



MARK RISJORD

Nursing Knowledge

SCIENCE, PRACTICE, AND PHILOSOPHY

 WILEY-BLACKWELL

Nursing Knowledge

Science, Practice, and Philosophy

Mark Risjord

Philosophy Department and
The Nell Hodgson Woodruff School of Nursing
Emory University



 **WILEY-BLACKWELL**

A John Wiley & Sons, Ltd., Publication

This edition first published 2010
© 2010 by Mark Risjord

Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Blackwell's publishing programme has been merged with Wiley's global Scientific, Technical, and Medical business to form Wiley-Blackwell.

Registered office:

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ,
United Kingdom

Editorial offices:

9600 Garsington Road, Oxford, OX4 2DQ, United Kingdom
2121 State Avenue, Ames, Iowa 50014-8300, USA

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell.

The right of the author to be identified as the author of this work has been asserted in accordance with the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Library of Congress Cataloging-in-Publication Data

Risjord, Mark W., 1960-

Nursing knowledge : science, practice, and philosophy / Mark Risjord.
p. ; cm.

Includes bibliographical references and index.

ISBN 978-1-4051-8434-2 (pbk. : alk. paper)

1. Nursing-Philosophy. 2. Nursing-Practice. I. Title.

[DNLM: 1. Nursing Theory. 2. Health Knowledge, Attitudes, Practice.

3. Nursing Process. 4. Philosophy, Nursing. WY 86 R595n 2010]

RT84.5.R57 2010

610.73-dc22

2009020260

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

Set in 10/12pt Palatino by Aptara® Inc., New Delhi, India

Printed and bound in Malaysia by KHL Printing Co Sdn Bhd

Nursing Knowledge

For the nurses and scholars who have influenced me.

Constance Risjord

Norman Risjord

Arleen Winter

Preface

My intellectual engagement with nursing began with a question about teaching. The Nell Hodgson Woodruff School of Nursing at Emory University had just created a PhD program, and Professors Sandra Dunbar and Margret Moloney were teaching “the theory course.” They called to ask for advice about readings in the philosophy of science. I was at a bit of a loss. Like many philosophers of science, I thought that philosophy of science should connect directly with the sciences. Only when the problems are understood from the perspective of the scientists can the important questions be asked. Since I had no understanding of nursing research, I had no clue about how to answer their simple question about a reading list.

The solution, which the Nursing School was happy to support, was to have me coteach the course. Working with PhD-level students would provide a sense of the philosophical questions that arose from nursing research. My intention was to find some philosophically and pedagogically useful readings for the course, and then return to the quiet life of a philosopher. I found, to my delight, a new world for philosophical reflection. Nurse scholars had been writing about philosophical issues for almost 40 years. While philosophers had not paid attention to them, they had been paying attention to us. The philosophical issues were clearly recognizable, and the context of nursing research and practice gave them a fresh aspect. I have taught, cotaught, or lectured in this course every year since its inception, and it remains some of the most rewarding teaching I do.

After several years of teaching the course, I began to kick around ideas for a book that would systematically treat the philosophical issues in nursing science. It was the fall semester of 2006 when a student question catalyzed the ideas. We were wrapping up our discussion of values in science. The students had worked through Longino, Harding, and other feminist philosophers of science. This is all very interesting, they said, but what does it have to do with *nursing* science? In the ensuing conversation, I was struck by the analogy between nursing roles and the oppressed

social roles that give rise to epistemic standpoints. With the idea of a nursing standpoint, serious work on this book began.

The phrase “nursing knowledge” is ambiguous. It might plausibly refer to knowledge that individual nurses gain through their training and experience. While the topic is vitally important, this book will not be directly concerned with the knowledge that goes into the decisions or care plans of the practicing nurse. Rather, we will be concerned with the kind of knowledge on which the nursing profession is based. This knowledge is developed within the research enterprise of nursing, maintained in the academy, and transmitted through professional publications. Ultimately, of course, the two senses should join: the knowledge of individual nurses should be informed by disciplinary knowledge. When disciplinary knowledge does not support professional nursing, a theory–practice gap emerges.

