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INVESTIGATING THE INFLUENCE OF PRE-THEORETICAL ASSUMPTIONS ON CLINICAL REASONING

by

Barbara R. Hooper

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
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Barbara R. Hooper

INVESTIGATING THE INFLUENCE OF PRE-THEORETICAL ASSUMPTIONS ON CLINICAL REASONING

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Western Michigan University, 1994

This study explored what internal beliefs a therapist holds about the nature of reality and how those beliefs influence how he/she delivers occupational therapy. A single-case study design was utilized. Data were collected from three in-depth interviews and observation of multiple treatment sessions.

The results suggest that this therapist's view of the world could be categorized into four areas: (1) What she believed about ultimate reality; (2) What she believed about life, death and eternity; (3) What she believed about human nature; and (4) What she believed about the nature of knowing. The study also suggests that this core world-view informed how the therapist framed her clinical practice, and how she provided occupational therapy. Further, the therapist's view of the world and her clinical practice are both deeply rooted in her socio-cultural experiences. This case-narrative provides a rich description of the inter-relatedness of socio-cultural context, world-view and clinical reasoning.

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CHAPTER I

INTRODUCTION

The History and Importance of Clinical Reasoning in Occupational Therapy

The discussion of clinical reasoning and its relation to the use of conceptual frameworks, its relation to assumptions underlying treatment techniques, to the integration of theory and practice, or to tacit knowledge is now a familiar discussion within occupational therapy (Barris & Kielhofner, 1985; Gillette & Mattingly, 1987; Krefting, 1985; Lau & McCall, 1989; Mattingly, 1989, 1991; Neuhaus, 1988; Parham, 1987; Reed, 1984; Rogers, 1983; Rogers, 1986; Schell & Cervero, 1993). Historically, the discussion of clinical reasoning has followed the medical profession's investigation of diagnostic reasoning among physicians (Elstein, 1976; Elstein, Schulman, & Sprafka, 1978; Fleming, 1991; Kassirer, Kuipers, & Gorry, 1982; Neuhaus, 1988; Rogers & Masagatani, 1982). More recently, the discussion of clinical reasoning has begun to focus on the uniqueness of reasoning in occupational therapy based on the uniqueness of the profession's fundamental philosophy and the uniqueness of the treatment context (Burke & Depoy, 1991; Crepeau, 1991; Fleming, 1991: Mattingly, 1989; Mattingly, 1991; Schell & Cervero, 1993; Schwartz, 1991). Regardless of the specific focus being considered, clinical reasoning has, in all aspects of its investigation, been recognized as a key component of clinical expertise (Kassirer et al., 1982) or clinical mastery (Depoy, 1990). It has been considered the determinant of quality patient care (Rogers, 1983); it has been proposed as the means to help

students connect theory with practice (Rogers, 1986); and it has been discussed as the distinguishing characteristic between lay person and "professional" (Parham, 1987). To further understand this multifaceted phenomena would have implications for education programs (Cohn, 1989; Neistadt, 1987), for program development, staff development, staff supervision, and occupational therapy management (Schell & Cervero, 1993).

Introduction to a Pre-Theoretical Component of Clinical Reasoning

The importance of clinical reasoning is clearly established. However, many facets of the reasoning process require further investigation, including the role that the personal context plays as a shaper of reasoning (Schell & Cervero, 1993). In attempting to describe one component of the personal context of reasoning, this study will explore the are of an individual therapist's worldview as an influence on theory and action. By "world-view" I am referring to an individual's perspective of the nature of reality, their assumptions about human nature, and their assumptions about the relationship of occupation to human nature. For this discussion, it is assumed that some basic or comprehensive understanding of the nature, origin, and destiny of persons (i.e. world-view) is inherent in every description of human functioning (Van Belle, 1980). It is also assumed that everyone holds to a framework, in various degrees of development, that addresses these issues of the nature and meaning of human existence, and that everyone acts both consistently and inconsistently with that framework (Holmes, 1983; Van Belle, 1980).

Historical Development of the Concept "Worldview"

The concept of "worldview" has its roots in philosophy. Kant was the first to coin the German word Weltanschauung. The term was transmitted from German Idealism and Romanticism through philosophers such as Fichte, Schleirmacher, Hegel, and Goethe until it was used as a standard term by the 1840's. The term was widely used to mean "a global outlook on life and the world" (Wolters, 1989, p. 15), or "a total vision of life" (Griffioen, 1989, p. 84). The term Weltanschauung was adopted by most languages in the Western world by the end of the nineteenth century. In English, "worldview" was assimilated as the Anglicized equivalent. Examples of Weltanschauung would include socialism, Marxism, materialsm--" a point of view on the world . . . a way of looking at the cosmos from a particular vantage point which cannot transcend its own historicity" (Wolters, 1989, p. 19). A worldview may be collective, but it will still reflect the particular experiences and perspectives of that nation, class or period.

Uses and Definition of "Worldview"

The term is used in a great many areas ranging from the natural sciences to philosophy to theology. In sociology, "worldview" has been used on a par with "ideology," "social frameworks," "Background assumptions" and "paradigms" (however, Kuhn distinguished worldview from paradigm in that worldview is an essential ingredient in any scientific paradigm--a worldview determines what counts as "nature" or "world.") But perhaps the notion of worldview is most often used in cultural anthropology where it is synonymous with "value system," "belief system," "collective representation," "cultural code" (Griffioen, , 1989, p. 90). Philosophers have differed, however, on the relationship of worldview to philosophy and value

systems; Dilthey formulated the idea that worldview can be distinguished from philosophy or from value systems in that philosophy emerges out of a deeper Weltanschauung; philosophy is highly theoretical, Weltanschauung is pre-theoretical.

In most of the disciplines that have adopted the term, worldview is often understood as personal or communal, pre-theoretical commitments about the relationship to self to others and the relation to humans to the non-human world.

Olthius (1989) reported an increasing awareness of how worldview affects our perceptions of the world and out actions in the world, and agrees with Griffioen (1989, p. 106) that "all theorizing is, to an important degree, regulated by visions stemming from the pre-theoretic realm." This approach has been increasingly used in the occupational therapy literature in such terms as phenomenology.

Purpose of the Study

The objective of this study is to explicate another piece of the clinical reasoning puzzle. It explores the following questions: What is the relationship of a therapist's pre-theoretical commitments, i.e. worldview, to his/her practice? Do these starting assumptions serve as a way of influencing clinical decision? Therefore this study will be an exploration to identify a therapist's pre-theoretical commitments and to examine if a deterministic relationship exists between world-view and practice. This study will follow the tradition of research that has utilized qualitative methodologies to investigate clinical reasoning (Argyris & Schon, 1974; Mattingly, 1989; Rogers & Masagatani, 1982; Schon, 1987).

Further Definitions

For the purpose of this study, I will adopt Fleming's (1991) definition of clinical reasoning. "The term reasoning is used as an umbrella term to cover all aspects of thinking" (p. 989). The focus of the study, however, will be on mining the "unstated thoughts and formulations" of the therapist's work with patients as described by Burke and Depoy (1991, p. 1027). They believed that examination of "the character and spirit of practitioners" could illuminate the clinical reasoning process.

In this study one's unstated thoughts and formulations about human nature and human meaning will be referred to as one's worldview, pre-theoretical commitments, philosophical starting points, or presuppositions. Throughout the literature, these terms have been used to indicate one's view of ultimate reality, human nature and human meaning, and these terms represent an explicit and/or implicit commitment on the part of the practitioner regarding the meaning of human life (Holmes, 1983; Van Belle, 1980).

The term "assumptions" also needs to be clarified before proceeding. In the clinical reasoning literature, there are at least two ways the term assumptions has been used. One, "assumptions" has been used to refer to theoretical assumptions, meaning the tacit or explicit theoretical rationale for a treatment technique. Two, "assumptions" has been used to refer to an underlying view of humans that can also be tacit or explicit. Unless referring to the work of another author, assumptions will be used as the latter in this discussion.

Organization of the Literature

In addition to the above definitions, I will categorize the literature on clinical reasoning into three categories for the sake of discussion. While the categories are an

oversimplification of the literature, they will serve as a suitable context for illustrating the relationship of this study to previous clinical reasoning studies. The first category will examine clinical reasoning from a theoretical rationale perspective. The second will review clinical reasoning from a perspective of filling in the gaps when theoretical rationale is inadequate for the clinical problem. The third category will look at clinical reasoning as a springboard from a pre-theoretical foundation.

CHAPTER II

LITERATURE REVIEW

Clinical Reasoning as Theoretical Rationale

The first category of clinical reasoning refers to a therapist's ability to present a rationale for the treatment approach chosen (Rogers, 1983, 1986); that is, to describe the decision-making process to change the treatment approach, or to understand why a certain treatment technique produces certain effects (Parham, 1987). For example, according to Parham (1987), Kaplan (cited in Parham, 1987) traced the underlying principles of various neurological treatment techniques back to the work of Sherrington (cited in Parham, 1987) and the concept of the reflex arc and the interaction of synaptic processes. In this case, "fundamental knowledge" (p. 2) refers to understanding and articulating the mechanisms believed to influence change in the central nervous system. Therefore, a thorough understanding of anatomy, neuroanatomy, physiology and kinesiology would be foundational to articulating a rationale for treatments utilized. She urged that therapists not attempt intervention techniques without such an understanding of governing principles.

Similarly, Parham (1987) proposed that assumptions about cause-and-effect relationships exist in every treatment decision. A reflective practitioner is aware of those assumptions embedded in the treatment of choice and makes a deliberate effort to articulate them. Parham (1987) used the example of a behavior modification model versus a sensory integration model. In a behavior modification model, a therapist may

select certain treatment techniques involving the administration of rewards and punishments in a systematic way. These techniques are based upon the underlying tenets that learning results in a change of behavior and that motivation toward change relies on the environmental consequences of behavior without regard for internal processes. In contrast, from a sensory integrative starting point a therapist may involve a client in a self-directed activity within a structured environment. These treatment techniques are bared upon the underlying tenets that learning results in a change in the central nervous system and that motivation is an innate drive toward mastery as opposed to environmental consequences.

The point made by Parham (1987) in these examples is that there is a conceptual basis underlying all treatment techniques which explains why the techniques are considered effective. She urged that this conceptual foundation must not be ignored. If it is ignored, the therapist could employ treatment principles that derive from incompatible theories and produce undesirable consequences from treatment.

In each of the examples above, clinical reasoning is defined as the therapist's ability to "clearly and critically analyze the reasons for the decisions and action we take" (Parham, 1987, p. 555). This type of reasoning is described by Mattingly (1991) as applied science or applied theory, both of which are characteristic of reasoning in the medical profession. In this applied-theory, both of which are characteristic of reasoning in the medical profession. In this applied-theory style of thinking, the diagnosis and the dysfunction serve as the basis for assessment, prediction of outcome, and treatment chosen (Rogers & Masagatani, 1982).

This method of framing clinical problems is considered to be important and essential in practice; however, applied theory, or applied scientific reasoning, itself is insufficient for effective therapeutic intervention (Mattingly, 1991; Schell & Cervero,

1993). Although occupational therapists continue to use this diagnostic-based thinking as an important organizer in intervention, seldom do they find themselves in a treatment situation that solely involves knowledge of a diagnosis or dysfunction, followed by a prediction of outcomes, and the application of treatment activities to achieve those outcomes. More typically, therapists find themselves faced with the complexities of individual cases where theoretical knowledge proves an insufficient guide (Mattingly, 1991).

