PANEL 4
Scaling Behavior. German Ethology between Zoological Research and Sociological Interventions, c. 1945–1980
/ Organised by Sophia Gräfe and Christian Reiß
/ Chair: Christian Reiß
/ Freitag, 17.9.21, 14.00–15.00 Uhr
/ Themenstrang „Social Scales“ (Einwahllink)

/ Sophia Gräfe (Marburg/HU Berlin)
Filmstrips and Milimeter Paper – On Analog Data Traffic in Behavioral Biology around 1950
/ Freitag, 17.9.21, 14.00–15.00 Uhr

The discipline of comparative behavioral studies continues to hold a prominent position in the history of twentieth century behavioral biology. Its development, which was full of conflict, has thus far been studied primarily from the perspective of the history of ideas or the sociology of science. However, an analysis of skillful research alliances and citation cartels only inadequately explains the success story of the animal research by Konrad Lorenz and Co. Rather, their prominence may be associated with their constant outreach into extra-biological fields. Historical examples from the ʻheydey ʼof comparative behavioral research around 1950 illustrate that the project of a general biology of behavior tends to involve anthropological subjects. Behavioral biological explanations of possible necessities and variances of any behavior addressed politics of natural living and peaceful coexistence. How can we explain the transfer of knowledge from behavioral biological theories to the ethics of human action? What formats of knowledge enable seemingly resistance-free data traffic between both fields? This paper proposes a praxeological perspective on the trans-animal transmissions of behavioral biology. It explores the mobility of biological behavioral knowledge by analyzing specific procedures for the recording, archiving, and calculating of animal behavior from the research archives of behavioral biology through the lens of media and technology history. Filmstrips, photographs, index cards, graph paper, and other tools of behavioural research can be considered as analog media of a general computation of biological knowledge. These analog media produced behavior as abstract data of space and time on the eve of biocybernetics. Seemingly neutralized laws of behavior held the promise of a free scalability of biological observations, which sought to invalidate existing resentments against a shared biology of humans and animals. Using the research estate of the East German behavioral biologist Günter Tembrock (1918–2011) as a case study, this paper shows the epistemic as well as the political significance of this metric of behavior

Sophia Gräfe (M.A.) is Research Associate of the project Transdisciplinary Networks of Media Knowledge at Philipps-University of Marburg as well as guest researcher at the Museum of Natural History in Berlin. Her research interests are the media history of behavioral science, research film as well as cultural animal studies. She is co-publisher of the upcoming anthology “Wissensgeschichte des Verhaltens. Interdisziplinäre Perspektiven”.

/ Jakob Odenwald (Universität Zürich)
Scales of writing Ethology – Ethology and the colloquial science book in the 1960s and 1970s
/ Freitag, 17.9.21, 14.00–15.00 Uhr

In the history of ethology during the second half of the 20th century, colloquial science books occupied a prominent but contested position. Konrad Lorenz, Irenäus Eibl-Eibesfeldt, and others were not only regarded as outstanding yet controversial scientists but were known to a wide nonscientific audience as prolific authors of well-written monographs. Their popular writing often addressed what they considered the major problems of their time (aggression, overpopulation, environmental degradation)

and popularized ideas of human nature which were based on the assumption of an evolutionarily "pre-programmed human." In West Germany during the 1960s and 1970s, however, these books were often the subject of heated debates in which they were criticized for their biological determinism and the violation of scientific norms. Existing historical research has shown that Lorenz's popular writing during the 1940s and 50s in particular had a formative influence on the establishment and consolidation of the discipline. However, the scientific and cultural impact of ethological colloquial science books in the following two decades, in which the discipline was increasingly able to reach out into nonbiological fields and to place controversial topics of sociopolitical relevance in the broader public, is for the case of West Germany not yet sufficiently understood.
In my presentation, I draw on approaches from the history of knowledge and the history of books to explore the scales and boundaries of writing popular ethology during the 1960s and 70s. The following three questions are addressed: How was biological knowledge presented in colloquial science books in order to construct large-scale arguments from individual and often scattered findings? Which actors and networks enabled ethology's increase of range and societal impact? And finally, how did different actors—scientists, reviewers, and publishers— problematize and reflect upon the boundaries of colloquial science in the conflict-ridden field of tension between scientific virtues, political values, and economic interests? By analyzing both published and archival material (esp. from archives of the publishing house Piper), the presentation sets focus on selected colloquial science books by human ethologist Eibl-Eibesfeldt, who, like his teacher Lorenz, excelled as a public scientific persona during the 1970s. It therefore contributes to a better understanding of ethology as a 'public science 'and the contemporary history of the popularization of knowledge in Western Germany.

