

# A model of consensus formation for reconciling nursing's disciplinary matrix

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## Abstract

With questions raised as to whether or not nursing knowledge should be developed from extant conceptual/theoretical models or from practice-based environments, this paper utilizes Kuhn's disciplinary matrix and Laudan's model of consensus formation to explore the changing nature of the discipline's structural matrix. Kuhn's notion that a discipline's structural matrix includes symbolic generalizations, models and exemplars, and Laudan's view that a maturing discipline embraces factual, methodological, and axiological (goals and aims) knowledge, and that context and discourse are also involved in advancing a discipline is described as a means for reconciling the source of nursing knowledge. This paper posits that shared axiological goals connect both theorists and practitioners, and resolve potential conflicts as to viable sources of nursing knowledge. Through shared goals that include humanization, meaning, quality of life, caring, consciousness, transcendence, and presence, which bridge both theoretical and practice approaches, nursing's charge to contribute to the good of society is fulfilled.

*Keywords:* epistemology, nursing philosophy, nursing theory, philosophy of science, theory–practice.

## Introduction

Over time as a discipline advances and matures, the members of its scientific community can point to certain values, perspectives, objects, and areas of

knowledge development that play an important part in that discipline's unique identification. These entities provide a means of differentiation from other disciplines that nevertheless share certain commonalities. There may be overlap in terms of some content areas, knowledge bases drawn upon, and perhaps mutual goals of these the disciplines. For example, nursing and medicine might be said to share ultimate goals related to human health and draw upon some of the same knowledge bases; however, they differ in areas of values and perspective. The differences are significant enough to identify the disciplines as separate.

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As the given discipline moves forward on its path towards maturation, these important values and objects become linked in such a way that a model or pattern can be identified. This pattern in its broadest and most abstract form has, as a result of Kuhn (1970) theorizing, come to be termed a paradigm. For a particular discipline, 'a paradigm is an accepted model or pattern' (Kuhn, 1970, p. 23). Kuhn (1977) later noted that a paradigm includes 'what the members of a scientific community, and they alone share' (p. 294). Kuhn (1977) eventually broadened his notion of the meaning of a paradigm, and he replaced this term with the new nomenclature of disciplinary matrix.

Along with being a structural framework that is a place-holder for a discipline's values, objects or areas of specific interests models and patterns, Kuhn (1977) envisioned a disciplinary matrix as being broader in scope than a paradigm as he originally envisioned this. The objects in a discipline's framework are easily identified by its members. These objects include practice concepts, such as those that are associated with the construct of caring (empathy, touch, presence). Patterns arrange 'information that depicts the whole, understanding of the meaning of all the relationships at once' (Newman 1994, p. 71). Thus, the objects or concepts contained with caring can be depicted by a model, and the meaning of caring can be discerned through patterns. The term disciplinary matrix more adequately captures 'all the shared commitments of a scientific group' (Newman 1994, p. 294). Moreover, a disciplinary matrix includes all the subsets (values and objects) that a discipline isolates as 'a particularly important sort of commitment' (Newman 1994, p. 294). Since Donaldson & Crowley (1978) seminal paper attempting to define nursing's substantive structure, the issue has remained more or less a point of discussion for nurse scholars. In their recent book, Roy & Jones (2007, pp. 26–31) document the *Consensus Statement on Emerging Nursing Knowledge* that resulted from a series of discussions of nurses 'from throughout the US and other countries' (Roy & Jones, 2007, p. 26). Among the statements is the assertion that 'nursing knowledge is based on understandings and values related to the person' (p. 27). This perspective still shapes the discipline. In addition to being a 'helping process with a primary focus on inter-

personal interactions between a nurse and another individual' (Chinn & Kramer, 2008, p. 54), nursing is charged with a 'social mandate to contribute to the good of society' (Roy & Jones, 2007, p. 14). Thus, nursing can be considered a moral undertaking because it attends to the needs of human beings related to their well-being. However, nurses are often not able to fulfill the commitments of the discipline because of environmental or institutional barriers to their ability to practice well. Austin (2007) notes that increasingly 'nurses (are) experiencing their work environments as morally uninhabitable' (p. 85).

This paper explores the values and knowledge that are most likely to facilitate nursing's historically developed and conceptualized purposes of providing a good for individuals and society via the interrelationship of knowledge development and practice. Given the recent debated in the literature about what should be the appropriate basis for nursing development (i.e. practice-based or stemming from extant conceptual-theoretical models) and the worries that these two different ways of developing nursing knowledge could be divisive for the discipline, Kuhn (1970, 1977) hierarchical model and Laudan's (1984) model of consensus formation are used as a framework for describing nursing's disciplinary matrix, its accepted models and paradigms, and the subsets (values) that the discipline shares with its members. These two frameworks also provide a structure for the discipline to critically explore aspects of this recent debate with the purpose of providing clarity and of reconciling both practice-based and conceptual-theoretical model perspectives.

