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- The book begins with coverage of the minor senses and builds up to vision. This unique and highly-praised approach allows students to grasp the fundamental principles in relation to the relatively simple sensory systems before moving on to the more complex topics.
- Includes a chapter on Individual Differences, which considers potential sources of difference such as age, sex, expertise, and culture
- This second edition features a completely new chapter on Multi-sensory Perception, including a section on synesthesia
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FOUNDATIONS OF SENSATION AND PERCEPTION

Second edition

George Mather

"Mather has included some excellent pedagogical features that put this book in a class by itself. ... Moreover, Mather's conversational and interactive style of writing results in a book that is enjoyable as well as informative ... Would I use it for my S&P course? The answer is a resounding 'yes!'"

- Praise for the first edition from
Stephen F. Davis in *PsycCRITIQUES*, July 2006

"This second edition adds tremendous value to an already excellent text. It presents a solid foundation in physiology and psychology of the senses in a very accessible and engaging manner. It is an excellent choice for introductory as well as advanced courses and has the breadth and depth to serve as a basic reference text for all."

- Patrick Cavanagh, Université Paris Descartes
and Harvard University

Foundations of Sensation and Perception

Second Edition

By **George Mather**

Professor of Experimental Psychology at the
University of Sussex, UK

The first edition of this comprehensive introduction to Sensation and Perception has been highly praised for its unique approach, which begins with the minor senses and progresses to vision.

The book begins with an introductory chapter on general physiological, perceptual, and theoretical principles which gives the reader the conceptual tools to build a clear understanding of how we perceive the world. The next two chapters then flesh out basic topics such as transduction, receptive fields, and sensory adaptation via coverage of the minor senses (touch, balance, smell, and taste). Later chapters on hearing and vision build on these foundations. This approach allows students to thoroughly grasp the fundamental principles in relation to the relatively simple sensory systems before moving on to the more complex topics.

Unlike other perception textbooks, *Foundations of Sensation and Perception* has a whole chapter on Individual Differences, which considers potential sources of difference such as age, sex, expertise, and culture.

This full-color second edition has been revised and updated to include:

- Revised and expanded coverage of taste processing and perception, touch perception, pitch perception, and receptive field modeling
- New sections on word perception, the size after-effect, crowding, scene perception, and optic flow
- A completely new chapter devoted to multi-sensory processing and synesthesia, with a new tutorial on attentional effects in perception
- A new 'Tutorial' on visual dysfunction in artists.

The book includes a number of helpful textbook features, such as key terms, chapter summaries, and student and instructor supplementary resources. There are also 'Tutorial' sections in each chapter, which provide an opportunity for students to advance their studies by exploring supplementary information on recent or controversial developments. Further, over 700 references to original source material lead the interested reader into the specialist literature.

Foundations of Sensation and Perception provides students with a thorough analysis of our perceptual experience, how it relates to the physical properties of the world and how it is linked to the biological properties of the brain. It will be an invaluable resource for those studying psychology and neuroscience, enabling the reader to achieve a firm grasp of current knowledge concerning the complex processes that underlie our perception of the world.

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Student Resources: Perception Student Learning Program

The student website includes our Perception Student Learning Program (Perception SLP) which offers a unique and innovative approach to study. The Perception SLP is available free of charge to departments adopting *Foundations of Sensation and Perception, Second Edition*, by George Mather.

Each chapter from *Foundations of Sensation and Perception* is condensed into a concise summary version, providing an effective set of revision notes. These notes also expand on and elucidate the book's content, with references to specific pages in the textbook. 'Must know' information is presented

in a clear, accessible style, along with sections to stretch more advanced students. The notes also provide an integrative framework for a range of interactive multimedia materials and features, including:

- Animations and simulations of key perceptual phenomena
- Fill-in-the-blank questions
- Key-term definitions
- Short-essay questions
- Multiple-choice questions
- Research studies
- Links to related websites.

Demo 6.4. Eye Movement



Instructor Resources

We offer web-based, password-protected resources free of charge to instructors who recommend *Foundations of Sensation and Perception, Second Edition*, by George Mather. These resources include:

- A comprehensive chapter-by-chapter slideshow lecture course
- A set of short-answer questions per chapter to stimulate discussion.

Visit www.psypress.com/mather for free preview access to the resources!



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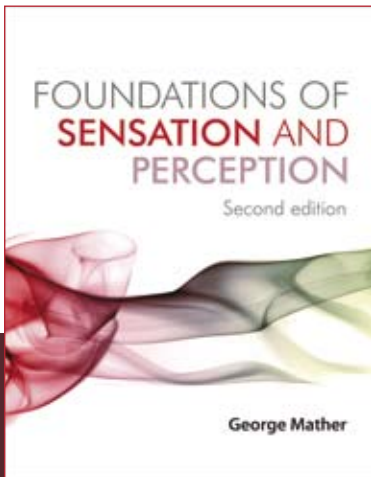
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FOUNDATIONS OF SENSATION AND PERCEPTION

SECOND EDITION

By **George Mather**

"Mather does an excellent job of bringing the topic of Sensation and Perception to life using many examples from the 'real world' as well as giving a comprehensive overview of both recent and classic experimental findings. The book is highly recommended for students who are new to the topic."

- **Dr Jamie Ward,**
University of Sussex

"This is an excellent book with thorough coverage of all five senses grounded in clear descriptions of what is being sensed and why. The book has useful boxes that define key terms and excellent tutorials at the end of each chapter so that students can actively engage with the subject."

- **Professor Iain D. Gilchrist,**
University of Bristol

"George Mather did it again! Students of perception will be even happier with this second edition, especially as it now includes state of the art sections on two highly active research areas: multisensory processing and synesthesia. It will also prove to be an excellent source for anyone who is eager to find out about the fundamental role of our senses in perceiving the real and artificial world."

- **Professor Frans Verstraten,**
Helmholtz Institute, Utrecht University

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