

ROBBIE DAVIS-FLOYD
Department of Anthropology
University of Texas at Austin

ELIZABETH DAVIS
Woman to Woman Clinic
Windsor, California

Intuition as Authoritative Knowledge in Midwifery and Homebirth

As defined by Jordan (1992, 1993[1978]), authoritative knowledge motivates decision and action. Based on interviews with 22 white middle-class midwives in the United States conducted between 1992 and 1993, this article explores the inner knowing that constitutes a primary source of authoritative knowledge for homebirthers but is granted no authority in the realm of technomedicine. The purpose of this article is to call attention to these midwives' utilization of and reliance on intuition as a guide to action and decision making during homebirths. The midwife-interviewees are highly literate and competent in technological skills and biomedical diagnosis, and are keenly aware of the cultural and legal risks they run when they cannot justify their actions during a birth in logical, rational terms. Nevertheless, the deep value they place on connection, in the context of their holistic model of birth and health care, leads them to listen to and follow their "inner voice" during birth, rather than operating only according to protocols and standard parameters for "normal birth." The nature of intuition and the reasons for and consequences of the general devaluation of intuitive thinking by the wider society are also considered. [midwifery, homebirth, intuition, authoritative knowledge]

Diagnostic technologies, from the most mundane and routine ultrasound to the most exotic embryo transplant, have in common that they work toward the construction of the fetus as a separate being—they reify, they make real, the fetus. They make the fetus a visible, audible presence among us, and they do that by doing two other things. They medicalize pregnancy, and they render invisible and inaudible, women.

The history of Western obstetrics is the history of technologies of separation. We've separated milk from breasts, mothers from babies, fetuses from pregnancies, sexuality from procreation, pregnancy from motherhood. And finally we're left with the image of the fetus as a free-floating being alone, analogous to man in space, with the umbilical cord tethering the placental ship, and the mother reduced to the empty space that surrounds it.

It is very, very hard to conceptually put back together that which medicine has rendered asunder. . . . As I speak to different groups, from social scientists to birth practitioners, what I find is that I have a harder and harder time trying to make the meaning of connection, let alone the value of connection, understood.

—Barbara Katz Rothman, Plenary Address, Midwives' Alliance of North America Conference, New York City, November 1992

Both of us were in the audience when sociologist Barbara Katz Rothman gave the speech from which this quote is excerpted. Her words, spoken to an audience of midwives who have no trouble at all understanding the value of connection, crystallized for these midwives their aloneness in the world of medicine—a world in which the subtle rewards of connection are often lost as the value of those technologies of separation is increasingly taken for granted. The warm exchange of breath and sweat, of touch and gaze, of body oils and emotions, that characterizes births in which there is an intimate connection between the mother and her caretaker, has given way in the United States to the cool penetration of needles, the distant interpretation of lines on a graph. Building on Rothman's earlier work (1982, 1989), one of us (Davis-Floyd), in *Birth as an American Rite of Passage* (1992), identifies the "technocratic model" of birth as the core paradigm underlying contemporary obstetric practices, including diagnostic technologies. As Rothman points out, separation is a fundamental tenet of this paradigm, which she calls the "medical model." Other basic tenets include the metaphorization of the female body as a defective machine and the working premise that birth will be "better" when this defective birthing machine is hooked up to other, more perfect diagnostic machines.

Under this model, authoritative knowledge—the knowledge on the basis of which decisions are made and actions are taken (Jordan 1993[1978])—is vested in these machines and in those who know how to manipulate and interpret them. This is so despite the fact that the near-universal use of such machines on laboring women in the United States has not resulted in improved birth outcomes, as has been convincingly demonstrated by numerous large-scale studies (Leveno et al. 1986; Prentice and Lind 1987; Sandmire 1990; Shy et al. 1990; see Goer 1995:131–153 for summaries of 39 medical studies of electronic fetal monitor use). These studies have shown that hooking women up to electronic fetal monitors results only in a higher cesarean rate, not in better outcomes. Davis-Floyd (1992, 1994) discusses these machines as symbols of our culture's "supervaluation" of machines over bodies, technology over nature. She analyzes obstetrical procedures, diagnostic and otherwise, as rituals that not only convey cultural core values to birthing women, but also enhance the courage of birth practitioners by deconstructing birth into identifiable and (seemingly) controllable segments, then reconstructing it as a mechanistic process. She found that these ritual procedures enhance courage not only for obstetricians and nurses, but also for the women themselves—being hooked up to some of the highest technologies society has invented gives many American women the feeling that they are being well taken care of, that they are safe. A reassuring cultural order is imposed on the otherwise frightening and potentially out-of-control chaos of nature.

