

The Knowledge Crisis of Nursing: A warping between ideological methodology, classical phenomenology and reflexive practice

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Abstract

In Norway and Denmark, the public healthcare is comprehensive, and nurses constitute a large and important part of the healthcare system. Nursing is at the same time a practical and a theoretical discipline. The academic development of knowledge in nursing is dominated by an interpretation of human science that uses health- or natural science methods. In this article, we engage in a theoretical examination of knowledge within the context of nursing academia in Denmark and Norway, pointing out structural similarities between the developments of knowledge, based on two

prominent positions. The theoretical framework is built up from the tradition of praxeology and critical theory and used as the pervasive analytical lens to undertake a sociological analysis of knowledge. As a technique to the interpretation of the two positions, we perform a minor historization and an argument analysis of text samples from the agents. The results indicate that the dominating clinical nursing science in Denmark and Norway has been a success when it comes to capacity building at hospitals within an academic research tradition similar to the dominating tradition of the medical profession. However, this research primarily contributes with techniques and standard models, as it focuses on application-oriented research and is eager to produce suggestions *in* and *for* practice. This is important research, but insufficient when it comes to producing theories *on* and *about* nursing practice. We argue that this lopsided academic development causes a crisis in knowledge, because it fails to provide nursing with a proper theoretical scientific base. Such a base is prerequisite for nursing to develop as a subject in the academic university logic and is essential to enable professional reflexivity and social scientific knowledge on nursing care in order to meet the contemporary demands.

Keywords: classic phenomenology, knowledge crisis, ideological methodology, Kirkevold, Martinsen, praxeology, reflexive practice, nursing theory.

Introduction

A relevant and important focus on a global level is given to the difficulties in recruitment and retention of nurses in practice (Williamson, Burog & Taylor, 2022). Pressure from a growing elderly population and new treatment options make cost control urgent, and at the same time, the youth cohorts are getting smaller in the Global North (Alvsåker, 2023). The reasons for the lack of nurses have different and complex origins in various parts of the world. Nevertheless, achieving health for all will depend on sufficient numbers of well-trained and educated, regulated and well-supported nurses, who receive pay and recognition commensurate with the services and quality of care that they provide (WHO, 2020). Research shows that the consequences of not recruiting and retaining enough nurses lead to severe lacks in nursing (Ryder et al, 2022) and missed nursing care (Kalisch & Xie, 2014), which results in poorer care and treatment of patients (Aiken et al, 2016). The importance of the number and presence of nurses in clinical care, as well as the need for a good working environment and possibilities of developing competencies, seem well established in the literature, which deals with what is currently referred to as the Nursing crisis in the sense of a lack of recruitment into the profession. However, the specific contents of the nurses' knowledge base that will help them cope with the increasing complexity in health systems and patient care seems to hold a crisis on another level. Studies on knowledge and education in nursing seems more concerned with skills for standard interventions in practice. However, we find in the literature an agreement on a general development in health care that is more complex (Nygård, 2022; Sortvik, 2011; Sortvik, Boge, Callewaert & Petersen 2016). In the Danish curriculum for nurse education for example, clinical leadership and decision making in practice has been given attention (Petersen, 2021), and in clinical practice, different management and governance regimes have a significant influence on the organization of nursing care (Frederiksen, 2016, 2019). However, the development of knowledge in education and research is very application-orientated by e.g. skills-learning, evidence-based models of action, or case studies; knowledge adheres to a classical academic understanding without delving into further theoretical considerations. One might argue that classic academic theory is also an expression of indifferent distance to a profession such as nursing. Perhaps as a result of these apparently antagonistic positions, some educational research in recent years focuses on overcoming

a “gap” between theory and practice (Salifu et al, 2018, Akram, Mohamad & Akram 2018). However, the existence of such a gap is a matter of a scientific approach (Greenway, Butt & Walthall, 2019). In our case, we do not see this as a gap to overcome, as we in accordance with a Bourdieuan understanding (Bourdieu, 1973, 1977, 1990; Bourdieu, Chamboredon & Passeron, 1991) see theory and practice as two different logics, each existing in its own right. We claim that a knowledge crisis occurs because of the one-sided focus on knowledge produced in and for practice. This does not provide nurses with appropriate knowledge to address the increasing need for insight, driven by societal development. Increasing complexity in care situations requires knowledge and reflexive abilities to meet the demands, which among other things, are grounded in traditional theoretical knowledge.

In Denmark, the base of the establishment of nursing as an academic discipline is dominated by the humanities, with phenomenology as a predominant epistemological position. This tradition has gained recognition in remodeled expressions with some structural similarity in both Denmark and Norway. Social sciences traditions such as praxeology and critical theory are also found in nursing research, although relatively speaking it is minor positions having difficulty raising funding (Petersen et al, 2023). Also health- and natural science specific traditions, e.g. bio-statistics or epidemiology of cause, are present in nursing research which is mainly carried out at the university hospitals.

In this article, we argue that there is a warped development of knowledge on nursing, where theory development in nursing science is mixed up with the development of practical models of a theory in practice. From our point of view this leads to a confusion, which is significant because it implies a knowledge crisis in the field of nursing that has an inherent structural connection to the overall nursing (recruitment) crisis. We construct the empirical basis for this argument by comparing the two major positions in Danish contemporary nursing theory, which both are from Norway, represented by professor emerita Kari Martinsen (KM) and professor Marit Kirkevold (MK), and further discuss the implications of our findings within the theoretical framework presented in this article. The theoretical framework is that of Bourdieuan praxeology, supplemented with relevant sources of inspiration for Bourdieu’s theory, with the intention of carrying out a sociologic analysis of knowledge.

The aim of the article is to increase the awareness of how knowledge and science have an important role to play in the development of nursing care in theory and practice, though not connected, and following very different logics. The contribution is thereby to nuance an often very simplified view on the relationship between theory and practice in nursing and challenge the notion that a viable science of nursing is possible to develop based on clinical research alone. If we were to compare with the medical profession, no one would ever insist that clinical medicine alone suffices, as development of basic science from a range of scientific disciplines and basic trials as references for clinical studies is of important value for the profession. Yet, nurses seem to stress only clinical research.