Clinical Reasoning When Theoretical Rationale is Inadequate

A situation in which the therapist finds theoretical knowledge inadequate opens another category of clinical reasoning which was introduced by Schon (1983, 1987) and Mattingly (1989). These researchers have explored what processes a practitioner uses to make decisions when foundational knowledge, as mentioned above, is inadequate or incomplete for interpreting a clinical problem or for providing a rationale for action. Schon (1983) found, through descriptive research methods, that physicians, engineers, architects, teachers, counselors, therapists, or urban designers identified "unfamiliar situations where the problem is not initially clear and there is no obvious fit between the characteristics of the situation and the available body of theories and techniques" (p. 34). In such situations, the practitioner will have what Schon (1983) calls a "reflective conversation" with the situation. The practitioner will experiment with the clinical problem in an attempt to answer the question, "What is this?" Through experimentation, she/he listens to the "back talk" of the materials and shapes future action accordingly. This reflection-in-action produces an on-the-spot experiment. Original ways of understanding are questioned and new ways of shaping the problem are explored, shaping the problem differently than carries a variety of

implications for choosing a next move for the situation. In this description, observation of the current situation, the practitioner's past experience, and the ability to frame the problem differently in individual situations appear to be the starting points used to articulate reasons for action. This reasoning occurs in addition to the basic tenets of knowledge mentioned above by Parham (1987).

Parham (1987), also described this reflective process in the context of occupational therapy. A therapist reasoning in this manner determines what will be addressed in treatment and sets a tentative plan for action. The therapist then begins the problem solving process by applying technical procedures and evaluating the results in light of the expected results. If an unexpected conflict arises, the therapist may reframe the problem, change the approach, and evaluate the results again. In reflecting on the intervention afterwards, the therapist becomes more skillful in articulating explanations for the numerous decisions made in the session.

Rogers (1986) also described the process in which a therapist uses reflection-in-action. She described this reasoning style as "clinical theorizing" (p. 123). The reflective therapist develops possible hypotheses and proceeds to monitor and modify variables based on clinical discoveries during treatment. Rogers (1986) believed that understanding this reasoning process is an important quest because it has potential for opening several implications for how to educate students to become reflective practitioners.

Also following Schon's (1983) theory of reflection-in-action, Mattingly (1989) completed an ethnographic study researching the ways in which a therapist reasons in those moments when "anticipations and prejudgments are thrown into radical doubt" (p. 3). She described the narrative process as the means of reflecting on past clinical events as well as shaping future treatment decisions. Therapists used stories as sense-

making tools. In her study, stories served as the vehicle for the reflection-in-action process described by Schon (1983). Through narrative, a therapist reflected on what happened in practice, why it happened, and the significance of its happening. Through story, therapists sought to understand more than what variables prove effective and which should be modified. Mattingly (1991) observed that therapists sought to understand the "human world of motives, values and beliefs" (p. 983) in which the disease occurs: "Narratives make sense of reality by linking the outward world of actions and events to the inner world of human intention and motivation" (Mattingly, 1991, p. 999).

In addition to telling stories as a reasoning or sense-making tool, Mattingly (1989) described how therapists would also project story onto new clinical situations. In projecting narrative onto a particular situation, the therapists envisioned a certain future for a patient and gave plot to story from that vision. The projected story served as the larger context that guided the selection of treatment activities. The stories were shaped by the past experience of the therapist, futuristic images of the therapist, the patient's past and the concept the patient held of his or her future. As therapists attempted to enact their projected story, they were often confronted by a conflict between what was actually occurring in the patient encounter and the projected plot.

As opposed to the ability to articulate mechanisms believed to influence change in the nervous system, or skill in on-the spot experimentation, "fundamental knowledge" (Parham, 1987, p. 2) now becomes an understanding of the contexts of an individual patient's life that has been interrupted and changed by the illness experience.

Summary

Thus far, two categories of clinical reasoning apparent in the literature have been addressed. First, clinical reasoning has been discussed as the therapist's ability to give a sound rationale, using applied theoretical reasoning, for decisions made in treatment; that is, for why certain treatment techniques are considered effective.

Second, clinical reasoning has been described as the therapist's ability to perform onthe-spot experiments when knowledge and experience are inadequate for explaining decisions. Narrating the events of a treatment session may be one means of arriving at explanations and future clinical plans.

These categories have been delineated for the sake of discussion. In reality they are not as clear cut as they have been described in the preceding pages; in fact, Rogers (1983), Mattingly (1989, 1991), and Fleming (1991) have observed that therapists actually shift back and forth from one mode of reasoning to another depending on the expectations of the work environment, the focus of the intervention being the disease or the situation of the patient, and the therapist's experience.

For this discussion however, still a third category of clinical reasoning can be found throughout the discussion on reason's directives. This third element of clinical reasoning will be the focus of this study.

Clinical Reasoning as Stemming From a Pre-Theoretical Foundation

In addition to theoretical knowledge and experiment in the face of unexpected outcomes, it appears that an active personal worldview is influential in the reasoning process. Krefting (1985) defines knowledge at this philosophical foundation level as follows:

A philosophical base is presented as the model builder's frame of reference. Frames of reference are defined as individual's personal notion of reality, their cultural, social, and psychological biases, their values and beliefs, and how these factors influence the practice of occupational therapy (p. 175).

Mosey (1981) defines this level of logic as underlying supporting assumptions "regarding the nature of the individual and the individual's relationship to the human and nonhuman environments" (p. 17). These assumptions are the "first remises from which the reasoning of a philosophical system derives its beginning" (Mosey, 1981, p. 18). Neither Mosey (1981) or Krefting (1985) seem to make the distinction between philosophy and worldview that Dilthey (1960) proposed. They seem to use the model proposed by Engels (cited in Wolters, 1989) that worldview equals philosophy.

Although both Mosey (1981) and Krefting (1985) discussed the impact of philosophical [worldview] assumptions on the profession of occupational therapy, this premise of reasoning from pre-theoretical assumptions is true for the individual therapist as well. (Rogers (1983) proposed that each therapist carries a "pre-image" (p. 605) of a patient and that image is derived form the postulate system of the individual therapist. The therapist's unique view of occupational therapy reflects a "nonconscious ideology" the therapist brings to the clinical situation.

This philosophical foundation of clinical reasoning also emerged form the two year ethnographic study completed by Mattingly (1989; Mattingly & Gillette, 1991). Mattingly (1989), investigated multiple facets of clinical reasoning. One component in the reasoning process the researchers identified was the informing influence that a therapist's underlying framework had on the therapeutic approach. That is, the particular frame of reference about the nature of human meaning made a difference in what intervention was provided and why. Although these underlying tenets embeded in practice were initially tacit, they were explicable and through the reflective process. Therapist's stories about practice, and about frustrations encountered in practice,

served as indicators of underlying assumptions or beliefs that were actively influencing their intervention (Mattingly, 1991).

For example, Mattingly (1989) discussed two underlying belief systems that informed a therapist's vision of disability and its treatment. One derives from a Cartesian or Kantian world-view in which the material world is separated from the world of ideas, the temporal from the spiritual, the body from the soul or mind. (This dualism actually has its roots in Platonic thought.) From this world-view the body and its diseases could be treated separately from the person and his or her experience of the illness. Disease was no longer connected to the patient and the meaning it may have to the whole of the patient's life, thus making the interpretation of the situation more mechanistic. This mechanistic view of the world, and more specifically, of the body, translated into a biomechanical frame of reference in occupational therapy.

When occupational therapists operate within a biomechanical frame, they focus especially on the development of the patient's skills and strength; activities are conceived as exercises in skill-building. This may involve exercises in the usual sense (e.g. lifting weights) or functional exercises, such as learning how to guide a wheelchair after a stroke or learning to do a bed transfer as a paraplegic (Mattingly, 1989, p. 145).

Thus, a frame of reference may derive from certain world-views prevalent in the development of Western thought and have an impact on the treatment process.

The second belief system that Mattingly (1989) described derives from philosophies that opposed the mind-body dichotomy. This school of thought, known as phenomenology, views the body as inseparable from a person's network of relationships, from his/her personal history, from one's sense of self, from the occupations that have shaped and influenced the individual, from deep commitments and values the individual holds. The body cannot be separated from the way one experiences the world. Therefore, "when our natural way of moving through the world is lost, the world itself, as we have inhabited it, is lost" (p. 174).

This integrated world view defines reality not in dualistic terms but in terms of subjectivity, or the life experience of each individual. From this starting point, occupational therapists utilize activities as a means of structuring experiences as a bias for the patient's reorientation to the world. For instance, toilet transfers were not just used for skill-building but also as a means of "learning new ways of orienting themselves (Mattingly, 1989, p. 175) in the world. "Therapist's efforts are directed, in part, toward a patient's re-embodiment--a reclaiming of the body" (Mattingly, 1989, p. 177).

Not only with the choice of certain treatment activities be influenced by one's starting assumptions, the functional assessment may also be performed with subtle differences depending on which view, the biomechanical view or the phenomenological view, dominates a therapist's philosophical framework (Mattingly, 1989).

These examples of the biomechanical frame of reference and the phenomenological frame of references serve to illustrate that certain notions of reality, or pre-theoretical commitments, often inform the occupational therapy process. It is possible, though, that a therapist may work from both sets of assumptions simultaneously. In fact, the analysis of a practice session offers multiple layers of interpretation (Mattingly, 1991). This study, however, attempts to identify one of those layers as the therapist's pre-theoretical assumptions about the nature of humans and how those assumptions affect his/her basic intent in therapy.

Only recently has this discussion of the influences of presuppositions on thought and action entered the arena of occupational therapy. It is necessary, therefore, to look to the social sciences for further background and information on the influence of starting assumptions on thought and action. The following discussion examines the discussion of presuppositions in philosophy, natural science, human science, and psychology.

A Philosophy of Knowledge

First, the belief in an influential inner set of assumptions stems from a certain philosophy of knowledge. This implicit component of knowledge has been articulated by Polanyi (1947, 1951, 1962) and other philosophers. Polanyi (1962) stated repeatedly that there is always a personal element to the knowledge we hold and the knowledge we articulate. A distinctive feature of knowing, in fact, is our active shaping of knowledge and our active acceptance of it as a token of reality; we do this shaping and accepting according to a "framework of commitment" (p. 115) that we hold tacitly. Therefore, scientific values and scientific inquiry are guided by the scientist's particular framework of commitment—that is, his/her conception about the nature of things—and are accompanied by the scientist's corresponding views of reality.

For example, according to Polanyi (1962), the ideal of purely objective knowledge was introduced by Laplace (cited in Polanyi, 1962). Laplace proposed that the world could be represented by detached, precisely determined particulars, and that all experience should be explained in bits of data. This supposedly objective program, however, stems from a personal world-view from which the world is perceived as a mechanical system. If the nature of reality is ultimately mechanistic, then the affairs of humankind are perceived to be reducible to statistical interpretation. Therefore, like all science, Laplace (cited in Polanyi, 1962) approached nature with passionate commitments or pre-theoretical beliefs. These beliefs serve as a guide to scientific inquiry. "There is present a personal component which sets our standards of values,

drives us to fulfill them and judges our performance by these self-set standards" (p. 195).

