Thank you for inviting me to this Doctoral Symposium as your keynote speaker. Those of you here at the College of Social Work are no doubt pleased for what this Symposium adds to what educators these days call your "co-curriculum." However, you should know that those of us engaged in doctoral education in social work across the country are grateful to you, your Dean, Tony Tripodi, and your Doctoral Director, Denise Bronson, for what the Symposium does for all of us: providing an important venue for doctoral students and recent graduates to present their dissertation research, disseminating information about that research and offering selected social work educators a chance to talk about important issues affecting social work education and social work research. In fact, we could say that the Symposium has become part of the co-curriculum of every social work doctoral program in the country.

It is rare these days to have as generous an invitation as this one: to speak on a topic of one's own choosing. As my career as a social work educator and scholar has evolved, I have found myself grappling with questions that I did not expect, questions that in one way or another can be subsumed under the heading of "epistemology." This development has surprised me: In fact, when deciding about Ph.D. studies, I chose social work over sociology specifically because of its practicality, its emphasis on knowledge for use, not just for knowledge's sake. Over the years, however, changes in our field, developments in the academy in general, and in the social sciences in particular, and certain practical and intellectual problems I have encountered in my work have led me to this point. I have chosen this topic for my address today primarily for the doctoral students who are in attendance because I am now convinced that you too will, sooner or later, have to answer important epistemological questions for yourselves, if you have not done so already. In addition, as the future leaders in social work education and research, you will help to define and shape how our profession as a whole confronts these issues, which I believe have not had the careful attention to date that they deserve. However, I am taking the liberty of talking about epistemology by telling some stories about my own intellectual journey as a way (I hope) of making epistemology seem a bit less abstract and perhaps a
more important matter than it might at first appear to be, especially for a profession engaged in helping others with a range of pressing human and social problems.

What is Epistemology?

Epistemology is the branch of philosophy that deals with the nature of knowledge, that is, with questions of what we know and how we know it. As with many branches of philosophy, there are now also other traditions of thinking about epistemology, such as in the cognitive sciences, in the history of science, and even in cultural studies. Within contemporary philosophy, it is the philosophy of science that most often addresses epistemology, which in itself says something about contemporary culture and society: where we tend to locate knowledge and knowing.

In fact, it was through doing, teaching, and writing about research that epistemological problems first presented themselves to me. Working on the first edition of my research methods text in the early 1990s, my co-author, Marian MacDonald, and I were seeking a way to talk about scientific method in a way that did not, explicitly or implicitly, give priority to either qualitative or quantitative research (Anastas & MacDonald, 1994). Heineman's controversial (1981) paper characterizing the "scientism" of social work as obsolete had been out for some time, and the rather polarizing discussion about whether qualitative and quantitative research should be taught and used in social work was then well underway. While this debate had happily resulted in more knowledge of and respect for qualitative research methods within the profession, real differences in epistemologies had been, and my opinion continue to be, "papered over."

An example of this premature closure of discussion can be found in the use of such terms as "postpositivism" (Fraser, Taylor, Jackson, & O’Jack, 1991). "Postpositivism" is a term that seems to mean, in the works of a leading textbook in the social work research, “...emphasiz(ing) objectivity, precision and generalizability in ... inquiries, but...recogniz(ing) that observation and measurement cannot be as purely objective as implied by the ideal image of science (Rubin & Babbie, 2001, p.34)." Such a definition does not locate "postpositivism" anywhere in terms that a philosopher of science could understand. This description (and it is more of description than a definition) is also full of terms like "objectivity," "precision," and "measurement" that are not part of the discourse and description of qualitative methods and epistemologies. In addition, this definition and the elaboration of it given in the book seem to simply emphasize standard scientific skepticism, not to describe a new epistemological position.

