

A CONCEPTUALIZATION OF CONCEPT

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One of the prominent concerns of contemporary professional nursing is with the state of nursing theory. This concern runs the gamut: Does nursing theory exist? Can nursing develop a theory base? Where, and how, should nursing theory or theories develop? Each of these aspects of concern has its proponents and opponents. A very basic aspect of the concern over nursing theory, however, should be a concern with concepts used in basic nursing research. The concern should focus on such aspects of concepts as to how they are developed and defined, and implicitly, why such a concern with concepts is necessary.

In order to understand something, for example, a concept, it is necessary that the "something" be taken apart and analyzed; thereby gaining a greater understanding of its place in the schema of other things. Unfortunately, the term concept has such a familiar sound to it that it is generally taken for granted; each and every user of the term fully comprehends the philosophic and scientific meanings of the term. In reality, however, what is comprehended by many users of the term is only a very loose meaning (Torres, 1980). Such a loose comprehension of the meaning of the terms is inadequate for the continued development of nursing theory. It is necessary to realize that if the concepts used are loose the potential contribution of the concepts to theory will be lost.

It follows, then, that for concepts to make the maximum contribution to theory they must be initially clarified and examined. Chinn & Jacobs (1978) see this examination of concepts as a poorly understood activity, one that is generally neglected. Therefore, it is necessary to examine the what and how of concept formulation for the subsequent knowledgeable use of concepts in the development of nursing theory. The present intent is to address a conceptualization of concept and to suggest the value of a perspective using micro concepts, rather than general — or macro — concepts, in nursing research and in the development of nursing theory.

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CHARACTERISTICS OF CONCEPTS

A characteristic of the term concept is the ambiguity of what is meant generically by the term. There are three characteristics to which the term can refer: 1) a property of things; 2) a relationship; or, 3) a context (Brodbeck, 1963). As an example of these differing characteristics Brodbeck uses the following example. The concept of "16" may refer to either $12+4$, or to 4^2 . The former indicates relations, the latter, property. This example also illustrates another characteristic of a concept. That is, the meaning of a specific concept is based on convention and consensual agreement, and not on private meaning.

The conventional meaning of a concept has some latitude, however, depending upon the theory in which the concept is used. For example, the meaning of the concept of attachment has quite a different meaning in a theory dealing with maternal-infant interaction than it does in a theory dealing with psychotherapist-client interaction. The precise meaning of a concept is thus dependent upon the context in which it is employed.

Another characteristic of concepts is that they are neither true or false, valid or invalid. This point is at variance with the position of those who hold that concepts that may appropriately be said to be true or false are called propositions (Dickoff & James, 1975). The question of truth or non-truth has no place in either the delineation, analysis, or use of concepts in the development of theory. Theories are only models of reality and not reality itself, and therefore concepts are only models of reality and not reality itself. Concepts are elements in a theory; they make a contribution to the theory attempting to approximate reality. All error cannot be eliminated from conceptualizations of reality and since error is always present truth or non-truth cannot be said to be present.

Concepts can, however, be significant or not significant. Their appraised significance is dependent upon the frequency and the regularity with which the property, relation, or context of the perceived reality occurs. If the phenomena occur infrequently or in an unusual context, the concept is non-significant regardless of the goodness-of-fit of the concept with reality.

In an effort to deal with the ambiguity and confusion engendered by the term concept several authors have suggested that another term be used in any discussion of concept. Brodbeck (1963) suggests the word "term" be used; Hage (1972) uses the word "element" to point out the interrelationship of concepts with other essential parts of a theory.

The label of "unit" is employed by Dubin (1969) to avoid the general confusion that exists when concept is used 1) to mean those things out of which science attempts to make sense, or 2) to mean whole theories, or 3) to designate conceptual frameworks.

Although each of these three substitute words — term, element, unit — is neutral and well describes the functional characteristic of a concept, there seems to be little gain in introducing another word into the language of theory development; it is akin to using a private meaning for a specific concept rather than using a conventional meaning. It is more appropriate, and necessary, that the confusion which exists about the characteristics of concepts be resolved. This resolution can begin with a clearer understanding of how concepts arise.

Concepts arise in the mind of an individual as a result of attempts to make order out of that which is observed. How each person will specify a concept is a function of both a personal world view, and for the social scientist, a professional world view. The result of this specification of concept is made public in science by the way in which the research effort is designed. The result occurs because the concepts of interest selected by the investigator lay out the field of inquiry and prescribe the method of investigation. What, then, are the various modes of concept specification, hence analysis, that have been and are employed in the effort to approach knowledge and make order out of the perceived world?

