

Abstract

The following dissertation presents the history of myrmecology from the times of Ulisse Aldrovandi up to the works of Edward O. Wilson in the 20th century. The oldest mentions of ants in the Antiquity and the Middle Ages are also partially elaborated upon. A special emphasis is given to the general idea about ants as developed by each of the authors, as well as to the mapping out of the contemporary ideas about social insect. This work points out that the portrait of the ant has always been related to the contemporary conception of human society and humanity as such. Throughout its history, myrmecology has always been strongly influenced by anthropomorphism, as the picture of the ant would be derived from the social order, political system and the general opinion on what constitutes human nature. On the other hand, though, myrmecology has also helped to shape the picture of humanity, because the conclusions drawn from myrmecological studies were applied to humans. Therefore, entomology started to influence anthropology and vice versa. In the Antiquity, ants were viewed basically as farmers; only harvester ants were known, they were seen as working on a field, going to the marketplace or holding celebratory festivals. The medieval picture of the ant drew heavily on the Antiquity ideas, but it added the dimension of moral and religious parables which transformed the ant into the picture of God's providence, goodness, humility and diligence. The Early Modern authors enriched this picture with the idea of an immense engineering ability of ants, civic technical occupations, and discussions concerning their intelligence. In the 19th century, together with large-scale changes in society, ants were viewed as aggressive warriors; slavery among ants was discovered, there were first deliberations of their nationalism or their individuality, the first socialist or eugenic interpretations of social insect started to take shape as well. In the 20th century, the most important turning point was World War II, following which myrmecology developed a Neo-Darwinist interpretation of the behaviour of social insect with special emphasis on „calculation“ of losses and profits, „investment“ into relatives, and fighting for power within the colony. In the present-day studies we may encounter computer and IT analogies of social insect.

From the theoretical viewpoint, this dissertation is based upon Lorraine Daston's works and her description of the process of “naturalization.” The theoretical basis is also rooted in the work of Ernst Topitsch whose concept of sociomorphic modelling is largely dealt with in this dissertation and furthermore in the older Kuhn tradition of historiography of science, with reference to Foucault's conception of *epistémé*. Peter Burke is also mentioned, and so is his concept of “mentality” with regard to the history of science.