

Case Study Research

Principles and Practices

Case Study Research: Principles and Practices provides a general understanding of the case study method as well as specific tools for its successful implementation. These tools are applicable in a variety of fields, including anthropology, business and management, communications, economics, education, medicine, political science, psychology, social work, and sociology. Topics include: a survey of case study approaches; a methodologically tractable definition of "case study"; strategies for case selection, including random sampling and other algorithmic approaches; quantitative and qualitative modes of case study analysis; and problems of internal and external validity. The new edition of this core textbook is designed to be accessible to readers who are new to the subject and is thoroughly revised and updated, incorporating recent research.

John Gerring is Professor of Government at University of Texas at Austin. He is the author of *Party Ideologies in America*, 1828–1996 (Cambridge, 1998), A Centripetal Theory of Democratic Governance (Cambridge, 2008), Concepts and Method: Giovanni Sartori and His Legacy (with David Collier, 2009), Social Science Methodology: A Unified Framework, 2nd edition (Cambridge, 2012), and Applied Social Science Methodology: An Introductory Guide (with Dino Christenson, Cambridge, 2017), along with numerous articles.



Strategies for Social Inquiry

Case Study Research Principles and Practices

Editors

Colin Elman, Maxwell School of Syracuse University John Gerring, University of Texas at Austin James Mahoney, Northwestern University

Editorial Board

Bear Braumoeller, David Collier, Francesco Guala, Peter Hedström, Theodore Hopf, Uskali Maki, Rose McDermott, Charles Ragin, Theda Skocpol, Peter Spiegler, David Waldner, Lisa Wedeen, Christopher Winship

This book series presents texts on a wide range of issues bearing upon the practice of social inquiry. Strategies are construed broadly to embrace the full spectrum of approaches to analysis, as well as relevant issues in philosophy of social science.

Published Titles

John Gerring, Social Science Methodology: A Unified Framework, 2nd edition Michael Coppedge, Democratization and Research Methods

Thad Dunning, Natural Experiments in the Social Sciences: A Design-Based Approach

Carsten Q. Schneider and Claudius Wagemann, Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis

Nicholas Weller and Jeb Barnes, Finding Pathways: Mixed-Method Research for Studying Causal Mechanisms

Andrew Bennett and Jeffrey T. Checkel, Process Tracing: From Metaphor to Analytic Tool

Diana Kapiszewski, Lauren M. MacLean, and Benjamin L. Read, Field Research in Political Science: Practices and Principles

Peter Spiegler, Behind the Model: A Constructive Critique of Economic Modeling



James Mahoney and Kathleen Thelen, Advances in Comparative-Historical Analysis

Jason Seawright, Multi-Method Social Science: Combining Qualitative and Quantitative Tools



Case Study Research

Principles and Practices

Second Edition

John Gerring

University of Texas at Austin





CAMBRIDGEUNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

4843/24, 2nd Floor, Ansari Road, Daryaganj, Delhi - 110002, India

79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107181267

DOI: 10.1017/9781316848593

© John Gerring 2017

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2017

Printed in the United Kingdom by Clays, St Ives plc

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Gerring, John, 1962- author.

Title: Case study research: principles and practices / John Gerring.

Description: Second edition. | Cambridge, United Kingdom; New York, NY: Cambridge

University Press, 2017. | Series: Strategies for social inquiry

Identifiers: LCCN 2016025901 | ISBN 9781107181267 (Hardback)

Subjects: LCSH: Social sciences–Research–Methodology. \mid Case method. \mid BISAC:

POLITICAL SCIENCE / General.

Classification: LCC H62 .G47 2017 | DDC 001.4/33–dc23 LC record available at https://lccn.loc.gov/2016025901

ISBN 978-1-107-18126-7 Hardback

ISBN 978-1-316-63250-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



Truth, naked and cold, had been turned away from every door in the village. Her nakedness frightened the people. When Parable found her, she was huddled in a corner, shivering and hungry. Taking pity on her, Parable gathered her up and took her home. There, she dressed Truth in Story, warmed her, and sent her out again. Clothed in Story, Truth knocked again at the villagers' doors and was readily welcomed into the people's houses. They invited her to eat at their table and to warm herself by the fire.

