THEORETICAL BASIS for Nursing

FOURTH EDITION

Melanie McEwen
Evelyn M. Wills

Wolters Kluwer Health
Lippincott Williams & Wilkins

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DEDICATION

To Kaitlin and Grant—You have helped me broaden my thoughts and consider all kinds of possibilities; I hope I've done the same for you.

Also for Helen and Keith—Our children chose well. Besides, you have given us Madelyn, Logan, Brenna, Liam, Lucy, and Andrew; they are gifts beyond words.

Melanie McEwen

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PREFACE

Frequently, nursing students respond with a cringing expression or a resounding "ugh!" when faced with the requirement of taking a course on theory. Indeed, many fail to see theory's relevance to the real world of nursing practice and often have difficulty applying the information in later courses and in their research. This book is the result of the frustration felt by a group of nursing instructors who met a number of years ago to adopt a textbook for a theory course. Indeed, because of student complaints and faculty dissatisfaction, we were changing textbooks yet again. A fairly lengthy discussion arose in which we concluded that the available books did not meet the needs of our students or course faculty. Ultimately, we determined to "build a better mousetrap." Our intent was to write a book that was a general overview of theory per se, stressing how it is—and should be—used by nurses to improve practice, research, education, and management/leadership.

As in past editions, an ongoing review of trends in nursing theory and nursing science has shown an increasing emphasis on middle range theory, evidence-based practice, and situation-specific theories. To remain current and timely, in this fourth edition, we have added a new chapter discussing evidence-based practice, highlighting how it relates to theory in nursing, and presenting several evidence-based practice models commonly used by nurses. We have also included new middle range nursing theories and added a significant section discussing situation-specific nursing theories, describing how they relate to evidence-based practice. Updates and application examples have been added throughout the discussions on the various theories.

Organization of the Text

Theoretical Basis for Nursing is designed to be a basic nursing theory textbook that includes the essential information students need to understand and apply theory.

The book is divided into four units. **Unit I, Introduction to Theory,** provides the background needed to understand what theory is and how it is used in nursing. It outlines tools and techniques used to develop, analyze, and evaluate theory so that it can be used in nursing practice, research, administration and management, and education. In this unit, we have provided a balanced view of "hot" topics (e.g., philosophical world views and utilization of shared or borrowed theory). Also, rather than espousing one strategy for activities such as concept development and theory evaluation, we have included a variety of strategies.

Unit II, Nursing Theories, focuses largely on the grand nursing theories and begins with a chapter describing their historical development. This unit divides the grand nursing theories into three groups based on their focus (human needs, interactive process, and unitary process). The works of many of the grand theorists are briefly summarized in Chapters 7, 8, and 9. We acknowledge that these analyses

are not comprehensive; rather, they are intended to provide the reader with enough information to understand the basis of the work and to whet the reader's appetite to select one or more for further study.

Chapters 10 and 11 cover the significant topic of middle range nursing theory. Chapter 10 presents a detailed overview of the origins and growth of middle range theory in nursing and gives numerous examples of how middle range theories have been developed by nurses. Chapter 11 provides an overview of some of the growing number of middle range nursing theories. The theories presented include some of the most commonly used middle range nursing theories (e.g., Pender's Health Promotion Model and Leininger's Culture Care Diversity and Universality Theory) as well as some that are less well known but have a growing body of research support (e.g., Meleis' Transitions Theory, the Theory of Unpleasant Symptoms, and the Uncertainty in Illness Theory). The intent is to provide a broad range of middle range theories to familiarize the reader with examples and to encourage them to search for others appropriate to their practice or research. Ultimately, it is hoped that readers will be challenged to develop new theories that can be used by nurses.

Chapter 12, which discusses evidence-based practice (EBP), is new to this edition. This chapter explains and defines the idea/process of EBP and describes how it relates to nursing theory and application of theory in nursing practice and research. The chapter concludes with a short presentation and review of five different EBP models that have been widely used by nurses and are well supported in the literature.

