THE FUNDAMENTALS OF POLITICAL SCIENCE RESEARCH
THIRD EDITION

This third edition of the best-selling *The Fundamentals of Political Science Research* provides an introduction to the scientific study of politics. It offers the basic tools necessary for readers to become both critical consumers and beginning producers of scientific research on politics. The authors present an integrated approach to research design and empirical analyses whereby researchers can develop and test causal theories. The authors use examples from political science research that students will find interesting and inspiring, and that will help them understand key concepts. The book makes technical material accessible to students who might otherwise be intimidated by mathematical examples. This revised third edition features new "Your Turn" boxes meant to engage students. The edition also has new sections added throughout the book to enhance the content's clarity and breadth of coverage.

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THE FUNDAMENTALS OF

Political Science Research

Third Edition

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CAMBRIDGE
UNIVERSITY PRESS

Dedicated to

Lyman A. Kellstedt, Charmaine C. Kellstedt,

David G. Whitten, and Jo Wright-Whitten,

the best teachers we ever had

— PMK and GDW

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Preface to the Third Edition

We received a great deal of constructive feedback on the second edition of this book. In crafting a new edition, our challenge was to try to produce a book that incorporated as much of this feedback as possible, coupled with our ideas for changes, without expanding the book by an unreasonable amount. Our general goals for this edition were to continue to strive to make our explanation of the material even more clear, and to keep up with continuously developing trends in the literature.

We continue to update both the general and instructor-only sections of the webpage for our book (http://www.cambridge.org/fpsr). As before, the general section contains data sets available in formats compatible with SPSS, Stata, and R. The instructor-only section contains several additional resources, including PowerPoint and TeX/Beamer slides for each chapter, a test-bank, and answer keys for the exercises.

Perhaps the most visible change we have made comes in the form of new "Your Turn" boxes. In an effort to increase student engagement with the material, we have introduced, throughout the book, short boxes – some with links to outside material, some with questions about implications – in an attempt to get students to apply the lessons of that chapter to a new situation.

As outlined above, we have made broad changes that permeate all of the book, but we have also made major changes to particular chapters as follows:

- We have expanded Chapter 2, "The Art of Theory Building," by adding a new section on "Three Strategies toward Developing an Original Theory." Consistent with the discipline's increasing use of interactive models, this section includes new material on conditional theories about how a Z variable can modify the relationship between X and Y. Also in the chapter, we have a new section on how to build on previous scholarly work.

- We have added a new section to Chapter 4 on how to effectively summarize and critique scholarly work that is in the literature.
- To increase the ease of presentation, we have taken Chapter 5 from the second edition, "Getting to Know Your Data: Evaluating Measurement and Variations," and split it into two (Chapters 5 and 6) in this new edition. The new Chapter 5 is titled "Measuring Concepts of Interest," and the new Chapter 6 is entitled "Getting to Know Your Data."
- We have added a new section to Chapter 7 on the challenges of random sampling in advanced contemporary societies.
- We have updated the data in a very large portion of our examples.
- We have expanded our explication of the logic behind chi-squared tests and tabular analysis in Chapter 8 to make the argument flow more smoothly and the example unfold more naturally.
- We have added a new section to Chapter 10, "Multiple Regression: the Basics," on how to effectively present figures and tables.

Acknowledgments to the Third Edition

We have benefited tremendously from the advice and support of a large variety of individuals in preparing the third edition of this book.

As ever, we are grateful for the constructive criticism we've received since the publication of the second edition. The thoughtful engagement by so many students and faculty from around the world has been instrumental in shaping the changes that we've made to this third edition. We do our best to keep a running tally of people who have contacted us with questions and comments, but we've almost certainly left some people off this list, and we apologize for the omissions. We owe a debt of gratitude to the following people for their feedback: Ryan Bakker, Florian Hollenbach, Doug Kriner, Eric Lawrence, Matt Lebo, Bob Lupton, Joanne Miller, Dave Peterson, Mark Pickup, Nicholas Rivers, and Ammar Shamaileh.

The guidance and encouragement from the professionals at Cambridge University Press have been instrumental in seeing this project through to completion. In particular, we thank our editor, Robert Dreesen, for his continued support of us and our work. Every conversation with him – whether at a conference or on the phone – energized us and kept our focus squarely on the quality of the manuscript. It has surely made the book better, and for that, we are most grateful.

We continue to be sustained by the love and support of our families. We do not have the words that can adequately express how thankful we are for Christine, Anna, Deb, Abigail, and Elizabeth.

Acknowledgments to the Second Edition

We had a tremendous amount of help writing the first edition of this book and even more as we prepared this second edition.