Jewish Teaching Story

People foolishly imagine that the broad generalities of social phenomena afford an excellent opportunity to penetrate further into the human soul; they ought, on the contrary, to realise that it is by plumbing the depths of a single personality that they might have a chance of understanding those phenomena.

Marcel Proust (1992: 450; quoted in Ginzburg 2007: 256)

Historical knowledge and generalization (i.e., classificatory and nomothetic) knowledge ... differ merely in the relative emphasis they put upon the one or the other of the two essential and complementary directions of scientific research: in both cases we find a movement from concrete reality to abstract concepts and from abstract concepts back to concrete reality – a ceaseless pulsation which keeps science alive and forging ahead.

Florian Znaniecki (1934: 25)

Immersion in the particular proved, as usual, essential for the catching of anything general.

Albert Hirschman (1967: 3)



The examination, surrounded by all its documentary techniques, makes each individual a "case": a case which at one and the same time constitutes an object for a branch of knowledge and a hold for a branch of power. The case is no longer, as in casuistry or jurisprudence, a set of circumstances defining an act and capable of modifying the application of a rule; it is the individual as he may be described, judged, measured, compared with others, in his very individuality; and it is also the individual who has to be trained or corrected, classified, normalized, excluded, etc.

Michel Foucault (1977:191; quoted in Forrester 1996: 12)



Contents

	List of figures	page xiii
	List of tables	xiv
	Preface	xvii
	Acknowledgements	XXV
	Key symbols and terms	xxviii
Part I	Case studies	1
1	Surveys	3
	1.1 Intellectual histories	3
	1.2 Bibliometrics	8
	1.3 Exemplars	11
	1.4 Summary	25
2	Definitions	26
	2.1 Case	27
	2.2 Case study	28
	2.3 Additional terms	31
	2.4 Summary	36
Part II	Selecting cases	37
3	Overview of case selection	39
	3.1 Strategies and criteria	39
	3.2 Clarifications	46
ix		

 $\underline{\textcircled{o}}$ in this web service Cambridge University Press



More Information

X	Cont	ents	
	3.3	Validation	52
	3.4	Summary	55
4	Desc	criptive case studies	56
	4.1	Typical	56
	4.2	Diverse	58
	4.3	Summary	62
5	Caus	sal case studies	63
	5.1	Exploratory	65
	5.2	Estimating	92
	5.3	Diagnostic	98
	5.4	Summary	117
6	Algo	orithms and samples	118
	6.1	Random sampling	119
	6.2	Algorithmic ("quantitative") case selection	122
	6.3	The size question revisited	128
	6.4	Summary	133
Part III	Ana	alyzing cases	135
7	A ty	pology of research designs	137
	7.1	Case study evidence	139
	7.2	Multimethod studies	144
	7.3	Summary	151
8	Quai	ntitative and qualitative modes of analysis	153
	8.1	Quantitative analysis	155
	8.2	Qualitative analysis	157
	8.3	Standards for qualitative inquiry	164



More Information

Contents

	8.4 Rules of thumb for qualitative inquiry	170
	8.5 Summary	189
Part IV	Validity	193
9	Internal validity	195
	9.1 Manipulable causes	197
	9.2 Causal comparability	202
	9.3 Front-door approaches	206
	9.4 Transparency, replicability	208
	9.5 Separation of theory formation and testing	213
	9.6 Informative estimates of uncertainty	214
	9.7 Summary	217
10	External validity	219
	10.1 Sample representativeness	220
	10.2 A two-level game	222
	10.3 Establishing scope conditions	228
	10.4 Assessing external validity	235
	10.5 Summary	239
Part V	Conclusions	241
11	Tradeoffs	243
	11.1 Validity: internal versus external	244
	11.2 Research goal: depth versus breadth	245
	11.3 Causal insight: mechanisms versus effects	247
	11.4 Population: heterogeneous versus homogeneous	253
	11.5 Variation in <i>X</i> and <i>Y</i> : rare versus common	258
	11.6 Data: concentrated versus diffuse	260