Methodology

In this article, we perform a theoretical construction on a minor example of empirical material in order to investigate structural similarities in the development of academic approaches to nursing in Denmark. First, we build up the theoretical framework from Pierre Bourdieu’ praxeology, supplemented by some classical positions within sociology and philosophy, and thus develop a lens that is pervasive to both the theoretical and methodological understanding in the article. We include Aristotle and Durkheim from whom Bourdieu essentially derived his understanding of the relationship between theory and practice, and in addition, we include Jürgen Habermas’ division of science types

as a supplement from critical theory, in continuation of the Marxist tradition. According to Callewaert (1998), Bourdieu's position can be understood as based on three major classical positions from continental theory: Durkheim, Marx and Weber, although it may be unclear whether Bourdieu understands the latter as his own position. Secondly, we introduce the classical argumentation model from Toulmin, which we later use as a technique for the interpretation and construction of our two chosen nursing theory positions. Thirdly, we introduce the context of academic nursing theory in Denmark based on short historization of the two positions according to the methodology in the chosen framework. After this, we proceed as the fourth part of our investigation to the text analysis.

Theoretical framework

The traditional understanding of knowledge is derived from Aristotle's *Nicomachean Ethics* (2019), and later in the modern interpretation by the father of academic pedagogy and sociology, Émile Durkheim (2014), who argued that pedagogy as a subject should have a place as an academic discipline at the university and not just be a subject in practice. Durkheim described three levels of knowledge that he believed pedagogy as an academic subject contained (Durkheim, 2014). In figure 1 we develop the three levels in a didactic model. Durkheim points out that you cannot develop a practical theory without starting from a scientific theory, i.e. you cannot know how something should be, and develop technologies for this, if you have not first uncovered, what it is like. He follows the division from the *Nicomachean ethics* between art, practical theory and scientific theory. We choose and process the theory as it increases our attention to the different logics we have initially argued are present within nursing's knowledge development.

Art:	Theory/reflection-for-practice: what is here and now/the present; prudence (wisdom), phronesis (targeted practical knowledge)
Practical theory:	Theory-in-practice: what should be, as coming/the future; techne ; (cf. technologies)
Scientific theory (to keep order):	Theory-on-practice: the thing that is, the thing that was/structure and genesis: episteme : to construct theoretical knowledge about something

Figure 1: A didactic model for a subject at university developed from Durkheim's theory by the authors

Praxeology from Pierre Bourdieu

Praxeology is a term used by the French sociologist Pierre Bourdieu to describe knowledge of practice alternative to, on one hand, the objectivistic tradition (including e.g. positivism, critical rationalism and structuralism) and, on the other hand, the subjectivist tradition (including e.g. phenomenology, ethnomethodology and social constructivism) (Bourdieu, 1973). Within the praxeology tradition, knowledge is not derived from a philosophical ontology of human being who exists in the world together with others through his body, i.e. from a philosophical analysis. Rather, the praxeological researcher constructs the theory based on the dual nature of human social practice: As a subjective creation and as an objective entity at the same time (Bourdieu, 1977, 1990).

On the analytical meta level, this necessitates the exercise of criticism of subjective theory and meta-theory as well as objective theory and meta-theory, which both claims one-sided perspectives about practice, although their origins are in practice. The challenge is that science about practice is limited to work as a reference, to which the reflexive discourse for the practitioner can refer, and not as a reference to develop scientific theory on practice. However, the dual nature of practice

(subjective-objective) enables a science that re-fulfills both the subjective and the objective side of human action. The claim in this article is that a scientific development in nursing requires both forms of science.

According to Bourdieu (2011), praxeology can help us nuance these approaches. He claims that researchers must first be empirical-analytical, i.e. objectifying analytical, second understanding/phenomenological, and as the third, bring both approaches together in a practical and an emancipatory perspective.

The praxeologic tradition is founded on French historical epistemology, that works with a retrospective and descriptive approach. In this sense, the theory from Bourdieu becomes the method to produce science through historical rupture thinking, reflexivity, and structural re-construction, to explain the social practices studied (Bourdieu, Chamboredon & Passeron, 1991). An important approach when recognizing connections is to understand the structural similarities that arise across contexts and history - not because what happens is the same - but because there are variable structural connections or homologies that may be constructed theoretically and analytically. A homology is a dialectic between position and representation (Broady, 2000). For example, for positions/agents who appear in both Denmark and Norway, the context is not the same, but there is a homology between the way the agents seek to act in the different contexts in order to maintain or strengthen their position. When the theory can be understood as the method, then the way in which the specific data processing is carried out is by tools or techniques that are chosen or developed by the researcher contextually.

In praxeology, the aim is to reveal the knowledgeable practitioner's autonomous invention of his or her practice (e.g. care and care practices, the nurse's practices) that is guided by both external and internal dispositions. The concern is not to develop prescriptions and regulations for best practices that are good nursing care, for how it is best and should be, but to study what the practitioner does in a social practice. From here on, the intension is to develop scientific theory about the social practice named nursing in everyday language. Praxeology intends to explain nursing and care practices by developing a scientific theory of the social structures behind the immediate perception of these practices. In other words, in the case of nursing, praxeology aims to develop a theory that can *explain* the social practices of nursing and care. This theory can work as a basis for further development of nursing and care in other contexts, such as nursing practice, where clinical nurses are the hands-on experts, but in practice expertise belong to a knowledge realm different from that of academic or scientific knowledge. This way of explaining theory development in nursing science is a didactic model to further reflection on the organization of educational and research activities within the scientific discipline we call nursing science. The model is originally developed by Durkheim (2014).

