

019

FOUNDING RESEARCHES ON ACOUSTIC COMMUNICATION IN PRIMATES

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The anatomical proximity between human and monkeys brought naturalists to question the nature of monkeys' sonorous communication. The first work on primate sounds and play-back experiments were carried out by Garner in the XIXth century. The earliest description of a vocal repertoire came in 1934. In the XXth century, researchers tested the abilities of primates to acquire sounds in order "to learn to speak". Meanwhile, Lieberman emphasized that humans differ from monkeys due to a lowering of the larynx and the development of a pharynx. The lack of the primate ability to acquire new sonorous signs will take decades to be admitted. This gave rise to test apes aptitude for learning artificial visual signs. While these experiments attest of their great cognitive faculty, their linguistic skills seem to be reduced. Moreover, mixed vocal structures uttered by hybrids illustrate that primate vocalizations are genetically predetermined. Ethologists are still interested by the immediate function of the vocal repertoire and orientate their research on primate acoustical referential signs. They also use field experimentation and study the role of social learning in the acquisition of the meaning of the different sound types during their ontogeny. Nowadays, some research evolves towards the gestural origin of human language. Finally, we will show how new technological developments (recording equipments, better quality microphones, laryngophones on specific individuals, sophisticated acoustic analyses) have brought significant answers to questions related to the role of individual's communication system. More recently, use of brain imaging allows localizing brain pathways used for vocalization

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