But not all women are reassured by the technocratization of birth. There are some women in the United States who supervalue nature and their natural bodies over science and technology, who regard the technological deconstruction of birth as harmful and dangerous, who desire to experience the whole of birth—its rhythms, its juiciness, its intense sexuality, fluidity, ecstasy, and pain. Those women who most deeply trust birth place themselves quite consciously as far out of the reach of the technocratic model as they can get, choosing to give birth in the sanctity and safety of their own homes, and grounding themselves philosophically in a holistic model of birth (Davis-Floyd 1992:154–159). Like the midwives who attend them, these homebirth¹ women have no trouble understanding the value of connection; indeed, connection is the most fundamental value undergirding their holistic paradigm.

There is increasing evidence that midwife-assisted homebirth is as safe as, and often safer than, hospital birth (see Davis-Floyd 1992:177–184; Goer 1995; Wagner 1994), but this evidence is little known and not at all acknowledged in the wider culture, which still assumes the authority of the technomedical tenet that hospital birth is far superior to birth at home. Thus, as health care practitioners, all midwives, even those who attend women in their homes, are under tremendous cultural pressure to “do birth according to medical standards,” as one midwife put it. But “doing birth according to medical standards” will in many cases mean using interventions and/or transporting the woman to the hospital, despite the midwife’s alternative judgment. Midwives must attempt to meet these cultural imperatives. Such attempts place many midwives in conflict with their own holistic paradigm and the patience and trust in birth and the female body that it charts. Contemporary midwives cannot fail to be aware of this dilemma—it is a central defining theme of their practices and their lives, ensuring that for them, every homebirth that is not textbook perfect will pose ethical, moral, and legal dilemmas that might end them up in a courtroom in danger of losing the right to practice. The level of tension between the technocratic and holistic paradigms with which homebirth midwives must constantly cope makes their occasional willingness to rely solely on intuition—sanctioned by the holistic model and condemned by the technocratic model—a strong marker of their commitment to holism and its underlying principle of connection.

The purpose of this article is to call attention to midwives’ use of intuition as a salient source of authoritative knowledge. Our intention is not to refine the concept of intuition, but simply to utilize Jordan’s (1993[1978]) formulation of the notion of authoritative knowledge as a theoretical tool to help us understand the role that intuition plays for contemporary midwives. To begin, we will explore some recent theoretical perspectives on the nature of intuition.

On the Nature of Intuition: Theoretical Perspectives

I think, because we’re in a culture that doesn’t respect intuition, and has a very narrow definition of knowledge, we can get caught into the trap of that narrowness. Intuition is another kind of knowledge—deeply embodied. It’s not up there in the stars. It *is* knowing, just as much as intellectual knowing. It’s not fluff, which is what the culture tries to do to it. [Judy Luce, homebirth midwife]

Intuition is defined by the *American Heritage Dictionary* (1993) as “the act or faculty of knowing or sensing without the use of rational processes; immediate cognition.” Despite the common occurrence of intuition, it is poorly understood and poorly studied by psychology (Laughlin 1997). One of the best studies of the topic is that by Tony Bastick (1982), in which he isolates a number of characteristics of intuition, including confidence in the process of intuition, the sense of certainty of the truth of insights, the suddenness and immediacy of awareness of knowing, the association of affect with insight, the nonanalytic (nonrational, nonlogical) and gestalt nature of the experience, the empathic aspect of intuition, the “preverbal” and frequently ineffable nature of the knowledge, the ineluctable relationship between intuition and creativity, and the possibility that an insight may prove to be factually incorrect.

