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Benner and expertise in nursing: a critique

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Abstract—This paper examines the work of Benner (*From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Addison-Wesley, Menlo Park, CA, 1984) on expertise in clinical nursing. The philosophical foundations of her work are explained as well as the work located within the wider context of the use of Heideggerian philosophy. Various criticisms of her study are developed in relationship to her methodology and her interpretation of nursing. It is argued that she represents a retreat into tradition and authority in nursing.

Introduction

Benner is one of the more interesting theorists in nursing. This is because her work is coherent, well written and, most importantly, strongly theoretically grounded. The attraction of her work is that she has moved the emphasis towards the clinical practitioner and clinical practice and away from formalisms such as nursing models. The underlying philosophy is that of Heidegger (1962), especially as it has been interpreted by Dreyfus (1991). She has applied this theoretical perspective not only in the context of expertise, but also that of caring and its relationship to stress in nursing. Benner provides the most sophisticated critique of the rationalist tradition in nursing and therefore directly and indirectly of products of that tradition such as nursing models.

Her position is based on the difference between practical and theoretical knowledge. Using Kuhn (1962) and Polanyi (1958), as well as Heidegger (Benner, 1983) as authorities, she argues that there is a distinction between 'knowing how' and 'knowing that', and that "some Practical Knowledge may elude scientific formulations of 'knowing how' and 'knowing that'" but some 'knowing how' may "challenge or extend current theory". This distinction holds that there is a fundamental difference between propositional knowledge, the 'knowing that' and the ability to perform something, the 'knowing how'. This can be

seen clearly in Polanyi's (1958) example of the skill necessary to ride a bicycle; knowing the theory of riding the bicycle does not mean that the novice rider will be able to ride the bicycle without falling off. So, therefore, knowledge development in a practice discipline such as nursing depends on developing 'knowing why' through scientific investigation and, making explicit the 'knowing how' that Benner says "develops through the practice of the discipline". A strong theme in the Benner argument is related to intuition and its place in clinical thinking.

In this paper I intend to explain the theoretical basis of her work and then to examine certain criticisms which can be developed. This will need an examination of the ideas of Dreyfus, and also developing a critique of the notion of intuition.

The theoretical basis of Benner's oeuvre

The model of practical knowledge that Benner's work uses is that of Heidegger (1962) as interpreted by Dreyfus (1980, 1985, 1991). The Dreyfus interpretation has been influential in both nursing (Benner, 1984) and in the critique of artificial intelligence (Winograd and Flores, 1987). It is considerably clearer than Heidegger's own statement of his view which is notoriously dense (Steiner, 1978).

Dreyfus (1980) constructs a theoretical structure, based on Heidegger and heavily utilised by Benner (1984), where he provides a scheme for discriminating between a science and a social science on the basis of the contextual nature of knowledge. Dreyfus uses the practical holism of Heidegger (1962) where, if theoretical holism equals interpretation as translation, then practical holism equals interpretation as explication. This is because practical understanding entails beliefs that are only meaningful in the context of underlying shared practices within specific domains. As Dreyfus (1980) says: "We acquire these social background practices by being brought up in them, not by forming beliefs and learning rules" (p.7).

This background cannot be formulated theoretically because:

1. It is too pervasive, so that it cannot be made an object of analysis. Any attempt to reduce these to a system of beliefs leads to problems because the all pervasive nature means that the task is enormous.
2. The background is comprised of habits and customs, not beliefs. Named by Foucault (1972) as micro-practices, "We do just what we have been trained to do" (Dreyfus, 1980, p.8). Practices described propositionally lose flexibility and are no longer the practice itself.
3. If these backgrounds are described propositionally then we need a rule for applying them skilfully; this is Ryle's (1949) infinite regress. If you accept the argument that skills are propositional, then to apply a rule skilfully means that you will have a series of propositions that will enable you to do so. But these propositions will also need propositions so that they can also be applied skilfully, and so on to infinity.
4. "The background customs and habits involve skills and these cannot be formulated theoretically. It makes no sense to capture a skill by using a representation of the original elements used by beginners, since these elements are not integrated into the final skill... [since]... the background does not consist in representations at all" (Dreyfus, 1980, p.9).

Heidegger calls this habitus 'primordial understanding'. There are three categories of explicit understanding in the Heidegger/Dreyfus world.

1. The tacit background, the "totality of cultural practices" which determine how we interpret the world. This is called the Vorhabe (fore-having) and is identical to Kuhn's (1962) "disciplinary matrix".
2. The vocabulary or conceptual scheme that we bring to any problem: this is the Vorsicht.
3. The specific hypothesis which, within the overall theory, can be confirmed or disconfirmed by the data; this is the Vorgriff.

