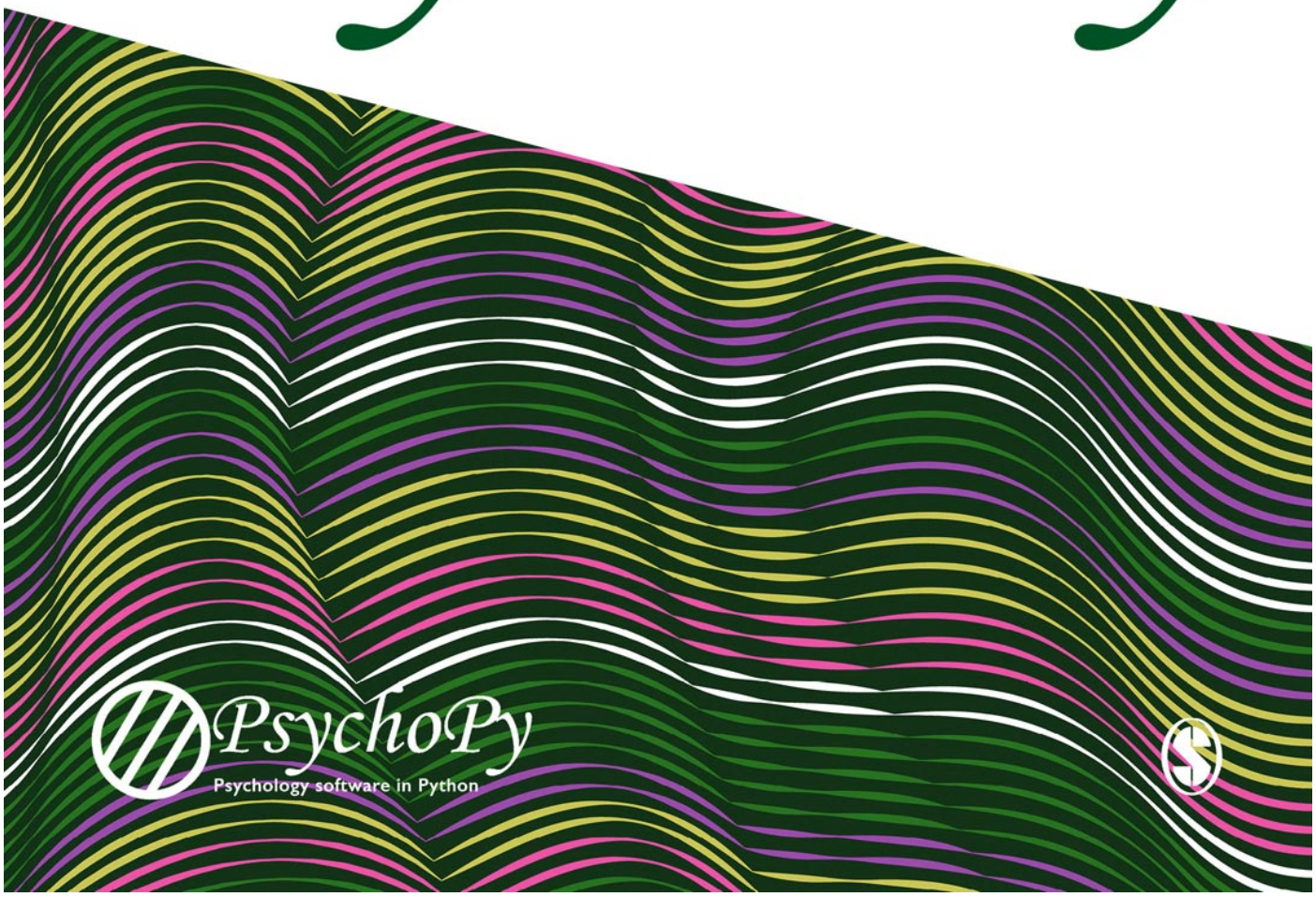
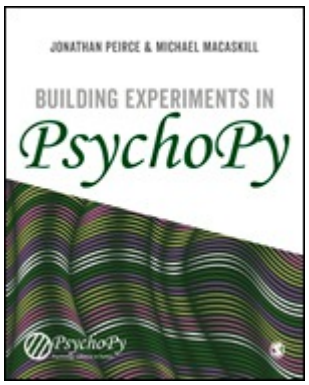
JONATHAN PEIRCE & MICHAEL MACASKILL