In *Women's Intuition* (1989) one of us (Davis) points out that, regarding the acquisition of information, Western society gives authoritative status only to the highly linear modes of inductive and deductive reasoning. Yet it is well established that “there is no creativity in science, indeed, in any domain of creative activity, that does not entail intuition” (Laughlin 1997:6; see also Bastick 1982; Hayward 1984:29–33; Jung 1971; Poincaré 1913; Slaatte 1983; Vaughn 1979; Weil 1972; Westcott 1968). Why then is intuition so devalued in the West?

As a number of social scientists have pointed out (Martin 1987; Merchant 1983; Rothman 1982) mechanistic metaphors for the earth, the universe, and the body have been gaining increasing cultural prominence since the time of Descartes. Conscious deductive reasoning, which can be logically explained and replicated, is the most machine-like form of human thought. Thus ratiocinative processes (“to ratiocinate” means “to reason methodically and logically”) are reified in the West and often couched in terms of normative rules (Beth and Piaget 1966; Rubinstein et al. 1984:34). Intuition, in contrast, refers to our experience of the results of deep cognitive processes that occur without conscious awareness and cannot be logically explained or reproduced. Laughlin (1992, 1997) postulates that intuition is *neurognostic*—inherent to the basic structure of the human central nervous system—which would account for the panhuman attributes of the experience of intuitive insight. He suggests that language and its concomitant ratiocinative conceptual structures did not evolve to express the *entire* human cognitive system and its operations, but only those relevant to social adaptation, noting that the kind of knowledge that can be expressed by the human brain's linguistic and conceptual structures is superficial in relation to the deeper neurocognitive processes “upon which knowledge in its broader creative sense depends” (Laughlin 1997:17).

Neurophysiological research on the complementary functions of the two brain hemispheres has shed some light on the process of intuition. The left hemisphere primarily mediates language production, analytic thought, and lineal and causal sequencing of events, whereas the right hemisphere primarily mediates the production of images, gestalt or holistic thought, and spatiotemporal patterning (Bryden 1982; Ley 1983; Sperry 1974, 1982). Simplifying a bit, one could say that the left lobe distinguishes parts of wholes, making analytic thought and linguistic communication possible, while the right lobe makes gestaltic perception possible—and difficult to communicate or analyze in our Western linguistic system.

Some researchers have used these findings to suggest that humans have two modes of consciousness, one corresponding to what we call "reason," associated with left-lobe functioning, and another called "intuition," associated with right-lobe functioning (Lee 1976). As Laughlin (1997:9) points out, some anthropological theorists have gone to the extreme of suggesting two different types of culture defined by these two ways of knowing. For example, Warren TenHouten (1978-79) has used the labels "propositional" and "compositional" and has argued that these two ways of knowing lie on a continuum with a third mode, the "dialectical," in the middle as an integration of left- and right-lobe cognition. Sorokin (1941) suggested that all societies oscillate over time like a pendulum between two extreme poles, one characterized by rational knowledge and materialistic values, the other by intuitive knowledge and spiritual values. Sorokin's suggestion is paralleled in contemporary popular writings by Rianne Eisler's (1988) distinction between "dominator" and "partnership" cultures, and Daniel Quinn's (1993) between "Takers" and "Leavers." These distinctions are also paralleled by the differences between contemporary American homebirth midwifery and the technocratic society in whose midst midwifery exists and struggles to flourish. The technocracy is largely hierarchical, male-dominated, machine-oriented, and based on left-brained principles of separation and discrimination, while homebirth midwifery is primarily egalitarian, nature- and female-oriented, and based on right-brained principles of holism and connection.

Of course, such apparently clear-cut dichotomies often mislead. It is important to remember that in spite of hemispheric dominances, the whole brain is involved in all brain functions. Sharp functional division between the hemispheres occurs only in subjects whose brains were physically split or damaged, either by injury or by surgery (Sprenger and Deutsch 1981). In the normal, healthy brain, similarity and replication of function are much more common. Laughlin suggests that intuition is "mediated by neural networks in both lobes, not merely in the right lobe" (1997:11), calling the neurocognitive processes that produce intuition "transcendental" in part to stress their cross-hemisphere, whole brain functioning. The corpus callosum, which plays a major role in conveying information between hemispheres, may be most significant in the genesis of intuition. In *Women's Intuition* Davis (1989) postulates that interhemispheric coherence linked to transcendent states (Goldberg 1983) and intuitive connections may occur more readily in women than in men, since it appears that the corpus callosum in the female brain is significantly larger. It can be argued, however, that this part of the brain can be deliberately developed in either sex.

