as these were made to keep the cost of the book down, for it is indeed less costly than other books in this field. If that was the consequence, well then we can at least thank the publishers for that. Other than these technical faults, the book can be rated as an excellent introduction and collection of articles in the field of child language acquisition.

Reviewed by RICHARD F. CROMER
M.R.C. Developmental Psychology Unit
London

(Received 25 November 1973)

H. RAMGE, *Spracherwerb: Grundzüge der Sprachentwicklung des Kindes.* Tübingen: Niemeyer, 1973. Pp. x+110.

In terms of the number of publications, developmental psycholinguistics is very unpopular in German-speaking European countries. Empirical studies are exceptionally rare. Any student looking in the university library for a book in German on German language development has been simply disappointed. Now there is one written by the University of Giessen linguist, Hans Ramge.

The book consists of six chapters: (1) on the relation of language acquisition to communicative act, (2) on the relation of language acquisition to theory of grammar, (3) on the acquisition and development of semantics, (4) on the acquisition and development of phonology, (5) on the acquisition and development of syntax, and (6) on language development of preschoolers. References are given in footnotes and at the end of each chapter as well as at the end of the book. Sadly, many recent studies are missing. Utterances were obtained from the author's own two children, but there is no mention of how they were collected. Neither the size of the sample nor mean length of utterance is given. Age is the only index by which the children's linguistic ability may be estimated.

Chapter 1 is concerned with how the interaction between speech partners affects the form of communicative acts. Starting from deictic gestures expressing some demand, children come to learn, on the one hand, that their social role is tied to some duties and expectations, and on the other hand, that gesticulation can be replaced by verbal communication. Social norms thus determine the learning process by which the child's communicative strategies are established. The operation of these strategies is described in terms of Searle's 'speech acts' – 'illocutionary acts' in particular. First illocutionary acts are realized by intonation, which is followed by syntactic–morphological differentiation.

In chapter 2, Chomsky's theory of transformational grammar is criticized. The author argues, based on Watt's notion of abstract performative grammar, that mental grammar cannot coincide with linguistic grammar. He argues further that performative factors (such as Bever's perceptual strategy) and also the pragmatic factor described in chapter 1 play a part in the determination of

Downloaded from https:/www.cambridge.org/core. University of Basel Library, on 11 Jul 2017 at 11:43:50, subject to the Cambridge Core terms of use, available at https:/www.cambridge.org/core/terms. https://doi.org/10.1017/S0305000900000180

competence. Yet the author seems to agree with the notion of LAD, which is regarded as the starting point of his analysis of semantic, morphological and syntactic development.

Chapter 3 (semantics) begins with a brief description of Piaget's theory on the development of intelligence and that of Vygotsky's complex thinking. The actual learning of 'first meanings' occurs in terms of Osgood's mediational theory. The child then builds 'concepts of meaning', which accounts for the child's semantic generalization. Further development of meaning is determined by linguistic contrast. For example, the acquisition of *big* depends on the acquisition of *small*. The meaning of *mommy* is acquired with regard to that of *papa* and the meaning of non-directional prolocatives and prepositions is learned with regard to that of directional ones. The acquisition of nominal meaning is disregarded.

The description of phonological development (chapter 4) is a reduction of Jakobson's *Child language, aphasia and phonological universals*. At first, vowel and consonant are differentiated by the principle of maximum contrast (*a* and *p*). The consonant and the vowel are split in the minimal consonantal system and minimal vocalic system, which are then further differentiated.

As for morphological development, 'the first plural forms that a child acquires...are always correct, for they are conditioned as the first language signs'. Deviations occur when the child learns a number of plural forms, since 'the child builds a hypothesis on how the plural is marked'. The treatment of morphology is limited to some plural forms. The acquisition of other inflectional rules is ignored.