### **Nursing's disciplinary matrix**

A structural framework, or disciplinary matrix, is important for knowledge development in a discipline as it forms the foundation of its cognitive operations. As delineated by Kuhn (1977), the components of a discipline's structural matrix and the foundational framework for its cognitive functions include 'symbolic generalizations, models, and exemplars' (p. 297). First, the *symbolic generalizations* that are contained within a discipline's structural matrix include those concepts or facts that its members accept without

question. The symbolic generalizations are also the most readily recalled components of a discipline's structural framework. Some exemplars of facts that are readily recalled are the 'physiological and psychological responses that may serve as cues by which one can infer the range of normal variations of health' (Carper, 1978, p. 15). Nurses understand and recall these human responses when they attend to the healthcare needs of individuals, families, and communities so that the good of persons and society can be maintained, protected, and advanced. While Kuhn (1977) noted that symbolic generalizations are the most easily named objects in a discipline's structural matrix, models give the 'group its ontology or deeply held values' (p. 298). Hence, models are an important part of a discipline's structure as they represent its shared commitments, point to its ontological perspectives and point the way to the 'foundational values and beliefs of its adherents' (Dobratz & Pilkington, 2004, p. 302). If models are such a vital part of a disciplinary matrix, then its conceptual/theoretical models should be held in high regard by its members, and they should also hold a prime position in a discipline's foundational structure. Without models, such as Watson (1985) conceptual/theoretical model that depicts the science of human care, then a highly regarded value in nursing is diminished, knowledge development in the area is retarded, and human healthcare needs based on caring concepts would not be defined.

Earlier in nursing's historical development as a distinct discipline, Silva (1986) noted that conceptual/theoretical models differentiate nursing purposes and perspectives from those of medicine, and that these entities articulate the profession's values and provide direction for practice and future knowledge developments. For an applied discipline, such as nursing, while its symbolic generalizations, or readily identified objects, provide the basic materials upon which to build its structure; its extant conceptual/theoretical models weave these materials together to form the frameworks that distinguish nursing from other disciplines. Overton (1984) states that, if models or abstract conceptual systems are not accepted by a discipline, then 'they lead to incompatible forms of explanations, families of theories, and ultimately to an

incompatibility in the meaning of the empirical phenomena and the problems that scientists attempt to resolve' (p. 192). Fawcett (2000) arrived at this same conclusion noting the incongruity of research that lacked a nursing perspective, and then questioned whether or not research without a discipline focus can indeed be called nursing research.

Aligned with Silva's discussion of conceptual models (1986), Chance (1982) proposed that nursing models were the paradigms upon which to develop nursing theory and to move the discipline forward. Currently, however, the future of conceptual/theoretical models as a source of nursing knowledge development is being questioned. In a recent editorial in *Nursing Science Quarterly*, Parse (2008) describes the debate in question. It centres on the issue of whether or not nursing knowledge should be developed (solely) from practice-based environments or from extant conceptual/theoretical models. In this debate, one group of scholars argues that 'practice situations provide(d) the only source of researchable material for nurses' (p. 101), and they contend that extant frameworks are no longer relevant for inquiry. Another group of notable scholars dispute this claim maintaining that extant conceptual/theoretical models still 'provide the disciplinary knowledge from which phenomena are gleaned for inquiry' (p. 101). A dispute about the 'appropriate origin of researchable phenomena to advance nursing knowledge' (p. 101) is significant enough to require a reasoned discourse about what is the appropriate derivation of nursing knowledge and such confusion or conflict within the discipline has the potential to thwart the aims of the discipline. If, as Kuhn (1977) suggests, models are central to a discipline's cognitive operation, its foundational structure, and the configuration of its shared values, it is difficult for nursing to claim to be a maturing discipline while a lack of consensus remains among its members in respect of nursing's epistemology. According to Dobratz & Pilkington (2004), epistemology 'indicates the sources of knowledge and addresses the question: What constitutes knowledge within the worldview' (p. 302). The debate reported by Parse (2008) begs the question: does nursing inquiry stem from clinical, evidence-based driven

problems, or does it flow from the 'human-universe-health process' (Parse, 2008, p. 101) as conceptualized in nursing's extant conceptual/theoretical models? This question also points to differing ontological world views, in so far as the two groups of scholars appear to see the world of nursing through different lenses. Hence, the question remains: are the researchable phenomena that arise from practice situations more significant than inquiry that stems from conceptual/theoretical perspectives, such as, e.g. the 'conditions of the life processes of the human adaptive system' (Roy & Andrews, 1999, p. 40)? Or are both important for researchable questions? Furthermore, is nursing's disciplinary matrix or structural foundation built upon a body of symbolic generalizations that its members can readily recall? Finally, does nursing lay claim to valued subsets that all members of its discipline share? In addition to attempting to answer these questions, another aim of this discourse is to further the dialogue on the primary question: what is the source of nursing knowledge? To provide clarity, Kuhn (1977) notion of a disciplinary matrix, Laudan (1984) model of consensus formation, and the assumptions that the author derives from this discourse are presented in Table 1.