As noted above, science, for all its supervaluation of left-brained deductive reasoning, could never have proceeded without the creativity of intuition; concomitantly, no intuition-oriented culture could survive without heavy reliance on ratiocination. Likewise, even the most technocratic of physicians can find themselves following their intuition instead of their reason (Fox 1975, 1980), and even the most holistic of midwives, in this postmodern era, is likely to have attained a high level of competence in using the technocratic tools of birth, and to be able to explain and defend her actions in scientific, linear, and logical terms. The praxis of postmodern midwifery entails, in many ways, the careful exercise of inductive and deductive

reasoning even as it continues to rely for its primary ethos on the enactment of bodily and psychic connection.

Background and Context: Introducing the Postmodern Midwife

In the postmodern era in the Western world we have gone beyond the anesthetized births of the 1940s and 1950s, the near-total demise of lay midwifery by the 1960s, and even the "natural childbirth" movement of the 1970s to a hegemonic focus on technology-assisted reproduction and technobirth, the basic principles and tenets of which have become formally encoded as the "standards of practice" regarded as authoritative in courts of law. Resistance to this technocratic hegemony in birth is strong and has spawned multiple movements and options that offer true alternatives, including the Bradley method of childbirth education (McCutcheon-Rosegg 1984), freestanding birth centers (Rooks et al. 1989), the homebirth movement (Kitzinger 1979; Sullivan and Weitz 1988), and the midwifery renaissance (Davis 1987; Gaskin 1990[1977]; Schlinger 1992). The fact that the legal system so completely supports the praxis of technobirth has forced those midwifery practitioners who take the risk of opposing it to become almost hyper-educated in the science of obstetrics so that they can both defend themselves against legal persecution by the medical establishment and work to change the laws that keep them legally marginal.

In response to such pressures, and in service to the increasing numbers of urban middle- and working-class women who request their services, "lay"² midwives in the United States have expanded from their original base of traditional practitioners serving specific ethnic groups in bounded communities (see, for example, Susie 1988) to full participation in the postmodern world. In the Third World, as the viability of indigenous systems of birth knowledge is everywhere challenged by imported biomedical systems (Jordan 1993[1978]; Sargent 1989; see also Sesia, Georges, and Sargent and Bascope, this issue), midwives are emerging as articulate defenders of traditional ways, as well as creative inventors of systems of mutual accommodation (see Jambai and MacCormack, this issue). This phenomenon, which we have labeled *postmodern midwifery*—midwives who are educated, articulate, organized, political, and highly conscious of both their cultural uniqueness and their global importance—is not limited to the United States but is increasingly emergent all over the world (for examples see Kitzinger 1990).³

Our juxtaposition of *postmodern* (a charged word in the anthropological lexicon) with *midwifery* is far from casual. With this juxtaposition we are trying to make salient the qualities emergent in the praxis, the discourse, and the political engagement of a certain kind of contemporary midwife. George Marcus has stressed that the power of the postmodern intervention in anthropology has inhered in its "radical critique" (1993:6) of unexamined conventions and monological assumptions, both ethnographic and cultural. As Linda Singer points out in "Feminism and Postmodernism," in feminist writings this radical critique "recurs with variations" as

an explicit discursive strategy of challenging the terms, conventions, and symbols of hegemonic authority in ways that foreground the explicitly transgressive character of this enterprise . . . postmodern discourse disrupt[s] the project of closure by consensus, by insisting on exposing how differences inscribe them-

selves, even when they are explicitly refused or denied. The voice of rationality is shown to be riddled with contradictions it cannot exclude. [1992:469–470]