In chapter 5, the question of writing grammars adequate to the child's utterances is discussed. First two-word utterances fit well into the scheme of Pivot–Open grammar, with the author finding PO(OP) and OO, but no PP construction. The P–O grammar is criticized on the basis that it cannot specify various meanings conveyed by the syntactic structure. Yet there is no mention of the underlying semantic relations. Transformational grammar includes four separate rewriting rules in accordance with the four syntactic relations, Sub + V, Sub + Obj, Genitive, and V + Obj. The rules are as follows: $S \rightarrow NP + VP$ (rewritten as N + V), $S \rightarrow NP + VP$ (rewritten as N + N), $S \rightarrow NP$ (rewritten as M + N) and $S \rightarrow VP$ (rewritten as V + NP or V + PP, PP being N or Adv). In the next phase (age 25 months) the rules are combined: (1) $S \rightarrow NP + VP$, (2) $NP \rightarrow$ (M)N, (3) $VP \rightarrow V + NP$. There is no other rewriting rule. At this phase VP is also expanded by Modals, which are acquired by conditioning. The first Modal is *wollen* ('will') since 'the experience of the will belongs to the earliest utterance intention of the child'. At the same time *müssen* ('must') is learned as the result of the mother's regular questions containing it. *Mögen* ('want') and *sollen* ('should') follow. On the other hand, *du* ('you') occurs as the first personal pronoun conditioned by the mother's regular questions containing it, for 'the

Downloaded from https:/www.cambridge.org/core. University of Basel Library, on 11 Jul 2017 at 11:43:50, subject to the Cambridge Core terms of use, available at https:/www.cambridge.org/core/terms. https://doi.org/10.1017/S0305000900000180

experience of the social self and the role behaviour are effected consciously' between 2;0 and 2;6. Transformational rules acquired at this phase are the interrogative and genitive. The genitive is now derived, in contrast to the early phase, from X *has* Y or Y *belongs to* X. As for the interrogative which is also acquired by conditioning, *wh*-questions occur after the child learns the subject–verb inversion occurring in German *yes–no* questions. Furthermore, among *wh*-questions, the *wer* ('who')-question has some occurrence lag, 'because the subject NP is represented by a dummy symbol in the deep structure'.

Finally, some results are reported of an imitation test in which five preschoolers repeat a few complex sentences, and of an interview at which two preschoolers explain how football is played.

Throughout the book children's utterances, occurring only as examples, never undergo any distributional analysis, so that the book cannot give a systematic view of the acquisition process. The utterances serve simply as examples of this or that interpretation derived from a mosaic of various theories. Moreover, there is an indication of strong sampling bias. These, along with the ignorance of recent cross-cultural studies, often lead the author to premature over-generalization and theorizing concerning what is considered to be idiosyncratic and accidental. Surprisingly, there is not even a mention of sequential variation, which is usually introduced by German-speaking children in violation of order rules. The author very often poses such questions as 'why do two-word utterances occur?' and 'why does *du* (you) occur?' and always has some psychological, linguistic or cognition theory answer to hand, in a decisive form. On the other hand, he never questions why only particular linguistic components are acquired by conditioning, and not others, and further how the syntactic function of these components is accounted for in terms of conditioning, among other things.

The book is intended for a course on developmental psycholinguistics. For this purpose it must be treated very carefully with reference to further matter-of-fact information obtained by many recent studies. Otherwise students can hardly get knowledge of how the German language is actually acquired by children.

Reviewed by TSCHANG-ZIN PARK
Psychological Institute
University of Berne

(Received 1 August 1973)

J. B. CARROLL & R. O. FREEDLE (eds), *Language comprehension and the acquisition of knowledge*. Washington, D.C.: V. H. Winston, 1972. Pp. viii+380.

This book contains a selection from among the papers that were presented at a conference held in North Carolina in 1971. The conference was planned to focus on a very important but very difficult topic, namely on the comprehension of connected discourse and on the implications for education, and for the psychology of complex learning in general, of what this kind of comprehension involves.

Downloaded from https:/www.cambridge.org/core. University of Basel Library, on 11 Jul 2017 at 11:43:50, subject to the Cambridge Core terms of use, available at https:/www.cambridge.org/core/terms. https://doi.org/10.1017/S0305000900000180