This work will bring ideas and arguments from the philosophy of science to the discussion of nursing theory. The object is *not* to create a new nursing theory. Nor will there be sustained evaluation of, or commentary on, nursing theories. Rather, we will engage what could be called nursing “metatheory,” that is, theory about theory. Since the late 1950s, nursing has had lively debates about what forms theory should take, about the unity of the discipline, about the status of borrowed theory, and so on. These debates have been philosophical, and have drawn on philosophical writings, but they have been debates among nurse scholars. In keeping with the idea that the philosophy of science ought to be rooted in philosophical questions arising from scientific practice, this work will primarily engage with the nursing metatheoretical literature. It will elucidate the historical and contemporary nursing debates and critically evaluate the arguments. While we will develop ideas within the philosophy of science, the primary audience of this work is not philosophers, but nurse scholars.

A book with two audiences risks leaving both unsatisfied. If the technical details are passed over, philosophers may find the arguments superficial. If presented in all of their abstract glory, nurse scholars may find the arguments pedantic. This problem is partly addressed below by the chapter divisions. Some chapters (5, 8, 10, 14, and 17) are devoted mostly to philosophical positions, arguments, and counter-arguments. Readers who want to understand the full philosophical background to the ideas developed in the other parts of the book will need to work through these chapters. Those who are familiar with the philosophy of science, and who are primarily interested in the ramifications of postpositivist philosophy of science for nursing, might skip them. Those readers interested in an overview of the position developed in this book might read the introduction to each Part and Chapters 3, 7, 12, and 19.

This book is the culmination of 10 years of thought about nursing science. The nurse scholars who patiently taught me about their discipline have my deep admiration and sincere appreciation: Sandra Dunbar, Margret Moloney, Kenneth Hepburn, Sue Donaldson, and every one of the nursing doctoral students who have come through Emory’s program. During this period, my thinking about theory and methodology was sharpened by some very special colleagues in the humanities and the social sciences. I hope that Ivan Karp, Cory Kratz, Martine Brownley, Kareem

Khalifa, and Robert McCauley see something of themselves reflected in this work. A number of colleagues read and commented on this book at various phases of completion. Feedback of this sort is invaluable and I am deeply grateful to Ulf Nilsson, John Paley, Emily Parker, Norman Risjord, Stephanie Solomon, Alison Wylie, and especially Beverly Whelton for their thoughtful responses. Finally, this book was entirely written during my tenure as Associate Dean of the Graduate School. It would have been impossible but for the support of Dean Lisa Tedesco. She not only helped me find the balance between research and administration, but she also made substantive contributions to my thinking about these issues.

Special appreciation must be reserved for Barbara, Andrea, and Hannah Risjord. Throughout the process of writing this book, they supported me in uncountable ways and suffered both my absences and absentmindedness.

Foreword

Nursing Knowledge is a unique and compelling contribution to the body of philosophical work in nursing. Mark Risjord offers a fresh perspective of the evolution of nursing theory, science, and practice as seen through the lens of a philosopher. Risjord comprehensively analyzes the history of the development of the professional discipline of nursing. He includes all the major threads of philosophical thought, identifying their origins, critical differences, and potential for primacy. By revealing the historical juxtaposition of competing philosophies of nursing, he retraces nursing's tortuous path and conveys the passion of its scholars for the discipline and the practice. But this book is not a dry text; it reads as an exciting documentary that relates the development of nursing philosophy in the context of an evolving professional practice of nursing and an evolving general philosophy of science. Risjord goes beyond analysis of the writings to consider the philosophical debates in nursing in the context of societal changes in the status of women and nurses in health care along with the continuous transformation of philosophy of science into successive postpositivist forms. Each philosophical thread in nursing is addressed, treated as valid, and appropriately placed in the evolution of contemporary philosophy of nursing. But there are some surprising revelations from Risjord's philosophical analysis.