On the other hand, the constructivist position described by advocates of qualitative research did not seem to me to be compatible with professional practice because, like what has been called "interpretivism" (Rubin & Babbie, 2001, p.34), it may or may not concede that an external reality exists. Nor is such a position compatible with traditional quantitative methods of research, which I also value. However, while Heineman Pieper's later writings on the heuristic method also seemed to push the boundaries too far (such as when defining professional judgment as research), several of the works she cited in her 1981 paper provided me with some answers in the literature on varieties of realism
Let me now describe the main tenets of realism. Although there are significant differences among major realist philosophers, I am emphasizing here key commonalities in their thinking. There are four main tenets of realism that I will describe:

1. There is a reality separate from the knower of it.
2. Concepts and theories, not just data, are essential in knowing.
3. The researcher is inevitably bound up in the research.
4. Explanation is useful even when one cannot demonstrate causation or prediction.

As you listen, please think about each tenet in relation to knowledge for social work, a value-based profession that cares most about knowledge for use. In addition, these tenets can be used to understand both quantitative and qualitative research in their own terms, and neither form of inquiry is by definition any better or worse than the other.

**There is an Independent Reality**

Realism, as its name suggests, assumes that there is a reality independent of the knower of it (Bhaskar, 1989; Harre, 1972, 1986; Klee, 1997; Manicas, 1987; Manicas & Secord, 1983; Papineau, 1996). Papineau (1996), for example, calls this the "independence thesis" (p.16), and Heineman Pieper (1989) describes it as belief in a mind-independent reality.

Realism shares this assumption with logical positivism while differing from it many other ways. However, this tenet places realism at variance with some lines of postmodern thinking that hold that language, culture and/or other aspects of standpoint are such powerful mediators of observation in that there is no real possibility of any shared understanding about the world.

The realist point of view on reality is taken for granted in the "naïve" or "common sense realism" with which we experience the everyday world of mid-size objects. However, philosophers of science take this problem to be a very serious one when it comes to very large (e.g., supernovae), very small (e.g., subatomic particles), and other phenomena that ordinary, unaided sense perceptions do not capture easily, including many social, psychological and interpersonal ones. This last issue is important for social work, which trades heavily in psychological and social concepts that are not readily observable in the way, for instance, that a table is. Philosophers of science therefore regard it as a matter of curiosity that logical positivism has persisted as long as it has in the social sciences (Klee, 1977), longer than in the physical sciences.

**Theory Is More Decisive Than Data**

Concepts and theories are essential to our understanding of the world. It is not just data that matter; our explanations of our observations are key (Kuhn, 1970). In fact, Kuhn and others have long held that major scientific change occurs when conceptual, or paradigm, shifts occur, shifts in how we understand data.
There are three important consequences of this idea that deserve mention. One is that there may be concepts and theories that have not yet been demonstrated to exist in reality (that is, have not yet been "empirically verified or observed") that are nevertheless useful. A widely cited example in the history of science is that of the virus, a term originally used to describe a presumed infective agent that could not be seen but that was thought to be responsible for communicable diseases, like the common cold, for which bacteria could not be found. A virus is far smaller than a bacterium and could not in fact be visualized until the age of the electron microscope. However, the idea of a virus was helpfully used long before this visualization could be made. A more recent example of such a concept is the meme, an entity hypothesized by some to be driving human evolution more rapidly than genetics at this point (Blackmore, 1999; Dawkins, 1989). Since the meme is defined as an imitable and transmissible unit of thought, language, and/or behavior, it is of great interest to psychologists, anthropologists and others even though the empirical work to demonstrate its existence in reality has yet to be done.

The second consequence places contemporary realism squarely among those that hold that no human enterprise, including science, is value-free or apolitical. That is because even our concepts and interpretations may be colored by our political (and other) stances. Although the term "objectivity" is still widely invoked, this position is at the core of what divides the modernism of the early 1900's from the post modernism of today. As I learned through feminist consciousness-raising years ago, the personal is political, and so is the scientific or scholarly.