хii

More Information

Contents

11.7	Hypothesis: generating versus testing	263
11.8	From Tradeoffs to Synergies	271
- c		
Refe	rences	274
Inde	x	319



Figures

1.1	Frequency of "case study" in Google Books	page 8
2.1	Case study with two cases	34
2.2	Large-C study with forty cases/observations	35
6.1	Sample means of large-sample draws	120
6.2	Sample means of small-sample draws	121
8.1	Skocpol's explanation of breakdown of the French state	158
9.1	The front-door path with potential confounders	208

xiii



Tables

1.1	Most-cited studies in Web of Science	page 10
1.2	Exemplars	12
3.1	Case-selection strategies and criteria	41
4.1	Case-selection strategies for descriptive case studies	57
4.2	Typical case studies	59
4.3	Diverse case studies (descriptive)	61
5.1	Case-selection strategies for causal case studies	66
5.2	Extreme case exemplars	69
5.3	Index case exemplars	74
5.4	Deviant case exemplars	78
5.5	Exemplary most-similar (exploratory) case design	80
5.6	Most-similar (exploratory) case exemplars	82
5.7	Exemplary most-different case design	84
5.8	Most-different case exemplars	85
5.9	Diverse (causal) case exemplars	91
5.10	Diverse cases in Moore (1966)	92
5.11	Longitudinal case exemplars	94
5.12	Exemplary most-similar (estimating) case design	96
5.13	Most-similar (estimating) case exemplars	97
5.14	Influential case exemplars	104
5.15	Pathway case exemplars	107
5.16	Pathway case design with binary factors	108
5.17	Example of pathway cases with continuous variables	112
5.18	Exemplary most-similar (diagnostic) design	115
5.19	Most-similar (diagnostic) case exemplars	116
6.1	Algorithmic case selection	124
6.2	Medium- <i>C</i> case studies	130

xiv



More Information

Cambridge University Press 978-1-107-18126-7 — Case Study Research 2nd Edition Frontmatter

χV

List of tables

7.1	Typology of research designs	138
7.2	Multimethod exemplars	146
8.1	Qualitative tests and their presumed inferential role	166
9.1	Archetypal research designs compared with respect to	
	internal validity	197
9.2	Case studies with manipulable (in principle) treatments	200
11.1	Summary of tradeoffs	244



Preface

There are two ways to learn about a subject. One may study many examples at once, focusing on a few selected dimensions of the phenomena. Or, one may study a particular example, or several examples, in greater depth.

I shall refer to the first as a large-*C* approach, characterized by a large number of cases (denoted *C*) and a correspondingly narrow focus of attention. I shall refer to the second as a small-*C* or *case study* approach, characterized by one or several cases and a correspondingly broad focus of attention.¹

While both are concerned with the same general subject they follow different paths to this goal. But they are not equally regarded. At the heart of social science lies a fundamental conflict between extensive and intensive modes of analysis.

By the standard of praxis, the case study method is flourishing (see Chapter 1). At the same time, case studies continue to be viewed with extreme circumspection. A work that focuses its attention on a single example of a broader phenomenon is apt to be described as a "mere" case study, and is often identified with loosely framed ideas, nongeneralizable theories, biased case selection, undisciplined research designs, weak empirical leverage (too many variables and too few cases), subjective conclusions, and non-replicability.

This is a historic reversal of the case study's origins. When the term "case study" first entered scientific usage at the turn of the twentieth

xvii

¹ I reserve "N" to refer to the number of observations in a study, which is quite different from the number of cases (C) – a crucial distinction, as it turns out (see Chapter 8).



xviii

Preface

century, it represented an attempt to think more systematically about evidence and inference. Narratives about *X* were to be understood as "cases," signifying their connection to a broader set of phenomena and the possibility of developing a general theory of *X*. In this manner, it was thought that knowledge would cumulate and general theories would be formulated and systematically tested.