Habermas' division of the sciences

To gain a deeper understanding of the different levels of science, our praxeological point of view is supplemented by the theories of German philosopher and sociologist Jürgen Habermas (1990). In his work, Habermas has made a distinction between natural sciences and cultural sciences (Petersen & Callewaert, 2013). In this article, we define natural sciences as mainly characterized by technical and instrumental interest seeking casual explanations, using empirical-analytical methods (Petersen et al, 2023).

The cultural sciences consist of the social and historical sciences i.e. the individual unique transaction/event and its premises. Within the sociological or general social science Habermas further distinguishes between 1) normative-analytical, and 2) empirical-analytical sciences. In addition, Habermas describes a third type of science, namely those focused on the emancipatory reflection: These are the critical sciences that analyse the power relations in society.

The normative-analytical sciences work empirically, but with normative concepts. This means that a normative-analytical science is concerned with describing the social entity or field based on: How it is, when it is, and how it should be (best practice). The empirical-analytical sciences operate on one hand with intentional action (i.e. understanding), on the other hand with stimulated behavior (behaviourism) and with functions. In elaborating on the empirical-analytical sciences, and the meaning-giving role in them, Habermas finds that they exist in three forms:

- 1) Phenomenological sciences or science of experience
- 2) Linguistic or understanding science
- 3) Hermeneutics or interpretive sciences (Ibid, 2023)

We find this distinction helpful in understanding and discussing the differences of the two chosen positions in our sample from nursing theory.

Argumentation method

One way of describing simple academic argumentation, we find in the model from Toulmin et al. (1979). In our analysis, we found this model helpful. By breaking down the argument into smaller parts, we use this model as a technique to interpret the text samples. A certain claim is the primary assertion in an argument, leading from a ground of evidence that supports the claim. The claim needs an underlying warrant from beliefs or logic assumption to make the claim valid in academic argumentation. Furthermore, the warrant needs backing from theory or research, and in addition, data and cases will work as qualifiers emphasizing the argument. In Toulmin's model, rebuttal is also included, which is a rhetorical device where weaknesses in one's own argument are addressed before other question them.

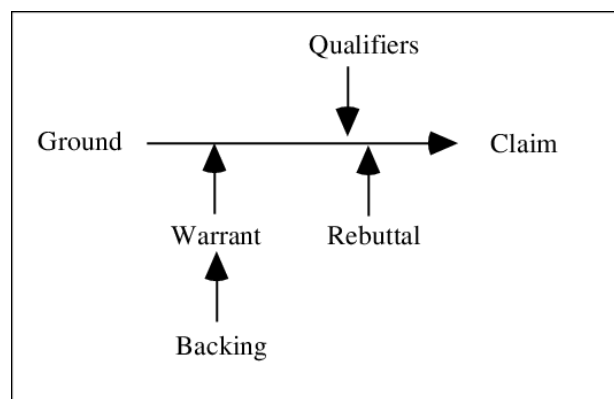


Figure 2: Toulmin's argumentation model¹

Empirical text sample

We have delimited the empirical sample to two examples: The positions of two professors in nursing; Kari Martinsen (KM) and Marit Kirkevold (MK), both Norwegians who both have had great impact on master program in nursing at the University of Aarhus, Denmark.

The main sample consists of two articles from the relatively recently published Danish textbook *Sygeplejens superhelte. Sygeplejeteoretikere der styrker klinisk praksis [The superheroes of nursing - Nursing theorists who strengthen clinical practice]* (Martinsen, Dreyer and Norlyk (ed.), 2021). In this

¹ Source: www.researchgate.net/figure/Toulmins-argumentation-model_fig2_2311739, accessed 4th of December 2023

textbook professor KM contributes with the chapter “My journey with Løgstrup in philosophy and nursing” [“Min rejse med Løgstrup – i filosofi og sygepleje”]. Professor MK has written a chapter named “The eternal relevance of nursing theory” [Sygeplejeteoriens evige aktualitet]. The editors of the book are themselves nursing researchers, who, at the time of publication, were employed with the master program in nursing education at Aarhus University. Also, they all work within the phenomenological hermeneutic research tradition and framework of understanding.

In order to perform the analytical construction in this article the samples from Danish textbooks are translated by the authors.

KM is professor emerita at VID University College in Bergen, Norway, and the University of Tromsø, department Harstad, Norway. MK is head of the Department of Nursing and Health Promotion at Oslo Metropolitan University, a position to which she came from the master education of Nurses at the University of Oslo. Both professors hold positions within nursing education and research in Norway, but their trajectory to that tradition – their cultural capital - lies within the medical faculty and tradition (MK) and within the tradition of the humanities and the social sciences (KM), respectively. Both have had great impact on nursing as an academic discipline in Denmark over more than 20-30 years. They both took part in the first efforts to establish a Nursing Science Program in Denmark based on their academic work and their academic and scientific production, and in connection with their ways of defining nursing research as academic work through their own work and that of their students (Petersen, 2021, 2023, Petersen et al, 2023).

It is not our intention to give an exhaustive description of the contributions of KM and MK, but to stipulate a minor part of the two agents’ habitus that enables an analysis of structural similarities and differences in the development of knowledge related to the positions. We find this delimited sample suitable for such a comparison.

The contextual historicization of academic nursing in Denmark

In the late 1980’s, the Medical Research Council in Denmark decided to fund a project located at Denmark’s University College of Nursing at Aarhus University. The funding was at the project’s disposal for a period of five years. Among other things, funding was provided for employment of two senior lecturers, two lecturers and several PhD scholars. In Denmark, then and now, a bachelor in nursing is not a university degree. Nevertheless, the task of this specific project was to establish a master's degree in nursing with a 2, 3 or 4 year duration as a superstructure on the medium-long advanced practical training that all nurses have and so to strengthen the previous further education of one-year supplementary training from Denmark's Nursing College/University college of Nursing. In addition, the project was to establish a PhD program with a first group of eight PhD students (Petersen, 1999).

To build up the monodisciplinary master's degree in nursing science, the Norwegian nurse and philosopher KM was invited to apply for one of the two lecturer positions. KM got the position for a period of five years (1990-1995). The other associate professor employed by the Research Council was cultural sociologist Pia Ramhøj, from the University of Copenhagen and the Danish Institute for Health Care and Nursing Research (DISS) (Michaelsen et al., 2023).