Unit III, Shared Theories Used by Nurses, is rather unique in nursing literature. Our book acknowledges that "shared" or "borrowed" theories are essential to nursing and negates the idea that the use of shared theory in practice or research is detrimental. In this unit, we have identified some of the most significant theories that have been developed outside of the discipline of nursing but are continually used in nursing. We have organized these theories based on broad disciplines: theories from the sociologic sciences, behavioral sciences, and biomedical sciences, as well as from administration and management and learning. Each of these chapters was written by a nurse with both educational and practical experience in her respective area. These theories are presented with sufficient information to allow the reader to understand the theories and to recognize those that might be appropriate for her or his own work. These chapters also provide original references and give examples of how the concepts, theories, and models described have been used by other nurses.

Finally, **Unit IV, Application of Theory in Nursing Practice,** explains how theories are applied in nursing. Separate chapters cover nursing practice, nursing research, nursing administration and management, and nursing education. These chapters include many specific examples for the application of theory and are intended to be a practical guide for theory use. The heightened development of practice theories and EBP guidelines are critical to theory application in nursing today, so these areas have been expanded. The unit concludes with a chapter that discusses some of the future issues in theory within the discipline.

Key Features

In addition to numerous tables and boxes that highlight and summarize important information, *Theoretical Basis for Nursing* contains case studies, learning activities, exemplars, and illustrations that help students visualize various concepts. New to this edition is a special feature called Link to Practice.

- **Link to Practice**: All chapters include at least one "Link to Practice" box, which presents useful information or clinically related examples related to the subject being discussed. The intent is to give additional tools or resources that can be used by nurses to apply the content in their own practice or research.
- **Case Studies:** At the end of Chapter 1 and the beginning of Chapters 2 to 22, case studies help the reader understand how the content in the chapter relates to the everyday experience of the nurse, whether in practice, research, or other aspects of nursing.
- **Learning Activities:** At the end of each chapter, learning activities pose critical thinking questions, propose individual and group projects related to topics covered in the chapter, and stimulate classroom discussion.
- **Exemplars:** In five chapters, an exemplar discusses a scholarly study from the perspectives of concept analysis (Chapter 3); theory development (Chapter 4); theory analysis and evaluation (Chapter 5); middle range theory development (Chapter 10); and theory generation via research, theory testing via research, and use of a theory as the conceptual framework for a research study (Chapter 19).
- **Illustrations:** Diagrams and models are included throughout the book to help the reader better understand the many different theories presented.

New To This Edition

- New Chapter 12, *Evidence-Based Practice and Nursing Theory*
- More detailed explanation of EBP and its relationship to theory in nursing
- Enhanced attention to situation-specific theories and how they relate to EBP
- Numerous recent examples of application of theories in nursing practice, nursing research, leadership/administration, and education
- NEW instructional support

Student Resources Available on thePoint

- **Literature Assessment Activity** provides an interactive tool featuring journal articles along with questions that will encourage students to think critically about the literature. Students can print or e-mail their responses to their instructor.
- **Case Studies** with applicable questions guide students in understanding how the various theories link to nursing practice.
- **Learning Objectives** for each chapter help focus the student.
- **Internet Resources** provide live web links to pertinent sites so that students can further their study and understanding of the various theories.
- **Journal Articles** for each chapter offer opportunities to gain more knowledge and understanding of the chapter content.

Instructor Resources Available on thePoint

- **Instructor's Guide** includes application-level discussion questions and classroom/online activities that Melanie McEwen uses in her own teaching!
- **Strategies for Effective Teaching of Nursing Theory** provide ideas for instructors to help make the nursing theory class come alive.
- **Test Generator Questions** provide multiple-choice questions that can be used for testing general content knowledge.
- **PowerPoints with audience response (Iclicker) questions**, based on the ones used by Melanie McEwen in her own classroom, help highlight important points to enhance the classroom, experience.
- **Case Studies** with questions, answers, and related activities offer opportunities for instructors to make the student case studies an exciting, fun, and rewarding classroom/online experience.
- **Image Bank** provides images from the text that instructors can use to enhance their own presentations.

In summary, the focus of this learning package is on the application of theory rather than on the study, analysis, and critique of grand theorists or a presentation of a specific aspect of theory (e.g., construction or evaluation). It is hoped that practicing nurses, nurse researchers, and nursing scholars, as well as graduate students and theory instructors, will use this book and its accompanying resources to gain a better understanding and appreciation of theory.