This surely is an apt and accurate description of midwifery practice as described in this article. We will see how midwives, in their intentionally transgressive reliance on intuition, quite regularly expose the contradictions that the voice of rationality proves, in the domain of birth, to be unable to exclude. As we shall see, the transgressive nature of postmodern midwifery is further displayed in the fluidity with which the midwives interviewed for this study move between the biomedical and midwifery domains, appropriating the authoritative lexicon and the whiz-bang technologies of biomedicine to the holistic philosophy and “of service to women” ethos of homebirth midwifery. These same midwives, and others like them, have become adept at challenging the terms, conventions, and symbols of hegemonic authority in the courts, in the press, in their state legislatures, and through the politics generated by the actions and interactions of their national organizations. Through such ongoing activities, as well as in countless aspects of the daily discourse and praxis of midwifery, these midwives self-consciously engage in the most radical of cultural critiques.

In the United States the two organizations most instrumental in facilitating the advent and transgressive activities of the postmodern midwife have been the Midwives’ Alliance of North America (MANA),⁴ to which almost all of the midwives interviewed for this study belong, and the American College of Nurse-Midwives (ACNM). Although MANA was conceived and created in 1982 as an umbrella organization that would unite all North American midwives, to date it has primarily served as a vehicle for the collective voice of homebirth midwives; most members of MANA actively attend births at home or in freestanding birth centers. The ACNM, founded in 1955, limits its membership to certified nurse-midwives (CNMs). CNMs must first become registered nurses, after which they undertake an additional year or more of intensive academic and technomedical midwifery training. Most of the 5,000 CNMs currently practicing in the United States work in hospitals, some work in freestanding birth centers, and a few attend births at home.

In spite of the polarization between these two organizations,⁵ MANA members have not lost sight of their original charter; in keeping with that vision, from its inception MANA has insisted on inclusivity. It welcomes all midwives as members—including CNMs (who constitute one-third of its membership), *direct-entry midwives* who have been trained in midwifery schools or (in Canada) college midwifery programs, and *independent midwives* who have learned strictly through hands-on apprenticeship training. The apprenticeship route to midwifery, not considered legitimate by the ACNM, is highly valued by the members of MANA for the connective and embodied experiential learning it provides.⁶

MANA as an organization operates by consensus, a process that requires a high degree of agreement on basic issues and values. MANA’s explicitly stated philosophy of birth, arrived at through the consensus process, is holistic, and its 1,400 members have made it clear that they generally share in that holistic philosophy and approach, as expressed in the following excerpt from the 1992 final draft of MANA’s Statement of Values and Ethics (MANA 1992):

We value:

Women and their creative, life-affirming and life-giving powers which find expression in a diversity of ways.

The oneness of the pregnant mother and her unborn child; an inseparable and interdependent whole.

The integrity of life's experiences; the physical, emotional, mental, psychological and spiritual components of a process are inseparable.

Pregnancy and birth as natural processes that technology will never supplant.

Pregnancy and birth as personal, intimate, internal, sexual and social events to be shared in the environment and with the attendants a woman chooses.

A mother's intuitive knowledge of herself and her baby before, during, and after birth.

A woman's innate ability to nurture her pregnancy and birth her baby; the power and beauty of her body as it grows and the awesome strength summoned in labor.

The essential mystery of birth.

Our relationship to a process larger than ourselves, recognizing that birth is something we can seek to learn from and know, but never control.

Expertise which incorporates academic knowledge, clinical skill, intuitive judgment, and spiritual awareness.

Relationship. The quality, integrity, equality, and uniqueness of our interactions inform and critique our choices and decisions.