The third consequence involves the problem that philosophers of knowledge call the underdetermination of theory by evidence. The same facts, or observations, are commonly taken to mean quite different things. It is theory that shapes data and gives observations their meaning and utility. The most common example of this in the philosophy of science is the shift from a heliocentric to a Copernican view of the universe. The empirical data—that the sun appears to circle around the earth in the sky—did not change. What changed is that we came to understand this appearance—as a result of the earth’s rotation on its axis while circling around the sun. A recent professional example of the importance of interpretation was in a panel discussion of EMDR treatment led by Dr. Bruce Thyer at the 2002 meeting of the Society for Social Work and Research. A variety of experts (Bronson, 2002; Rubin, 2002; Smyth, 2002; Williams, 2002) discussed the published data, which suggested that even the best research evidence to date could not determine whether it is specific techniques of the EMDR method or what are termed nonspecific treatment effects that produce the positive outcomes apparently seen when EMDR is used. What is needed is the ability to connect any observed change with a specific mechanism related to the EMDR theory and technique.

The Researcher Is in the Picture

In part because of the importance of concepts and the interpretation that any observer give to the world, realism holds that the researcher is inevitably bound up in the research. Thus the examination of the relationship of the researcher to the researched is essential.
Hence methods of inquiry aimed at "objectivity," or the greatest detachment possible of the researcher from the research situation, and those that use researcher subjectivity as a tool of inquiry are equally valid. They simply differ in how the relationship is handled and used.

Based on this tenet, you have no doubt figured out by now that my decision to talk a little about the evolution of my own thinking in this lecture on epistemology is not just a device to hold your interest. It is also a matter of philosophical conviction. I am in my work, and by telling you how, I am inviting you to draw your own conclusions about whether that has been help or a hindrance.

Causation Is Not Required

Explanation after the fact can be useful even when one cannot demonstrate causation or make precise predictions. For example, we find epidemiological data useful in making public health policy even though the data are by definition ex post facto. We seek complete descriptions of what happened when an airplane crashes or when a bridge or tower falls. That is why in practice guidelines or evidence-based practice, we are careful to specify the nature of the evidence we have, that is, how it was derived—from research or from expert consensus. We also use the evidence and explanations we do have -- at least until they may be improved upon in the future.

The randomized control trial is a good thing for studying interventions, but it is not the only truly worthwhile kind of research to do. That is why we distinguish between efficacy and effectiveness, for example. Our explanations -- how we understand what has happened -- are key. Finally in the human and social sciences, including medicine, in most cases we have at best probabilistic, not deterministic, knowledge.

Having I hope convinced you that thinking about epistemology is important and worthwhile to do, how well are philosophical issues, including content on the nature of truth (Reamer, 1993), covered in social work doctoral program curricula? A few years ago, Elaine Congress and I conducted a survey of doctoral program directors to learn more about this. Our findings showed that content on logical positivism and its critiques were commonly covered in research courses. Our survey showed that there was reportedly much more content offered on logical positivism than on social constructivism and/or postmodernist thought (remember, now, that philosophers of science find it a matter of interest and curiosity that there continues to be interest in logical positivism in the social sciences since it is elsewhere considered an outdated perspective). However, those doctoral programs reporting a focus on practice or clinical content and those reporting a focus or emphasis on teaching both included more philosophical content than others (such as those who described themselves as primarily research focused). However at the time of the survey, about one-quarter of doctoral program directors were planning to do more with philosophical, especially epistemological, issues in the curriculum in future, so there is reason to hope that these issues, so central to the research that is core to the doctoral curriculum, may be enjoying more attention in more programs at this point.
Teaching and Learning

The second area of my own professional development in which I found myself grappling with epistemological issues is in teaching. Re-examination of my own assumptions and practices in this area were stimulated when I began teaching a course on teaching and learning for doctoral students several years ago. I ask you to imagine how self-conscious—what a degree of reflexivity there is, if you will—in teaching advanced learners about teaching and learning. I and they were reading the literature on best practices, and I was challenged as never before to bring my practice to the level of the content. Over the years because I was learning so much and because my students were finding the course so helpful, I decided to write a book on the subject, which is unfortunately still in progress, although Columbia University Press will publish it when completed.

The best teaching is based on a sound understanding of learning. In addition, the kinds of skills needed to practice social work effectively require complex learning and thinking skills that are characteristic of advanced levels of cognitive development in adulthood. Adult development is of course a vast field that cannot be adequately summarized in one short chapter. In recent decades, however, there has been a major revision in how we understand adulthood: as a time of dynamic development and continuing learning. In addition, a great deal is now known about how adults develop in thinking and learning both in educational and in work settings.