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UNIT I

Introduction to Theory

CHAPTER 1

Philosophy, Science, and Nursing

Melanie McEwen

Largely due to the work of nursing scientists, nursing theorists, and nursing scholars over the past five decades, nursing has been recognized as both an emerging profession and an academic discipline. Crucial to the attainment of this distinction have been numerous discussions regarding the phenomena of concern to nurses and countless efforts to enhance involvement in theory utilization, theory generation, and theory testing to direct research and improve practice.

A review of the nursing literature from the late 1970s until the present shows sporadic discussion of whether nursing is a profession, a science, or an academic discipline. These discussions are sometimes pleading, frequently esoteric, and occasionally confusing. Questions that have been raised include: What defines a profession? What constitutes an academic discipline? What is nursing science? Why is it important for nursing to be seen as a profession or an academic discipline?

Nursing as a Profession

In the past, there has been considerable discussion about whether nursing is a profession or an occupation. This is important for nurses to consider for several reasons. An occupation is a job or a career, whereas a profession is a learned vocation or occupation that has a status of superiority and precedence within a division of work. In general terms, occupations require widely varying levels of training or education, varying levels of skill, and widely variable defined knowledge bases. In short, all professions are occupations, but not all occupations are professions (Finkelman & Kenner, 2013).

Professions are valued by society because the services professionals provide are beneficial for members of the society. Characteristics of a profession include (1) defined and specialized knowledge base, (2) control and authority over training and education, (3) credentialing system or registration to ensure competence, (4) altruistic service to society, (5) a code of ethics, (6) formal training within institutions of higher education, (7) lengthy socialization to the profession, and (8) autonomy (control of professional activities) (Ellis & Hartley, 2012; Finkelman & Kenner, 2013; Rutty, 1998). Professions

must have a group of scholars, investigators, or researchers who work to continually advance the knowledge of the profession with the goal of improving practice (Schlotfeldt, 1989). Finally, professionals are responsible and accountable to the public for their work (Hood, 2010). Traditionally, professions have included the clergy, law, and medicine.

Until near the end of the 20th century, nursing was viewed as an occupation rather than a profession. Nursing has had difficulty being deemed a profession because many of the services provided by nurses have been perceived as an extension of those offered by wives and mothers. Additionally, historically, nursing has been seen as subservient to medicine, and nurses have delayed in identifying and organizing professional knowledge. Furthermore, education for nurses is not yet standardized, and the three-tier entry-level system (diploma, associate degree, and bachelor's degree) into practice that persists has hindered professionalization because a college education is not yet a requirement. Finally, autonomy in practice is incomplete because nursing is still dependent on medicine to direct much of its practice.

On the other hand, many of the characteristics of a profession can be observed in nursing. Indeed, nursing has a social mandate to provide health care for clients at different points in the health–illness continuum. There is a growing knowledge base, authority over education, altruistic service, a code of ethics, and registration requirements for practice. Although the debate is ongoing, it can be successfully argued that nursing is an aspiring, evolving profession (Finkelman & Kenner, 2013; Hood, 2010; Judd, Sitzman, & Davis, 2010). See Link to Practice 1-1 for more information on the future of nursing as a profession.

Link to Practice 1-1

The Future of Nursing

The Institute of Medicine (IOM, 2011) recently issued a series of sweeping recommendations directed to the nursing profession. The IOM explained their "vision" is to make quality, patient-centered care accessible for all Americans. Recommendations included a three-pronged approach to meeting the goal.

The first "message" was directed toward transformation of practice and precipitated the notion that nurses should be able to practice to the full extent of their education. Indeed, the IOM advocated for removal of regulatory, policy, and financial barriers to practice to ensure that "current and future generations of nurses can deliver safe, quality, patient-centered care across all settings, especially in such areas as primary care and community and public health" (p. 30).

A second key message related to the transformation of nursing education. In this regard, the IOM promotes "seamless academic progression" (p. 30), which includes a goal to increase the number and percentage of nurses who enter the workforce with a baccalaureate degree or who progress to the degree early in their career. Specifically, they recommend that 80% of RNs be BSN prepared by 2020. Last, the IOM advocated that nurses be full partners with physicians and other health professionals in the attempt to redesign health care in the United States.