By the 1920s, however, the term had become suspect. In one of the first attempts to contrast case study and non-case study approaches to social science, Stuart Rice (1928: Chapter 4) associated the former with "history" and the latter with "statistics" and "science" – a telling contrast.² A few years later, Willard Waller (1934: 296–7) described the case study approach as an essentially *artistic* process.

Men who can produce good case studies, accurate and convincing pictures of people and institutions, are essentially artists; they may not be learned men, and sometimes they are not even intelligent men, but they have imagination and know how to use words to convey truth.

The product of a good case study is insight, and insight is

the unknown quantity which has eluded students of scientific method. That is why the really great men of sociology had no "method." They had a method; it was the search for insight. They went "by guess and by God," but they found out things (Waller 1934: 296–7).

Several decades later, Julian Simon (1969: 267, quoted in Platt 1992: 18) opines,

The specific method of the case study depends upon the mother wit, common sense and imagination of the person doing the case study. The investigator makes up his procedure as he goes along.

Practitioners of this method are prone to invoking its name in vain – as an all-purpose excuse, a license to do whatever a researcher

² See also Lazarsfeld and Robinson (1940), Sarbin (1943, 1944).



xix

Preface

wishes to do with his or her particular topic. Zeev Maoz (2002: 164–5) noted recently,

There is a nearly complete lack of documentation of the approach to data collection, data management, and data analysis and inference in case study research. In contrast to other research strategies in political research where authors devote considerable time and effort to document the technical aspects of their research, one often gets the impression that the use of case study absolves the author from any kind of methodological considerations. Case studies have become in many cases a synonym for freeform research where everything goes and the author does not feel compelled to spell out how he or she intends to do the research, why a specific case or set of cases has been selected, which data are used and which are omitted, how data are processed and analyzed, and how inferences were derived from the story presented. Yet, at the end of the story, we often find sweeping generalizations and "lessons" derived from this case.

To say that one is conducting a case study sometimes seems to imply that normal methodological rules do not apply; that one has entered a different methodological or epistemological (perhaps even ontological) zone. Here, the term functions as an ambiguous designation covering a multitude of "inferential felonies."

In the field of psychology, a gulf separates "scientists" engaged in large-C research and "practitioners" engaged in clinical research,

Achen and Snidal (1989: 160). See also Geddes (1990, 2003), Goldthorpe (1997), King et al. (1994), Lieberson (1985: 107–15, 1992, 1994), Lijphart (1971: 683–4), Odell (2004), Sekhon (2004), Smelser (1973: 45, 57). In psychology, Kratochwill (1978: 4–5) writes: "Case study methodology was typically characterized by numerous sources of uncontrolled variation, inadequate description of independent/dependent variables, was generally difficult to replicate. While this made case study methodology of little scientific value, it helped to generate hypotheses for subsequent research." See also Hersen and Barlow (1976: Chapter 1), Meehl (1954). It should be underlined that these writers, while critical of the case study format, are not necessarily opposed to case studies per se; that is to say, they should not be classified as opponents of the case study.



XX

Preface

usually focused on one or several cases.⁴ In the fields of political science and sociology, case study researchers are acknowledged to be on the soft side of increasingly hard disciplines. And across fields, the case study orientations of cultural anthropology, education, law, social work, and various other fields relegate them to the non-rigorous, non-systematic, non-scientific, non-positivist end of the academic spectrum.

Even among its defenders, there is confusion over the virtues and vices of this ambiguous research design. Practitioners continue to ply their trade but have difficulty articulating what it is they are doing, methodologically speaking. The case study survives in a curious methodological limbo.

This leads to a paradox. Although much of what we know about the empirical world has been generated by case studies and case studies continue to constitute a significant proportion of work generated by the social science disciplines (see Chapter 1), the case study *method* is unappreciated, perhaps even under siege.

How can we make sense of the profound disjuncture between the acknowledged contributions of this genre and its maligned status? If case studies are methodologically flawed, why do they persist? Should they be rehabilitated, or suppressed? How fruitful *is* this style of research? And, finally, in what respects can current practices be improved?