Adult Thinking and Learning

The work of Belenky and her colleagues (1986) has been especially relevant to educational thinking about knowing. Noting that ideas about cognitive development in adulthood, such as those of Perry (1970), were also developed based on research involving male undergraduate students in an elite university, Belenky and her colleagues studied a group of poor, rural women who were nontraditional students enrolled in a college program to examine how they approached learning and how their ways of thinking developed and changed. What they described was quite different from the prior findings on young men, and it bears repeating because it has had an influence on the social work education literature.

The Belenky et al. (1986) study described many of the women as beginning from a position of "silence," of having no "voice" or placing little value on anything they might think, know or say. Belenky et al. (1986) argue that this position is more often found in women than in men because of women's many experiences of disadvantage, even oppression. From this position, many women then moved to a position of "received knowledge," of placing value on what expert others, such as teachers or books, might have to say. In this stance, learning is equated with listening, with "hearing, understanding, and remembering" (p.45). This stance resembles closely what the student and the educational process look like in the traditional "empty vessel" or "chalk and talk" model; it also reflects dualism or the idea that is a right and a wrong answer to any question.
The next position, that of "subjective knowing," was the most common among the women Belenky et al. (1986) studied. As Belenky et al. describe it, "the move away from silence and an externally oriented perspective on knowledge and truth eventuates in a new conception of truth as personal, private, and subjectively known or intuited" (p.54). Often the shift to this position, which goes beyond the dualism of right and wrong, reflected experiences with "failed authority," that is, with traumatic or invalidating family, interpersonal, or social experiences.

The shift out of dualism is regarded as important in all models of adult cognitive development because it involves "the inward watching and listening" that is essential to the development of an authentic self. However, for educational purposes, like preparing people to be professional practitioners, scholars, or critical thinkers, these stances or stages just described are not a sufficient achievement for doing the work.

A more complete epistemological position that Belenky et al. (1986) found among the women they studied they called procedural knowledge. In this position, women believed that "intuitions may deceive; that gut reactions can be irresponsible and no one's gut feeling is infallible; that some truths are truer than others; that they can know things they have never seen or touched; that truth can be shared; and that expertise can be respected" (p.93). This stance is called procedural knowledge because an important feature of it is to evaluate how a given piece of knowledge was derived. It is a stance that can be characterized by an emphasis on the impersonal rules of method ("separate knowing", emphasizing doubt, skepticism, and objectivity) or by an emphasis on empathic connection, on the ability to suspend judgment and to take another's perspective even when it is quite alien from one's own ("connected knowing"). The final position Belenky et al. (1986) described is termed "constructed knowledge" in which women were making an effort to "reclaim the self by attempting to integrate knowledge that they felt intuitively was personally important with knowledge they had learned from others… of weaving together the stands of rational and emotive thought and of integrating objective and subjective knowing" (p.134). In this phase, people are "challenged, not daunted" by conflict and ambiguity and are actively concerned with the moral and spiritual as well as the pragmatic dimensions of their actions. These more complex ways of knowing are what is required in reconciling the specifics of a case or situation with general knowledge, in keeping the value dimension of professional practice in view, and in dealing with complex psychological, interpersonal, organizational, cultural and social realities that must be taken into account in all social work practice.

Merdinger (1991) points out that for women and others from non-dominant groups in the society, the simple but profound act of finding "voice," of developing some confidence in the value of one's own perceptions and experiences in a situation and of being able to describe those perceptions to others, must be a goal of learning. In fact, traditional reflective techniques often used in the classroom and the field, such as journaling and process recording, requires the student to record his or her personal observations, perceptions and subjective reactions to the practice encounter, readings, or classroom events. While students may experience such an exercise as a way for the teacher to "find
them out" as "right" or "wrong" in their perceptions or actions, these are in fact exercises in identifying and giving voice to the nature of one's own experience. Only from a firm anchoring in the self can one move to entertaining the multiple possibilities for meaning in an interaction as various clients and practitioners (and learners) might experience them and hence to enlarge the possibilities for action and response that can be brought to the practice situation. In fact, some theorists explicitly relate their highest-level epistemologies with post-modernism.