These "messages" are critical to the future of nursing as a profession. Indeed, standardization of entry level into practice at the BSN level, coupled with promotion of advanced education and independent practice, and inclusion as "leaders" in the health care transformation process, will help solidify nursing as a true profession.

Nursing as an Academic Discipline

Disciplines are distinctions between bodies of knowledge found in academic settings. A *discipline* is "a branch of knowledge ordered through the theories and methods evolving from more than one worldview of the phenomenon of concern" (Parse, 1997, p. 74). It has also been termed a field of inquiry characterized by a unique perspective and a distinct way of viewing phenomena (Butts, Rich, & Fawcett, 2012; Parse, 1999).

Viewed another way, a discipline is a branch of educational instruction or a department of learning or knowledge. Institutions of higher education are organized around disciplines into colleges, schools, and departments (e.g., business administration, chemistry, history, and engineering).

Disciplines are organized by structure and tradition. The structure of the discipline provides organization and determines the amount, relationship, and ratio of each type of knowledge that comprises the discipline. The tradition of the discipline provides the content, which includes ethical, personal, esthetic, and scientific knowledge (Northrup et al., 2004; Risjord, 2010). Characteristics of disciplines include (1) a distinct perspective and syntax, (2) determination of what phenomena are of interest, (3) determination of the context in which the phenomena are viewed, (4) determination of what questions to ask, (5) determination of what methods of study are used, and (6) determination of what evidence is proof (Donaldson & Crowley, 1978).

Knowledge development within a discipline proceeds from several philosophical and scientific perspectives or worldviews (Litchfield & Jonsdottir, 2008; Newman, Sime, & Corcoran-Perry, 1991; Parse, 1999; Risjord, 2010). In some cases, these worldviews may serve to divide or segregate members of a discipline. For example, in psychology, practitioners might consider themselves behaviorists, Freudians, or any one of a number of other divisions.

Several ways of classifying academic disciplines have been proposed. For instance, they may be divided into the basic sciences (physics, biology, chemistry, sociology, anthropology) and the humanities (philosophy, ethics, history, fine arts). In this classification scheme, it is arguable that nursing has characteristics of both.

Distinctions may also be made between academic disciplines (e.g., physics, physiology, sociology, mathematics, history, philosophy) and professional disciplines (e.g., medicine, law, nursing, social work). In this classification scheme, the academic disciplines aim to "know," and their theories are descriptive in nature. Research in academic disciplines is both basic and applied. Conversely, the professional disciplines are practical in nature, and their research tends to be more prescriptive and descriptive (Donaldson & Crowley, 1978).

Nursing's knowledge base draws from many disciplines. In the past, nursing depended heavily on physiology, sociology, psychology, and medicine to provide academic standing and to inform practice. In recent decades, however, nursing has been seeking what is unique to nursing and developing those aspects into an academic discipline. Areas that identify nursing as a distinct discipline are as follows:

- An identifiable philosophy
- At least one conceptual framework (perspective) for delineation of what can be defined as nursing
- Acceptable methodologic approaches for the pursuit and development of knowledge (Oldnall, 1995)

To begin the quest to validate nursing as both a profession and an academic discipline, this chapter provides an overview of the concepts of science and philosophy.

It examines the schools of philosophical thought that have influenced nursing and explores the epistemology of nursing to explain why recognizing the multiple "ways of knowing" is critical in the quest for development and application of theory in nursing. Finally, this chapter presents issues related to how philosophical worldviews affect knowledge development through research. This chapter concludes with a case study that depicts how "the ways of knowing" in nursing are used on a day-to-day, even moment-by-moment, basis by all practicing nurses.

Introduction to Science and Philosophy

Science is concerned with causality (cause and effect). The scientific approach to understanding reality is characterized by observation, verifiability, and experience; hypothesis testing and experimentation are considered scientific methods. In contrast, *philosophy* is concerned with the purpose of human life, the nature of being and reality, and the theory and limits of knowledge. Intuition, introspection, and reasoning are examples of philosophical methodologies. Science and philosophy share the common goal of increasing knowledge (Butts et al., 2012; Fawcett, 1999; Silva, 1977). The science of any discipline is tied to its philosophy, which provides the basis for understanding and developing theories for science (Gustafsson, 2002; Silva & Rothbert, 1984).