In editing Polanyi's (1962) works, Grene (1969) clarifies Polanyi's personal-knowledge philosophy describing it as "from-to knowledge" (p. xi). That is, knowledge "guides me from proximal, interiorized particulars to the integration of a coherent distal whole" (p. xiv). Knowledge, in this sense, is analogous to the visual-perceptual system in which perception relies on types of information that are not attended to directly and yet contribute to the realization of an object on which attention is focused. The eye muscles adjust the thickness of the lens to produce a sharp retinal image. At the same time, the brain takes into account clues form the field of vision, clues form the labyrinth, clues from different angles and varying degrees of illumination. Sometimes the eye will even override standards of correctness in order to see objects behave in a reasonable way. These clues occur automatically without effort on the part of the perceiver and yet are fundamental for the perception of a coherent, external whole.

Human beings are impelled to move from obscurity to clarity, from incoherence to comprehension, in the same way the visual system works to make clear and coherent the things that are seen. "In both cases we pick out clues which seem to suggest a context in which they make sense" (Polanyi, 1962, p. 101). Thus explicit awareness is always founded in and carried by the tacit acceptance of something not explicit. This means that knowledge is always personal. All knowledge has an implicit base and is never entirely explicit.

The context in which events and circumstances taken on meaning may be the context of one's individual concepts of reality. Polanyi (1962) believed that people

entrust the "life and guidance of our thoughts to our conceptions . . . we grant authority over ourselves to the conceptions we have accepted (p. 104).

There is a reciprocity, however, between one's interpretive-framework and one's experience (Olthius, 1989). Experience is assimilated according to a presuppositional framework, but it simultaneously re-shapes that framework to include new experiences. Worldview is expanded or adapted to attune our understanding and perception more closely to what is true. In both the assimilation of information or the adaptation of the framework "a formal step can be valid only by virtue of our tacit confirmation of it" (Polanyi, 1962, p. 131). The part of knowledge one articulates must rely on the tacit coefficient for guidance and confirmation. An affirmation exists anterior to the premise at hand.

The role of pre-theoretical commitments as shapers of practice can be illustrated by comparing two philosophies of science and the way in which philosophies impact on the practice of science.

The Influence of Pre-Theoretical Commitments on the Practice of Natural Science

VanLeeuwen (1982) offers a brief history of natural science, which was ushered in with changing periods of thought since the fifteenth century. Natural science emerged to eclipse the sixteenth century religious world-view in which the world was considered to be created by God for human benefit and was influenced by both natural and supernatural powers. The view of human experience which natural science proposed as a replacement was that the earth exists as one of many planets in one of many galaxies. If supernatural forces do exist, they hold no influence upon the natural world. From this naturalistic view of the universe, the laws of the natural world and for humanity are not subject to any appeals to authority to unlock their

mysteries, but can be extricated through the vigorous application of human reason.

The Scientific Revolution and the Renaissance were fueled by this belief that humanity and nature were both ends in themselves.

Simultaneously, these two historical movements perpetuated the belief system that defined the nature of the world and humans in the world as autonomous. This belief system that the natural world is a closed system implied that it could be reduced to its smallest components through rigorous analysis. This world view then played a role in ushering in technological advances and contributed to a growing reliance on mechanization over the individual craftsperson in the workplace. The eighteenth century Enlightenment was explicit in its intent to liberate human personality from the supernatural—its mission informed by a belief in human autonomy and humanity's ability to control destiny. Natural science was perceived as the means to guarantee the success of this mission through imposing methods of control over human and subhuman experience.

In sum, these historical movements from the sixteenth to eighteenth centuries were united by a common, directing belief system referred to as secularism. The secular worldview perceives all matter (human and non-human) to be morally neutral, able to be understood by examining the smallest parts apart from the whole, and able to be described in statistical terms (VanLeeuwen, 1982; Walsh & Middleton, 1983). These underlying assumptions about humanity, reason, technology and natural science gave rise to a positivistic philosophy of science. A positivist approach is based on the belief that "only sense-observable data can be accepted as fact, that the appropriate language of all scientific inquiry is that of mathematics and formal logic" (VanLeeuwen, 1981, p. 32). The methods for attaining such knowledge became

reductionism, experimentation, explanation, operationalization, quantification, and objectivity.

This underlying worldview also became a framework for the practice of organizational theory, economics and politics. It birthed the rules of the marketplace, the content and methodologies of medicine and psychology, and even priorities for parenting (Starr, 1982; VanLeeuwen, 1982).

The purpose of this brief and simplified historical review is not to deny the merit of natural science methodologies, but to illustrate that even the "objectivist" approach to science and knowledge is rooted in certain historical and philosophical positions about the nature of the universe, human nature, and human meaning (Polanyi, 1985; VanLeeuwen, 1982). How one practices science is influenced by cultural, historical and personal world views.

The Influence of Pre-Theoretical Commitments on the Practice of Human Science

Dissenters from this mechanistic, autonomous view of persons and from this positivist view of knowledge underlying the practice of the natural sciences called for a new paradigm--one not based on the fundamental belief that human and subhuman phenomena are equal in empirical approach, but one that considers the unique nature of human beings. From the perspective of human science, human subjects and their researchers are reflexive beings able to transcend experimental manipulations by reflecting on procedures, and human action cannot be examined apart from the meaning it holds for the actor.

Therefore, a pre-theoretical commitment has been embraced which perceives human beings as complex and unique creatures having capacities above non-human species. How this particular science is practiced will emerge from this belief. That is,

from this assumption about the nature of persons, the emergent scientific inquiry will include the subject as a collaborator in the process. In addition, the commitments of both researchers and participant will be spelled out and allowed to illumine the research, and skills in empathic understanding will be developed to allow the researcher to enter the situation from the subject's perspective. Human science is "based on the premise that the reflexive capacity of both researchers and participants is so radically human and so basic to the research process and outcome that it makes sense to work with it than to keep struggling to make it disappear" (VanLeeuwen, 1982, p. 116).

Again this discussion is not designed to herald one approach over another but to illustrate that underlying assumptions about human nature may play an active role in thought and action. An examination of the practice of psychology offers further illustration that one's intent in therapy may be informed by certain philosophical starting points.

Pre-Theoretical Assumptions and the Practice of Psychology

Vander Goot (1987) affirmed that inquiry and therapeutic process is guided by a mindset or a set of attitudes: "In all discussions, guiding attitudes are operating, sometimes without being stated and sometimes without even being held consciously" (p. 125). She continues to assert that "it is unavoidable that our explorations are selective... our process of selection must be guided by a larger and more inclusive view into which we will incorporate our observations" (Vander Goot, 1987, p. 125). She attempted to clarify what larger and more inclusive views were operating in different psychologists' approach to the specific concept of emotion. Each approach is based upon strong commitments to how one answers the question, "What is a person?"

For example, the ethological tradition in psychology is based on the assumption that all human behavior is either a help or a hindrance in the struggle for survival. Therefore, with that belief as the backdrop, emotional expression gets interpreted as being either essential to the human species as a simple form of communication, or a result of higher differentiation in the human brain. In both cases, although oversimplified here, "what we are is what our ancestors became as they adapted in order to prevail in the timeless struggle of the species against nature" (Vander Goot, 1987, p. 130). Organic, emotional, and social structures have reached their present form over the history of evolution. For therapists starting from this philosophical foundation, the basic intent in therapy is to determine the role certain behaviors play in the species' survival.

Another example of how underlying assumptions about the nature of persons influence the intent of therapy, can be found in the psychoanalytic tradition. From this perspective, humans are believed to be driven by irrational, instinctive energies which sometimes come into conflict with the standards imposed on them through socialization by parents and society. It is believed that this conflict produces negative feelings such as anger, jealousy, fear, etc. For therapists practicing in this tradition, the basic intent of therapy will be to uncover the hidden meanings and motives of actions.

According to the humanist tradition, a human being is believed to be an organismic, actualizing process; an active actualizing gestalt (Van Belle, 1980). The individual finds worth and dignity from free and spontaneous expression, living by the self's own agenda and wishes. This view is based on the premise that human nature is basically good, and, given free and spontaneous expression, will pursue constructive ends. From this pre-theoretical commitment about persons, a therapist will facilitate an

improved understanding of one's own feelings, desires, and agendas as a means to self-fulfillment.

Van Belle (1980) agreed that psychologists work from some understanding of human nature. However, in his opinion, psychologists seldom explicate this view. More frequently, a therapist's anthropology (a term he uses to mean one's view of humans) is held tacitly, but can be distilled from their practice and from their writings. He published a study of Carl Rogers' view of humans in relation to Rogers' view of therapy, believing that there is an anthropological basis (that is, statement about the nature of humans) to every tradition in psychotherapy. Psycholotherapy is a human activity and cannot be practiced without some view of human nature. Van Belle (1980) demonstrated the implications of Rogers' person anthropology on the dominant themes in his view of therapy, bringing forward the implicit meanings in Rogers' work to the point that Rogers' himself felt "clarified" (p. 121).

As in the comparison of two approaches to science developed earlier in this paper, this brief comparison of different approaches within psychology attempts to illustrate that there are certain pre-theoretical commitments about the nature of reality and the nature of humans that actively influence one's intent in practice.

Significance of the Study

If the practice of psychotherapy as a human activity cannot be practiced without some active view of reality and hum, an nature held by the psyhchotherapist, then certainly a similar framework exists for the individual practitioners of occupational therapy. This element has been introduced by Mattingly (1989) as one in several processes involved in clinical reasoning. And in this study I will examine the role an

underlying worldview plays in influencing the reasoning process of occupational therapists.

If thought and action emerge from a foundational worldview as the authors cited above suggest, then there is a need to explicate that foundation. Schell and Cervero (1993) proposed that "practice will be strengthened by educational approaches that support therapist's identification of their own practice theories and understanding of how embedded their knowledge is in their personal and practice context" (p. 609). According to these authors, learning to evaluate one's assumptions and how those assumptions relate to one's practice has implications for teaching clinical reasoning, for staff development, and for the focus of supervision and management. Mosey (1970) suggested, "the professional practitioner may be distinguished from the layman or technician by his/her knowledge of the particular propositions which guide his/her actions and his/her conscious selection of these propositions" (p. 9). Therefore, clarifying underlying propositions, as well as teaching new therapists to examine these propositions and articulate them to patients and other health professionals could contribute to improving the professional status of occupational therapy. It could also aid in developing clinical programs that reflect occupational therapy's unique vision of life and very necessary contribution in the health professions. This study introduces another facet of the process by which the knowledge of propositions is accessed.

CHAPTER III

METHODOLOGY

Subject

Due to the exploratory or introductory nature of this study, a single-case design was chosen. The therapist chosen for the study was selected by the researcher based upon the unique combination of her cultural background, her ability to articulate her underlying philosophical assumptions and her view of the scope of occupational therapy. At the time of the study, she was one of 17 therapists employed by a private contract agency. All 17 therapists were working separately in geriatric rehabilitation in the context of long-term care facilities throughout a 200-mile radius of southwest Michigan.

The subject knew the general topic and process of the project and submitted a Therapist Consent Form (Appendix A). The facility where the research took place was also informed.