A major advance in this book comes from Risjord's presentation of disparate views as valuable to the evolution of nursing knowledge and science rather than as distractions. Risjord documents that while philosophers of nursing strived for consensus and adoption of a single model to unify the discipline; opposing views were key to clarifying the purpose of the discipline and developing its knowledge. A notable and valuable contribution to nursing philosophy is Risjord's analysis of the pervasive impact of logical positivism over time, despite nursing's rejection of this philosophy of science. One becomes aware of Risjord's prowess as a philosopher in his analysis of the subtle and, apparently, unrecognized influence of positivism, even in recent presentations and publications of philosophers in nursing. I

had not recognized this evidence and thus was surprised by his findings. It is extremely important for nursing to fully understand the philosophical underpinnings of its models for knowledge and theory generation and this book teaches by example how this is done. Risjord offers an alternate, nonpositivist, conceptual model for generating value-laden theory to assist nursing in its quest for scientific discovery that is relevant to nursing practice and to the understanding of human health in general.

Risjord captures the prevailing sense of urgency on the part of nurse scholars to articulate a unique and defining conceptual model or grand theory of nursing. Identification of a unique discipline and science of nursing was and still continues to be needed to respond to external threats to the legitimacy of nursing as a profession and as a field of PhD study. Internally, nursing scholars fiercely and legitimately debated the directionality of influence of practice and knowledge. For the beginning scholar or student in nursing, this book is an essential companion to the reading of original classic and contemporary philosophical papers in nursing because it clarifies the unique contribution and historical context of each. This book is a definitive guide to the universe of nursing knowledge and philosophy. For the seasoned scholar, *Nursing Knowledge* reads as a compelling documentary that recasts long-standing debates on the nature and generation of nursing knowledge in a new mode and revisits the relationship of theory to practice. *Nursing Knowledge* takes the reader on an historical trip that celebrates disparate views on philosophical issues as a natural part of the evolution of the discipline and its relationship to the practice of nursing. What is unexpected is the progressive philosophy of nursing that awaits the reader at journey's end. Risjord does not disappoint; he transports the reader into a new frame of reference, a new philosophy, for advancing nursing knowledge in a manner that promises to make it more relevant to practice and theoretically coherent.

In his analysis of philosophy of nursing science, Risjord focuses on nursing's continuing utilization of hierarchical disciplinary structures, such as meta-paradigm/paradigm and grand/middle-range/situation theory. This analysis alone makes the book required reading. He points out that while these structures serve the purpose of identifying a unique domain of nursing knowledge, they are at odds with nursing's professed preference for postpositivist philosophical views of value-laden science, including nursing's intent to bridge the theory–practice gap. Risjord argues that hierarchical structures isolate nursing knowledge from that of other disciplines, thus limiting the impact of nursing in advancing an enlightened view of human health across disciplines. His analysis of the separation of qualitative and quantitative research into distinct paradigms within the discipline is particularly astute; it reveals that, while intellectually convenient, this separation limits the overall support for critical theories in nursing. Perhaps the most shocking of his revelations is that hierarchical disciplinary structures in nursing emanate from the positivist viewpoint.

As an alternate, Risjord offers a radically different, nonpositivist philosophical view of knowledge structure that was first introduced by Quine ([1953] 1961). In this frame of reference, human knowledge is viewed as an integrated whole of

theories from many disciplines; individual disciplines influence the whole of knowledge to the extent that their theories are coherent with those of other disciplines. Disciplines are expected to work within a unique perspective and to offer theories that reflect this perspective; but the ultimate goal is to find external support for the theories of the discipline of origin. Risjord presents this model of theory coherence in a distinctive and memorable way using the metaphors of a quilt and a spider web. Theories are depicted as nodes of a spider web that gain structural support and utility based on coherent linkages to other theories, irrespective of discipline of origin. Risjord makes a strong case for seeking coherence of theories originating in nursing across many disciplines. In the coherence model, nursing is free to link its theories to those in other fields to gain to support for them and to offer theoretical support for theories beyond nursing. The theory coherence model offers nursing a more expansive means of generating knowledge to advance the values and practice of the profession. Within a coherence framework, nursing has the potential to develop knowledge for the world as well as the practice of nursing. As a relatively young discipline, nursing is justified in considering the possibility of losing its disciplinary identity through interdisciplinary research. In Risjord's conceptualization of theory coherence, nursing practice unifies the discipline, allowing nursing to share theory and knowledge. Supportive linkages to other disciplines can be created without losing nursing's distinctive disciplinary perspective. In turn, nursing can use theory from other sources not for the purpose of "borrowing" but rather for establishing coherence and support for nursing theories.