The education was an experiment, and no one knew exactly what it would become. The university wagered on a monodisciplinary master's degree in nursing (cand. cur.) and envisioned a PhD cand. cur. Later, they tried with a Dr. Cur. attached to Denmark's Nursing College/University college at Aarhus University and/or at the Faculty of Health Sciences, Aarhus University. However, in Denmark, a university *degree* must be achieved at an established university, and at Denmark’s Nursing School of advanced studies, it was never possible to take academic degrees at any level, since the institutional organization never got its own autonomy within this institutional order. Consequently, establishing the master's program during the trial period was not quite as simple as the professional

ideology prescribes. The program was started regardless, and the first PhD students were admitted. All the PhD-students were transferred to the faculty of Health Science at Aarhus University (Ibid, 2023). KM returned to Norway and continued her work as a professor at the University of Tromsø, along with running her nurse education programs in Bergen.

In 2001, the Nursing master program were gathered at the Faculty of Health Sciences after DISS were closed, later also with a department in Copenhagen. In 2023, the latter department was transferred to Roskilde University, Department of People and Technology, due to a political desire to relocate education from the larger cities. The new location is at a department that has a profile within the humanities and social sciences. The relocation to this milieu, then, might look like a partial movement back towards the starting point. However, it has now also become possible to study clinical nursing at master level at The University of Southern Denmark (SDU), and master in healthcare at SDU, Aarhus and Copenhagen University. All these programmes are placed at the Faculty of Health at the respective institutions (Petersen, 2023, Petersen et al, 2023).

In 2002, Aarhus University appointed the Norwegian nursing researcher, MK, in a position as a 20 % professor II to continue the work and develop the education and research environment with a stronger clinical focus. MK held this position until 2013 along with her full time employment as a professor at the University of Oslo. Today, she is a professor and Head of department at Oslo Metropolitan University – a former University College, which in 2018 became a university. The environment at the program in Denmark developed in the same way as a medical organization with clinical professorships and lectureships attached to the program, predominantly with employment at the university hospitals, where main part of the research took place. MK, together with a group of the next generation of nursing researchers, influenced the nursing program based on the belief that: “The research in nursing should be close to practice and clinically orientated, and that task is best based on an understanding of nursing science as a critical-normative science” (Vesterdal & Bagh, 2002).

Summarizing the problem

In Denmark, nursing as an academic discipline is a young and rather weakly rooted science. In the classical meaning of a scientific discipline, it has been established during the last 35 years. In this period, the dominant scientific paradigm seems to have changed from a reinterpretation of the phenomenological position or ‘science of experience’ into developing methodological techniques that follow the health and natural science interpretation or a normative analytical approach. Our analysis of the historical context indicates that the central development of a knowledge base of nursing was constituted with the ambition to establish nursing as a scientific subject, based on its own theory development about nursing. KM, Ramhøj, and others in the trial period at the School of Advanced Nursing in Aarhus were agents for this ambition. However, the aim changed due to relocation of the education from the School of Advanced Nursing to the Faculty of Health at the university. This was on one hand supported by a political focus on economy, and on the other by a powerful professional focus on clinical practice within the profession. As a consequence, research and theory in nursing has for the last 20 years been dominated by a model where a combination of phenomenology and hermeneutics is used as a method for clinical investigation alongside traditional studies, and research is typically located at the Faculty of Health. This entails a great deal of research, which may be classified as practical theory (cf. Dürkheim, 2014) or technologies of a normative-analytical nature (Habermas), while the production of scientific theories based on knowledge of nursing are sparse, if existing at all.

Analytical construction of positions

In the analysis of the selected texts, we describe some characteristics of the two positions and incorporate historization in order to construct parts of the agents' positions of knowledge.

The position of Kari Martinsen (KM) – a classic philosopher and historian

KM is a philosopher and a historian, yet she is first and foremost a thinker, and her thinking is devoted to ontological topics, such as: "There are other things and more in life than what has been created by mankind", with reference to her book *From Marx to Løgstrup* (Martinsen, 1993).

KM developed her philosophy during the years from the 1980's to the time academic nursing education was established in Denmark. The early basis was a critical Marxist-inspired position, which KM replaces to a philosophy of care based on the Danish philosopher and theologian K.E. Løgstrup (1905-1981). The warrant to where KM is leaning is predominantly developed from theoretical/philosophical works, and orientated of examples from nursing, making it possible to think of nursing practice. KM claims that the objectivist human-social and natural science foundations must be rejected as the basic theory construction and thinking of the nursing profession, but not as an academic subject. Consequently, she sets out to develop theory-for-nursing and conduct empirical historical research (Petersen, 1993). KM's works contain nursing as qualifiers for a profession and as a practice, developed from historical empirical research to metaphysical considerations and phenomenological descriptions of the essence and practice of nursing.

In the text chosen for this article, KM claims that she works with philosophy as a form of thinking and points out that her pivotal focus has been on ontologically questioning whether something beyond human creation exists in life (Martinsen 2021, p. 31). KM first met the writings of Løgstrup while she wrote *From Marx to Løgstrup* (Martinsen, 1993). She claims that the question of ontology in Løgstrup's philosophy is related to his view on genesis. The genesis has given us something, we accept, which leads KM to ethics, with an example given from a narrative about the caring situation. In this example, she discusses the situation with texts from Løgstrup, and it is possible to read this as an example of how KM works with philosophy.

KM is engaged in the art of nursing (prudence), and she wants to describe nursing as practical theories and to do empirical research on the history of Nursing. KM is a nurse, but as an academic she is deeply rooted in the classic university disciplines within the humanities (philosophy) and theology (philosophical theology).

KM works with nursing close to lived life, and at the same time, her approach is socially critical. The social cultural space is the epic center of nature and society. When claiming "With my senses embedded in a larger context, in the large space of nature and the university... the life lived is given" (Martinsen, 2021 p. 32), KM leans towards an argument where the ground and warrants are very close and related to Løgstrup's metaphysical explanations.