We have, then, the hermeneutic circle where any interpretations presupposes the Vorhabe because the Vorhabe cannot be made totally explicit, but because it provides the background practices of any Vorsicht, then any interpretation must be circular. In other words, as we try to explain the background of any practice, we have other practices which we accept tacitly at that stage. When we try to explain these tacit practices then this presupposes other tacit practices. The point at which we stop is, as Ryle (1949) suggests, when we have explained enough for our purposes.

The background of practices does not have to be incorporated in a theory but defines what counts as confirmation. This "Background ontology... is our practices as ways of behaving" (p.7). So when we come to understand another culture we come to share its know-how and discriminations rather than "Which assumptions and beliefs are true." So:

The practices of scientists cannot be brought under the sort of explicit laws whose formulation these practices make possible (p. 16).

But science is successful because these background practices can be taken for granted. But clearly for the human sciences to ignore the Vorhabe is to ignore what they should be investigating. In other words science decontextualises, but social science should be contextual. The issue for nursing, therefore, is the degree to which, when we are talking about expertise we are talking about decontextualising actions.

Dreyfus and Dreyfus (1985) have further developed this model in terms of the development of skills necessary for flying an aircraft, and the way that expert managers practise. It holds that the development of expertise is the transition between five stages of development;* going from the use of formal rule systems to the use of implicit, intuitional modes of thinking. The expert uses intuition, and when she has recourse to formal rules, stumbles. The expert has developed, according to Dreyfus and Dreyfus, a large repertoire of contextualised and context-free examples of how to act, and these provide the templates against which new examples are matched.

The application of formal modelling in business management was examined by Dreyfus (1982). He argued that the critical factor in determining whether models are used well or badly is:

"The extent of the manager's sense of familiarity with, and understanding of, the problematic situation in which he finds himself" (p. 134).

He distinguishes between those problems which are susceptible to objective analysis, and those that are unstructured and not amenable to such examination. In these latter cases there is no complete description available of the problem and actions that are associated with it. In this situation, the actions taken will be determined by the interpretation of the situation by the manager. He argues then, and this is the key argument of his paper, that "formal models do not represent abstractions and simplifications of expert understanding" (p. 136). Instead they represent the reasoning of beginners and the inexperienced.

*These are novice, advanced beginner, competent, proficient and expert.

This, then is the theoretical foundation of the work of Benner. She (Benner, 1984) uses the following model of skill acquisition in terms of clinical nursing practice. She says that movement through the levels of skill acquisition is characterised by three things.

1. "A movement from reliance on abstract principles to the use of past concrete experiences as paradigms" (p. 132).
2. A change in the perception of the 'demand situation' where the situation is seen as whole rather than a set of equally important elements, and where the same elements are seen as more relevant than others.
3. The transformation from detachment to involvement.

To demonstrate the character of competencies, she uses exemplars, and these can be used to make practice explicit, making the move that common meanings, evolved over time, and shared amongst nurses constitute a tradition. This practice knowledge can be shared by experts by the use of maxims, the interpretation of the maxim varying according to the degree of expertise. An example given is the golfer's maxim "keep your eye on the ball", which she says is meaningless to the beginner. There is, then, a move from the novice to the expert characterised by the transition from explicit rule-governed behaviour to intuitive, contextually determinate behaviour.

From novice to expert

The central text in Benner's application of the Dreyfus model of skill acquisition is *From Novice to Expert* (1984). The study "was aimed at discovering if there were distinguishable, characteristic differences in the novice's and expert's description of the same clinical incident" (p.14).

The selection of the experienced clinicians was by staff development directors after conferring with ward managers and peers. The criteria were: (a) at least 5 years clinical experience; (b) currently working clinically; and (c) those recognised as being 'highly skilled technicians'.The resulting nurses were mainly baccalaureate nurses, seven having master's degrees. The nurses were not classified according "to the proficiency levels; rather, each clinical situation was judged independently as reflecting a particular level of expertise" (p.15). For example, she holds that a characteristic of the expert is that "The expert is at home with the language" (p.18). She provides as an example, a comparison of the response of a learner nurse with a more expert one. The first nurse uses language in a more formal, stilted manner, with a plethora of technical terms, terms that have equal status and do not discriminate the important elements of the scene for the listener. The more expert nurse however breaks the scene down into its important elements and imparts a sense of fluidity and relevance in the use of the language. Benner argues that this level of analysis enabled her "to describe the performance characteristics at each level of development" by following the Dreyfus model.