Situating this book

This book aims to provide a general understanding of the case study as well as the tools and techniques necessary for its successful

⁴ Hersen and Barlow (1976: 21) write that in the 1960s, when this split developed, "clinical procedures were largely judged as unproven, the prevailing naturalistic research was unacceptable to most scientists concerned with precise definition of variables, cause-effect relationships. On the other hand, the elegantly designed, scientifically rigorous group comparison design was seen as impractical, incapable of dealing with the complexities, idiosyncrasies of individuals by most clinicians."



xxi

Preface

implementation. The subtitle reflects my dual concern with general principles as well as specific practices. To assist the reader, a number of differences between this work and others on the same general topic should be signaled at the outset.

First, this book does not attempt to vindicate or vilify the case study method. There is much to be said "for" and "against" it. I think the genre is best served by a clear-eyed depiction of the pros and cons so that researchers can understand the benefits, as well as the limitations, of adopting a case study format. If the tone of the book is occasionally defensive, it is only because I wish to dispel certain misperceptions that (in my opinion) serve to downgrade the contributions of case studies to the work of social science.

Second, this book adopts what might be called (if one can stomach the term) a "positivist" approach to case study research. That is, I hope to show that case studies can be employed in a rigorous, systematic, replicable, and theoretically informed fashion – one that is fully consistent with, and complementary to, work conducted with a large sample of cases (large-*C* research).

Third, the book gives special attention to the role of case studies in facilitating causal analysis. This is because the descriptive aspects of case studies are difficult to distinguish from methods of data collection, e.g., surveys, interviews, ethnographies, archival research, and so forth. These topics are not unique to case study research, are well covered by other texts, and are not especially problematic from a methodological point of view. What is problematic – at least in the eyes of many methodologists – is the attempt to reach causal inferences from case study evidence. Accordingly, we focus our attention on this vexed subject. Even so, we should not lose sight of the fact that many of the most influential case studies are descriptive in nature. I hope, therefore, to encompass both sub-genres in the chapters that follow.

Fourth, rather than focusing on a single field or sub-field of the social sciences, I take a broad, cross-disciplinary view of the topic. My



xxii

Preface

conviction is that the methodological issues entailed by the case study method are general rather than field-specific. Moreover, by examining basic methodological issues in widely varying empirical contexts we sometimes gain insights into these issues that are not apparent from a narrower perspective. Examples discussed in this book are drawn from all fields of the social sciences, and occasionally from the natural sciences and humanities. To be sure, the discussion betrays a pronounced tilt towards my own discipline, political science. However, the arguments should be equally applicable to other fields in the social sciences.

Fifth, this volume does not intend to provide a comprehensive review of methodological issues pertaining to social science research. My intention, rather, is to home in on those issues that pertain specifically to case study research. Issues that apply equally to small- and large-*C* analysis are given short shrift. Thus, I do not have much to say about the process of data collection, the discovery of new ideas (the formulation of theories), the nature of causal inference, research ethics, or issues of epistemology or philosophy of science. Likewise, techniques drawn from the field of statistics and econometrics – *regression*, *matching*, *cluster analysis*, and so forth – are not fully explained or developed. To do so would require a very different sort of book. Readers who wish to know more about these and other topics touched upon in the text may consult cited references or general introductions to social science methodology and statistics.⁶

- ⁵ Some case study textbooks seem to cover the subject of social research in its entirety conceptualization, measurement, research design, analysis, along with reflections on epistemology and philosophy of science. As such, they function as introductory methods texts with a special focus on qualitative research methods (e.g., Berg and Lune 2011; Hancke 2009; Somekh and Lewin 2005; Yin 2009).
- ⁶ General introductions to social science methodology include Gerring (2012b) and King *et al.* (1994) pitched to graduate students and Gerring and Christenson (2017), which is designed for an undergraduate or master's level audience. Introductory statistics texts are legion. Readers primarily concerned with causal inference might consider Angrist and Pischke (2009) or their shorter, pithier text (Angrist and Pischke 2015).



xxiii

Preface

Even with respect to issues pertaining directly to case study research, the present volume cannot hope to be entirely comprehensive. Fortunately, there is now a sizeable literature on these topics. Readers looking for more in-depth treatment of various subjects are advised to follow the trail of citations in the text or meander through the voluminous references at the end of the book.