BUILDING EXPERIMENTS IN *PsychoPy*





Building Experiments in PsychoPy

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Michael MacAskill

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Paperback		9781473991392	$44.00
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‘Python is quickly becoming the programming language of choice in psychology and one very useful toolbox for designing and implementing experiments is PsychoPy. The PsychoPy Builder, in combination with this book, provides a smooth transition into the fine art of writing experiment code. This book is written by vision scientists, and it shows.’ - *Tom Verguts, Department of Experimental Psychology, Ghent University*

PsychoPy is an open-source (free) software package for creating rich, dynamic experiments for psychology, neuroscience, and linguistics. It provides an intuitive graphical interface (the ‘Builder’) as well as the option to insert Python code. This combination makes it easy for teaching, but also flexible enough for all manner of behavioural experiments. Divided into three parts, this textbook is suitable for teaching practical undergraduate, or as a reference text for the professional scientist.

The book is written by Jonathan Peirce, the original creator of PsychoPy and Michael MacAskill, and they utilise their breadth of experience in Python development to educate students and researchers in this intuitive, yet powerful, experiment generation package.

KEY FEATURES:

- Written by Jonathan Peirce, the original creator of PsychoPy.
- The author runs a support section of his website and has PsychoPy tutorials available on YouTube.
- Final three chapters concentrate on methods in cognitive psychology—an area of psychology where this kind of software is most commonly used.

Table Of Contents:

Chapter 10: Implementing research designs with randomization

Chapter 11: Coordinates and color spaces

Chapter 12: Understanding your computer timing issues

Chapter 13: Monitors and Monitor Center

Chapter 14: Debugging Your Experiment

Chapter 15: Pro-tips, tricks, and lesser-known features

Chapter 16: Psychophysics, stimuli and staircases

Chapter 17: Building an fMRI study (FFA/PPA localizer)

Chapter 18: Building an EEG study (Measure a Visual ERP)

Chapter 19: Add eye-tracking to your experiment

A: Mathematics refresher

B: Exercise solutions

Reviews:

This friendly and comprehensive book should be required reading for any student planning a

psychology/neuroscience experiment. It provides a friendly introduction for the non-programmer as well as a handy reference guide for the more advanced user. Your students will thank you for recommending it. Make sure that your library has it in stock.

Dr Joseph L Brooks
Senior Lecturer, School of Psychology, Keele University

Python is quickly becoming the programming language of choice in psychology and one very useful toolbox for designing and implementing experiments is PsychoPy. The PsychoPy Builder, in combination with this book, provides a smooth transition into the fine art of writing experiment code. This book is written by vision scientists, and it shows.

Tom Verguts
Department of Experimental Psychology, Ghent University

Including a variety of real-word examples and step-by-step screenshots for beginners with further sections for professionals, this a resource essential reading for anyone wanting to use it for serious research.

John Allen
School of Psychology, University of Kent

This book fills an incredibly important gap in the field. Many users of PsychoPy will be excited to learn that there is now a highly accessible and well-designed written guide to refine their skills. No more tinkering with the templates of other people's scripts (unless you want to, of course). The book provides clear instructions on how to build computerized experiments from scratch to the exact specifications you want.

Having previously taught PsychoPy to university students, I am also convinced that the book will soon turn into one of their most cherished learning companions. In particular, its dedicated 'Warning' sections provide extremely handy reminders what to look out for when a script does not seem to do what it was meant to do. In fact, within 30 min of reading the book, I spotted a problem I currently had with one of my own scripts (the typical 'duh!' moment).

Equally handy are the book's chapters that outline how to make PsychoPy 'speak' to external devices, ranging from eye-trackers to fMRI scanners. They provide invaluable information about all the nitty-gritty details that should be considered under such circumstances. In consequence, the book really helps with handling any unnecessary panic that can set in when setting up a new experiment.

The only thing that can be criticized about this book is that it was not published any earlier. I am a bit envious of the generations of new users that can simply look up 'loop ordering options' or 'non-slip timing'.

Susanne Quadflieg, Senior Lecturer in Social Psychology,
University of Bristol