Data Collection and Analysis

A semi-structured interview was used to explore the personal commitments held by the clinician. General topics for the initial interview guideline (Appendix C) were originally formulated from Reed's (1984) description of assumptions underlying the theory and practice of occupational therapy" (pp. 514-519) and from Mattingly's (1989) study on narrative reasoning. The questions outlined in Appendix C were guidelines used to facilitate open-ended discussion regarding cultural-historical

influences in the clinician's career, the clinician's a priori assumptions about the nature of humans, the relevance of occupation to human nature, and other world-view tenets the therapist feels impacts their doing of occupational therapy. The interview was held in person and audiotaped. Following the initial interview, the interview was transcribed by the researcher and transfered onto 3x5 index cards (Lincoln & Guba, 1985). The index cards were then grouped into categories according to similar context. The categories were named and organized through the method of causal analysis (Miles & Huberman, 1984). Causal analysis was selected because the purpose of the study was not simply to describe what occurs in treatment in certain philosophical contexts, but to disclose why treatment may be carried out in a particular way. The saliencies in this study emerged more as deterministic than merely correlational. All data was coded to its original source to create an audit trail. An audit process would verify the authenticity of the final results (Lincoln & Guba, 1985).

From the first interview, questions were developed for a second interview depending on what topics needed further clarification or what connections needed confirmation or negating by the respondent. The data was again transcribed and coded. Using the same categories from the first two interviews, a third interview was conducted to provide a more in-depth description of saliencies that emerged from the first two interviews. The third interview was also transcribed and coded. Each interview was conducted over a 60-90 minute time frame.

In addition to the interviews, the clinician was asked to select a treatment session that was videotaped for the project. The therapist determined which patient to approach, location, treatment modalities, and duration of the treatment session. See Appendix B for patient release form.

The therapist was observed during three more treatment sessions which were not videotaped. Field notes were used to record observations. All observations were coded in the same way as the transcribed data.

Causal analysis and descriptive text a model was developed. Both the model and the text were submitted to the informant for validation. In checking the results for accuracy to the data, she commented, "You really made it very beautiful. It was very logical and appropriate. I feel like I am reading my autobiography."

The research design established for this project has been identified as having potential for provoking reflection on underlying value systems, beliefs, and assumptions influencing one's practice (Fondiller, Rosage, & Neuhaus, 1990; Mattingly, 1991).

The project was then written according to guidelines established by the Graduate College and submitted for partial fulfillment of the requirements for a Master of Science Degree in Occupational Therapy from Western Michigan University.

CHAPTER IV

RESULTS AND DISCUSSION

The results of coding, categorizing and analyzing the data collected in this study are illustrated in Figure 1. The therapist's observable practice decisions and her approach to patient care is believed to emerge out of the four primary categories describing her underlying philosophical commitments. I suggest in this model that these unseen commitments constitute her underlying view of the world, or the lens through which she gazes and which focus or frame her reasoning process. The relationship of the four categories to each other is believed to be an organic relationship in which each category both informs and is informed by the others. There is also a permeability from outside the four categories suggesting that these tenets are directly related to the socio-cultural experiences of the therapist. The model is illustrated as an open system indicating that change in one sub-category can result in change at any other point(s) of the model. The components of the model and the relationships it depicts are described in detail in the following discussion.

Socio-Cultural Influences on the Development of the Respondent's Thoughts

The purpose of this section is to present a sketch of a few key elements of the therapist's culture, which includes cultural beliefs, societal structures, family structure, family background, childhood education, influences on career choice, and occupational therapy education and treatment in her culture. The elements of this sketch are based

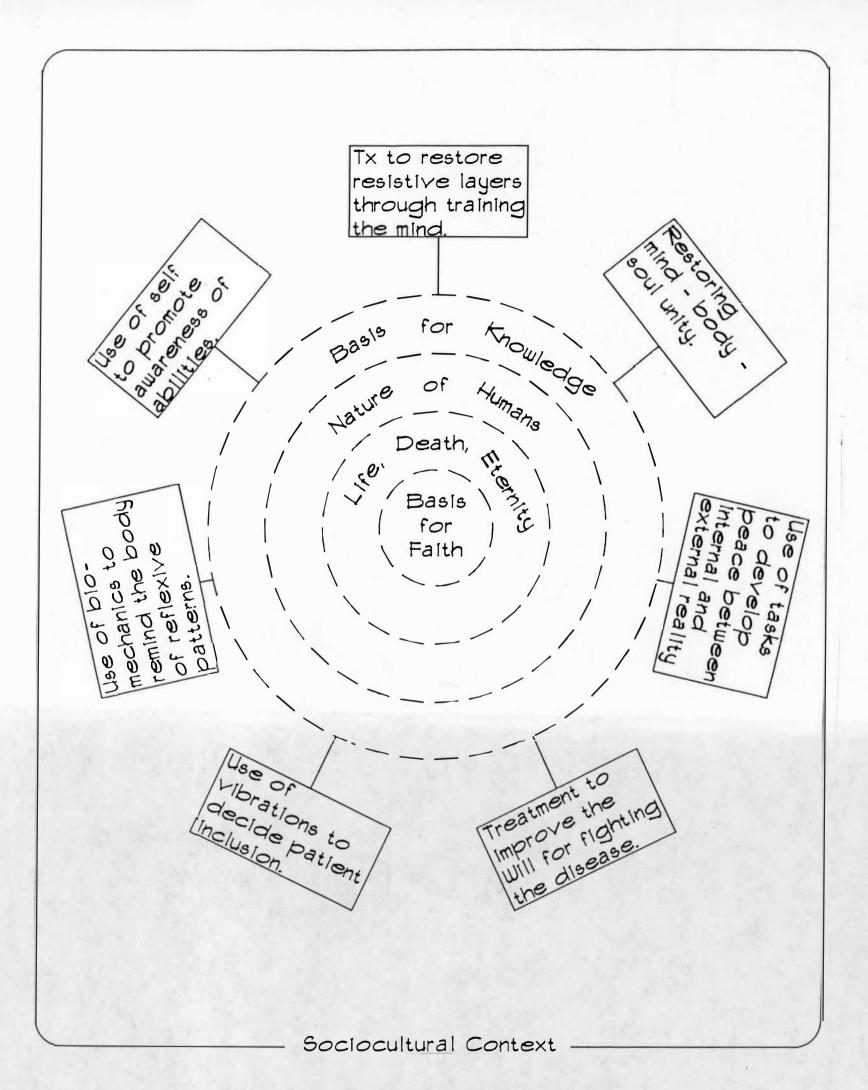


Figure 1. Significant Categories in the Respondent's Worldview and the Relationship of Worldview to Clinical Practice.

on autobiographical data found throughout the interviews conducted during this case narrative. The overall attempt in this chapter is to understand this therapist as a person embedded in, and inseparable from, a particular cultural climate. This chapter will set the backdrop from which her viewpoint of the world and her approach to occupational therapy emerges.

Cultural Background

The therapist involved in this case study (A) is a citizen of Bombay, India. She has lived and worked in Bombay until coming to the United States in 1992. She had 15 years of work experience as an occupational therapist in Bombay working with multiple diagnoses and age groups. She is the first of her family to travel to the States to work. English is her second language; all of the direct quotes from the data have been modified for grammar and syntax. The therapist reviewed these corrections and agreed that no data had been altered in meaning as a result.

Reincarnation and Societal Structure

In India, according to the Hindu belief system, one's current life is a reflection of the greatness or lowliness of one's prior existence. Reincarnation is the basis used to explain why someone is born into a particular family in a particular socioeconomic group; that is, one may receive good or bad parents, poverty or wealth, based on good or bad Karmas, or work, done in a prior life. A believes that she was born to her particular set of parents because of common desires or interests between she and her parents in a prior life. For example, A shared her father's interest in art, she shared her mother's calm and peaceful spirit, she shared a quiet spirituality with her parents that her other siblings did not share. Therefore, A believes that she is a combination of

both her father and her mother, and this combination in their current family situation emerged out of their shared associations in the previous life.

Reincarnation also forms the basis for explaining family events such as not being able to have children, or the failure to be married despite many family-arranged meetings of potential marriage partners. Why do these unfortunate events happen to someone who is otherwise healthy and treating others well? "They must have hurt someone in the past life, and now they are paying for that."

The belief in reincarnation can also have an impact on the opportunities a person has access to in his/her current life. The respondent shared that her family believed she had been someone great in her past life. Her parents were able to make that conclusion through comparing her personality and actions and accomplishments with other children, including their own children. A was always the child who did well and received high merits. Families often target the high achieving child for higher education and success.

Family Roles and Structure

As an adult woman, A bought a house of her own in India. This is very uncommon in the culture since most households are multi-generational households. It was a shock for A coming to the United States to work in long-term care settings and finding so many geriatric people separated from their families and their own households. In India, it is not expected that anyone of age seventy should be independent; it is the duty of the daughter or daughter-in-law to take care of the parents. Similarly, if anyone in the household would become ill, there may be up to twenty people at home to care for that person. Particularly, though, the burden of care falls on the daughter or the wife. It is considered the woman's duty to "forget about her job,"

forget about everything; her priority is to take care of her husband or to look after her mother."

With this cultural value as a backdrop, occupational therapy (OT) has a different focus in India. On one hand, A reports she can achieve a better result with the geriatric population in India because of the support system they have within their family. Here in the States, she finds that to be a limitation in treating the geriatric population. On the other hand, in India, when a patient begins to eat by themselves again, the family may not allow this. Especially if the person is a "major person in the family," the family members will feed him even though he is capable of independence.

Childhood Education

A reported that children in India learn the religious beliefs of Hinduism from a very early age in the school system. They are taught about Krishna, Atman, God, as the source of all life and strength. They learn about reincarnation, and about the biographies of those who were disciplined enough to reach Yogi status (a person who transcends all material life, becomes all-knowing like God, and is able to manifest themselves in another place through the power of the mind), what actions are good for society and how one becomes a good person. A clarified that although everyone learns about the dominant beliefs of the culture, not everyone in India will practice it. She sees herself as unique in the sense that the Hindu philosophy has occupied her "total interest" since learning it as a child. As an adult, she has often been teased by her colleagues for attending "peace studies" at work. She reports that many people will begin to practice the religion they learned as a child when they get older because they are not able to find solutions to problems and will, therefore, turn to God.

Family Influence, Destiny, and Intuition on Career Choice

A grew up with a sibling who had polio. She discussed the impact this had on her professional choice: When she was younger, A would take her sister to therapy, and as she watched the physical therapist, she "had the impression she must do PT because therapy made a lot of difference in her sister's life." In the therapist's culture, these "impressions" are related to the Hindu belief system. These early experiences allowed her to realize that she had been associated with the medical professions in her past, and that she must pursue her interest in the medical field. With this connection of professional choice to destiny, many people in the Hindu culture will stay in a single profession their entire life. However, if one is destined to change careers, that, too, will become apparent at the right time and right age.

In addition to her experiences with her sister's therapy, A also expressed the importance of her family background to her career interests. Her family valued ambition and having their children well educated. "My parents are looking for that in their children. Their children should do great in the society and become well-educated. But higher education is very difficult to do financially--my parents would sacrifice anything to get me through that." The therapist feels she received her motivation and her ambition from her family--her father encouraged her to pursue a medical career, and it was prestigious to have a daughter learning at the medical college. The therapist clarified, however, that in addition to her father's wishes for her, it was ultimately her choice to pursue an education in the medical professions.

