspectives, we probably cannot hope for a truly unified treatment of language processing in children and language processing in adults. Harris and Coltheart have given us as fair an integration as we are likely to get.

REFERENCES


(Received 6 October 1986)

Reviewed by ANNE CUTLER,
MRC Applied Psychology Unit,
15 Chaucer Road,
Cambridge CB2 2EF, UK.