For KM, Løgstrup's philosophy was a turning point away from the classical philosophical tradition concerned with abstract and constructed concepts. Løgstrup's metaphysics expanded the term experience into more than what man himself has created and received. It became connected to the pre-consciousness, the pre-cultural, and what phenomenology can reveal in studying nursing (Martinsen, 2021, p.33).

The notion of pre-cultural determination implies that man has to care for life, and be responsible in the way we behave towards one another. We depend on one another in a holistic understanding of life and the universe. KM writes: "Philosophy is a thinking and an approach; philosophy is the discipline of asking what can open up the mystery of life. What is not yet told, or thought, it goes to the border of language, where words become silent" (Martinsen 2021, p. 35). By this claim she underscores that the ground for this way of understanding nursing is to wonder how things are

without asking why, but just accepting the wonder life as it is. Likewise, in nursing, one should not ask why nursing is (practiced and understood) but rather: What can nursing be like? (Martinsen 2021, p. 34). From this turning point, KM does not work with theory that seems like models in order to understand the world very specifically. Instead, she introduces a thinking that is a philosophy very different from theory defined as scientific theories, or models.

The position of Marit Kirkevold (MK) – an ideological nurse and researcher

MK argues that she “will predict the importance of nursing theories in the future as well”, and she emphasizes “that nursing is and becomes an absolutely essential part of society's machinery for handling crises”. She claims that “good nursing theories are absolutely essential for tomorrow's nurses to be equipped to provide relevant, high-quality nursing care in the many different situations you find yourself in as a nurse” (Kirkevold, 2021, p. 13). The claim is that only trained nurses who have experience with nursing work can develop theory about the profession. We see this as similar to how you can politically monopolize a practical field in society. This implies that theory is a direct extension of practice, which is a reasoning that might find some warrant within natural science and medicine. Although this view has no solid backing in academia, it leaves behind a reception that transforms theory universes into methodical regulations. It is not difficult to find traces of this in nursing research in Denmark.

The position MK defends, is one of practical theory (techne). In discussing nursing theory, she explicitly states that the aim of nursing theory is to develop technologies that practitioners must subsequently adopt. Moreover, MK is often used as reference point in education programs and cited for her definition of nursing theory: “A nursing theory is a theory that tries to define what nursing is and should be” (Kirkevold, 1998, p. 38). In the text selected for this article, she elaborates on this and explains that she ...: “understand and frame ... nurses..., in terms of being able to decide and prioritize which nursing measures should be implemented...”, concluding that “this definition of nursing theory differs from the classical scientific theories” (Kirkevold, 2021, p. 15). Here, the claim is that nursing theory should differ from scientific theory, and the warrant seems to be a practical and instrumental necessity. In this sense, nursing is defined in contrast to the classic scientific theories. MK continues: “I choose to understand nursing theory as a tool that ensures a professional gaze or perspective on nursing” and that sense, nursing (theory) is normative and “different from more classical scientific theories, as we know them from the natural sciences, the social sciences and the humanities” (Kirkevold, 2021, p.16). Here, the backing is paradoxically picked up from theory, for an argument that emphasizes practiciness as the normative ideal from more critical traditions. Practiciness is understood as a one-sidedness in the assessment of the importance of practice and resulting in a lack of interest in theories for understanding practice. The symbolic effect of practiciness is strongest in education programs such as nursing, because the curriculum relates to other types of knowledge than a clinical or medical perception of methodology as the only path to knowledge (Frederiksen, 2016, p. 212). Later in the article, however, MK points out that we also need nursing theories “that place nursing in a larger historical, societal and cultural context” (Kirkevold, 2021, p. 23) which is a rebuttal to recognize nursing research in the less prominent traditions.

Summing up the analysis

Both KM's and MK's works could alternatively be interpreted as intending to develop practical theory. However, there is a significant difference between them. When MK defines nursing theory, she stipulates defining such a theory as a position that only nurses can take, and she moreover regards nursing theories as technologies on a normative-analytical basis. By contrast, KM carries a classical scientific tradition that does not have as a prerequisite that one must be a nurse to be able to reflect on nursing or develop normative/analytical or empirical/analytical knowledge of nursing

(Petersen et al, 2023). The position of KM seems to be one that embraces a science of experience (Habermas). Below, we further discuss our analytical findings using our theoretical framework. We look into the two positions contributions to knowledge of nursing, and we further discuss the connection to the knowledge base in health-science and sociology. In conclusion we look at the connection to the initial claim of a knowledge crisis in nursing.

Discussion: The construction of knowledge in a praxeologic perspective

In the discussion, we unfold the theoretical framework to bring out the different nuances of knowledge and science according to the aim of the article. Here, we include praxeology as a third position of scientific theory-on-practice or empirical-analytical knowledge and at the same time use it as a frame to understand and explain notions of nursing.

KM and MK as different agents in a practice of academic nursing

We have stipulated some steps on the way that could lead to outlining an explanation based on the historical development of nursing as an academic discipline and the analysis of the positions of KM and MK in the field of nursing research. In a praxeological point of view, everything is understood relationally, and one cannot understand one position without understanding the other. To understand either (and any) position, one must uncover the prevailing doxa within the field in questions, i.e. which positions occupy which opinion, attitude or action, and based on which dispositions within the field.

To perform a thorough Bourdieuan field-analysis is a comprehensive undertaking and beyond the scope of this article. However, based on the material at hand, we are able to point out some homologous structural similarities between the positions. We are thus able to draw a limited outline of the two positions. As for the similarities, both researchers received basic training in Oslo, the capital of Norway, and they both went to Denmark to develop the academic nursing there. Yet, when we look into the backgrounds and career or habitual preferences of the two researchers' positions, we find some significant differences as well.

