

Analysis of hand movements of mountain gorillas.

Study on the basis of personal observation and video recording.

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Based on personal observation and video documentation of a mountain gorilla family in the Virunga mountain reservation of Uganda, one male gorilla was analysed for the use of both hands during the daily search for food and eating as well as everyday motions and attending a wound sustained on the left upper arm.

The expedition was made possible by the special support of the competent minister, Exc. Moses Ali, in August of 1997. First our group had to undergo an informative training on how to behave in the presence of gorillas. We were able to observe a family of mountain gorillas, consisting of a male of nearly 20 years of age, a female of around 16 years and a 4-month-old gorilla baby with its older brother of 4 years for a period of 3 hours deep within the rain forest. The male gorilla of the family had had previous contact with human beings and was known to be peaceful and friendly. As he gained human beings and was known to be peaceful and friendly. As the male gained confidence he approached the observation team, keeping at a distance of 2-3 meters. Unexpectedly, he twice came as close as one meter, once touching the left arm of a team member of our group.

Analysis of the film and observational notes revealed that the fine movements of the fingers and hands and the coordinated motor actions of both upper extremities of the seemingly right-handed male gorilla were most similar to those found in men in equivalent situation. The use of instruments as seen in chimpanzees is not necessary in the environment of the mountain gorilla.

From these observations the conclusion can be drawn that the motor function of gorillas and human beings are mostly similar in equivalent situation like gathering food and eating. The gorilla though proved incapable of performing other detailed motoric action of hands because of anatomical restrictions in the motor system and corresponding nervous centres.