Finally, it should be emphasized that the text is designed to make the material accessible to readers who are new to the subject. Notation is minimal (see Key symbols and terms). Debates with the literature are minimized, or relegated to footnotes. Key terms are defined in the text, and may be located by consulting page references in the Index. At the end of each chapter, a concluding section summarizes the main points that have been presented.

I hope that the book is useful for those who are embarking for the first time in a social science field as well as those who have completed many voyages.

Outline

Part I of the book establishes our subject. Chapter 1 surveys the field of case study research across the social sciences. Chapter 2 proposes definitions for "case study" and associated terms. A great deal flows from these definitions so the chapter should not be passed over quickly.

Part II deals with case selection – the choice of cases to analyze intensively. Chapter 3 sets forth a summary of strategies. This serves to introduce readers to a wide variety of work conducted in a case study mode and more specifically, to illustrate the diversity of methods that may be employed to select cases for intensive analysis. Chapter 4 focuses on the selection of cases for purposes of description and Chapter 5 on the selection of cases for the purpose of causal inference. Chapter 6 discusses the application of random sampling and other algorithmic approaches to case selection, as well as the viability of medium-C samples.



xxiv

Preface

Part III deals with methods of analysis – what to do with cases once they are chosen. Chapter 7 establishes a typology of research designs, distinguishing among case studies, large-*C* studies, and multimethod studies. Chapter 8 distinguishes quantitative and qualitative modes of analysis, focusing primarily on the latter.

Part IV deals with the problem of validity. Chapter 9 focuses on internal validity and Chapter 10 on external validity.

The book concludes, in Chapter 11, with a series of comparisons and contrasts between small-*C* and large-*C* research in order to understand their distinctive affinities. I argue that the many of the perceived weaknesses of the case study are overcome if case studies are complemented by large-*C* studies of the same general topic. Multimethod work – whether incorporated in the same study or in different studies – often provides a reasonable solution to situations where case studies sit uneasily on their own.



Acknowledgements

This book evolved from a series of papers (Gerring 2004b, 2006a, 2006b, 2007b, 2017; Gerring and Cojocaru 2016; Gerring and McDermott 2007; Gerring and Thomas 2005; Seawright and Gerring 2008). I am grateful to my collaborators and also to the publishers of these papers for permission to adapt these works for use in the present volume.

Drafts of the first edition were presented at Bremen University in 2004, sponsored by the Transformations of the State Collaborative Research Center (CRC); at the Third Congress of the Working Group on Approaches and Methods in Comparative Politics, Liège, Belgium; at the annual meetings of the Institute for Qualitative Research (IQRM); and at the annual meetings of the American Political Science Association. I am thankful for comments and suggestions from participants at these gatherings.

For detailed feedback on the first edition, I owe thanks to Andy Bennett, Melani Cammett, Kanchan Chandra, Renske Doorenspleet, Colin Elman, Gary Goertz, Shareen Hertel, Ronggui Huang, Staci Kaiser, Bernhard Kittel, Ned Lebow, Jack Levy, Evan Lieberman, Jim Mahoney, Ellen Mastenbroek, Devra Moehler, Howard Reiter, Kirsten Rodine, Ingo Rohlfing, Richard Snyder, Peter Starke, Craig Thomas, Lily Tsai, and David Woodruff. For clarification on various subjects, I am in debt to Bear Braumoeller, Patrick Johnston, Jason Seawright, Jas Sekhon, and Peter Spiegler.