### Laudan's model of consensus formation

Kuhn's (1970, 1977) model, based upon a linear and hierarchical process in which consensus is first reached on the facts that are contained within a discipline's world view, methodologies are disputed and goals/aims are resolved. In contrast, Laudan (1984) proposed a model of scientific decision-making that interrelates rather than separates three levels of knowledge formation: factual, methodological, and axiological (goals and aims). For Laudan, a hierarchical, stepwise model such as that advocated by Kuhn is incongruent with his philosophical stance. From Kuhn's perspective, 'general and conceptual abstract systems' (Overton, 1984, p. 192), or an empirical approach only, forms the basis for knowledge construction. In contrast, Laudan adopts a 'rationalist epistemology' (Overton, p. 219) rooted in context, observation, and discourse to 'resolve conceptual as well as empirical problems' (Overton, p. 219). Thus, from Laudan's viewpoint, 'science is advanced through a problem solving approach' (Overton, p. 200) that not only uses empirics, but also examines contexts and uses reasoned consensus. Laudan notes, 'factual beliefs drastically shape our views about which sorts of methods are viable, and about which

**Table 1.** A model for consensus formation in nursing.

Kuhn's disciplinary matrix	Laudan's levels of knowledge	Nursing consensus
<b>Symbolic generalizations</b>	<b>Factual level</b>	<b>Knowledge patterns</b> Empirics, aesthetics, ethics, Personal, emancipatory
<b>Models/paradigms</b> Conceptual/theoretical Practice (Synergy) Blended (Attending Caring Team Model)	<b>Methodological level</b>	<b>Discipline inquiries</b> Totality, simultaneity Unitary transformative, Humanbecoming, Philosophical inquiry, Practice-based paradigm
<b>Exemplars</b> (Valued subsets)	<b>Axiological level</b> (goals/aims)	<b>Human processes</b> Health, caring, consciousness, Transcendence, mutual process, patterning Presence, meaning, Facilitation of humanization, Choice, quality of life, Healing in living and dying Wholeness, transformation

sorts of methods do in fact promote which sorts of aims' (p. 62). Hence, Laudan proposes that our beliefs and values drive knowledge development, and that the methodologies used by a discipline to discover the facts that drive its cognitive operations also propel its shared values. Moreover, to Laudan's way of thinking, the discourse or dialectical process in which members of a scientific community reach consensus takes place in a reasoned, constructive way.

According to Laudan, differences at the factual level are not to be viewed as evidence of fundamental differences in aims or goals, as 'two scientists share a paradigm if they subscribe to the same ontology and same axiology' (pp. 43–44). In other words, agreement or consensus at the axiological level (goals and aims) is far more important than one at the factual level, as decision-making should be dictated by a discipline's highest values and goals. Laudan notes that disputes at the axiological level 'are thought to be non-existent on the grounds that scientists are presumed to share the same goals' (p. 26). Nonetheless, disagreements do occur and when arguments at the axiological level occur, or when goals are disputed, 'they are irresolvable' (p. 26). Needless to say, this is a serious consequence as it can lead to a weakening, or indeed a splintering of a discipline's structural matrix. When different factions or groups of individuals within a discipline share different values and goals and then spin off into separate directions, as with the dispute reported by Parse (2008), issues may not be resolved; Laudan would call this a critical event. Hence, if the discourse on the source of nursing knowledge; be it practice-driven or theory-driven is not continued, or remains unresolved, there is the potential for the disciplinary matrix to be damaged. Nursing's charge to contribute to the good of the individual and society could be jeopardized if consensus about the nature of the 'the good' cannot be achieved.

### **The factual or symbolic generalizations level**

According to Laudan (1984), consensus at the factual level occurs when the members of a discipline reach agreement about the facts that they want to include within their disciplinary matrix. There is evidence in the theoretical literature that nursing has moved

towards some degree of consensus on the knowledge that structures its cognitive operations. Carper (1978) derived four patterns from an extensive 'analysis' of the 'conceptual and syntactical structure of nursing knowledge' (pp. 13–14) as identified in the literature to that point in time. For Carper, the foundational structure of nursing's disciplinary matrix includes 'empirics, the science of nursing; aesthetics, the art of nursing; the component of personal knowledge in nursing; and ethics, the component of moral knowledge in nursing' (p. 13). Carper's patterns of knowing have been critiqued for adequacy and various commentators concluded that a sociopolitical component (White, 1995), a social justice concept (Schim *et al.*, 2007), and a pattern of emancipatory knowing in which nurses 'critically examine the social, cultural, and political status quo' (Chinn & Kramer, 2008, p. 4) are additional patterns to be included. The patterns of knowing as identified by Carper as well as by Chinn & Kramer (2008) are named in Table 1, where the content of these four sources of nursing knowledge are juxtaposed both with Kuhn (1977) notion of symbolic generalizations, or a discipline's readily recalled facts; and with Laudan (1984) level of factual knowledge.