Overview of Science

Science is both a process and a product. Parse (1997) defines science as the "theoretical explanation of the subject of inquiry and the methodological process of sustaining knowledge in a discipline" (p. 74). Science has also been described as a way of explaining observed phenomena as well as a system of gathering, verifying, and systematizing information about reality (Streubert & Carpenter, 2011). As a process, science is characterized by systematic inquiry that relies heavily on empirical observations of the natural world. As a product, it has been defined as empirical knowledge that is grounded and tested in experience and is the result of investigative efforts. Furthermore, science is conceived as being the consensual, informed opinion about the natural world, including human behavior and social action (Gortner & Schultz, 1988).

Science has come to represent knowledge, and it is generated by activites that combine advancement of knowledge (research) and explanation for knowledge (theory) (Powers & Knapp, 2011). Citing Van Laer, Silva (1977) lists six characteristics of science (Box 1-1).

Box 1-1 Characteristics of Science

1. Science must show a certain coherence.
2. Science is concerned with definite fields of knowledge.
3. Science is preferably expressed in universal statements.
4. The statements of science must be true or probably true.
5. The statements of science must be logically ordered.
6. Science must explain its investigations and arguments.

Source: Silva (1977).

Table 1-1 Classifications of Science

Classification	Examples
Natural sciences	Chemistry, physics, biology, physiology, geology, meteorology
Basic or pure sciences	Mathematics, logic, chemistry, physics, English (language)
Human or social sciences	Psychology, anthropology, sociology, economics, political science, history, religion
Practice or applied sciences	Architecture, engineering, medicine, pharmacology, law

Science has been classified in several ways. These include pure or basic science, natural science, human or social science, and applied or practice science. The classifications are not mutually exclusive and are open to interpretation based on philosophical orientation. Table 1-1 lists examples of a number of sciences by this manner of classification.

Some sciences defy classification. For example, computer science is arguably applied or perhaps pure. Law is certainly a practice science, but it is also a social science. Psychology might be a basic science, a human science, or an applied science, depending on what aspect of psychology one is referring to.

There are significant differences between the human and natural sciences. Human sciences refer to the fields of psychology, anthropology, and sociology and may even extend to economics and political science. These disciplines deal with various aspects of humans and human interactions. Natural sciences, on the other hand, are concentrated on elements found in nature that do not relate to the totality of the individual. There are inherent differences between the human and natural sciences that make the research techniques of the natural sciences (e.g., laboratory experimentation) improper or potentially problematic for human sciences (Gortner & Schultz, 1988).

It has been posited that although nursing draws on the basic and pure sciences (e.g., physiology and chemistry) and has many characteristics of social sciences, it is without question an applied or practice science. However, it is important to note that it is also synthesized, in that it draws on the knowledge of other established disciplines—including other practice disciplines (Dahnke & Dreher, 2011; Holzemer, 2007; Risjord, 2010).

Overview of Philosophy

Within any discipline, both scholars and students should be aware of the philosophical orientations that are the basis for developing theory and advancing knowledge (Dahnke & Dreher, 2011; DiBartolo, 1998; Northrup et al., 2004; Risjord, 2010). Rather than a focus on solving problems or answering questions related to that discipline (which are tasks of the discipline's science), the philosophy of a discipline studies the concepts that structure the thought processes of that discipline with the intent of recognizing and revealing foundations and presuppositions (Blackburn, 2008; Cronin & Rawlings-Anderson, 2004).

Philosophy has been defined as "a study of problems that are ultimate, abstract, and general. These problems are concerned with the nature of existence, knowledge, morality, reason, and human purpose" (Teichman & Evans, 1999, p. 1). Philosophy

Table 1-2 Branches of Philosophy

Branch	Pursuit
Metaphysics	Study of the fundamental nature of reality and existence—general theory of reality
Ontology	Study of theory of being (what is or what exists)
Cosmology	Study of the physical universe
Epistemology	Study of knowledge (ways of knowing, nature of truth, and relationship between knowledge and belief)
Logic	Study of principles and methods of reasoning (inference and argument)
Ethics (axiology)	Study of nature of values; right and wrong (moral philosophy)
Esthetics	Study of appreciation of the arts or things beautiful
Philosophy of science	Study of science and scientific practice
Political philosophy	Study of citizen and state

Sources: Blackburn (2008); Teichman & Evans (1999).

tries to discover knowledge and truth and attempts to identify what is valuable and important.

