

# Preface

The purpose of this textbook is to provide insight into the areas of action planning and action control. These two areas are still relatively separated, and many of the topics we will be discussing are studied in different disciplines and subdisciplines, such as cognitive vs. motivational psychology, movement and sport sciences, neurophysiology, and biology. Unfortunately, this diversity has generated different kinds of scientific jargon and theorizing, which is difficult to relate to one another. Despite the varied studies throughout multiple disciplines, action still plays an underprivileged role in psychology. It does not feature as a relevant topic in 99 % of psychological introductory textbooks. We believe that every effort has to be taken to better integrate action into psychology's canon of knowledge. To do so, we have taken an uncommon route.

Generally speaking, textbooks provide a more or less exhaustive overview of a research area or topic and discuss the most recent findings and trends therein. The advantage of this strategy is obvious: the reader is provided with maximum information and, thus, with the opportunity to make up her own opinion. But, there is also an often overlooked disadvantage: while experts have enough background to structure new information in the most efficient way, novices can be over-challenged by the sheer amount of information that standard textbooks provide and, often, are not be able to appreciate all the subtle implications that the most recent findings might have. This is, at least, the experience that we have had when we were students and that our current students often report when struggling with textbooks.

We therefore opted for another strategy. It consists of focusing on, in our opinion, the most basic principles and theoretical figures of thought in the historical development of the research area. As a result, we have used only a few empirical findings as examples for how theory and data are connected. Also, we translated domain-specific jargon into our own preferred terminology, which makes it easier to relate the concepts we discuss. Furthermore, we offer a general organizational framework of how we think action planning and action control is working, which will help the reader to organize the information we provide. Our approach has obvious disadvantages: it is necessarily much more selective and often refers to classical papers that have introduced particular lines of thought rather than the most

recent applications of these thoughts, which explains why the average age of the literature we cite is unusually high. Most importantly, this selectivity implies that this textbook is likely to reflect the theoretical preferences and biases of its authors more than others. It is, thus, important that the reader does not forget that our approach is just one of several possible approaches. “Doubt comes *after* belief,” Wittgenstein says in his last book, *On Uncertainty*, meaning that we can start doubting only once we are done with building up our basis of knowledge. It is in this sense that we encourage readers to use this book as a jumping board to build their first basis and later try questioning it based on what other authors say, wherever appropriate and necessary.

Many of the questions that we discuss in the following chapters, and many of the answers that we suggest, emerged from Nattkemper and Hommel’s numerous collaborations with members of the “Cognition & Action” Unit of the Munich Max Planck Institute for Psychological Research and its spiritual leader, Wolfgang Prinz. We were unable to reconstruct exactly which ideas and speculations have motivated which of the considerations that we will present in the following chapters, but we are 100 % certain that our theoretical preferences and biases, and the style of reasoning about cognition and action, were strongly shaped by “Cognition & Action.”

Leiden, The Netherlands  
Leiden, The Netherlands  
Berlin, Germany

Bernhard Hommel  
Stephen B.R.E. Brown  
Dieter Nattkemper

Human Action Control

From Intentions to Movements

Hommel, B.; Brown, S.B.R.E.; Nattkemper, D.

2016, XII, 220 p. 60 illus., 14 illus. in color., Hardcover

ISBN: 978-3-319-09243-0