In the three decades since Carper (1978) identified empirics, personal knowledge, aesthetics and ethics, and since Chinn & Kramer (2008) added a pattern of emancipatory knowing, these epistemics (or what we believe we know) form the foundation for curriculum development and provide a structure by which to impart knowledge. While Carper cautioned that the pattern of empirics (science of nursing) was at the pre-paradigm stage, Chinn & Kramer (2008) now contend that nursing knowledge is too heavily weighted with the empirics (or science of nursing) pattern. Correspondingly, the personal, ethical, aesthetic, and emancipatory patterns are not as developed within nursing's disciplinary matrix, and reflect a 'neglect of these patterns of knowing' (Chinn & Kramer, 2008, p. 4). Silva *et al.* (1995) suggest that Carper's four patterns should be refocused from an epistemological perspective, on what we should know, to an ontological thrust that answers the question: what does our knowing mean? The call from Chinn and Kramer for the discipline to examine critically the

social, cultural, and political contexts embedded within emancipatory knowing, and then change these influences to create equal and just conditions for all, not merely for a select group of individuals, would help answer the ontological questions of what does nursing's knowing mean. It would also address how nursing can best contribute to the good of all persons including those individuals who currently find themselves to be part of the marginalized, disenfranchised, and oppressed groups of society. In other words, an ontological approach that moves a discipline beyond just knowing and recalling facts also requires that its members talk to each other in order to reach consensus on valued goals. With nursing knowledge based on 'understandings and values related to the nature of persons' (Roy & Jones, 2007, p. 27), discourse related to promoting the well-being of all persons is timely.

While it appears the discipline has a foundation for building a knowledge base from the above patterns, another set of ideas where consensus is lacking is related to what Fawcett (1984) terms nursing's 'metaparadigm'. She names human being, health, environment, and nursing as the four metaparadigm concepts. Hardy (1978) notes that 'the metaparadigm is the broadest consensus within a discipline' (p. 38); hence, how a discipline defines its metaparadigm is critical to nursing's development as a scientific discipline. In a later synthesis, Fawcett (2005) notes that nursing's metaparadigm should represent a realm of knowledge that sets it apart from other disciplines, hold all the concepts of interest to nursing, and not adhere to any one perspective. Fawcett (2005) states that the metaparadigm should be culture-free, in that, the 'concepts and propositions do not reflect the beliefs and values of any one country or culture' (p. 5). This last metaparadigm assumption was given additional support (at least in one alternative context) when Fawcett (1984) four concepts were compared from an Eastern rather than a Western philosophy.

In exploring the metaparadigm through the perspectives of Taoism and Confucianism (Koa *et al.*, 2006), Chinese-rooted meanings were found within the four metaparadigm concepts, as well as a person-environment relationship that is central to the Science of Unitary Human Beings (Rogers, 1970, 1994). In this analysis, the Eastern viewpoints of

holism, interrelatedness of the person-environment, and ongoing mutual, open processes were consistent with Roger's theoretical framework. While the exploration by Koa *et al.* (2006) supports metaparadigm cross-cultural and global perspectives, the idea that four central concepts represent nursing's broad range of philosophies is disputed. Fawcett (2005) herself notes that 'the differences of opinion about the requirement of perspective neutrality indicate that consensus about the appropriate requirements for the metaparadigm of any discipline does not yet exist within nursing' (p. 5). Therefore, with the metaparadigm representing 'a general orientation or total world view that holds the commitment and consensus of the scientists in a particular discipline' (Hardy, 1978, p. 39), this important component of nursing's structural matrix awaits resolution. Therefore, the metaparadigm is not listed in Table 1 as one of Kuhn (1977) symbolic generalizations or in Laudan (1984) level of factual knowledge.

### The methodological level

Laudan (1984) notes that the next area in which consensus occurs in a scientific discipline is its accepted methodologies or methods of inquiry. Laudan goes on to note that 'there is no single right goal for inquiry, because it is evidently legitimate to engage in inquiry for a wide variety of reasons and with a wide variety of purposes' (pp. 63–64). Nevertheless, the acquisition of a research paradigm and accumulated body of research within a particular world view is a sign that a discipline is advancing. As Parse (1997) notes, there is evidence that the different ontological underpinnings that drive the simultaneity and totality world views are both valued as axiological foundations for research inquiries. Each of these perspectives takes a philosophical stance on how a discipline's knowledge is acquired, as well as an ontological approach that 'consists of the assumptions, postulates, and principles of the framework or theory' (Barrett, 2002, pp. 52–54). Particularly, how the adherents of each paradigm view the human-universe-health process (Parse, 2000) determines the theoretical knowledge that emerges from each of these two philosophical perspectives.