A expressed the other factors influencing her career choice were her own interest and ambition, her academic merit, and her interest in art. She was always interested in attaining something beyond a bachelor's degree, beyond the "status of a

technician." She enjoyed anatomy and physiology much more than chemistry and mathematics, but realized her merit was not high enough for medical or dental school.

The process which followed, and by which A decided she was meant to study OT, is a god example of how professional choice is rooted in the belief system of her culture. A was working on a chemistry experiment when she got a call to schedule an interview for admission to the OT program. This appointment surprised her since she was awaiting a call to interview for PT school. But she left the lab in the middle of her experiment and went for the interview, feeling that "she must go there." Although at the time did A not know very much about OT, she was "drawn" to that interview and that profession. She had an intuitive understanding that this would suit her interests in psychology, art and science. She also realized this was destined for her and that inside herself she had the drive or desire to be admitted to that school. Her education at the medical college began that day and she never even returned for the things in her locker at the lab.

Occupational Therapy Education

In describing her OT program in India, A described frames of references and textbooks very familiar to American-trained occupational therapist. When she graduated, sensory integration was the dominant frame of reference being taught and her program used the familiar Willard and Spackman, Trombley, and Pedritti texts (the founder of the OT school in Bombay was from America). However, she stated that she learned to emphasize therapeutic use of self through the higher focus o psychology in her program and through her own studies in Hindu philosophy. The field of psychology in India has a strong focus on the power of the mind and the human learning process.

A reports that currently the OT program in India has incorporated the human occupation model. In her opinion, the model is based more on the philosophy of her culture than the philosophy of western culture. She feels the basic assumptions of the model are a given in her culture, things they have taken for granted about their daily practice in India for years. Therefore, because of the different cultural belief systems, A feels that the human occupation model is more difficult for western therapists to learn. In her opinion, occupational therapy in India does not have to focus on whole-person theories as much because students have a foundation of those philosophies from their former education in Hindu studies.

Occupational Therapy Treatment in India

The typical occupational therapy clinic in India is equipped with inclined planes for sanding, peg activities, a quadricep chair which is a custom made device for strengthening, pedal-driven band saw, Plasticin (version of theraputty), and bead work. Therapists in India do not practice "hands-on" techniques, since that is considered to be the role of PT because no activity is involved. All therapy goals are addressed through activity.

A expresses that she uses similar treatment activities now that she is practicing in the stats, but that the documentation and the limitations placed on her by insurance influence her reasoning process. For example, she may identify someone who could benefit from her services, someone she would be able to treat in India, but here she must consider the payor source and the patient's potential when making decisions about length of treatment. She does not believe these restrictions should interfere with her decision to provide needed service, nor does she believe that there should be a

distinction between "skilled" and "non-skilled" service--"if the need is there, it is skilled."

One can understand these opinions by examining how our referral system and treatment contrasts with that in India. Before coming to the States, A would regularly provide service to people who had been disabled for 10-20 years. For a she realizes that she will not change the deformity, "but you can make them aware of what is within them, and improve their positive factor to fight that illness." Therefore, as will be discussed later, the role of OT in India goes far beyond facilitating functional improvement. In fact, it is not uncommon for therapists to arrange marriages for clients or collectively pay for equipment that a patient needs. All services in India are provided without charge. However, who receives services is often determined by someone's position in life, intelligence, positive attitude and their will.

The only thing that needs to be documented in India is the evaluation. The evaluation includes sensorimotor, cognitive, and perceptual components. It includes chief complaint, medical history, social history and future plan. Since there is no insurance, nothing will be documented beyond the value. A expresses that what she does with a patient is difficult to document. She wonders how the philosophical/spiritual element, the mental strength, the mind-body-soul approach could be documented.

Conclusion

These were a few of the cultural and educational factors which establish the soil out of which has grown A's experience and her perspective on the world. The following chapter will attempt to describe in more detail what the world looks like from

her vantage point and how the elements of her world-view lived out in her practice of occupational therapy.

Components of the Respondent's World-View

The purpose of this section is to describe the unseen commitments held by the therapist, and to suggest that these commitments are dynamically related to how the therapist frames clinical situations and makes treatment decisions. The key commitments identified in this study were the therapist's: basis for faith, view of life, death, and eternity, beliefs about the nature of human beings, and what constitutes a basis for knowledge.

Basis for Faith

The Hindu culture believes that God is everywhere in the form of energies. The energies are omnipresent and are available for personal strength and protection against events that may cause illness or harm. This power that permeates the universe is also within each person. This God, or power, can only be realized on a cosmic level through reaching the God within. Once you have tapped that divine energy within, you will know contentment and peace, and understand the power that upholds the cosmos.

The category "basis for faith" is perhaps the cornerstone of the therapist's world view because it seems to impact and shape the contents of all the other components of her world view. This component can be described as her "beginning that has no beginning" or her "final reality." This category includes her presuppositions about a final reality that explains the way things are (Sire, 1990).

In this case narrative, the therapist described personal commitments that "final realty" is an energy source that is cosmic in nature. This energy is the source from "whom all beings are projected, in whom all live and unto whom all return"

(Sadhanas). It exists both within and without every living thing--"Whatever has life is considered God, or a form of God."

With this cosmic-internal power as a starting point, the therapist believes the ultimate purpose in life is to reach beyond the material life, beyond the senses and consciousness and become aware of this power, to tap this energy for strength, peace, balance, enlightenment, protection and resistance to stresses or sufferings. She stated that this can be accomplished by focusing one's mental capacities on a symbol and by restraining the senses in an 8-step progression of increased complexity of control. Through a rigorous discipline of controlling and focusing one's mind and body, one can realize this power within and consequently realize the power that upholds the cosmos. To approach one's center through strict training is to approach the God (Sadhanas, 1989).

The first step in approaching one's own divinity is to gain control of breathing patterns. From there, the next step is to begin to restrain other senses such as hunger. This is accomplished by fasting. Another example is the control of pain--one may experience bleeding, but because the senses are being restrained, the pain will not be felt. This control occurs through the mind, which can override what happens with the skin. Senses control results in enhanced resistance to any damage encountered. After one has gained control of their senses, the next step is concentration, or focusing on an object to the exclusion of any internal or external stimuli. With this totally exclusive concentration, complete control of the mind can be accomplished.

After completing all eight steps, a person can reach the God that is within. The result of this inward journey is peace, calm, personal balance. Through effective concentration, internal and external balance can be achieved. This is considered 'success.'

The therapist expressed that when a person can become united with this divine power within, one can be outside of anxiety and worry, one will be a balanced person, one will be filled with positive vibrations and can fight any stresses.

From her vantage point on the world, life is a quest for ultimate unity. One aspires to unity between one's internal world and the external world, unity between

one's personal divinity and the Supreme energy, unity between self and others. There is a divine oneness that unifies everything. Through meditation a person attempts to overcome material desires and meet god," or just unite with the Supreme Soul."

The respondent went on to state that if someone is not able to accomplish oneness with the Supreme Unity in this lifetime, then the quest will continue into the next lifetime and the next until one's internal divinity is one with the external cosmic divinity and the soul finds its ultimate peace in that eternal ONE.

The events of the current life are determined or destined by the deeds of the previous life, the interests or associations one had in the previous life.

In sum, ultimate reality for this therapist is a Supreme Energy, which one strives to unite with through realizing that same divinity within oneself. One's soul continues to be re-birthed until it has finished its work and that oneness is achieved. Then it no longer takes on a new birth having achieved an eternal state of Peace.

As a starting point, this basis for faith impacts all other antecedents of her world-view as they can be categorized as elaborations on the themes found in the therapist's description of hat is ultimate in her view of life. The other antecedents seem to be informed by what the therapist described as life's basis for faith. The themes of awareness, developing resistance to stresses, peace of mind, internal and external unity, positive acceptance, and personal divinity recurred often in the therapist's description of her viewpoint on the world and her reasoning about why she does what she does in the clinic.

View of Life, Death, Eternity

The Hindu belief system holds that there is a connection between the soul, the previous life and professional choice. That is, not only is a person's current birth influenced by the goodness of deeds done in the previous birth, but it is also determined by what interests one held, or what activities one was 'drawn'

to, in the previous life. If these interests and activities were not fulfilled or completed, then another birth is taken to finish them. For example, the therapist believes that she either had an interest in health care in her previous life or had actually worked as a medical professional. Therefore, she was born with that as an imprint on her soul.

To discuss her views of life and death, the therapist starts in the present life, but looks back to the previous life for answers to why things are the way they are in the here-and-now. She looks forward to the next life for motivation to aspire to goodness, vocational fulfillment and peace of mind. Her view of life is a continuum of past, present and future all dynamically interconnected, and holding strong influence over each other. And each component of her description of life, death and eternity is related to how she defined ultimate reality.

The Soul

The therapist defined life as an embodied soul on an immortal journey. If on that journey, the soul does good deeds, it returns in the next birth as a good person with few sorrows and few worries. However if the soul was hurtful to others, it must undergo suffering in the current life. The quest of the soul throughout lifetimes is to liberate itself from material connections, from worries, sorrows, etc. "Your main goal is to be liberate, to be reaching to the peaceful... more peace and liberation, going away from desires and attachments." How the soul manages suffering and how it serves humanity will determine the destiny for its next generation--"The soul has come from some other body to this body to suffer a little bit and come out of that. You will develop that much strength to go for the next part."

Therefore, the soul comes here now to develop strength through facing and resisting sufferings. If one fights stresses with mental strength, one will inherit a good next life on the way to that eventual Union.

Overcoming Past Mistakes Through Struggle

Not only does one inherit a good next life through fighting, but through struggle one can also move past old mistakes and realize one's divinity.

The opposite state of struggle and resistance or fighting is weakness, fear and ignorance. This state must be overcome if one is to reach Divinity; according to the therapist in this study, this state of weak-mindedness must also be overcome if one is to progress in occupational therapy. The therapist proposed that:

Humans are born into this material life, which means there will be ups and downs in life that everyone must undergo. However, the most important thing is how someone faces those stresses. Different people will face hardships in different ways depending on their mental strength and their background, or their experiences in previous lives.

The way one redeems past actions is to develop strength and resistance through sufferings. "Fighting, struggle is the great benefit of life. Then the soul comes out again" (Sadhanas). If someone has experienced physical illness and are fighting that situation with mental strength, they have accepted their situation, and have developed a calmness about it, they will not suffer in the next birth.

The Body and What Happens at Death

Since 'the soul is the highest idea' (Sadhanas), the body is considered a temporary house for the soul or temporary clothing for the soul. After this life is complete, the therapist believes that 'your soul will just leave this clothing. They just change the dress and enter another. Soul is immortal; it has no death. What is lasting is soul. Your soul comes from so many. Your desires are getting few, still you need to do something. We have this philosophy, get rid of the physical, you'll enter another world until you finish, and after that you will not take body form.

"When you die, you mix with the five elements including earth, air, and water."

