
Just about everyone connected with the LANA project seems to have got an additional publication to list on his or her c.v. as a result of Language Learning by a Chimpanzee, so the book has served one purpose. I can see little other reason for its publication. Instead of presenting a scholarly report, it is largely anecdotal and presents many opinions unsupported by evidence. Furthermore, it is often meticulously attentive to stupendously boring detail: "Warner attended a one-week crash course in computer interfacing given at the Georgia Institute of Technology, which consisted of five 8-hour days, four 3-hour evenings and an 8-hour weekend" (p. 145).

The text appears to have been written in 1975, and gives the impression of a progress report. The chapters fall into four main groups. (1) There is a detailed description of Lana's quarters, her "machine", and the computer programs involved in the project. The casual reader can, however, learn all he needs to know to understand the results from the fine photograph on the book's cover; and any reader with a passionate interest in the technical minutiae (due perhaps to a desire to, ahem, ape the undertaking) would no doubt visit the Yerkes Laboratory and inspect the set-up in person. (2) There is an account of Yerkish, the artificial language developed for the project. (3) Five chapters report results of the study, often in a rather informal manner but quite clearly. (4) There are several chapters of a more theoretical nature.

These latter chapters, containing material which ranges from historically based justification to futuristic speculation (apes as co-authors?) present the authors' reasons for undertaking the project and their beliefs about its importance. Here Rumbaugh himself is a little more realistic than his co-workers; he correctly notes that the interactions with Lana which other contributors call "conversations" were in fact precipitated by the assistant who knew in advance what Lana wanted, but manipulated the situation to make her ask in several different ways. To call such interactions "conversations" is wishful thinking. No free exchange of information initiated by Lana is reported.

Rumbaugh is also more cautious than other workers in the "chimp language" field. Take, for instance, the title of the book. Psychologists often refer to "second language learning", whereas the acquisition of a first language is customarily called "language development" or "language acquisition". Strictly speaking, Lana has learnt to use a language, inasmuch as Yerkish can be called a language (it is based on a gross simplification of the principles of natural language; for example, at the time the book was written, the language contained no embedded sentences). Lana has, of course, neither developed nor acquired language. She has learnt to respond correctly to a variety of stimuli and to manipulate various signs in fixed patterns. The fact that these patterns have a linguistic character is the responsibility of those who designed the system, not of Lana. Suppose the patterns she had been taught to use had not been natural language based, but had violated all sorts of universal linguistic constraints? Would she have been any less successful in manipulating them? The answers to such questions will eventually tell us more about the chimpanzees' cognitive structure than will the simple fact that they can use linguistically motivated communication systems.

It is clear that Rumbaugh and his co-workers are enormously proud of their protégée's achievements. Just as Washoe's trainers cannot resist telling us of the time Washoe called a duck a "water bird", readers of this book are repeatedly regaled with the story of how Lana called a Fanta drink a "Coke-which-is-orange": the authors appear to assume that this indicates that Lana had assigned the predicate "orange" to the soft drink: but suppose their combining sign "which-is" had instead been named "and", would they still assume that? They certainly have every reason to be proud of their own assiduity: one of their achievements not matched by other chimpanzee projects is that they have compiled a complete record of every response made by Lana. It is a pity that summary statistics of this record were not included in the book.

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