Various versions of this Statement of Values and Ethics were developed, reviewed by the membership, revised, and revised again until full consensus was reached on the final draft, from which this excerpt is taken.⁷ This set of values constitutes a direct challenge to the technomedical approach to birth; its high degree of reflexivity is thoroughly postmodern. The enormous value that MANA midwives place on relationship and connection is evident throughout. We present these excerpts as a clear illustration of MANA's working philosophy—the context within which the high regard which our midwife-interviewees have for intuition must be understood. The full conceptual and practical ramifications of this philosophy are complex and far-reaching, and will be addressed in future works. Here we will only point out the conflicts that will inevitably arise between this holistic (inclusive, egalitarian) philosophy and the exclusive, hierarchical demands of the technocracy, which up until now has consistently devalued “lay” midwifery, and has given status and credibility only to CNMs, who took pains many years ago to constitute themselves as a profession associated with—and structurally subordinate to—the medical establishment.⁸

One of the most pressing issues facing independent postmodern midwives in the United States and Canada is this question of professionalization. This has been a divisive issue within MANA for some years, as professionalization involves more organization, regulation, bureaucracy, and limits on practice than some independent midwives have been willing to accept (see Schlinger 1992). Part of the fear has been that with the encoding of independent midwifery into a profession with specific certification and practice requirements will come—as has happened in so many other professions, including nurse-midwifery—a decrease in respect for “softer,” situationally responsive elements of practice such as reliance on intuition. In this light, the interest of one of us (Davis) and some of her midwifery colleagues in writing, speaking, and offering workshops about the use of intuition at birth can be seen as an attempt to formalize midwives' understanding of intuition in order to

heighten its status as a viable and valid source of authoritative knowledge—an endeavor in which this present study may also play a role.

Methods

This article is based on interview data obtained from 22 white middle-class American midwives about the role that intuition plays in their behavior at births. Seventeen of these midwives are empirically trained and primarily attend home-births; five are CNMs. Most interviewees are experienced midwives with 3 to 16 years in practice; three have been in practice less than a year. Three of the CNMs attend births both at home and in the hospital; the other two are based in hospitals. All of the midwives were attendees at the 1992 MANA conference in New York or the 1993 MANA conference in San Francisco; almost all interviews were conducted at these two conferences. While we can make no definitive claims as to the representative nature of our interview sample, we can affirm from many years of interaction with midwives that the attitudes, beliefs, and experiences of our interviewees are typical for MANA members.

Our interviews, which were tape-recorded, were generally from one-half to one hour in length; most of them were conducted by Davis-Floyd, who began by interviewing midwives who were recommended to her as having “good stories” to tell. Some interviews ended up taking the form of storytelling sessions, as midwives walking by felt moved to join the session and recount their own experiences. Each one was asked to tell as much as she wished about incidents surrounding birth in which intuition had played a role. Our goal was to elicit as many “intuition stories” from the midwives as we could, so that we could begin to gain a sense of if and how much these midwives relied on intuition, of the results in actual births of their acceptance or rejection of intuitive messages, and of their feelings about the value and usefulness of intuition as a diagnostic tool and guide to action—in other words, as a form of authoritative knowledge.

An additional 20 stories were gathered at a tape-recorded workshop on intuition called “Spinning Tales, Weaving Hope” that Davis led at the 1993 MANA conference in San Francisco, during which all the midwives present were asked to share any experiences with intuition that they felt were important. While we cannot be sure what role this workshop and the interviews we conducted played in these midwives’ opinions and ideas about intuition, the mere fact that we, as authoritative figures, were particularly focused on intuition no doubt helped to validate or to enhance the idea of intuition as a legitimate source of authoritative knowledge in the minds of our interviewees. This in fact was explicitly intended by Davis, who designed her workshop for just that purpose; in Davis-Floyd’s case it was an inevitable by-product of the interview process—yet another illustration of the essential connectedness of the anthropologist to her subjects of “study,” and of the intense subjectivity of the anthropological endeavor (Clifford and Marcus 1986; Marcus and Fisher 1986).

That subjectivity was also much in evidence during the process of data analysis. As anyone who works with interview data knows, the process by which one arrives at an interpretation of those data is difficult to describe. Asked to do just that for this journal, we confront a hard-to-delineate “fuzziness” in that process. When one interviews, as each of us has in the past, from a predesigned list of

questions, one can compare the answers to a certain question or set of questions across the database. In this case, however, we were not working from such a list, but rather were asking for stories and listening to them as they unfolded. We transcribed the tapes, read the transcriptions over and over, and discussed them at length, until salient themes and patterns began to emerge that shed light on our central organizing question: To what extent and under what circumstances do midwives utilize intuition as a source of authoritative knowledge for decision-making during birth?