One may question at this point how such ethereal beliefs are possibly related to how one practices occupational therapy. As this discussion continues, I will suggest that there are direct implications of this therapist's interpretation of what is ultimately Real and what constitutes life, death and eternity to what occurs in her delivery of OT.

In her case, the commitments to what constitutes life and death discussed above directly inform how the therapist frames the situation in which each of her patients find themselves in.

Destiny and Illness or Injury

Hindu philosophy proposes that accidents are destined according to past Karmas or previous life issues. However, such future events can be determined through use of the horoscope. It is considered a 'very developed science over there.' According to birth time and place, and the influence of the planets on an individual's life, a calculation can be made. The calculation will reveal how decisions should be made, who will be involved in an accident, who will become a paraplegic, etc.

Although the event or the physical injury cannot be avoided, the mind can be prepared for the predicted destiny. That is, someone who is predicted to become a paraplegic may plan for that life in terms of housing or work. Thus, they will develop mental strength and a positive attitude. It is possible that they will also become a good person. For example, if someone finds out they are going to die in six months, that person will avoid hurting others, will be enjoying life and doing good deeds. As a result, they may become 'well' in that time period and change their destiny. 'It happens.'

The therapist described the backdrop of the previous life's events as what predestines one to certain events in this current life. Not only does a person meet with injury and illness as a result of destiny, but one is born into a certain family, marries a certain person, makes decisions about purchases such as a car or house, moves to another geographic location, etc. based on the events combined by destiny.

However, the most important element in the event is the attitude in which one approaches the situation--one can meet the event with mental strength or mental weakness. As stated above, developing mental strength is one means by which the soul progresses from one life to another. Therefore, as will be illustrated later, the therapist believes one of her primary roles as a therapist is to intervene to diminish

anxieties, promote peace of mind and enable patients to overcome their physical condition through enhanced mental strength.

Nature of Humans

Already in the above discussions the therapist has begun to unravel her beliefs about what constitutes being a human person. She has stated that a human person is an embodied soul birthed into the present to struggle and fight in order to develop resistances, serve humankind, and better themselves in the next life. She has alluded to her belief that every person is divine and is charged in life to become aware of his/her own divinity as an extension of Divinity. Other pieces to her definition of a person also emerged from the data and will be discussed below.

<u>Human Persons as a Sum of Their</u> Evolutionary History

The therapist stated that a person is a product of a long evolutionary history and that each step of that evolution is carried within the subconscious and can be brought to conscious control through strict training. For example,

Once a pattern is made in our evolutionary history, it is there forever but may need to be brought back under conscious control. e.g., once humans could shake the skin like the cow-this submerged pattern can be brought back from the vast ocean of action (Sadhanas, 1989, p. 1).

This underlying belief directly influences the therapist's treatment and the rationale given for treatment in such areas as self-feeding.

<u>Use of Self to Promote Awareness.</u> From this therapist's perspective, all movement patterns are ingrained. You are born with functional abilities such as hand-to-mouth patterns. They are laid down from childhood and are not destroyed by

CVA's or other treatment diagnoses. However, the therapist believes that the injured patient now experiences a gap between those inborn patterns and their current life with a handicap. She stated that it is her role to "remind the person they can do it. They lose that connection and I will connect that link between what they lost and what they are. I make them more aware of that." One goal of occupational therapy from this view on the world is to increase awareness and to re-birth forgotten patterns.

Use of Biomechanics to Remind the Body. This therapist will not use the feeding task itself to revive that dormant skill because the ability to feed oneself is ingrained. They are no longer "aware" of their potential. Therefore, the therapist works to increase the patient's "awareness" and to develop the movement through "therapeutic media" such as cones, pulleys, etc. Once the patient is aware and the movement is there, the therapist reasons that the patients will apply it automatically to the feeding task because "the meal is there; the hunger is so much they will start using the hand." When the patients receive this biomechanical training, the therapist believes that he/she will again realize he/she has been conditioned for the feeding pattern from somewhere in the past.

Another example the therapist used involved how a patient regains skill in donning upper body clothing.

We work on movements. We are training for that functional task. We are using a purposeful activity to accomplish the movements. For example, when I say, 'go back, take the cone and put it in front,' I am encouraging her rotation. Then I will say, 'go higher.' In doing so, I am encouraging the movement she needs to reach her bra. That is the way we were trained--to tie the movement to the function.

Upon first clinical observations, it appeared that this therapist's focus was primarily on sensorimotor component areas, not connected to ADL's. Only when this belief about how humans are inborn with the skills of entire lifetimes was explicated,

could one understand the reasoning behind the therapist's interventions. I suggest her clinical intervention was directly rooted in this cultural-personal belief about what makes a person.

Human Persons as Mind-Body-Soul Oneness

The respondent also stated that a human person is a unity between mind, soul, and body.

I see their mind, I see their physical needs, I see their mental needs, their psychological needs, their spiritual needs and their emotional needs. Everyone has this mind, body and soul. When I work with a patient, I work on the three levels. I believe my therapy should approach the mind, reach to the soul, and then the physical will not be a problem.

The therapist not only believes there is an inextricable unity between the three areas, but also there is a hierarchy of access. In order to make physical changes, there must be 100 percent concentration of mind and the soul must be aware or conscious of what is happening. Awareness and insight occur at the soul level. When the mind is free from distraction and the soul has awareness of what is occurring, the body can be empowered to overcome injury.

This belief formed the backdrop to many treatment interventions the therapist provided. It was not only part of her reasoning given for certain treatment approaches, but was also a screen for how she framed clinical situations.

Providing Treatment to Restore Mind-Body-Soul Unity. The therapist often described her role as both improving range of motion or strength, etc. in order to meet the physician's requirements and increasing awareness at the soul and positiveness of the mind. For example, she was treating a geriatric patient for standing balance and trunk control. She described her approach as follows: Initially, the patient stated she

was unable to stand, afraid to attempt getting up from her wheelchair or to stand for more than a few seconds. The patient thought she was sick because she had fallen. The therapist proceeded to ask her to transfer to another surface. The patient became very angry with the therapist, and in her anger transferred herself to the other chair. The therapist interpreted the problem at that point to be "her spirit is not under control; this behavior is interfering with her progress." The therapist proceeded to educate the patient saying, "if you train your mind, if you calm down, if you go slowly, if you use high-level seats, you will do it." The therapist described her intervention as making the patient more "aware" and showing her what her potential was-- "I improve her awareness, and then she can do it." The patient improved from maximum assistance with transfers to stand-by assistance at walker level. The therapist's goals were to have the patient participating in functional mobility tasks independently and safely through increased hand function and decreased agitation. She believed these were accomplished by making the patient more aware and more positive.

In this case, the therapist defined the problem as a problem of mind, calmed the mind, made the soul aware, and the body improved (this case was dropped by both PT and Speech due to the patient being "uncooperative").

Another treatment example of how this belief drives therapy is in the area of arthritis. Again the therapist delivered a traditional joint stiffness, muscle strengthening and mobility program. However, she stated that it is not only a disease of the body. The disease process is hand-in-hand with their emotions, their mind, their environment, and even the weather. Therefore, she approaches treatment by "targeting the mind, using their inner strength, their positive approach" to fight the disease. She explained to her patients that the disease is not going to go away; it is degenerative, and all medication is superficial; it can only reduce the symptoms temporarily. "If you do

not use your mental strength, and you are not going to fight for your own strength, it is going to damage your whole pattern." She explained to the patient that worries will affect the endocrinological balance, which will result in a decrease in joint lubrication and will increase arthritic symptoms. "So try to develop your inner strength and fight the disease. Reduce the drugs and use your willpower."

On the contrary to achieving physical improvements through mental strength and increased awareness, the therapist described extreme cases where patients actually died due top "a weak mind." It is her opinion, from this particular framing of a client's condition, that the occupational therapist is the primary professional who can prepare the mind, and "pull her out of a stressful mindset."

In less extreme cases, a clinical problem such as a patient not improving was framed as a problem of the mind, not having enough resistance. In order to improve physically, the patient must have a developed pain threshold, tolerance for resisting pain, an understanding of the disease, awareness, rapport and trust with the therapist. "You have to see it is not one faculty or one category you are treating." In contrast, the therapist used the example of providing occupational therapy to a patient with dementia and focusing solely on a wrist contracture.

Use of Tasks and Self to Develop External Unity and Peace. In addition to an internal unity, there must also be a unity between what is going on in one's mind and what one is engaged in externally. If one is engaged in a task, but one's mind is distracted by other things, unity is disrupted. The mind must be made ready for the event or task and must "tune with that" external object or project.

The therapist often used treatment tasks to divert the patient from distractions of the mind and the internal world, from pre-occupations, to the task. She will make the patient aware by asking them to concentrate on the task and to let go of what is worrying them. Grooming was one example described in this context. That is, grooming is a refocusing on the external from say a state of depression. The therapist also uses herself as a means of re-connecting a patient to the external environment, e.g. "just wash your face, clean up and just be with me. You are smiling and it is so pleasant to talk with you."

Health and Illness Defined Through a Mind-Body-Soul Framework. The therapist's view of health is related to her belief that a person is a mind-body-soul unity. To have health restored, one must foremost have the mind healthy since it is the gatekeeper of the body and soul. "That person who says I can face anything, I can be out from any stress, I have that ability, and my positiveness makes me healthy." The therapist believed that if her patients are easily accepting their situation, they are happy, positive and confident, and, primarily, have peace of mind, then they have health. One must not let the mind get distracted, or allow the mind to have negative thoughts.

Instead one must focus the mind, concentrate until there is internal calm and peace uniting mind-body-soul. The Hindu philosophy's practice of Yoga is an exercise to accomplish "balance between the mind, body and soul." This is believed to be the way one becomes the best human being possible.

In treatment, although the therapist was providing biomechanical treatment techniques, she was attempting to accomplish a balance of mind and soul as she addressed hand function.

Human Persons and Their Protective Layers

Not only is there an internal unity of mind-body-soul that makes up a person's humanness, there is an external protective system that guards against life's stresses.

The therapist described a person as having "auras" or "layers" or "coverings." Only

with these resistive layers in place can a person be in tune with the external environment. A patient who comes for occupational therapy is described as having lost "the layers for the resistance to that stress. The coping mechanism goes away."

Use of Self to Restore Resistive Layers Through Training the Mind. Because of stresses, a person has lost their resistive layers and must "develop resistive powers for fighting with the stresses." The therapist stated that she must provide her patients with all the necessary layers for resistance to stress. She must also help patients think positively about reaching the goal of therapy.

In Hindu philosophy we believe there are 7 layers surrounding the body. According to the number of lyers, there is that much resistance for facing stress. Layers usually include positive thinking and self-confidence.

The therapist believes that by developing a positive and self-confident mind, one can restore protective layers to the body. She believes that occupational therapists play an important role in helping patients develop enough resistance to fight the suffering they are encountering. For her, this is primarily accomplished through a therapeutic use of herself and her interactions with patients.

For example, in the above case of the treatment of osteoarthritis, the therapist teaches her patients to develop resistance against pain. If the patients can train their minds, they will control the pain and restrain that sensation. If you cut out the pain, you cut out the suffering and the stresses because it is a cycle of pain, suffering, and stresses due to worries about the future.