The totality paradigm sees the person as a bio-psycho-social-spiritual being who can be investigated in each of his or her parts, but who is also the sum of these components. While a person is constantly interacting with a constantly changing environment, they can be separated from this influence (Barrett, 2002). In comparison, those who prescribe to the simultaneity paradigm view the person in his or her wholeness. It is impossible to know a person by separating them into parts or to see them as unconnected to the environment (Parse, 1997). Similar to the totality and the simultaneity paradigms, Overton (1984) described two rival research programmes that he deemed the mechanistic and the organismic world views. These two perspectives are based on the notion of the natures of things or individuals as *Being* or *Becoming*. According to Overton, in the *Being*, mechanistic paradigm, the basic nature of objects or events is 'ultimately stable or fixed' (p. 203), hence a reductionist point of view. In contrast, from Overton's viewpoint the *Becoming*, organismic position accepts activity and change as necessary and 'encourage practitioners to work within a holistic-analytical framework' (p. 204). In addition to the totality and simultaneity approaches to knowledge development, nursing shows evidence of reaching consensus on other perspectives.

Newman *et al.* (1991) claim that, 'knowledge development within a discipline may proceed from several philosophic and scientific perspectives (worldviews)' (p. 2); hence, they called for a unitary-transformative viewpoint. When knowledge development takes this approach, a phenomenon, such as health, is part of a larger whole, and the focus is on pattern recognition. Fawcett (1993) too added another philosophical perspective that is based on not only pattern recognition, but also one that includes human change. A growing body of published research lends support to the idea that nursing embraces multiple research paradigms and values different investigative approaches. In fact, Fawcett *et al.* (2001) note the need for 'diverse processes of inquiry' (p. 117) to discern the knowledge that is embedded within Carper (1978) patterns of knowing.

Parse's (1992) distinctive research method and the rapidly developing body of knowledge that is emerg-

ing from the humanbecoming inquiry supports a Becoming (organismic), simultaneity research paradigm. The analysis of 116 research studies by the *Boston-Based Adaptation in Nursing Research Society* (BBARNS) (Roy *et al.*, 1999) that was based on Roy Adaptation Model (RAM) theory (Roy, 1970, 1984) provides empirical evidence for the model's assumptions, structural framework, and fits with the Being, mechanistic (totality) paradigm. Not only is nursing knowledge expanding within both the simultaneity and totality paradigms, but the walls between these two different approaches to knowledge development appear to be less rigid and more flexible than earlier in nursing's history.

Roy's (1988) expansion of the adaptation model to include philosophic assumptions provides a context for the inclusion of a Becoming, simultaneity perspective. The RAM now addresses philosophic assumptions that express the inherent nature of persons to find meaning, to use creative abilities, and to relate to others and a Supreme Being (Roy & Andrews, 1999). Perrett's (2007) recent review of RAM-related qualitative research supports a growing body of work in the Becoming, simultaneity paradigm. Even though the RAM began its theoretical journey as a totality, system-focused model, three decades later it is now starting to extend nursing knowledge beyond the Being, mechanistic (totality) perspective. In addition to evolving nature of the inquiries that are developing theories from within the structural framework of the RAM, Fawcett (2006) identified other specific discipline-related methodologies.

More recently, Reed & Lawrence (2008) propose a practice-based paradigm. Knowledge development is informed by the experiences of practicing nurses, and this augments nursing's knowledge production, and facilitates the discernment of a wide range of human responses. In this practice-based paradigm inquiry, nurses 'look for patterns, make connections, posit possible explanations about their observations, test out and revise their ideas as the situation changes' (p. 427). Given the recent debate about practice-based vs. extant conceptual/theoretical models as the basis for knowledge derivation, Reed and Lawrence's practice-based paradigm is included in Table 1. This the predominant methodologies that are nursing

discipline-specific, and they are delineated within Laudan (1984) methodological level of knowledge formation.

In spite of these multiple ways of inquiry that are now used to glean nursing knowledge, the discipline is cautioned not to rely too heavily on empirics as the sole mode of knowledge development. According to Winters & Ballou (2004), philosophical and non-empirical inquiries are needed to ascertain the human experience, empower persons, and create sociopolitical change; all of which are needed to advance the good of persons and society. Pesut & Johnson (2007) called for a philosophical approach, which is based upon intellectual processes of conceptualizing, judging, and reasoning to 'understand both what is good and right and to address nursing problems that are ultimate and abstract' (p. 116). This method is used to discern and analyse problems that relate to the ontology, epistemology and ethics of nursing in an 'effort to understand what is good and right and to address nursing problems that are ultimate and abstract' (p. 116). This method of discerning nursing knowledge (philosophical inquiry) will contribute to the good of the person and society and therefore it too is depicted in Table 1.

### The axiological level

While there appears to be partial consensus at the factual level, it is not clear that this exists at the axiological level. This, for Laudan (1984), is where the most critical need for consensus and agreement within a discipline takes place. The axiological level of Laudan's model coincides with a discipline's ontology, which is the foundation of a discipline's beliefs and values. According to Laudan, disputes at the axiological level occur when the dominant goals of the community of scientists 'are at odds with the goals that actually seem to inform that community's choices and actions' (p. 55). When a conflict is centred on a discipline's goals and actions, then tensions can result that lead to a state of disorganization. For a practice discipline this is a critical problem. The recent debate over the source of nursing knowledge; be it practice, or theory driven, appears to point to the friction that can emerge from two conflicting viewpoints. To help

resolve disciplinary conflicts, Laudan identified two methods by which a cognitive goal can be evaluated critically at the axiological level. As Laudan notes, a goal is argued on the grounds 'that it is utopian or unrealizable or that it fails to accord with the values implicit in the communal practice and judgments we endorse' (p. 50). In other words, if a goal or value cannot be adopted or put into practice, then there are no actions or 'grounds for believing that it can be actualized' (Laudan, 1984, p. 51). Disagreements start to take root when a group of a discipline's members begin to view a particular goal as being too utopian in nature. Laudan's went on to note that another reason why a goal is not adopted is also due to what he termed '*semantic utopianism*'.