Modern philosophy is usually traced to Rene Descartes, Francis Bacon, Baruch Spinoza, and Immanuel Kant (ca. 1600–1800). Descartes (1596–1650) and Spinoza (1632–1677) were early rationalists. Rationalists believe that reason is superior to experience as a source of knowledge. Rationalists attempt to determine the nature of the world and reality by deduction and stress the importance of mathematical procedures.

Bacon (1561–1626) was an early empiricist. Like rationalists, he supported experimentation and scientific methods for solving problems.

The work of Kant (1724–1804) set the foundation for many later developments in philosophy. Kant believed that knowledge is relative and that the mind plays an active role in knowing. Other philosophers have also influenced nursing and the advance of nursing science. Several are discussed later in the chapter.

Although there is some variation, traditionally, the branches of philosophy include metaphysics (ontology and cosmology), epistemology, logic, esthetics, and ethics or axiology. Political philosophy and philosophy of science are added by some authors (Rutty, 1998; Teichman & Evans, 1999). Table 1-2 summarizes the major branches of philosophy.

Science and Philosophical Schools of Thought

The concept of science as understood in the 21st century is relatively new. In the period of modern science, three philosophies of science (paradigms or worldviews) dominate: rationalism, empiricism, and human science/phenomenology. Rationalism and empiricism are often termed *received view* and human science/phenomenology and related worldviews (i.e., historicism) are considered *perceived view* (Hickman, 2011; Meleis, 2012). These two worldviews dominated theoretical discussion in nursing through the 1990s. More recently, attention has focused on another dominant worldview: "postmodernism" (Meleis, 2012; Reed, 1995).

Received View (Empiricism, Positivism, Logical Positivism)

Empiricism has its roots in the writings of Francis Bacon, John Locke, and David Hume, who valued observation, perception by senses, and experience as sources of knowledge (Gortner & Schultz, 1988; Powers & Knapp, 2011). Empiricism is founded on the belief that what is experienced is what exists, and its knowledge base requires that these experiences be verified through scientific methodology (Dahnke & Dreher, 2011; Gustafsson, 2002). This knowledge is then passed on to others in the discipline and subsequently built on. The term *received view* or *received knowledge* denotes that individuals learn by being told or receiving knowledge.

Empiricism holds that truth corresponds to observable, reduction, verification, control, and bias-free science. It emphasizes mathematic formulas to explain phenomena and prefers simple dichotomies and classification of concepts. Additionally, everything can be reduced to a scientific formula with little room for interpretation (DiBartolo, 1998; Gortner & Schultz, 1988; Risjord, 2010).

Empiricism focuses on understanding the parts of the whole in an attempt to understand the whole. It strives to explain nature through testing of hypotheses and development of theories. Theories are made to describe, explain, and predict phenomena in nature and to provide understanding of relationships between phenomena. Concepts must be operationalized in the form of propositional statements, thereby making measurement possible. Instrumentation, reliability, and validity are stressed in empirical research methodologies. Once measurement is determined, it is possible to test theories through experimentation or observation, which results in verification or falsification (Cull-Wilby & Pepin, 1987; Suppe & Jacox, 1985).

Positivism is often equated with empiricism. Like empiricism, positivism supports mechanistic, reductionist principles, where the complex can be best understood in terms of its basic components. *Logical positivism* was the dominant empirical philosophy of science between the 1880s and 1950s. Logical positivists recognized only the logical and empirical bases of science and stressed that there is no room for metaphysics, understanding, or meaning within the realm of science (Polifroni & Welch, 1999; Risjord, 2010). Logical positivism maintained that science is value free, independent of the scientist, and obtained using objective methods. The goal of science is to explain, predict, and control. Theories are either true or false, subject to empirical observation, and capable of being reduced to existing scientific theories (Rutty, 1998).