Relationship of Humans to the World

This therapist describes one's relationship to the natural world as something to be overcome because it serves to bind up the soul rather than free it and to distract the mind with worries. She believes that the material world is an illusion. It looks true,

but it is not. The material world distracts from what is really true, i.e. peace. It distracts from the internal journey toward one's divinity. The material world will be cast off because it is perishable.

Therefore, the relationship that humans have with the rest of the world is an adversarial relationship that must be transcended through strict discipline of the mind-body-soul.

Basis for Knowledge

The therapist in this study not only framed clinical situations according to her view of reality, life, and death, and humanity, but she also arrived at clinical decisions through her cultural view of knowledge.

Intuitive Knowledge

The therapist repeatedly described her reasoning process as "I see what is ahead," "I see the next thing," "I see behind the physical problem." She described her basis for knowing as "intuitive power." This intuition power was often her process for knowing what is occurring in a treatment session, knowing who she will establish friendships with, knowing where she will move and when, knowing which arranged marriage is not for her, and even knowing when she will be ready to drive in the States. She defined intuition as "the faculty that is your direct perception without any experience." When dealing with a person as a mind-body-soul unity, intuitive knowledge is the means by which the therapist knows what is behind the physical problem or what in the mind is actually contributing to the physical problem. She stated that because of her philosophical starting points, she can read the stresses of a

patient when she enters the room. She believes that a patient's problem is more than their medical diagnosis. Just as important is how the mind is affected and is reacting.

This intuitive faculty was not used in isolation of but in conjunction with scientific knowledge. The therapist demonstrated a high level of biomechanical knowledge and was able to apply it to treatment techniques; however, she often changed the clinical intervention or her interaction with patients based on what she perceived to be happening behind the biomechanics.

Vibrations and Intuition

As discussed earlier, Destiny is the key determiner of life events both small and significant. One way a person can "know" what Destiny holds is through the science of horoscopes and astrology. Another way one "knows" what one should do or not do, including the intervention between therapists and patient, is through vibrations that the person or situation or even object emits. The therapist discussed vibrations as a medium by which intuition is made known. Vibrations can be either positive or negative. Certain vibrations will only mix with other vibrations as what is meant to be in one's life is played out.

One way intuitive knowledge through vibrations was utilized in clinical reasoning is in the screening process. "In screening certain patients, I will not feel comfortable as I am conducting the screen; in those cases, I don't think she is a good OT candidate." Or, on the other hand, the therapist will often be the only therapist who can work with a patient because she "sees" the issues behind the behavior or the physical problems and addresses those in her treatment. Other ways in which her basis for knowledge was influential on treatment will be discussed.

View of Self and Relationship to Others

The therapist espoused all of the above components of her belief about what is a person to be true of herself as well. Those commitments are influential in both her personal and professional relationships. For example, since she perceives herself to be able to distribute her vibrations to her surroundings and since life events are determined by destiny, then in the context of arranged marriage, "you will will only meet the vibrations that you are supposed to meet; until that happens you will not select a marriage partner."

In the delivery of occupational therapy, the therapist viewed herself as being able to read through the picture because of her intuitive factor, and because of that, able to achieve treatment results that other therapies are unable to achieve.

She used her interaction with patients to become "totally with them," and finds in her treatment that her total union with the patient enables him/her to do the task she is asking the patient to do. She gave an example of a patient who was being seen by another therapist and was reported to have 30 second postural control in unsupported sitting. But when asked to fill in for the absence therapist, the respondent told the refusing patient, "OK, today I will just be here with you while you work. Do whatever you need to do for your bath." In her totality of support, she found the patient able to complete a 60 minute bath without postural support. The patient requested to be placed on the respondent's caseload saying, "I think you will do much better." The respondent believes her perspectives on the world make her treatment interventions "a different thing."

Because of her belief system, much of her intervention involved discussing with the patient to "Make them understand life stresses, how they can face them, and making their mind ready for that new life." The occupational therapist "must give them

solutions to how they can fight" the stresses and come out from them. Part of this involved educating them about the illness or injury and providing examples of how they can function in light of the condition. Another part involved comparing their current performance on certain treatment activities such as pulleys and cones to previous performance. In so doing, she believed, the patients were able to see "they are good and they will do it."

Establishing concentration power was another goal this therapist believed she accomplished through her interactions with the patient. If a patient is not aware of what is happening with the illness or injury, for example a patient is not aware of how impaired her hemiplegic arm is, the therapist believed the OT must make the patient aware by getting the patient to concentrate fully on the muscle needed to do the task. She believes that "when you make them aware, you will achieve the goal; it is easy when the patients put their whole concentration on that particular activity."

The respondent believes that when someone in concentrating intensely on what she is asking them to do, then she has reached to the soul. And "where the spiritual works, the mind works there."

In sum, a large portion of what the therapist provided to her patients was a therapeutic use of herself. She completely believed in the power of her own interactions to accomplish most of the facets that are critical to treatment from her world-view, i.e., trust, awareness, concentration, a positive mind, peace of mind, resistance to stresses, internal unity between mind-body-soul, and unity between internal environment and the external environment. One can conclude that much of what this therapist provided her patients was closely intertwined with and influence by an out-of-site system of beliefs about the world and people in the world.

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CHAPTER V

DISCUSSION

Many studies conducted in clinical reasoning have referred to an element of reasoning that is at work behind the scenes, that goes beyond a therapist's experience level, and is unique to the individual therapist (Barris & Kielhofner, 1985; Gillette & Mattingly, 1987; Krefting, 1985; Mattingly, 1989, 1991; Parham, 1987; Reed, 1984; Rogers, 1983; Rogers, 1986; Schell & Cervero, 1993). Some have considered this hidden element to be so tacit as to be mostly unmineable for articulation (Schon, 1983). In some documentation about clinical reasoning, this unseen facet of reasoning is referred to as a therapist's personal values and beliefs (Mattingly, 1989).

This study has begun to give description to that underground component of reasoning; it has begun to dive one step deeper than personal values and beliefs in order to get a glimpse of what births them. This study offers a model for clinical reasoning that emerges from specific categories in a therapist's belief system.

In this case narrative, I suggested that clinical reasoning is grounded, in part, in a therapist's particular spin on the world which includes his/her answers to the following questions: What is ultimate reality or what is the ultimate reason why things are the way they are? What is the purpose of life? What happens at death? What is a person? How do we know what we know? I have also suggested that each therapist will answer these questions differently depending on their own socio-cultural background and life experiences. In this model, I have suggested that the answers to such questions are fluid and may change over the course of time.

Looking at clinical reasoning as having world-view roots not only provides for a further description of the reasoning process, but also has several implications for both the profession and the individual practitioner. Since occupational therapy in this country is actively recruiting for increased diversity, this model may provide a framework of understanding when working with therapists trained outside the United States. It has potential to serve as a meeting ground, or bridge, between people of different cultures. For example, in this case narrative, I originally judged the performance of this therapist to be very reductionistic and biomechanical. But as I was able to understand how she defines the world, her treatment became quite profound and illustrated a kind of wholism I dream of for my own practice. As therapists are able to trade glasses, there can be tremendous learning across all borders.

The model has potential in both teaching and developing clinical reasoning skills. If the concept of practice as stemming from a therapist's particular view of the world is supported by further research, then clinical reasoning courses may begin to help students and therapists better understand their own working view of the world and how that impacts their treatment approach.

In sum, this case-narrative has supported what has been reported broadly in the literature of other disciplines and has supported the hypothesis of this particular study that this therapist held certain pre-theoretical commitments about the world. These tenets could be explored and identified in part. These tenets are believed to have a deterministic relationship to clinical practice decisions and approaches.

Appendix A

Therapist Consent Form

Therapist Consent Form

I am an OTR employed by NovaCare, Inc. I am also a graduate student at Western Michigan University completing the post-professional Master's program. In particular fulfillment for finishing Western's degree, I am conducting a study in clinical reasoning. I am seeking an experienced occupational therapist to participate in this study. The study may be helpful for increasing an awareness of the processes that guide reasoning throughout patient treatment.

In the study, you will be asked to be observed and to videotape a portion of your daily patient care. If you decide to participate, I will ask you to consent to (a) audiotape 304 interviews regarding your experience and your beliefs about OT, (b) submit a videotape of a patient treatment session which you will be able to choose, and (c) agree to observation by the researcher of your treatment sessions. One interview will occur before the treatment session, the others will occur after the treatment session and will attempt to link information gathered in the first interview to your approach to treatment. confidentiality of therapist and patient will be maintained at all times.

If this study result in publication, confidentiality of the facility, therapist, and patient will be respected.

Participation is voluntary. You have the option of not continuing with the study at any time without consequence. You also have the right to ask questions about the study and the methodology by contact me, Barb Hooper, at 776-0332.

| arb Hooper, OTR | |
|---|--|
| understand the nature of the research project and recognize my participation is oluntary and that I may withdraw at any time without penalty to my work erformance. | |

Appendix B
Patient Consent Form

Patient Consent Form

I am an occupational therapist with NovaCare, Inc. I am conducting a study about what is involved in how your therapist thinks as the two of you address your abilities and difficulties. This study may help your therapist and other therapists clarify what influences them to do what they do when working with patients.

I am asking your permission to have your sessions with your therapist video-taped. These tapes will not be used by anyone else. Each one will be coded and transcribed so that no names will be used at any time. The videotapes will be erased after the study.

The focus of this study is on your therapist, not on how you perform, what you say, or what you do. If this study were to be published all patient and therapist information will remain confident.

You have the right to refuse or to withdraw from the study at any time. This will in no way affect your therapy or your relationship with your therapist. You also have the right to ask questions about the study and its results by contacting me, Barb Hooper, at 776-0332.

| Barb Hooper, OTR | |
|----------------------|--|
| any time without jed | participation in this study is voluntary, and that I can withdraw at pardizing my therapy. I understand the nature of the study and its t, not on me. I agree to the release of information from these |

Appendix C
Guidelines for the First Interview

GUIDELINES FOR THE FIRST INTERVIEW

Historical Context of Career Development

Tell me the story of how you became an occupational therapist.

What was it about occupational therapy that seemed to "fit" your interests? What attracted you to the field? How did you become aware of these interests you held?

Describe your work history so far in occupational therapy.

How do you keep your skills current?

What other influences outside of occupational therapy impact on the way you practice OT?

What are your future career plans?

How would you describe your thinking processes as you carry out all the many aspects of vocation as a therapist?

What motivates you to do what you do?

Human Nature

14) As an occupational therapist, what do you believe about the nature of human beings?

8) How does the performance of occupation affect human beings?

Occupation

- 4) What is your definition of occupation? 13) Why are occupations therapeutic?
- 6) What is the relationship between human development and occupation?

Health/Illness

2) As an occupational therapist, how do you define health?3) What is illness? How do you make sense of the painful things that have happened to the people you work with?

Delivery of Services

9) What do you believe the role of the patient to be in his/her treatment sessions with you?

5) Who should receive occupational therapy services?11) Given unlimited resources, describe the "perfect" treatment session with a patient.

15) Tell me one of your "success" stories in patient treatment.

12) What does an occupational therapist contribute to health care delivery?

Occupational Therapy

- 1) In your opinion, what is unique about occupational therapy?
- 10) What is the purpose of intervention by an occupational therapist?
- 7) A physician looks at your name tag and asks, "What exactly does an occupational therapist do?" What do you say?