### Semantic and epistemic utopianism

In semantic utopianism, 'many scientists espouse values or goals that, under critical challenge, they cannot characterize in a succinct or cogent way' (Laudan, 1984, p. 52). While a goal of nursing theorists has been widespread implementation of extant conceptual-theoretical models in practice-based environments, this particular goal is not actualized and semantic utopianism may be a factor in the lack of practice applications. While only a few examples of semantic utopianism are found in the nursing literature, Jacobson (1984, 1987) used a semantic approach when she compared nursing models, and later explored user familiarity, learning, enthusiasm, and use of the same. Jacobson (1984) in depth analysis of five conceptual nursing models found that, while master's students viewed them as 'worthwhile and consistent with nursing's values' (p. 67), she also reported that, from among 35 scales of adjective pairs (i.e. concrete-abstract, worthless-valuable), the scale that showed the most variation was the easy-difficult pair. Although it was not termed as such, Tolley (1995) referenced semantic utopianism when she noted that the separate languages that are used in theory and practice compound the theory-practice gap. The different languages that are spoken by those versed in extant conceptual/theoretical models and those housed in practice-based environments continues to be problematic. Thus, with nursing students reporting

that they find conceptual/theoretical models to be difficult, and with Tolley noting that different languages separate theory and practice, semantic utopianism appears to be the underlying issue.

While few studies explore how extant conceptual/theoretical models are adopted in practice, Wimpenny (2002) reported that nurses who do implement a conceptual/theoretical framework in their practice-based environments use a surrogate or amended version. In conducting serial interviews with nurses who were taught from conceptual model curricula, Wimpenny found conceptual/theoretical models to be of limited value in practice environments, and nurses noted that the terminology used in conceptual/theoretical frameworks was confusing to them. Another problem that points to semantic utopianism and to lack of consensus on the implementation of conceptual/theoretical models in practice settings is reported by Keerfoot *et al.* (2006) who note that the practice arena includes nurses from many educational programmes 'that do or do not teach nursing theory or conceptual models to guide practice' (p. 20). Similarly, Chinn (2001) wrote that most baccalaureate programmes are not designing curricula based on nursing's theoretical perspective, and that master's programmes are decreasing their content on conceptual/theoretical frameworks. Consequently, with many nurses unfamiliar with nursing's conceptual/theoretical model terminology, nurses in practice-based environments are speaking a common language. In place of conceptual/theoretical model semantics, practicing nurses resort to a universal language that is framed by the nursing process and nursing diagnosis.

Laudan (1984) went on to note that the second way cognitive goals can be evaluated critically is through *epistemic utopianism*. When a goal is evaluated by way of epistemic utopianism, it cannot be adopted or put into practice, as there are no criteria by which to determine whether or not the theory is true. Under this set of conditions, the advocates of a particular goal are unable to specify its underlying truth and there is no body of data to substantiate its value. Laudan noted that in epistemic utopianism 'there are no grounds for believing that it can be actualized' (p. 51). Unlike Brooten *et al.* (1988) who validated the

role of the clinical nurse specialist in improving outcomes in low-birth-weight infants, in the 30 years since extant conceptual/theoretical models were structured into curricula designs, academicians have failed to produce research that links conceptual/theoretical models to improved student learning or to better patient care outcomes.

In one of the few studies that explored the relationship of conceptual frameworks to students' learning outcomes, DeBack (1981) found no difference in students' abilities to perform nursing diagnoses from among four different extant theoretical/conceptual models (mixed, interaction, developmental, systems). In spite of students being taught from a conceptual/theoretical perspective, other nursing frameworks are now emerging to guide practice. An example of a practice paradigm and a blended conceptual-theoretical-praxis model are listed under Kuhn (1977) components of a disciplinary matrix in Table 1 and described in the narrative that follows.

The Synergy model was developed by the American Association of Critical Care Nurses (AACN Certification Corporation, 1995) to define nurse competencies along a health/illness continuum in critical care settings. In addition to patient/family needs, this model includes the practice-based environment and addresses staffing, leadership, and other organizational standards. In this practice model, Synergy results when nurse competencies, patients/families needs, and practice-based standards are aligned. When the Synergy model was implemented in a large, tertiary healthcare system, Keerfoot *et al.* (2006) reported that 'nurse, patient, and family satisfaction greatly improved' (p. 25). Along with greater satisfaction, Keerfoot *et al.* note that nurses and other healthcare professionals could easily comprehend the Synergy model. With reports of this practice paradigm meeting institutional goals, and with this model being 'readily understood by nurses' (p. 25), the Synergy model, even though it is in the early stages of its development, appears to lack both semantic and epistemic utopianism for nurses who practice in US healthcare environments. An exemplar of a blended conceptual-theoretical-praxis model that bridges both conceptual/theoretical and practice-based paradigms is presented in what follows.

