AN APE-LANGUAGE STUDY BEGINS IN JAPAN

In November 1977, a one-year-old female chimpanzee arrived at the Primate Research Institute of Kyoto University (KUPRI), Japan. She was wild-born, probably in Sierra Leone, West Africa, and was purchased through an animal dealer. Importing wild-born chimpanzees was still legal at the time, as Japan only ratified the Convention of International Trade in Endangered Species (CITES) four years later, in 1980. In the 1970s, Japan imported more than 100 wild-born chimpanzees, mainly for biomedical research of Hepatitis B. This infant chimpanzee was one of them. However, instead of being sent to the biomedical facilities, she was sent to KUPRI, where she was to become the first subject of an ape-language research project in the country.

The chimpanzee was soon nicknamed Ai (pronounced 'eye'). Ai means "love" in Japanese, and is also one of the most popular girls' names in Japan. She was estimated to have been born in 1976, and was about a year old at the time. After being examined in quarantine, she was kept in a basement room, only about $4 \times 4$ m in size and without any windows. I was 27 years old at the time, the youngest assistant professor in the institute, and was expected to become Ai’s principal trainer. I first met her in that dimly lit basement room, a bulb hanging from the ceiling. When I looked into this chimpanzee’s eyes, she looked back into mine. This amazed me—the monkeys I had known and had worked with never looked into my eyes. For them, staring straight into one’s eyes carries a threat, and they would probably respond by opening their mouths and threatening you back or by presenting their backs and assuming
a submissive posture. I had simply thought that chimpanzees would be big black monkeys. She, however, was no monkey. She was something mysterious.

Soon after Ai’s arrival, she was joined by two other infant chimpanzees of about the same age. One was a 1½ year old male, nicknamed “Akira,” and the other a 1½ year old female, nicknamed “Mari.” The construction of the chimpanzee facility had also been completed by this time, and it consisted of four individual residential rooms (1.5 × 1.5 × 2 m high) and an attached outdoor pen (about 15 square m). The three infant chimpanzees moved to the new facility.

**HISTORICAL BACKGROUND AND RATIONALES OF THE AI PROJECT**

What is uniquely human? This question has long attracted psychologists. Specifically, many have tried to explore the human mind through comparisons with the mind of the chimpanzee.¹ A big turning point arrived in the early 1970s in this research area: the beginning of the so-called “ape-language” study.

The chimpanzee project in KUPRI started in 1977, originally with the aim of becoming an ape-language study. By the second half of the 1970s, before our project began, three successful and different approaches to ape-language study had been devised: American Sign Language (ASL),² Plastic Sign language,³ and a computer-controlled lexigram system.⁴⁵ All three projects produced reports that appeared in the journal *Science* and had already received wide attention.

The chimpanzee project in KUPRI was led by Dr. Kiyoko Murofushi, an associate professor and the head of the psychology section at the time. Dr. Murofushi was flanked by three assistant professors, Toshio Asano, Shozo Kojima, and me. However, when the project started, Asano was in the middle of a 2-year sabbatical at the University of California, San Diego (UCSD) and Kojima was about to leave for his 2-year sabbatical to the National Institutes of Health (NIH). Therefore, I had to face the three chimpanzees by myself, as the principal trainer/researcher under the supervision of Dr. Murofushi. Having got my job in 1976, I had only very limited experience in experimental psychology: human visual perception, physiological-psychological study of rats’ memory, and only a single year’s experience with visual discrimination learning in Japanese monkeys.