Risjord makes a compelling case for restructuring nursing knowledge into a model that is theoretically coherent and practically relevant. Most importantly, he offers a new philosophy of nursing to guide its knowledge development. *Nursing Knowledge* is essential reading, not just to trace the evolution of nursing science and knowledge, but to frame the philosophical issues for the next round of scholarly debates and to position nursing for a transdisciplinary role in knowledge development.

Sue K. Donaldson, PhD, RN, FAAN
Distinguished Professor of Nursing and Interdisciplinary Science
Emory University

Contents

Preface	xiii
Foreword	xvi

**PART I NURSING KNOWLEDGE AND THE
CHALLENGE OF RELEVANCE**

Introduction to Part I	2
Nursing knowledge	2
Two kinds of theory–practice gap	3
Philosophy of nursing science	4
1 Prehistory of the problem	6
The domain of nursing	6
Professionalization and the translation gap	8
Nursing education reform in the United States	9
Nursing research begins	11
A philosophy of nursing	13
What would a nursing science look like?	14
Nursing theory and nursing knowledge	16
Borrowed theory	16
Uniqueness	17
Conclusion: the relevance gap appears	18

2	Opening the relevance gap	20
	Two conceptions of nursing science	20
	The demise of practice theory	22
	The argument from value freedom	22
	The argument from theory structure	23
	The consensus emerges	24
	Carper's patterns of knowledge	24
	Donaldson and Crowley on the discipline	25
	Fawcett on the levels of theory	26
	The relevance gap	27
	The qualitative research movement	28
	The middle-range theory movement	29
	Conclusion: the relevance gap endures	30
3	Toward a philosophy of nursing science	32
	Philosophical questions about nursing	33
	Questions about the discipline	33
	Questions of philosophy	34
	Science, value, and the nursing standpoint	35
	Qualitative research and value-freedom	35
	Standpoint epistemology	36
	Theory, science, and nursing knowledge	37
	The received view of theory	37
	Explanatory coherence and inter-level models	38
	Consequences for nursing knowledge	39
	Conclusion: closing the gap	40
 PART II VALUES AND THE NURSING STANDPOINT		
	Introduction to Part II	42
4	Practice values and the disciplinary knowledge base	44
	Dickoff and James' practice theory	44
	Values and theory testing	45
	Challenges to Dickoff and James' criteria	47
	Beckstrand's critique	48
	Fact and value	48
	Intrinsic and instrumental values	49

Carper's fact–value distinction	50
Problems with patterns	51
The disintegration of nursing knowledge	51
The obfuscation of evaluative commitments	52
The role of theory in ethical knowledge	53
Sociopolitical knowing	54
Conclusion: fact and value in nursing knowledge	55
5 Models of value-laden science	56
The Johnson model: nursing values as guides for theory	56
Constitutive and contextual values	58
Constitutive values in science: Kuhn's argument	60
Epistemic and moral/political values	61
Models of value-laden inquiry	61
Value-laden concepts in nursing inquiry	62
Conclusion: constitutive moral and political values in nursing inquiry	64
6 Standpoint epistemology and nursing knowledge	65
Social role and epistemic privilege	65
Feminist appropriation of standpoint epistemology	66
Generalizing standpoints	68
Knowledge and the division of labor in health care	69
Nursing knowledge and nursing roles	71
Conclusion: nursing knowledge as an epistemic standpoint	73
7 The nursing standpoint	74
Top-down and bottom-up views of nursing	74
Values in the nursing standpoint	75
The philosophical questions revisited	76
Questions and concerns	77
What is the nursing role?	77
How are the boundaries of the profession determined?	78
Qualitative or quantitative?	79
Is nursing an applied science?	79
Conclusion: science and standpoint	80