Several modes of concept have been described by Edel (1979). These include: 1) *Socratic analysis* which imposes the criteria of generalness and essentialness. The criterion of generalness is more easily met than is essentialness as essentialness involves a value connotation that is subject to tradition and history. 2) Subscription to an *element analysis* mode indicates that the concept be broken into its component parts and the relationships among these parts be isolated. 3) Adhering to *genetic analysis* would delineate a concept on the basis of a consideration of how the concept evolved. 4) Application of the concept to the institutional and cultural norms extant in society is the process that is utilized in the *functional analysis* of a concept. 5) *Systems analysis* of concepts considers the global context in which a concept must be analyzed. 6) For *pragmatic analysis* the meaning of a concept is found in its practical consequences. 7) *Logical analysis* looks at the concept relative to the way the concept could be verified. 8) *Operational analysis* considers three things in the defining of a concept: operations as a necessary condition for meaning; where different operations are employed the concepts are different; and, the concept equates with its

operations. Finally, 9) *phenomenological analysis* looks for the meaning of the concept in the experience of the persons involved in the phenomenon. This brief listing of some of the major modes of concept definition points out the varied ways in which disciplines have attempted to define and analyze concepts.

The mode of analysis will be dependent upon the maturity of the particular discipline and the investigative aims of the discipline. It has been suggested by Edel (1979) that in those cases where such purposes or aims cannot be sharply drawn within the discipline, the definatory process regarding concepts could include an explanatory preamble. This preamble would substitute an explanation of problems and established knowledge for the tenuous pronouncement of meaning often found in many social science disciplines.

It may be discomfoting to acknowledge that concepts do have the characteristic of social values. The presence of social values is manifested when the scientists select and define those concepts in which they are interested. Thus, concepts relevant and significant to the discipline are selected but, as Nagel (1968) says, "so what?" Nagel takes the position that the thinking person is capable of conducting scientific inquiry by virtue of an interest in the concept; social values vis-à-vis concept selection are not of concern. It is in the explanation of the findings of the investigation of the concept that social values have no place. Subscription to the rigor of the scientific method is the check which helps avoid value biases in concept definition.

A final characteristic of concepts is that the label or name placed on the concept very often implies a sense or polarity, or dichotomy (Berthold, 1964). This sense of polarity leads to an inference that the obverse of the concept must exist. For example, adaption as a concept label leads to the logical inference that maladaption is a polar measurable phenomenon.

In summary, the knowledgeable and productive use of concepts in the process of theory development requires that: 1) concepts have intention; 2) concepts are seen as models of some aspect of reality; 3) the concepts selected are significant; 4) the mode of concept analysis dictates the method of investigation of the concept; 5) the value bias and semantic overtones are inherently present in the concepts selected for study; and, 6) concepts are subject to continual redefinition, analysis, and refinement.

MICRO AND MACRO CONCEPTS

It had been said earlier that concepts serve to lay out the field of inquiry and to prescribe the method of investigation. A reasonable

question to ask then is one regarding the scope of the field of inquiry laid out by concepts. The scope will be determined, in part, by the perspective of the field of concepts, either micro or macro.

Macro concepts are those concepts which are general in nature; for example, "man," "health." King (1968) held that concepts which are general in nature serve as a broad foundation and can lend flexibility in the process of structuring knowledge. I put forth the idea that, at this point in theory development in nursing, micro concepts rather than general, or macro concepts, may have the potential to contribute more to the structuring of nursing knowledge. Consider the following points.

A micro concept is less general in nature and deals with a more circumscribed phenomenon. Self-esteem is an example of a micro concept; it is much less general than the concept of personality, a general concept.

Another distinction which can be made between macro and micro concepts is one of the tightness or looseness of meaning which is allowed of the concept. Macro concepts, because of their generalness, have a loose flexibility of meaning. Micro concepts would not allow this looseness. The intention of macro concepts is to deal with the whole rather than parts and consequently a larger number of variables comprise the macro concept. This combination of flexibility of meaning and numerous variables can be problematic. And, the consequence could be that less would be learned about more.

In contrast perhaps more can be learned from less if micro concepts are employed. Since micro concepts deal with fewer variables the number of relationships among the variables is decreased. With a fewer number of variables and relationships it can be anticipated that the likelihood of spurious empirical findings is decreased.

No distinction, however, should be made regarding the need for maximum precision in operationalizing either macro or micro concepts. Precision of indices is a requirement for both. But, since micro concepts imply a tighter meaning the operationalization of the micro concept can more easily be made precise. Merton (1957) says that an index should stand, ideally, in a one-to-one correlation with what it signifies and that the difficulty of establishing this relation is one of the critical problems of science. I suggest that the difficulty could be employing micro rather than macro concepts.

The larger the knowledge base of a discipline the more likely it would be that macro concepts would be used in expanding that knowledge base. Less well established disciplines have a shorter tradition of knowledge and a smaller knowledge base. This may not

necessarily prevent a young discipline from laying claim to macro concepts. It does, however, raise the spectre of an edifice built upon a less than substantial foundation.