Drawing on this and other research, Davis (1993), Tennant and Pogson (1995) and others have tried to summarize what the various contemporary conceptions of learning and knowing tell us about knowing in adulthood. There are features that all of these models have in common. Truth goes from being seen as unitary to dualistic (right versus wrong) to potentially multiple. There are also changes in the way personal experience is viewed and used, from being irrelevant compared with the knowledge of experts to being a source of knowledge through the ability to reflect upon and contextualize experience. Subjectivity is at first not relevant, then is overly valued in the face of ambiguity or uncertainty, and then is integrated into a multidimensional approach to knowing. All of the models describe a progression from simpler to more complex ideas of truth; from focusing on what is known to how knowledge is developed and by whom; from reliance on expert others to the ability to evaluate truth claims oneself; from universalistic to contextual perspectives on knowledge. Tolerance of uncertainties and ambiguities is emphasized.

Teaching is most effective when it is tied to an understanding of learning and knowing. In teaching, it is common to over-estimate the cognitive level of development of our students (Davis, 1993). However, wherever they actually are in terms of any of these schemes, they have the potential to move forward in their cognitive development since each phase has valuable components of the next ones in it. In addition, especially when meeting a new challenge, in a new situation, or at other time of stress, any of us can revert to earlier ways of knowing because they all remain part of us.

In fact, students often come to school expecting access to a dualistic truth and find it disquieting to be encouraged to see the world more complexly. These theories about knowledge, however, also suggest that our students will differ in their starting points and will also differ in how far they are likely to progress in their ways of knowing as we are teaching them.

Because culturally competent social work practice requires that general knowledge be applied to specific situations in the context of the complexity of the helping relationship and because lifelong learning is necessary in any professional career, we must find ways to help our students become self-reflective and conscious of their own learning needs. We must also help them to understand that knowledge indeed depends on context and standpoint and to tolerate the ambiguities and uncertainties that flow from this recognition. While not all of our students will fully achieve these goals, this must be the vision we hold out to them.
Many traditions and practices in social work education are already well adapted to these goals. Field instruction itself represents learning through experience and reflection on that experience. Teaching from cases and using techniques like role-playing to learn interviewing techniques in the classroom do the same. The Reflective Judgment model (King & Kitchener, 1994) is based on an in-depth analysis of how adults think about "ill-defined problems." There may in fact be no better way to describe the practice situations that students (and graduate social workers) face and are asked to analyze and act on every day. Adult learning theory has caught up with tacit knowledge in the field of social work education. Revisiting these education practices in light of adult learning theory, however, can help us use those techniques in the ways that will best support student learning.

How well do our teaching practices integrate these adult developmental and epistemological ideas? Although we talk about the importance of critical thinking all the time, are we actually succeeding in helping our students understand their own thinking and learning styles and to develop into more complex thinkers and knowers? Pearson's (1998) study of the educational orientations of graduate social work faculty showed that current faculty on average rated questionnaire items describing a "master teacher" (traditional) as opposed to a mentoring or more student-directed teaching methods more highly. By self-report, only about a third of study respondents based their teaching methods in a specific educational philosophy. If these findings are accurate, it is disturbing that our current teaching methods do not seem to reflect contemporary understanding of adult knowing and how it develops more strongly.

Why Epistemology Matters

In conclusion, I have tried to make the case that epistemology matters both in research and in teaching. It matters, of course, in others ways as well, including how one approaches theory and knowledge development in many, if not most, substantive areas. My emphasis here has been to remind you, as doctoral students and new faculty, that epistemology will affect:

- what kind of research and scholarly work you do
- how you value the scholarship of others and the range of scholarship currently being produced in social work and allied fields
- how you understand your scholarly work politically
- how you situate and understand yourself and in relation to your research work
- how you understand the thinking and knowing of your students
- how you will teach them, and
- how the ways in which you teach can help them to become better and more conscious knowers as well.

There is no right and wrong in epistemology, only in not being willing to know about knowing. I challenge each of you to ask and answer these hard, interesting, and important questions for yourselves.
References


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