PART III NURSING THEORY AND THE PHILOSOPHY OF SCIENCE

Introduction to Part III	82
8 Logical positivism and mid-century philosophy of science	84
Some history and terminology	84
Empiricism	84
Logical positivism	85
Conceptions of theory in nursing	86
Theories and axiom systems	87
Euclid and Newton	87
Challenges to an axiomatic treatment of theory	88
Implicit definition	89
Theory structure: the received view	90
Theoretical and experimental laws	91
The hierarchy of theory	92
Explanation and confirmation	93
Explanation	93
Theory testing	94
Conclusion: logical positivism and scientific knowledge	95
9 Echoes in nursing	96
Did logical positivism influence nursing?	96
Three kinds of influence	97
Positivism and the critique of nursing metatheory	98
The metaparadigm of nursing	98
Validity of the metaparadigm	99
What is a “metaparadigm”?	100
Levels of theory	100
How the levels are distinguished	101
How the levels are related	101
Why the levels are supposed to be necessary	102
Borrowed theory	103
Conclusion: the relevance gap and the philosophy of science	104
10 Rejecting the received view	106
Holistic confirmation	107
The necessity of auxiliary hypotheses	107
Auxiliary hypotheses and borrowed theory	108
Consequences for nursing	109

Failure of the theory–observation distinction	110
The vagueness of the distinction	110
The role of training	111
Observation and theory testing	112
Levels of theory and interdisciplinary research	112
Theory change and level mixing	113
Theoretical integration	114
Consequences for nursing	115
Conclusion: rejecting the received view of nursing science	115

PART IV THE IDEA OF A NURSING SCIENCE

Introduction to Part IV 118

11 Postnursing theory inquiry 121

Passion for substance	121
Situation-specific theories	122
Postnursing theory inquiry	123
Research example: mastectomy	124
Background	124
Patient responses to radical mastectomy	126
Research example: pain management	127
Background	127
Sensory and distress components of pain	128
Breakthrough research and situation-specific theory	129
Conclusion: revisioning nursing theory	130

12 The structure of theory 131

Walls and webs	131
Questions and answers	133
Coherence and confirmation	133
Horizontal and vertical questions	134
Breakthrough research revisited	135
Radical mastectomy	135
Pain research	136
Borrowed theory	137
Research example: pain intervention	137
Borrowed theory and the nursing standpoint	138
Conclusion: piecing the quilt	139

13 Models, mechanisms, and middle-range theory	141
What is middle-range theory?	141
An old, new definition of middle-range theory	142
The semantic conception and the received view	143
Middle-range theories as theoretical models	144
Physical and nonphysical theoretical models	145
The challenge of precision in nursing models	146
Interlevel models in nursing science	146
Theoretical models and explanatory coherence	148
Holism, reductionism, and the nursing standpoint	148
The holistic patient care argument	149
The inconsistency argument	150
The causation and control argument	151
Causality, holism, and professional values	152
Conclusion: causal models and nursing science	152
 PART V CONCEPTS AND THEORIES	
 Introduction to Part V	156
 14 Consequences of contextualism	158
Concepts: theory-formed or theory-forming?	158
Public and personal concepts	159
The priority of theory	161
Linguistic arguments for contextualism	162
Scientific and colloquial contexts	163
Contextualism and realism	165
Moderate realism	165
Contextualism and antirealism	166
Realism and representation	167
Concept analysis and borrowed theory	167
Conclusion: philosophical foundations of multifaceted concepts	169
Theory development and multifaceted concepts	170
Concepts, borrowed theory, and interlevel models	171
 15 Conceptual models and the fate of grand theory	172
Models and theories	172
The orientation and abstraction pictures	173