

## MUCH LIKE US

### *What Science Reveals about the Thoughts, Feelings, and Behaviour of Animals*

What really differentiates us from our relatives in the animal world? And what can they teach us about ourselves? Taking these questions as his starting point, Norbert Sachser presents fascinating insights into the inner lives of animals, revealing what we now know about their thoughts, feelings, and behaviour. By turns surprising, humorous, and thought-provoking, *Much Like Us* invites us on a journey around the animal kingdom, explaining along the way how dogs demonstrate empathy, why chimpanzees wage war, and how crows and ravens craft tools to catch food.

Sachser brings the science to life with examples and anecdotes drawn from his own research, illuminating the vast strides in understanding that have been made over the last 30 years. He ultimately invites us to challenge our own preconceptions – the closer we look, the more we see the humanity in our fellow creatures.

Norbert Sachser is Professor of Zoology and Head of the Department of Behavioural Biology at the University of Münster, Germany. Widely considered to be one of Germany's leading behavioural biologists, he is known particularly for his pioneering work on stress, social behaviour, and welfare indicators in mammals.

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Norbert Sachser , Translated by Ruby Bilger  
Frontmatter  
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*What Science Reveals about the Thoughts, Feelings,  
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**Norbert Sachser**

University of Münster

**Translated from the German by Ruby Bilger**



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*For Claudi*

***Tat tvam asi***

*These words in Sanskrit were painted on the wall of the animal housing room in the famous evolutionary biologist Bernhard Rensch's institute at the University of Münster more than 50 years ago, according to his student Gerti Dücker. They mean: 'This is you.'*

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---

## Contents

<i>Preface</i>	<i>page ix</i>
1 Typical Human, Typical Animal? . . . . .	1
<i>Reconceptualising the Animal – an Introduction</i>	
2 Ginger Boris Doesn't Like to Be Alone . . . . .	16
<i>On Behaviour, Stress, and the Blessing of Socially Stable Relationships</i>	
3 Cats Are Happy When They're Playing . . . . .	34
<i>On the Well-Being, Emotions, and Humane Treatment of Animals</i>	
4 Nature Versus Nurture . . . . .	57
<i>Genes, Environment, and Behaviour: New Answers to an Old Question</i>	
5 Clever Dogs and Ingenious Ravens . . . . .	81
<i>All Animals Can Learn, Many Can Think, and Some Can Even Recognise Themselves in a Mirror</i>	
6 Animal Personalities . . . . .	100
<i>The Development of Behaviour and the Discovery of Individuality</i>	
7 Altruistic Squirrels and Egotistical Lions . . . . .	119
<i>The Sociobiological Revolution</i>	
8 Animals Like Us . . . . .	142
<i>A Summary</i>	
<i>Bibliography</i>	148

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## Preface

Most of us are interested in animals from a young age. Their behaviour fascinates us. The frequency with which their activities are covered in print media, television, and the web only reinforces this interest: humans want to pay attention to what animals are doing around us. Indeed, what society thinks of animals – how we interact with them, and how we interpret and explain their behaviour – changes with time. And in the last few years we have experienced a fundamental transformation.

The discipline largely responsible for this change is behavioural biology, which describes animal behaviour and seeks to identify its underlying causes and consequences. This book is for all who are interested in animal behaviour and the evolution of the scientific concept of the animal, and who would like to understand what current science actually knows about their thoughts, emotions, and behaviour.

It was a long road to finishing this book. The ideas at its core first emerged in the mid-1990s when Rainer Hagencord invited me to give a lecture to the Catholic community of the University of Münster. Conscious of the increasing ecological and bioethical problems facing science and our society at large, he had made it his mission to advance the interdisciplinary dialogue between the natural sciences and theology and philosophy. I chose the theme, ‘Humans: The Pride of Creation? On the Thoughts, Feelings, and Behaviour of Animals’. It was here that I developed, through data and arguments from behavioural biology, the central idea of this book: humans have grown closer to animals; there is much more of us in animals than we could have even a few years ago imagined. At that time, I had no idea how much this thesis

## PREFACE

would be supported by new findings in behavioural biology in the coming years.

The original German title of this book – *Der Mensch im Tier* (literally, *The Human in the Animal*) – goes back to a project of the same name at the UniKunstTage 2000 in Münster, which was initiated by my colleague Reinhard Hoeps, and sought to bring art into conversation with the natural sciences. The interaction between the artists and us biologists not only led to remarkable works – Silke Rehberg’s ‘Guinea Pig in Blue’, a set of circular reliefs of glazed terra-cotta, have since been prominently displayed on the front of our institutional building – but also raised my awareness to the fact that there is not only much of animal nature to be found in humanity, as is often said, but also much of human nature to be found in animals. Since then, I have found the converse perspective much more exciting.

The publication of this book, so many years later, is thanks to the persuasiveness of my editor, Frank Strickstroch. He became aware of a statement I had originally made in a conversation with *Der Spiegel*: ‘We are currently experiencing a revolution of the concept of the animal,’ and, during a visit to Münster, he asked if I could imagine writing a book on this topic. Although I was hesitant at first, after several follow-up meetings, my excitement grew.

And here is that book! I cover six topics from behavioural biology that are central to the change in the scientific understanding of the animal and have helped shrink the conceptual gap between humans and animals. To be clear, my personal research interests are also included in the selection of topics and can, of course, only reflect a small portion of current research in the discipline. Readers should note that each chapter of this book can stand alone. Those who are most interested in the topic of emotions and animal welfare should start with Chapter 3, while those who prefer to focus on animal personalities can begin with Chapter 6.

I could not have found this path in science alone, and this book would not exist without the support of others, so I have many people to thank! My parents nurtured my interest in research from a young age and have supported me unconditionally along the way. My teachers and mentors, first and foremost Klaus Immelmann, Hubert Hendrichs, and Dietrich von Holst, shaped me through their examples and showed me what

## PREFACE

‘good science’ is. Our research in the past few years would not have been possible without the excellent members of my team, many of whom are now professors themselves or hold other important positions. The scientific exchange with other researchers from all over the world has been indispensable. Many thanks to my colleagues at the Münster Graduate School of Evolution with whom I have had many stimulating discussions throughout the years, often far beyond the boundaries of my own subject.

I would also like to thank the German Research Foundation for having generously funded our research for decades. Our results, which are described in Chapter 2, were funded by the ‘Social Physiology’ project, and a number of the studies described in Chapters 3 and 4 are based on our project, ‘Fear, Anxiety, and Anxiety Disorders’, which we carried out through the Collaborative Research Centre. We gained many of the insights in Chapter 6 as part of the research group, ‘Early Experience and Behavioural Plasticity’, and the special research programme, ‘The Individual and Its Ecological Niche’, and our work described in Chapter 7 was carried out in the Priority Programme, ‘Genetic Analysis of Social Systems’.

When the first version of this book was finished, a number of esteemed behavioural biologists agreed to give each chapter a careful read through. Many thanks to Oliver Adrian, Rebecca Heimig, Niklas Kästner, Sylvia Kaiser, Helene Richter, and Tobias Zimmermann. I would also like to thank my wife, Claudia Böger. As a doctor of humanities, she has been a part of my research in an interdisciplinary and constructive manner for more than three decades. Her critical reading of the manuscript and her many helpful suggestions were an essential contribution to the creation of this book.

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