She used a method of pairing preceptors and students (21 pairs) and comparing their perceptions of clinical incidents using Critical Incident Technique. There were additional interviews and in some cases, participant observation of 51 'experienced nurse clinicians', 11 recent graduates and 5 senior nursing students. The coding was done by the research team using consensual validation. The team consisted of a nurse, a psychologist and an anthropologist. The method was used, not to provide the characteristics of a 'mythical'

expert, but to elicit the characteristics of expert practice within a specific context. The practice level was constrained within the Dreyfus' (1985) framework.

The criticisms of Benner's position

Benner therefore has a model of skills that is strongly contextual and the growth of expertise is developmental. The expert practitioner is strongly intuitive. It can be seen from the above that Benner has a strong foundation for the model of skills that she uses, however there are several criticisms that can be made.

The imposed model of skills

The first difficulty is brought out by Benner (1984) who holds that expertise is contextual, i.e. she says that she does not examine the expert but the expert knowledge embedded in practice, but also she holds to a developmental model of expertise. So, on the one hand, she says that the label expert cannot be fixed on a person, it is the context which is important, and on the other, she says that the individual expert is characterised by a specific way of thinking. It is difficult to see how to reconcile these two positions.* It could be argued that the developmental model only operates within a context and so the idea of an acontextual expert is incoherent. Then, however, we have the problem of determining precisely which context provides the environment for determining this expertise. There is a danger here of an infinite regress as we need a context for determining which context to use.

How do you make this knowledge explicit?

Benner used critical incident technique to elicit domains of nursing knowledge. A criticism of this is that it selects the domains that are regarded as significant by the nurses (Wagner and Sternberg, 1985), but where one gets a view of nursing that is not necessarily hermeneutical because text is missing, those incidents might be typical but not critical. The more one goes towards the atypical the more one gets away from the Vorhabe (Dreyfus, 1980), the background practices, that one is trying to expose. This raises the issue of how one would actually use Benner's method as a practical means of making the nursing practice explicit on, say, a unit. The first point is that her methodology implies that one would have an external investigator, for otherwise how would one determine one's own background assumptions? The second point is the logical one: at what point does the investigator stop and say — that is all the background that shall be made explicit?

This point is related to that of the status of the person who codes the material to establish the dimensions of expert practice. Benner's (1984) criteria for expertise appear to contain an experience element as well as a recognition element. Benner's coders do not apply these criteria to themselves as the group doing the coding and classification of expert practice. The implication seems to be that the expert practice will emerge from the data in an unproblematic way. Presumably the ability to code such data is subject to the same con-

*This tension can be seen in the way that in *From Novice to Expert*, Benner (1984) is explicit about not being able to refer to experts but rather expert practice, whereas in *The Primacy of Caring*, Benner and Wrubel (1989) explicitly refer to expert nurses (p. vi).

straints in terms of expertise as nursing practice. Benner does not provide a solution to the resulting infinite regress in determining who are the expert coders. The result is that the determination of what constitutes expert practice is by the approval of a specific group that is empowered to do so, either by being the research team, managers or some other legitimising groups. The concept of expertise is therefore arbitrary; it is legitimated by groups or individuals whose status is defined socially. For example the coders, apart from Benner in the 1984 study, were not nurses. Expert practice and the domains of nursing can therefore be decided by groups or individuals that possess some authority. This is the foundation of a traditional, authoritarian discipline, rather than one of autonomous practitioners.

Power and a distorted hermeneutics

The use of the Dreyfus model implies that the final result is an expert nurse. His model does not specify anything about the domains of expert practice — presumably the nurse can be exhibiting expert practice in situation X which is a subset of situation B where she is not practising expertly. It is the aggregation of areas that is interesting: at what point do we say that a boundary is drawn between the various situations? It is necessary to separate out the distinction between the internal acceptance of expertise, in other words the internal world of nursing and the wider context that nursing finds itself in, such as its relationship with medicine. The fact that these two contexts interact in the real world can be seen by the number of times that Benner gives exemplars that involve devolved medical practices and the relationship with the physicians.

The problem with just concentrating on the internal world is that it can become the subject of a vicious regress. Imagine a situation X, which consists of the subsituations P and Q; now P might consist of further situations Z and O, and so on. So there must be some way of defining the boundary of the situation that we are talking about. I suppose that it could be argued that there are some situations that are natural kinds, that are irreducible. One could be the gestalt of bicycle riding (Polanyi, 1958). People can either do it or not, and the signs of expertise are the lack of bruises and cuts — but this does not seem right for nursing situations. One might become more comfortable in some situations, a technical point might suddenly become clear but generally speaking the validation of a task done well will be within the matrix of the validation procedures of that discipline. Because of nursing's relationship with medicine this can be problematic. Looking at Benner's work we can see that a considerable number of the exemplars are to do with boundary disputes with medicine. This means that if the construction of nursing knowledge through the hermeneutical method is done uncritically as Benner implies, where the project is seen as making explicit the current reality and saying that that constitutes nursing, and if that reality is distorted by unequal power relationships, then that nursing knowledge will be distorted. The issue of unequal power and its relationship to knowledge is the emphasis in Benner's work on intuition.