In addition to a smaller knowledge base, younger disciplines have a smaller cadre of scientists capable of undertaking the task of exploring macro concepts. This consideration may not deter scientists in young disciplines from investigating macro concepts. However, such investigative efforts may in effect spread the skills of a discipline too thin; the opportunity to take on the task of redefinition of concepts and the development of theory may be hampered. This should be a major consideration in those instances where the discipline is not able to make clear exactly what it is attempting to understand.

I think that a young discipline such as nursing will most quickly advance its knowledge if initially it selects to vigorously investigate micro concepts. Out of these rigorous efforts could arise clusters of micro concepts which, with further investigation of the relationships among them, would evolve into the macro concepts that explicate the discipline's theoretical foundations, tradition of knowledge, and scholarly experience.

SIGNIFICANCE FOR NURSING

Nursing is a young discipline but one with a long history of tradition and experience. As a young discipline it has to deal with and accept the fact that knowledge comes in degrees and various disciplines are at varied stages of development. Our scientific knowledge is less well developed than that of more established disciplines. In the early stages of the development of a discipline's theoretical knowledge it is only through trial-and-error that concepts begin to fit a logical and consistent framework to explain phenomena. From this will come developed frameworks which can be tested; out of these testings distinct nursing theories will evolve. The outcome of this continual reformulation and refinement will be the science of nursing.

At this point in time nursing must deal with the issue of concepts. What are the specific concepts of interest to nursing? The crux of this question is that the image of reality being dealt with, the concepts, be precise.

The importance of this precision of concepts has been pointed out by Batey (1977). Batey reviewed the research articles published in the past 25 years in *Nursing Research*. She concluded that the major limiting feature of published research reports, relative to yielding knowledge advancements, was a weakness of the conceptual phase.

These limiting weaknesses included: lack of clarity regarding the concepts which had guided the investigation; ambiguity as to the meanings of the concepts used — particularly those which would serve as variables in the empirical phase of the work; inadequate definitions of conceptual meanings; and, an absence of concept re-examination.

The misuse of concepts developed by other disciplines is another limitation to be avoided in nursing's attempts at concept use and theory development. There is no quarrel with nursing's use of concepts from other disciplines since the nature of scientific knowledge is cumulative. The quarrel would be with its inept use, and therefore limited contribution to knowledge.

In conclusion, the position is taken that micro concepts are, at this time, the most productive mode of inquiry for nursing theory development. This position is supported by the following considerations.

First, the intention characteristic of a micro concept can be more easily construed. *Second*, the conventional meaning of micro concept is less likely to be distorted and misconstrued. *Third*, the nurse scientist working with a micro concept would be able to identify the most appropriate mode of concept analysis more easily; as a result the field of inquiry is delineated and the method of investigation made clear. *Fourth*, micro concepts escape the polarity evoked by macro concepts: for example, the micro concept of "response to immediate life events" does not evoke the polarity inherent in the macro concept of "coping" and the explanation of investigative findings about a micro concept should be less vulnerable to social values since micro concepts elicit a lesser sense of polarity than do macro concepts.

Dubin (1969) cogently states that scientists should be selective in what they choose out of the experiential field for purposes of analysis and that they should deal with selected characteristics rather than with things as a whole. If the goal of nursing is to advance knowledge, the use of micro concepts, the selected aspects of reality, rather than the wholes, the macro concepts, will at this point in nursing's scientific history facilitate achievement of that goal.

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RÉSUMÉ

La notion de concept

Toute personne qui entreprend des recherches orientées vers le développement de la théorie des sciences infirmières doit avoir une idée précise de la notion de concept, à savoir, comment on formule les concepts et comment on les étudie. L'usage intelligent des concepts dans le développement de la théorie des sciences infirmières sous-entend certaines données: le concept choisi doit refléter l'intention de l'auteur, il doit être vu comme le modèle d'un certain aspect de la réalité, il doit être important et soumis à une analyse et à un perfectionnement continu. L'auteur affirme que les micro-concepts qui traitent de phénomènes plus circonscrits que les macro-concepts, ou concepts généraux, sont susceptibles de contribuer davantage à l'élaboration des connaissances en sciences infirmières que les concepts généraux. Les quatre caractéristiques spécifiques des micro-concepts qui sont appelées à faire progresser les connaissances en sciences infirmières sont les suivantes: l'intention de l'auteur, la signification, l'analyse et la non-polarité. La recherche rigoureuse de micro-concepts pertinents aux sciences infirmières doit mener à des recherches éventuelles sur des groupes de micro-concepts qui pourraient expliquer les fondements théoriques des sciences infirmières et de l'expérience universitaire.