KM had her basic education and training at Ullevål hospital, Norway's largest hospital, in Oslo. She lived here while studying for her bachelor degree in psychology, physiology and philosophy at the University of Oslo, and then moved to the country's second largest city, Bergen, at the west coast of Norway to do a master in philosophy at the University of Bergen. After being denied access to source material on the content of the nursing education from the Norwegian Nursing Association, due to a declared Marxist political conviction, she turned to diaconal nursing, and became Doctor of Philosophy on a thesis on the development of diaconal nursing in Norway from the University of Bergen (Petersen 2021, Petersen 2023). The connection between universal humanism and Protestant Christianity seems to have followed KM until today. Back in Norway, after the years in Denmark, KM never returned to Oslo. Throughout her career, she was employed as a professor in the periphery of Norway, in Bergen and in the far northern province (Harstad). It would seem that by maintaining a certain distance to the central power, by which KM was delimited at an early stage, and maintaining relationships with people living their lives in interaction with and as part of the rough environment that characterizes the heartland of Norwegian Protestantism, KM found her true academic foundation in the combination of philosophy and theology.

MK also had her basic nursing training at Ullevål hospital in Oslo. Her subsequent education and academic training (master and doctoral education) were mainly acquired at Columbia University in the US (UiO, 2023). When MK came to Denmark, she was already an actor in the political and

professional development. Her ambition and career fitted well into the contemporary neoliberal political agenda within research, which occurred in Denmark in the late 1990s (Frederiksen, 2016).

When MK was encouraged to take a position in Denmark, she was working as a full professor at the University of Oslo. She kept this position while working part-time (20%) in Denmark. Based at the Faculty of medicine at the oldest university in Norway, MK was situated in the center of power while working in Denmark. Today, MK works as head of department at Oslo Metropolitan University, a former university college, where the nursing education program holds all levels of education.

The development of both nursing education and research in Norway must be attributed to MK, as she is often invited into both the administration and professional association as a member of advisory boards and counsels. Here, her profane approach to nursing theory as a clinical discipline has had a considerable impact on the development of nursing over the last decades. A possible assumption is that the pragmatic approach and ground/basis in her interpretation of the phenomenology and hermeneutic position, in addition to her affiliation with power, originates from her academic schooling in the US, which differs fundamentally from a continental European way of schooling in academia in general and in phenomenology and hermeneutic in particular.

Outlining positions of knowledge in nursing theory

We find it possible to suggest a construction of the two positions, with a certain homologous structural similarity, when it comes to the development of knowledge within nursing education and nursing research as it occurs in both Denmark and Norway. In a praxeological perspective, with reference to Habermas (1990), nursing science, particularly as it appears in the work of MK, but to some extent also in KM's work, is a normative-analytical science. It works empirically, but with normative concepts. This means that a normative-analytical science is concerned with describing the social field with regard to: How it is, when it is as it should be or should not be, and how it should be. However, if we want to develop a theory about nursing that seeks to explain what nursing is, where it comes from, and how it works, we must do something that enables nursing theory to reflect doxic positions. This is different from professional ideological thinking, or perhaps what MK (Kirkevold, 2021) believes is nursing theory is *not* nursing theory in the scientific sense, but practical theories, or *techne/technologies* (Aristoteles, 2019, Durkheim, 2014).

In the landscape of knowledge in, for and about nursing, there is a homologous development in Denmark and Norway, despite different history and contexts, leading to the view that nursing knowledge should be application-orientated and primarily established as health-science at the university and educations located at universities of applied science or similar educational institutions. The problem is not the emphasize in work for the nursing profession, or how one philosophically or theoretically develops the profession, or what one considers important. The problem arises if one does not recognize that all levels have their justification when working with a professional, academic or theoretical science subject under university auspices. All forms of knowledge have their justification and must be used if one wants to build a science subject such as nursing science, otherwise you exclude subject traditions that work critically with theory, and the classical science subjects, and thereby colleagues who could help fertilizing nursing as an academic (professional subject) or scientific (theoretical subjects) discipline (Petersen, 1999; Petersen, Høyen, Ilkjær & Langbehn 2023). When this is not the case, due to a lopsided development of scientific positions in nursing, the need to address nursing care as part of the solution to the welfare state's care crises through e.g. better coherence in healthcare systems, improved professional reflexivity and competences, and reduced inequality in health, seems to be ignored. At this, praxeology offers an empirical-analytical way to develop theory on the subject. In this article, the contribution is delimited to promotion of a more nuanced understanding of the homologous relationship between the care crisis and a knowledge crisis.

The discussion of the positions presented in this article are also known in international research. For example, Bender (2017) argues that models are far more dynamic representations of mechanisms or phenomena than theories and therefore they provide a better base for discussions and critiques in nursing. In a reply to this claim, Clinton (2023) maintains that this argument follows a certain view of science that attributes nursing action emancipatory power without theory. This discussion underscores the point that despite differences tied to a national development in nursing, the positions of knowledge development are homologously linked across borders.

Outlining nursing theory as science or professional ideology

The Danish medical doctor Henrik H. R. Wulff (1981) was aware of the theory-practice (clinic) problem for the medical profession, when he wrote his famous book *Rational Diagnosis and Treatment*. In the first chapter of the book, he introduces his topic by claiming that medical studies are everything except medicine, and because medicine does not work theoretically, the classical medical method: the clinically controlled trial, is the only reliable one.

While this explanation sheds light also on some aspects of nursing, we would like to draw attention to the essential difference between medicine and nursing. In clinical practice, medicine builds on basic research in the universities' laboratories, and in an expanding pharmaceutical and medical technology industry. Here, large faculties at the key universities secure the anchoring of clinical research (Petersen et al, 2023). This is not the case in nursing; clinical nursing is subordinate to medical knowledge and practice, rather to basic research that directly serves nursing practices. This is a difference to keep in mind, when trying to explain the development of academic positions within the two fields. For example in Denmark, where there has not been paid any attention to this difference, the consequence of ignoring it is that so far (primo 2024), not a single professorship in nursing science has been established at any university in the country. At the same time, nurses have had 45 professorships as clinical professors or affiliated to other subjects, such as pedagogy, psychology, public health etc. (Ibid, 2023). For some of these positions, there is no natural connection to the basic education of nurses, or to the academic extension courses and master programs at the university. This results in a rather isolated production of theory-in-practice and a weak relation to nursing as a subject at the university and to the education at the university colleges. Another challenge for the clinical professorships is that these cannot be grounded as independent subjects and subjects with a relative autonomy, because they are situated in the medical field led by the medical professors, who are superior to admit access as the hospital as historical structure is still 'the doctor's house' organized and managed according to a medical logic.