### Shared goals and aims (axiological)

Laudan (1984) stressed the mutual dependence of all three levels of a discipline's structure (factual, methodological, and axiological) in consensus formation. Laudan's position is that a discipline's matrix changes and evolves over time within all three levels of its structure and is helpful in discerning how a discipline matures. As noted by Laudan, 'theories change, methods change, and central cognitive values change' (p. 64), and 'progress makes sense only if it is progress toward the satisfaction of a goal or aim' (p. 64). Laudan goes on to heed that 'progress is always "progress" relative to some set of aims' (p. 66). As nursing matures as a discipline, with much effort on the part of both its academic and its practice arms, what are its shared aims? Now that the discipline supports multiple inquiries and can lay claim to a substantial body of theoretical knowledge what are its central values? Laudan's general answers in relation to a discipline's progress can be applied to nursing. Laudan spoke about *archetype reconciliation*, which is a way that a discipline's goals can be evaluated through the unification of theory and practice. Through archetype reconciliation, components of conceptual/theoretical models blend together and are adapted to practice-based environments. Thus, these blended conceptual-theoretical-praxis models are able to bridge both world views, resolve conflicts that may arise, and achieve an important discipline goal of consensus building through reasoned discourse about shared goals.

Watson & Foster (2003) integrated the 10 carative factors from Watson's Caring Theory (1985) in order to implement a theory-driven conceptual model with practice-driven evidence to provide pain management in a pediatric care setting. The Attending Nurse Caring Model (ANCM) that is now implemented at Children's Hospital in Denver blends concepts from both caring theory and evidence-based pain management protocols. As noted by Watson and Foster, the caring science of the ANCM framework is 'informed by values, theory and knowledgeable caring practices' (p. 364), and the practice arm of pain management includes 'not only the empirical and theoretical literature, but also clinical expertise and feedback from

patients and families' (p. 364). Hence, Watson and Foster's ability to blend both a conceptual/theoretical model with a practice-based environment exemplifies archetype reconciliation. Both perspectives share common goals that are focused on 'intentionality to use knowledge and evidence, as well as to help increase autonomy, enhance interdisciplinary teamwork, and reduce suffering in children' (p. 364). In order to include disciplines other than nursing, Watson (2006) renamed the ANCM as the Caring Attending Team Model. Watson's renamed model 'is informed and guided by the ethics of theory and caring – and caring relationships – combined with best evidence' (p. 92). The use of this blended model is now expanding into other practice-based environments.

Along with breaking down the walls that separate nursing models and practice environments, the Caring Attending Team Model affirms the changing structure of nursing's disciplinary matrix at the methodological as well as the axiological level. While Barrett (2002) supports the totality paradigm as the perspective upon which to build evidence-based practice in nursing, and while she noted that a 'problem-oriented focus on diagnosis, interventions, and outcomes' (p. 55) is not compatible with a simultaneity paradigm, the Attending Caring Team Model with its combination of a simultaneity. Becoming world view, as well as its totality, evidence-based foundation bridges both perspectives and combines both worlds. The caring ethics and theory model not only bridges the theory–practice gulf, but also reaches nursing's arm outward to embrace other disciplines.

Another exemplar of a theory–practice linkage is Wang's (2008) recent report of how she used *human-becoming* theory in her nurse practitioner practice. In working with older adults in home-care settings, along with her use of an evidence-based, medical approach, Wang integrated concepts from humanbecoming theory that relate to true presence and meaning. Before nurse–patient encounters, Wang meditated and centred herself, and also asked questions that addressed how patients discern health meanings, describe patterns of becoming from a both a person's and family's viewpoints, and attend to changes in humanbecoming. Wang also noted that 'medical science is still useful and effective when the patient

asks for diagnosis and treatment, but it cannot be the guide for advanced nursing practice' (p. 221). Reed (2006) provided support to Wang's work when she posited that theory-guided practice takes place in a dialogue between the giver of care (nurse) and the recipient of care (patient). This implementation of an extant conceptual/theoretical model in a practice setting also supports Chinn & Kramer (2008) notion of nursing as an interactive, helping process.

As noted by the above exemplars of extant conceptual/theoretical models in practice settings, the application of the human-universe-health process gives nursing a distinct focus that sets it apart from other disciplines. In the case of the Attending Caring Team Model, nursing's perspective reaches across other disciplines. While there are many other examples of nursing's theoretical frameworks being implemented on practice units, Bournes (2006) synthesized humanbecoming theory as a guide to nursing practice on a combined orthopedic surgical and rheumatoid medical unit. Bournes reported that implementing humanbecoming theory, with its tenets of human meaning and personal knowledge, resulted in increased nurse-patient satisfaction. These exemplars of theory-guided, practice embody Reed (2006) call to use the discipline's conceptual/theoretical models as practice-based guides.