Since the publication of the first edition of this book, we have enjoyed a steady stream of feedback from colleagues around the world. We would like to thank all of the students, faculty members, and others who took time from their busy schedules to offer us their questions, criticism, praise, and general thoughts about the first edition of this book. Although we have inevitably forgotten some names from this list, and we apologize to those who we have forgotten to mention here, we would like to thank the following people for the feedback that they provided on the first edition: Rick Bairett, Lorena Barberia, Neal Beck, Dan Doherty, Sean Gailmard, Steve Haptonstahl, Jude Hays, Karen Long Jusko, Kerem Ozan Kalkan, Eric Lawrence, Suzie Linn, Cherie Maestas, Vince Mahler, Scott Moser, Harvey Palmer, Evan Parker-Stephen, Dave Peterson, John Transue, Jenifer Whitten-Woodring, Cameron Wimpy, and Jason Wittenberg.

As we mentioned in the acknowledgements to the first edition of this book, we would never have written it without Ed Parsons's encouragement and sage advice. As such, we were happy for Ed but very nervous when he told us that he was leaving Cambridge University Press. Our new editor, Robert Dreesen, has been incredibly helpful and incredibly patient with us. We would like to thank Robert for his useful advice and encouragement throughout the preparation of this edition and his emphasis on the quality of the manuscript over considerations about timing.

This project would not have been possible without the love and patience of our families. Christine, Deb, Abigail, and Elizabeth were once again very generous with their patience and highly supportive throughout the process – as was Anna, the newest addition to our support team.

Acknowledgments to the First Edition

An inevitable part of the production of a book like this is an accumulation of massive intellectual debts. We have been overwhelmed by both the quality and quantity of help that we have received from our professional (and even personal) contacts as we have gone through every stage of the preparation of this manuscript.

This book arose out of more than twenty years of combined teaching experience at Brown University; the University of California, Los Angeles; the University of Essex; the University of Minnesota; and Texas A&M University. We tried out most of the examples in this book on numerous classes of students before they were refined into their present state. We thus owe a debt to every student who raised his or her hand or showed us a furrowed brow as we worked our way through these attempts to explain the complicated processes of scientifically studying politics.

More immediately, this project came out of separate and skeptical conversations that each author had with Ed Parsons during his visit to Texas A&M in the spring of 2006. Without Ed's perfect balance of candor and encouragement, this book would not have been started. At every stage in the process he has helped us immensely. He obtained three sets of superbly helpful reviews and seemed always to know the right times to be in and out of touch as we worked our way through them. It has been a tremendous pleasure to work with Ed on the book.

Throughout the process of writing this book, we got a steady stream of support, understanding, and patience from Christine, Deb, Abigail and Elizabeth. We thank them for putting up with our crazy hours and for helping us to keep things in perspective as we worked on this project.

For both authors the lines between family, friends, and professional colleagues are pretty blurry. We relied on our combined networks quite heavily at every stage in the production of this book. Early in the process of putting this manuscript together we received sage advice from Jeff

Gill about textbook writing for social scientists and how to handle early versions of our chapters. Our fathers, Lyman A. ("Bud") Kellstedt and David G. Whitten, provided their own unique and valuable perspectives on early drafts of the book. In separate but related ongoing conversations, John Transue and Alan M. Brookhart engaged us in lengthy debates about the nature of experiments, quasi-experiments, and observational studies. Other colleagues and friends provided input that also improved this book, including: Harold Clarke, Geoffrey Evans, John Jackson, Marisa Kellam, Eric Lawrence, Christine Lipsmeyer, Evan Parker-Stephen, David Peterson, James Rogers, Randy Stevenson, Georg Vanberg, Rilla Whitten, and Jenifer Whitten-Woodring.

Despite all of this help, we remain solely responsible for any deficiencies that persist in the book. We look forward to hearing about them from you so that we can make future editions of this book better.

Throughout the process of writing this book, we have been mindful of how our thinking has been shaped by our teachers at a variety of levels. We are indebted to them in ways that are difficult to express. In particular, Guy Whitten wishes to thank the following, all from his days at the University of Rochester: Larry M. Bartels, Richard Niemi, G. Bingham Powell, Lynda Powell, William H. Riker, and David Weimer. Paul Kellstedt thanks Al Reynolds and Bob Terbog of Calvin College; Michael Lewis-Beck, Vicki Hesli, and Jack Wright at the University of Iowa; and Jim Stimson and John Freeman at the University of Minnesota.

Though we have learned much from the aforementioned professors, we owe our largest debt to our parents: Lyman A. "Bud" Kellstedt, Charmaine C. Kellstedt, David G. Whitten, and Jo Wright-Whitten. We dedicate this book to the four of them – the best teachers we ever had.