Appendix D

Guidelines for the Second Interview

GUIDELINES FOR 2ND INTERVIEW

Cultural Influence in Professional Choice:

Role of family/status

Role of class

Professional choice vs. reductionistic approach to career decision

Why did the decision need to be so impetuous?

Further describe beliefs of Hinduism? Is desire to serve humankind part of that or family influence? What is the definition of God? Of a person? What is the primary meaning of life? What must a Hindu aspire to?

Feminism and choice

OT Education

Textbooks

Frames of reference

Role of human occupation from cultural perspective

How was therapeutic use of self taught

How does OT curriculum reflect Hindu/Yoga beliefs of the culture

What was the expected outcome for an entry-level therapist

OT Experience and Treatment

How has tx approach changed since coming to US?

How do you justify extreme biomechanical tx from wholistic philosophy?

Do you see therapy as a facilitation of self-healing? Is this a spiritual activity?

Review what is meant by each component of Mind-Soul-Body and how that gets applied to OT practice.

Appendix E

Human Subjects Institutional Review Board Approval



WESTERN MICHIGAN UNIVERSITY

Date:

November 22, 1993

To:

Barbara Hooper

From:

M. Michele Burnette, Chair W. W.

Re:

HSIRB Project Number 90-12-22

This letter will serve as confirmation that the changes in your research protocol, "Identifying theoretical constructs that guide the clinical reasoning skills of occupational therapists" have been approved by the Human Subjects Institutional Review Board.

xc: Smith, OT

REFERENCES

- American Occupational Therapy Foundation, Inc. (1990). <u>Guidelines for grant proposals using qualitative (naturalistic) methodology</u>. Rockville, MD.
- Argyris, C., & Schon, D. (1974). <u>Theory in practice: Increasing professional effectiveness.</u> San Francisco: Jossey-Bass.
- Barris, R., & Kielhofner, G. (1985). Generating and using knowledge in occupational therapy: Implications for professional education. <u>Occupational Therapy Journal of Research</u>, 5(2), 113-124.
- Bemporad, J. (1977). Commentary: Morality and religion. In T. Englehardt & D. Callahan (Eds.), Knowledge, Value and Belief (pp. 100-110). New York: The Hastings Center.
- Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Reading, MA: Addition-Wesley.
- Burke, J.P., & Depoy, E. (1991). An emerging view of mastery, excellence, and leadership in occupational therapy practice. <u>American Journal of Occupational Therapy</u>, 45(11), 1027-1032.
- Cohn, E.S. (1989). Fieldword education: Shaping a foundation for clinical reasoning, American Journal of Occupational Therapy, 43(4), 240-244.
- Crepeau, E.B. (1991). Achieving intersubjective understanding: Examples from an occupational therapy treatment session. <u>American Journal of Occupational Therapy</u>, 45(11), 1016-1025.
- Depoy, E. (1990). Mastery in clinical occupational therapy. <u>American Journal of Occupational Therapy</u>, 44(5), 415-422.
- Dilthey, W. (1960). <u>Philosophy of existence: Introduction to Weltanschauungsleher.</u> New York: Vision Press.
- Elstein, A. (1976). Clinical judgment: Psychological research and medical practice. Science, 194, 696-700.
- Elstein, A., Schulman, L.S., & Sprafka, S.A. (1978). <u>Problem solving: An analysis of clinical reasoning.</u> Cambridge, MA: Harvard University Press.
- Ely, M. (1991). <u>Doing qualitative research: Circles within circles.</u> London: Fulmer Press.
- Englehardt, T., & Callahan, D. (1977). <u>Knowledge, value and belief.</u> Hastings-on-Hudson, New York: The Hastings Center.

- Evans, C.S. (1989). Wisdom and humanness in psychology. Grand Rapids: Baker Book House.
- Feinstein, A. (1973). An analysis of diagnostic reasoning, parts I and II. <u>Yale Journal of Biology and Medicine</u>, 46, 212-232, 264-283.
- Fleming, M. H. (1991a). Clinical reasoning in medicine in medicine compared with clinical reasoning in occupational therapy. American Journal of Occupational Therapy, 45(11), 988-996.
- Fleming, M.H. (1991b). The therapist with the three-track mind. <u>American Journal of Occupational Therapy</u>, 45(11), 1107-1014.
- Fondiller, E.D., Rosage, L.J., & Neuhaus, B.E. (1990). Values influencing clinical reasoning in occupational therapy: An exploratory study. The Occupational Therapy Journal of Research, 10(1), 41-55.
- Ford, L. (1988). Clinical reasoning: The brain as a model. Unpublished manuscript.
- Ford, L. (1989). <u>Investigation into clinical reasoning as a cognitive/phenomenological process</u>. Unpublished proposal to conduct research.
- Gadamer, H.G. (1975). Truth and method. New York: Seabury Press.
- Gadamer, H.G. (1981). Reason in the age of science. Cambridge, MA: MIT Press.
- Gillette, N., & Mattingly, C. (1987). The foundation: Clinical reasoning in occupational therapy. <u>American Journal of Occupational Therapy</u>, 41(6), 399-400.
- Grene, M.G. (1969). Knowing and being. London: Routledge & K. Paul.
- Griffioen, S. (1989). The worldview approach to social theory. In P.A. Marshall, S. Griffioen, & R. Mouw (Eds.), <u>Stained glass: Worldviews and social science</u> (pp. 81-119). New York: University Press of America.
- Holmes, A.F. (1983). Contours of a world view. Grand Rapids, MI: Eerdman's.
- Kassirer, J., Kuipers, B., & Gorry, A. (1982). Toward a theory of clinical expertise.

 <u>he American Journal of Medicine</u>, 73, 251-259.
- Krefting, L.H. (1985). The use of conceptual models in clinical practice. <u>American Journal of Occupational Therapy</u>, 52(4), 173-178.
- Lau, M., & McCall, M.A. (1989). Knowledge and use of theory among occupational therapists: Canadian survey. <u>Canadian Journal of Occupational Therapy</u>, 56(4), 198-204.
- Lincoln, Y.S., & Guba, E.G. (1985). <u>Naturalistic inquiry.</u> Newbury Park, CA: Sage Publications, Inc.

- MacIntyre, A. (1977). Can medicine dispense with a theological perspective of human nature? In T. Englehardt & D. Callahan (Eds.), Knowledge, Value and Belief (pp.25-43). New York: The Hastings Center.
- Mattingly, C.F. (1989). Thinking with stories: Story and experience in a clinical practice. Unpublished doctoral dissertation, Massachusetts Institute of Technology, Massachusetts.
- Mattingly, C.F. (1991a) The narrative nature of clinical reasoning. <u>American Journal</u> of Occupational Therapy, 45(11), 998-1005.
- Mattingly, C.F. (1991b). What is clinical reasoning? <u>American Journal of Occupational Therapy</u>, 45(11), 979-986.
- Mattingly, C.F., & Gillette, N. (1991). Anthropology, occupational therapy, and action research. American Journal of Occupational Therapy, 44(1), 972-978.
- Miles, M.B., & Huberman, A.M. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage Publications.
- Morse, J.M. (Ed.). (1991). Qualitative nursing research: A contemporary dialogue (rev. ed.). Newbury Park, CA: Sage Publications, Inc.
- Mosey, A.C. (1970). <u>Three frames of reference for mental health.</u> Thorofare, NJ: Charles B. Slack.
- Mosey, A.C. (1981). Occupational therapy: Configuration of a profession. New York: Raven Press.
- Neistadt, M.E. (1987). Classroom as clinic: A model for teaching clinical reasoning in occupational therapy education. American Journal of Occupational Therapy, 41(10), 631-637.
- Neuhaus, B. (1988). Ethical considerations in clinical reasoning: The impact of technology and cost containment. <u>American Journal of Occupational Therapy</u>, 42(5), 288-294.
- Olthius, J.H. On worldviews. In P.A. Marshall, S. Griffioen, & R. Mouw (Eds.), Stained glass: Worldviews and social science (pp. 26-41). New York: University Press of America.
- Parham, D. (1987). Toward professionalism: The reflective therapist. <u>American Journal of Occupational Therapy</u>, 41(9), 555-561.
- Polanyi, M. (1946). Science, faith, and society. London.: Routledge & Kegan Paul.
- Polanyi, M. (1958). <u>Personal knowledge: Towards a post-critical philosophy</u>. London.: Routledge & Kegan Paul.

- Polanyi, M. (1960). <u>Knowing and being: Essays by Michael Polanyi</u>, ed. Grene, M. Routledge & Kegan Paul: London.
- Polanyi, M. (1962). <u>Personal knowledge: Towards a post-critical philosophy</u>. Chicago: University of Chicago Press.
- Reed, K.L. (1984). Models of practice in occupational therapy. Baltimore: Williams & Wilkins.
- Rogers, J. (1983). Clinical reasoning: The ethics, science, and art. <u>American Journal of Occupational Therapy</u>, 9(9), 601-616.
- Rogers, J. (1986). Clinical judgment: The bridge between theory and practice. In <u>Target 2000: Occupational therapy education.</u> (Ed.). Rockville, MD: American Occupational Therapy Association
- Rogers, J.C., & Masaganti, G. (1982). Clinical reasoning of occupational therapists during the initial assessment of physically disabled patients. Occupational Therapy Journal of Research, 2(4), 195-219.
- Schatzman, L., & Strauss, A.L. (1973). <u>Field research: Strategies for a natural sociology</u>. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Schell, B.A., & Cervero, R.M. (1993). Clinical reasoning in occupational therapy: An integrative review. American Journal of Occupational Therapy, 45(7), 605-609.
- Schon, D. (1983). <u>The reflective practitioner: How professionals think in action.</u> New York: Basic Books.
- Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.
- Schwartz, K.B. (1991). Clinical reasoning and new ideas on intelligence: Implications for teaching and learning. <u>American Journal of Occupational Therapy</u>, 45(11), 1033-1037.
- Sire, J.W. (1990). Discipleship of the mind. Downers Grove, IL: Inter-Varsity Press.
- Starr, P. (1982). <u>The social transformation of American medicine</u>. New York: Basic Books.
- Strauss, A.L. (1987). Qualitative analysis for social scientists. Cambridge: Cambridge University Press.
- Van Belle, H.A. (1980). <u>Basic intent and therapeutic approach of Carl Rogers.</u> Canada: Wedge Publishing.
- Vander Goot, M. (1987a). <u>Helping children grow healthy emotions.</u> Grand Rapids, MI: Baker Book House.
- Vander Goot, M. (1987b). Narrating psychology: How psychology gets made. Grand Rapids, MI: Baker Book House.

- VanLeeuwen, M.S. (1982). The sorcerer's apprentice: A christian looks at the changing face of psychology. Downer's Grove, IL: InterVarsity Press.
- ViveKananda, S. (1989). <u>Sadhanas: Preparations for higher life.</u> Calcutta: N.C. Mullick.
- Walsh, B., & Middleton, J. (1984). <u>The transforming vision.</u> Downer's Grove, IL: InterVarsity Press.
- Wolters, A.M. On the idea of worldview and its relation to philosophy. In P.A. Marshall, S. Griffioen, & R. Mouw (Eds.), <u>Stained glass: Worldviews and social science</u> (pp. 14-26). New York: University Press of America.