Intuition

Using the five-stage model of skill acquisition, Dreyfus (1982) makes an interesting statement in discussing the nature of proficiency. He says that this stage is characteristic of middle managers because they "allow themselves the prerogative of intuitively sizing up whole situation" (p. 145), however because of "the need for justification to higher authority"

they make decisions by "explicit evaluations of alternatives" (p.146). We have the relationship between the use of intuition and the exercise of power: it is to do with justification. In terms of nursing, therefore, when we have the fully intuitive, expert nurse meeting the equivalent doctor, we can see the situation where there will be competing intuitions. The situation will be resolved by the originator with the greatest epistemological power. One gets the feeling from Dreyfus and Benner that the definition of the expert is unproblematic once the characteristic of the expert as being the intuitive, contextually driven thinker is established.

An example of intuition in operation is by Hackleman (1984). This is an account by a Registered Nurse of how she recognised that something 'was up' with a patient, and how she tried to persuade the physician to do something about it — "Apparently intuition did not count with Dr Morrison", she says. She points out that the rule in her previous unit had been that if anyone felt that something was wrong then the patient should be watched. The underlying theme of the article is not really the desirability or not of intuition but, rather, the negotiation that has to take place for that intuition to be recognised. In other words it is a negotiation about epistemological power. The physicians have control over the clinical situation, the nurses' power is negotiated with them. Intuition, because it lacks immediate confirming evidence relies therefore for its status on the perceived epistemological power of the person having the intuition. Because nurses generally have relatively less power than physicians, the status given to the nurses' intuitions will be less. To argue therefore, as people like Benner do, that we should recognise the power of intuition is to put the cart before the horse: intuition does not give power, it needs it, or it confers further power where power already exists (Jamous and Peloille, 1970). What emerges from this article, and from the incidents reported by Benner (1984), is the fact that it is an article or a critical incident that tells us something. The only point in publishing it is if it is out of the ordinary. In this case the nurse was a victor in the power struggle, therefore it is worthy of publication.

The final point about intuition and expertise is that it is not clear whether only the expert thinks in this intuitive way. It can be argued that what they are describing is a feature of all learning and only differentiates the experienced from the inexperienced. Suppose we have our nurse who feels intuitively that using egg white on an ulcer will effect a cure, and she can skilfully perform the procedure. We have here two situations; she knows how to do it and, from her perspective, she knows that it will work; and she knows how to do it but she is mistaken in scientific fact that it will work. She holds there is an x — application of egg white, that will cause y — the cure of a pressure sore. We then have two questions. First, whether this belief is correct and, second, how she does the task of applying the egg white. Now, the use of 'know' in the context of the first situation feels wrong, in that can we be said to know something that is incorrect? Both situations collapse into the one where she is performing a task skilfully but her intuition has lead her into the wrong task. Intuition, therefore, is tested by its truth value and an amateur in scientific thinking can still have intuitions, and those intuitions can be wrong. The criterion that the expert or expert practice is characterised by the use of intuition therefore seems to be too general. It might be a necessary condition of expertise but it is not sufficient.

The way that expertise in practical matters is determined then, is by outcome and by what is regarded as acceptable by whatever community does the judging. This is presumably done according to criteria that are established by the group, and we would regret a group that could not state its criteria for success as amateurish. So, the idea of expertise is not

determined solely by the personal characteristics of the nurse but by the socially determined matrix of ways of evaluating skills that she finds herself in. To elevate intuition is, then, to neglect the epistemological validating structure that she operates within. In nursing terms this means that the idea of the nurse expert will be conditioned by factors both within nursing and by nursing's relationship with other disciplines.

Conclusion

Benner has produced a powerful and seductive interpretation of expertise. On the surface it appears to empower the clinical nurse and to raise the status of her knowledge. In practice, it has been argued, Benner produces a model of nursing which ignores issues of power and their influence on nursing epistemology. It is a method that ultimately retreats into the validation of practice by authority and tradition. The emphasis on intuition does not raise the status of nursing's knowledge claims, but rather fossilises a nursing practice distorted by the unequal power relations with competing epistemologies such as medicine. She is then, paradoxically, a profoundly conservative force in nursing.

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