Jakob Odenwald is a research assistant at the Chair of Modern History at the Department of History of the University of Zurich. In his dissertation, he explores the contemporary history of comparative behavioral research in the Federal Republic of Germany between 1950 and 1990. His research interests include the history of knowledge in behavioral science, the history of science popularization, and the history of books and media in the 19th and 20th centuries.

/ Christian Reiß (Regensburg)
The Many Scales of Behavior. Ethology, "organismische Biologie" and the Formation of Biology in the German Speaking World after 1945
/ Freitag, 17.9.21, 14.00–15.00 Uhr

The history of ethology is famously associated with charismatic researchers and controversies about their methods and theories in academic and public arenas. But ethology was also part of a particular development at the heart of biology as a discipline, still in the process of formation, in the middle of the 20th century. This so-called organismal biology – or "organismische Biologie" in German was a set of approaches and research practices rooted in the "biological perspective / life history studies" (Lynn Nyhart) of the 19th century and synthesized in the debates around the foundations of biology in the 1920s and 1930s. While the term "organismal biology" is today mostly used as a demarcation towards the dominance of molecular biology, this approach was a contender for the foundation of biology in the middle of the 20th century. It set out to investigate the life of animals from different perspectives and in various species. The same zoologist would study the behavior of one species, the ecology of a second and particular anatomical structures in a third. At the same time, these investigations were oriented towards larger philosophical and anthropological questions. Concepts like Jakob von Uexküll's "Umwelt" offered a larger framework for synthesis. In my presentation, I will argue that ethology was at the very heart of "organismische Biologie". I will use the example of four zoologists to investigate the various scales on which behavior was essential for the knowledge and the practices of this constellation and how this context shaped ethology conversely. Adolf Remane (1898–1976) at Kiel

University, Wulf Emmo Ankel (1897–1983) at Gießen University, Bernhard Rensch at Münster University (1900–1990) and Adolf Portmann (1897–1982) at Basel University all self identified as behavioral researchers. Though different in many respects, they shared important similarities. For all of them, ethology was only one of several subdisciplinary identities they held. They also described themselves as ecologists, marine biologists, taxonomists, paleontologists, and anthropologists. Furthermore, they engaged in broader academic and philosophical discussions and published for an audience beyond academia.

Christian Reiß is Assistant Professor for the History of Science at Regensburg University. His research follows the entangled histories of infrastructures and animals in the modern life sciences. After studying the history of the Mexican axolotl as a research animal and the role of the aquarium and the laboratory as research infrastructures in zoology, he wrote about the use of film as a technology in experimental embryology in Germany in the 1920s. His current project focuses on the formation of biology in the German-speaking world in the twentieth century.

/ Erika Milam (Princeton)
Commentary

Erika Lorraine Milam specializes in the history of the modern life sciences, especially evolutionary theory and ecology. Her research has explored how scientists have used animals as models for understanding human behavior, from sex to aggression. After a postdoctoral fellowship at the Max Planck Institute for the History of Science, in Berlin, Germany, she taught at the University of Maryland for several years before joining the Princeton History Department. Her new project explores the efflorescence of long-term field sites to study animal behavior after the Second World War and the growth of behavioral ecology as a discipline.