Anyhow, the strategy has been rather successful with regard to establishing and building capacity in clinical nursing research, but it has focused solely on clinical research and consequently failed to establish nursing as a basic research subject. We fully understand the position as a demanded part of the research in nursing, but we do not see the dominance of this position as sufficient to address the challenges raised by the knowledge crisis of nursing and the more general nursing crisis.

Intellectual reflexivity is required in both theory and practice

To accommodate the increased complexity with a growing elderly population with complex needs for care and treatment, nurses must expand their reflexive competences. The need of theory and knowledge to analyze the changes in tasks and organizational complexity demands reflexivity as a competence to prevent professional fatigue, moral distress, and burnout in nurses. Reflexivity is about relating critically and analytically to the mechanisms and power relations grounded as historical and social preconditions for the social reality, in which people enter into relationships to solve problems, perform a nursing action, or simply be present. This type of reflexivity must be developed by ongoing intellectual and theoretical work and is dependent on an academic tradition,

placed at the universities. The aim must be to have a balanced relation with research environments that also focus on basic research in nursing, and which produce theory about nursing alongside theory produced by the dominating position. A broadly oriented fundament of knowledge could provide nursing as a discipline with the robust knowledge that is necessary to address the current needs for nurse education and for clinical practice. To get there, we need professors with independent subjects and relative autonomy in every discipline involved in nursing as a field of knowledge.

Conclusion

This article points out that the academic nursing in Denmark was established with the ambition to build up an independent academic discipline and subject at the university, founded in a classic scientific tradition within the human and social sciences. After the first decade, academic nursing turned to follow a new tradition, inspired by natural and health science, where phenomenology and hermeneutics were used as a method to perform normative clinical research. From a professional point of view, the new position was rather successful, and over the last 20 years, it has created a basis for an increasing number of academic positions in clinical practice, at several universities. However, regardless of this apparently positive development, especially at the university hospitals, it suffers from lack of growth in theory on practice. While the dominating position of the so-called nursing theories is occupied by those making technology models or practical theories, the construction of theoretical knowledge about nursing has been slighted and is suffering.

When this warping between the theory and practice relationship poses a problem today, it is because the requirements and challenges to nursing in the same period has rapidly increased. To handle the many current social, organizational, political, and environmental challenges demands development of knowledge in a scientific sense in general, and with a social science approach in particular. Considering and addressing these problems in nursing requires reflexive competence, which predominantly is acquired through intellectual work and theoretical analysis. Although scientific theoretical knowledge and practical knowledge belong to different categorical levels and logics, they must both be developed to establish nursing as a scientific subject in academia, and to ground nursing with the necessary reflexive competence and foundation for nursing care. In this article, we have pointed out a mismatch in this development and named it the knowledge crises of nursing.

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References

- Aiken L.H., Sloane D., Griffiths P., Rafferty A.M., Bruyneel L., McHugh M., Maier C.B., Moreno-Casbas T., Ball J.E., Ausserhofer D. & Sermeus W. (2017). Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ quality & safety*, 26(7), 559–568. <https://doi.org/10.1136/bmjqs-2016-005567>
- Akram, A.S., Mohamad, A. & Akram, S. (2018). The role of clinical instructor in bridging the gap between theory and practise in nursing education. *Internation Journal Of Caring Sciences*, 11(2), 876-882.
- Alvsåker, Y.B. (2023). Velferdsteknologi i norske hjemmetjenester: en praxeologisk studie om statlige visjoner i møte med markedskrefter og kommunale realiteter. [PhD thesis]. University of Bergen.
- Aristotle (2019). *Nicomachean Ethics*. Third edition. Hackett Publishing Company Inc.
- Bender, M. (2017). Models versus theories as a primary carrier of nursing knowledge: A philosophical argument. *Nursing Philosophy*, 19(1). www.doi.org/10.1111/nup.12198
- Bourdieu, P. (1973). The three forms of theoretical knowledge. *Social Science Information*, 12(1), 73-80.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge Studies in Social Anthropology.
- Bourdieu, P. (1990). *The logic of Practice*. Polity Press.
- Bourdieu, P. (2011). *Der Tote packt den Lebenden*. Neuaufgabe der Schriften zu Politik & Kultur 2. VSA Verlag.
- Bourdieu P., Chamboredon J.-C. & Passeron J.-C. (1991). *The Craft of Sociology – Epistemological Preliminaries*. De Gruyter.
- Broadly D. (2000). Introduktion. I P. Bourdieu, *Konstens regler. Det litterära fältets uppkomst och struktur*. Brutus Östlings bokförlag.
- Callewaert S. (1998). Bourdieustudier 2: Det religiøse felts genese og struktur ifølge Pierre Bourdieu, s. 11-84. Institut for Filosofi, Pædagogik og Retorik, Københavns universitet.
- Clinton, M. (2023). On Bender's orientation to models: Towards a philosophical debate on covering laws, theory, emergence and mechanisms in nursing science. *Nursing Philosophy*. www.doi.org/10.1111/nup.12439
- Durkheim, É. (2014). *Opdragelse, uddannelser og sociologi*. Forlaget Mindspace.
- Frederiksen, J. (2016). Tværprofessionelle velfærdsprofessioner: Tværsamarbejde som en social praktik for den neoliberale velfærdsstats professioner [PhD thesis]. Roskilde University.
- Frederiksen, J. (2019). The Jigsaw Puzzle of Governance by Soft Terms in Healthcare: Capturing the Neoliberal Impact of Health Policy on Nurses' Work. *Praktiske Grunde. Nordisk tidsskrift for kultur- og samfundsvidenskab* (1-2), 7-24.
- Greenway, K., Butt, G. & Walthall, H. (2019). What is a theory-practice gap? An exploration of the concept. *Nurse Education in Practice* 34, 1-6. www.doi.org/10.1016/j.nepr.2018.10.005
- Habermas, J. (1990). *On the Logic of the Social Sciences*. MIT Press.
- Kalisch, B.J. & Xie, B. (2014). Errors of Omission: Missed Nursing Care. *Western Journal of Nursing Research* 36(7). <https://doi.org/10.1177/0193945914531859>
- Kirkevold, M. (1998). *Sykeplejeteorier – en analyse og evaluering*. Gyldendal Akademisk.
- Kirkevold, M. (2021). Sygeplejeteoriens evige aktualitet. I B. Martinsen, P., Dreyer & A.L. Norlyck (Eds.), *Sygeplejens superhelte. Sygeplejeteoretikere der styrker klinisk praksis*, chap. 1, pp. 13-29. Munksgaard.