Three decades ago Donaldson & Crowley (1978) argued that structural conceptualizations should not be accepted as givens and must be 'clarified or altered to make them consistent with reality' (p. 120). Laudan (1984) informed us that the various components of a 'world view are individually negotiable and replaceable in a piecemeal fashion' (p. 73). In other words, parts of a paradigm or a discipline's world view can be revised in what Laudan termed 'paradigm articulation' (p. 74). The exemplars demonstrate how, by way of paradigm articulation, knowledge from practice-based environments can merge with conceptual/theoretical models to fit within the practice world wherein nurses find themselves.

For this reason, along with debating the issues, another positive approach is to focus on the discipline's shared goals and values. The common goals that are shared by both theorists and practitioners alike are the themes that stem from extant nursing

conceptual/theoretical models. Thirty years ago the insightful analysis of Donaldson & Crowley (1978) concluded that nursing 'will be continually shaped according to significant themes' (p. 120). A decade after Donaldson and Crowley's paper, Sarter (1988) analysed four conceptual/theoretical models and found shared themes that included process, evolution of consciousness, self-transcendence, harmony, pattern, and holism. Now 20 years after Sarter's work, theorists still engage in discourse as to what nursing's goals should be, and what distinguishes nursing from other disciplines.

Newman (2003) posited that nursing is breaking down the walls that exist between theory and practice, and she cautioned against our placing theory and practice into separate compartments. In her review of the theoretical and empirical literature, Newman found support for the 'synthesis of caring and health' (p. 243) and themes of 'wholeness, patterns, mutual process, consciousness, transcendence, and transformation' (p. 243). Newman concluded that these themes transcend all conceptual/theoretical models and all practice-based environments. More recently, Newman *et al.* (2008) posited that the discipline's core concepts are themes of health, caring, consciousness, mutual process, patterning, presence, and meaning, and that these themes transcend research paradigms and nursing world views; they unify the discipline.

Another group of scholars came to this same conclusion. In their recent review, Willis *et al.* (2008) conclude that the central unifying focus for the discipline is 'facilitation of humanization, meaning, choice, quality of life, and healing in living and dying' (pp. E32-33). These themes, explicit goals, and core concepts are the subsets that nursing's members hold in high esteem. If the discipline shares and values these themes that flow from the 'human-universe-health' process (Parse, 2008, p. 101), then its argument about the source of nursing knowledge (practice-based or extant frameworks) can be resolved through continued discourse and ongoing dialogue. These themes also signify nursing's existence as an independent discipline, transcend the totality, simultaneity, and other research paradigms, and flow from its extant theoretical/conceptual models into its practice-based environments. With nurses in practice-based environ-

ments concerned with patients' quality of life, healing in living and dying, and the other themes that are named in the above reviews, extant conceptual/theoretical models should remain a vital focus of inquiry, and they should continue to hold a critical position in nursing's structural matrix. As reported in the theoretical literature, the discipline's most valued exemplars, or subsets of human processes, and axiological goals/aims are listed in Table 1.

The above exemplars show that academically based, nursing scholars are committed to defining the discipline and to exploring its unique knowledge base. At the same time, nurses in practice-based environments are hard at work to produce the evidence that is changing nursing practice for the benefit of the good of individuals and society. Importantly, Laudan (1984) tells us that the greatest challenge to a scientific community is 'basic changes of world view which arise from competition between rival paradigms' (p. 79). Most troubling, Laudan noted that disputes end when external factors, such as, 'the manipulation of the levers of power and reward within the institutional structure of the community' (p. 73) triumph over weaker, less powerful factions. Again, Laudan cautioned that those who manipulate power and reward might not have the right answer as to which paradigm is superior. The question that he implores us to ask is: according to which standards and whose goals (p. 72)? Hence, rather than dividing into different factions the discipline should continue to debate its sources of nursing knowledge and focus on its shared themes and valued subsets.

If we can agree on nursing's shared and valued goals of wholeness, transformation (Newman, 2003), health, caring, consciousness, transcendence, mutual process, patterning, presence and meaning (Newman *et al.*, 2008), and facilitation of humanization, meaning, choice, quality of life, and healing in living and dying (Willis *et al.*, 2008), then nurses can focus on promoting the good of individuals and society. These shared themes unite those who promote practice-based inquiry, those who advocate extant conceptual/theoretical models, and empower those nurses who practice in less than optimal workplace environments to focus on helping, interpersonal interactions in human life transitions.

Now that the discipline appears to accept multiple inquires or methods by which to derive its knowledge, reasoned discourse or focused dialogue can also be used to reach agreement on sources of nursing knowledge; be they practice-based or be they extant conceptual/theoretically driven. The complex work settings wherein nurses find themselves, the vast number of human responses that call for helping, interpersonal nursing interactions, and the myriad of human life transitions that call for nursing interventions, all open the door to multiple epistemological perspectives as sources of nursing knowledge.

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