The impetus for a second edition, nearly a decade after the first, came partly in response to the ongoing trajectory of work on case study methodology and related topics. Important recent works include Beach and Pedersen (2013), Bennett and Checkel (2015), Blatter and

XXV



xxvi

Acknowledgements

Haverland (2012), Fearon and Laitin (2008, 2014, 2015), Glynn and Ichino (2015, 2016), Goertz (2017), Herron and Quinn (2016), Humphreys and Jacobs (2015), Levy (2008a, 2008b), Lieberman (2015), Mahoney (2012), Mahoney and Thelen (2015), Nielsen (2016), Rohlfing (2012), Schneider and Rohlfing (2013, 2016), Seawright (2016a, 2016b), Soifer (2015), Waldner (2012, 2015a, 2015b, 2016), and Weller and Barnes (2014).

Readers of the second edition will find a book that is re-written from scratch, with a revised summary of case-selection methods, an expanded section focused on case analysis, and a somewhat revised notation.

A preliminary draft of the revised manuscript was presented at the Authors' Workshop at the Institute for Qualitative and Multimethod Research, Syracuse University, June, 2015. I want to thank members of that workshop and others who have read various versions of the manuscript. This includes Colin Elman, Danny Hidalgo, Nahomi Ichino, Kendra Koivu, Markus Kreuzer, Jack Levy, Jim Mahoney, Gerry Munck, Hillel Soifer, and Nick Weller. For clarification and feedback on specific issues, I am grateful to Jim Fearon, Adam Glynn, and David Laitin. Carl Gershenson, along with several reviewers for the Press, gave the manuscript a thorough read and contributed greatly to its present shape. I am grateful to Gary Goertz for sharing his book manuscript – which will be published concurrently (Goertz 2017) – and for feedback on the text. Thanks to John Haslam from Cambridge University Press, who shepherded the book through review and production.

My final acknowledgement is to the generations of scholars who have written on this topic – whose ideas I appropriate, misrepresent, or warp beyond recognition. (In academic venues, the first is recognized as a citation, the second is known as a reinterpretation, and the third is called original research.) Specialists will appreciate the extent to which this book is a compendium of ideas extending back to an earlier generation of methodological work on the case study method by the likes of Donald Campbell, David Collier, Harry Eckstein, Alexander



xxvii

Acknowledgements

George, Barney Glaser and Anselm Strauss, Arend Lijphart, Adam Przeworski and Henry Teune, and Neil Smelser – not to mention prior work by logicians and philosophers such as J.S. Mill and Cohen and Nagel. My debts are apparent in the crowded footnotes and lengthy set of references.



Key symbols and terms

Phenomena

- D Descriptive features
- M Mechanism connecting X and Y
- X Causal factor of theoretical interest usually a single factor but occasionally a vector of related factors
- Y Outcome
- Z Vector of background factors which may affect X and Y and thus serve as confounders

Causal argument

 $X \rightarrow Y$ Apparent or estimated causal effect of a change in X on Y

 H_X Hypothesis about $X \to Y$

 $P(H_X)$ The probability of H_X being true

Research design

K Variables N Observation(s): the lowest-level units in an analysis, which may or may not be of theoretical interest C Case(s): a spatially and temporally delimited phenomenon of theoretical interest T Time-periods $(T_1, T_2, T_3, ..., T_N)$

Sample All the observations in an analysis, regardless of how they

are chosen

Population Cases/observations of theoretical interest, generally much

larger than the sample.

xxviii



More Information

Cambridge University Press 978-1-107-18126-7 — Case Study Research 2nd Edition Frontmatter

XXIX

Key symbols and terms

Case selection

Algorithmic By algorithm, e.g., descriptive statistics, regression,

matching, QCA

Non- In an informal, qualitative fashion

algorithm ic

Analysis

Small-C/ One or several cases, each of which is analyzed

case study intensively in order to shed light on a larger population Medium-*C* Hybrid – several dozen cases each of which is analyzed

intensively

Large-*C* Sizeable sample of cases, analyzed with a quantitative

algorithm

Multimethod Small- and large-C analyses combined in a single study

or research stream

Cross-case Cross-sectional, across cases

Within-case Within a case, either longitudinally (through time) or at

a lower level of analysis

Quantitative Formal analysis based on matrix observations -

generally with a large sample

Qualitative Informal analysis based on non-comparable

observations - generally with a small sample