Contemporary Empiricism/Postpositivism

Positivism came under criticism in the 1960s when positivistic logic was deemed faulty (Rutty, 1998). An overreliance on strictly controlled experimentation in artificial settings produced results that indicated that much significant knowledge or information was missed. In recent years, scholars have determined that the positivist view of science is outdated and misleading in that it contributes to overfragmentation in knowledge and theory development (DiBartolo, 1998). It has been observed that positivistic analysis of theories is fundamentally defective due to insistence on analyzing the logically ideal, which results in findings that have little to do with reality. It was maintained that the context of discovery was artificial and that theories and explanations can be understood only within their discovery contexts (Suppe & Jacox, 1985). Also, scientific inquiry is inherently value laden, as even choosing what to investigate and/or what techniques to employ will reflect the values of the researcher.

The current generation of postpositivists accept the subjective nature of inquiry but still support rigor and objective study through quantitative research methods. Indeed, it has been observed that modern empiricists or postpositivists are concerned

with explanation and prediction of complex phenomena, recognizing contextual variables (Powers & Knapp, 2011; Reed, 2008).

Nursing and Empiricism

As an emerging discipline, nursing has followed established disciplines (e.g., physiology) and the medical model in stressing logical positivism. Early nurse scientists embraced the importance of objectivity, control, fact, and measurement of smaller and smaller parts. Based on this influence, acceptable methods for knowledge generation in nursing have stressed traditional, orthodox, and preferably experimental methods.

Although positivism continues to heavily influence nursing science, that viewpoint has been challenged in recent years (Risjord, 2010). Consequently, postpositivism has become one of the most accepted contemporary worldviews in nursing.

Perceived View (Human Science, Phenomenology, Constructivism, Historicism)

In the late 1960s and early 1970s, several philosophers, including Kuhn, Feyerbend, and Toulmin, challenged the positivist view by arguing that the influence of history on science should be emphasized (Dahnke & Dreher, 2011). The perceived view of science, which may also be referred to as the interpretive view, includes phenomenology, constructivism, and historicism. The interpretive view recognizes that the perceptions of both the subject being studied and the researcher tend to de-emphasize reliance on strict control and experimentation in laboratory settings (Monti & Tingen, 1999).

The perceived view of science centers on descriptions that are derived from collectively lived experiences, interrelatedness, human interpretation, and learned reality, as opposed to artificially invented (i.e., laboratory-based) reality (Rutty, 1998). It is argued that the pursuit of knowledge and truth is naturally historical, contextual, and value laden. Thus, there is no single truth. Rather, knowledge is deemed true if it withstands practical tests of utility and reason (DiBartolo, 1998).

Phenomenology is the study of phenomena and emphasizes the appearance of things as opposed to the things themselves. In phenomenology, *understanding* is the goal of science, with the objective of recognizing the connection between one's experience, values, and perspective. It maintains that each individual's experience is unique, and there are many interpretations of reality. Inquiry begins with individuals and their experiences with phenomena. Perceptions, feelings, values, and the meanings that have come to be attached to things and events are the focus.

For social scientists, the *constructivist* approaches of the perceived view focus on understanding the actions of, and meaning to, individuals. What exists depends on what individuals perceive to exist. Knowledge is subjective and created by individuals. Thus, research methodology entails the investigation of the individual's world (Wainwright, 1997). There is an emphasis on subjectivity, multiple truths, trends and patterns, discovery, description, and understanding.

Feminism and critical social theory may also be considered to be perceived view. These philosophical schools of thought recognize the influence of gender, culture, society, and shared history as being essential components of science (Riegel et al., 1992). Critical social theorists contend that reality is dynamic and shaped by social, political, cultural, economic, ethnic, and gender values (Streubert & Carpenter, 2011). Critical social theory and feminist theories will be described in more detail in Chapter 13.

Nursing and Phenomenology/Constructivism/Historicism

Because they examine phenomena within context, phenomenology, as well as other perceived views of philosophy, are conducive to discovery and knowledge development inherent to nursing. Phenomenology is open, variable, and relativistic and based