

Complex forms of learning in honeybees:
a behavioral and neural analysis
&
Sleep in honeybees:
its role in learning and memory



Inaugural-Dissertation

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by

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Chapter 1 of this dissertation is based on the following manuscript:

Forward and backward second-order Pavlovian conditioning in honeybees.

by Hussaini SA, Komischke B, Menzel R, Lachnit H.

Learning and Memory 2007 Oct 1;14(10):678-83.

The contributions of the different authors were as follows:

Komischke B and I performed the experiments, data analyses and wrote most of the manuscript. Menzel R and Lachnit H wrote several parts of discussion and introduction, and also provided suggestions, criticisms and corrections.