- Martinsen, K. (1993). *Fra Marx til Løgstrup. Om etik og sanselighet i sygeplejen*. Tano forlag.
- Martinsen, K. (2021). Min rejse med Løgstrup – i filosofi og sygepleje, I B. Martinsen, P., Dreyer & A.L. Norlyck (Eds.), *Sygeplejens superhelte. Sygeplejeteoretikere der styrker klinisk praksis*. Chap. 2, pp. 31-59. Munksgaard.
- Michaelsen, J.J., Ramhøj, P., Larsen, K., Christensen, J.M. & Hansen, H.P. (2023). De 'Bindegale Sygeplejersker' – en tværfaglig græsrodsbevægelse. *Sygeplejersken, Fag og Forskning*. Dansk sygepleaad. De 'Bindegale Sygeplejersker' - en tværfaglig græsrodsbevægelse | dsr.dk
- Nygård, A.K. (2022). Kunnskapsproduksjon i sykepleie: En praxeologisk analyse av masteroppgaver i sykepleievitenskap ved Universitetet i Bergen fra perioden 2011-2021 [master's thesis]. University of Bergen.
- Petersen, K.A. (1993). Den praktiske erkendelse: forholdet mellem teori og praksis i sygepleje og Sygeplejerskeuddannelsen. Conference Proceedings, special issue of Skrift-serie nr. 4, The Danish University College at Aarhus University.
- Petersen, K.A. (1999). Sygeplejevidenskab - myte eller virkelighed? Om genese og struktur af feltet af akademiske uddannelser og forskning i sygepleje i Danmark. [PhD thesis]. Aarhus University.
- Petersen, K.A. (2021). Opkomst og afvikling af faget sykepleievitenskap ved Universitet i Bergen (1979-2019). *Praxeology – A critical reflexive view on social practices*.
<https://doi.org/10.15845/praxeologi.v3i0.3205>
- Petersen, K.A. (2023). Når fænomenologien møder praxeologien. I H. Alvsvåg & I. Hunskaar (Eds.) *Fra 'Nødvendige omveier' til en dag med 'Langsomme pulsslæg'*. Rapport 2023/10, pp. 37-49. VID vitenskaplige høyskole.
- Petersen, K. A. & Callewaert, S. (2014). *Praxeologisk sygeplejevidenskab: Hvad er det? En diskussion med det subjektivistiske og det objektivistiske alternativ*. Forlaget Hexis.
- Petersen K.A, Høyen, M., Ilkjær, I. & Langbehn, F. (2023). Dansk sygepleje og højere uddannelse: et studie om danske sygeplejerskers uddannelsesvej fra titlen sygeplejerske/ professionsbachelor til forskeruddannelse/ph.d.. *Praxeology – A critical reflexive view on social practices*.
<https://doi.org/10.15845/praxeologi.v5.4003>
- Ryder, M., Kitson, A.L., Slotnes O'Brien, T. & Timmins, F. (2022). Advancing nursing Practice through fundamental care delivery. *Journal of nursing management*. 30, 601–3.
www.doi.org/10.1111/jonm.13402
- Salifu, D.A., Gross, J., Salifu, M.A. & Ninnoni, J.P. (2018). Experiences and Perceptions of The theory-practice gap in nursing in a ressource-constrained setting: A qualitative description. *Nursing Open* 19, 6(1), 72-83. www.doi.org/10.1002/nop2.188
- Sortvik, W. (2011). Sjukepleieran som akademisk aktør. Hva er sjukepleie vitenskap? [master's thesis]. University of Bergen.
- Sortvik, W., Boge, J., Callewaert, S. & Petersen, K.A. (2016). Korleis sjukepleievitenskap materialiserer seg i lys av historisk oppkomst – kunnskapsgenerering i spenningsfeltet mellom klinikk og akademia. *Nordisk Tidsskrift for helseforskning* 12(1), 77.
- Toulmin, S., Rieke, R.D. & Janik, A. (1979). *An Introduction to Reasoning*. Macmillan.
- University of Oslo (2023). Department of Public Health Science.
www.med.uio.no/helsam/personer/vit/maritk/index.html
- Vesterdal, A. & Bagh J. (2002). Konstruktiv forskning skal fremmes. *Sygeplejersken* (16), 26-29.
- Williamson, L., Burog, W. & Taylor R.M. (2022). A scoping review of strategies used to

recruit and retain nurses in the health care workforce. *Journal of Nursing Management*, 30(7), 2845–2853. [www.doi.org. 10.1111/jonm.13786](http://www.doi.org.10.1111/jonm.13786).

WHO (2020). State of the world's nursing 2020: investing in education, jobs and leadership. World Health Organization.

Wulff, H.R. (1981). *Rational Diagnosis and Treatment: An Introduction to Clinical Decision Making*. Blackwell.