Our collaboration emerged gradually. In 1992 Davis was one of Davis-Floyd's (no relation) first interviewees for this study. One year later we agreed to coauthor this article. We merge in this endeavor our unique perspectives. Robbie Davis-Floyd is a cultural anthropologist who has applied symbolic, cognitive, and feminist perspectives to the study of American childbirth. For over 12 years she has been conducting research on women's experiences of pregnancy and childbirth (1987a, 1992, 1994), on the beliefs, attitudes, and training of obstetricians (1987b), and on the ritual and symbolic dimensions of hospital and homebirth (1990, 1992, 1995); she has recently become interested in the emergent phenomenon of what she has been calling "postmodern midwifery." Elizabeth Davis is an independent midwife who has been in private practice for 16 years. She has attended over 300 births as primary caregiver; 90 percent of them have taken place at home. Internationally known for her work in women's sexuality and reproductive rights, she has authored a number of books on birth and related topics (Davis 1988, 1994, 1995), most notably the midwifery textbook *Heart and Hands* (1987), *Women's Intuition* (1989), and the coauthored *Women's Wheel of Life* (Davis and Leonard 1996), and is a frequent lecturer at childbirth conferences around the world. She is the director of Heart and Hands Midwifery Intensives, an educational program for direct-entry midwives she founded in 1982. She initiated the development of midwifery certification in California and was instrumental in getting legislation passed to decriminalize direct-entry midwifery in that state. She currently chairs MANA's Education Committee and is the president of the newly formed Midwifery Education Accreditation Council, a national accrediting body for direct-entry midwifery education.

Midwives and Intuition

Connection as a Prerequisite

The first thing that jumped out at us from our interview data was the enormous value midwives place on "connection." Connection, as these midwives experience it in homebirth, means not only physical, but also emotional, intellectual, and psychic links. It is not merely two-way, as with the connectedness of midwife to mother, or mother to child.⁹ If we were to diagram it, we might draw something like a web, with strands connecting mother, child, father, and midwives each to the other.¹⁰ If, further, we were to look inside each individual, we might see other strands of the web connecting each individual to the deepest essence of herself. Our interviewees insisted that the degree of connection they are able to maintain with mother and child depends on the degree of connection they maintain to the flow of their own thoughts and feelings. So basic is the importance of this internal

connectedness that many of them actively seek it during and even before birth. As Elizabeth Davis explained during her interview with Davis-Floyd:

Sometimes, especially when I've been doing a lot, it's really hard for me to clear myself and arrive at the birth open. So before I leave, I lie down and just try to unwind and unfold my concerns of the day and open to myself, so that I can also be open to the woman and her birth.

This effort to "be open" to oneself and to the woman and her birth is a common theme among homebirth midwives. The connectedness it facilitates extends not only to the psyche and emotions, but also to physical sensation and experience. Consider the following quote from a Canadian midwife:

In our collective practice, one of the things that we became really aware of over time was that if one of the midwives at a birth had diarrhea [it was a message that we should] look at things a lot closer. Inevitably in those births something came up. . . . *[Q: How would you explain that? Why would a midwife get diarrhea if something's wrong with the birth—what's the connection?]* I think you're intuitively picking up that something isn't quite right here. It's coming out in the body—it hasn't gone into the head yet.

The physicality of this knowing of which she speaks is reinforced in this description by a California midwife:

My scientific self believes that everything happens inside my skull, in my brain. [And I have intellectually learned many skills, many techniques.] But my physical experience is that [in dangerous situations in which my mind isn't sure what to do, which technique would be the very best]—say, the baby's head comes out, but it won't rotate, and the shoulders are stuck—a cone of power comes straight down the width of my head, through my body, and out through my hands. And my hands begin to do a maneuver, and my mouth begins to speak and I tell the woman to turn over [on her hands and knees], or I reach up and grab hold of the baby's butt and draw the baby down, or I do whatever I do—but I didn't know what I was going to do before that moment—and that's midwife intuition. [Maggie Bennett]¹¹

Whence does this "cone of power" originate? While both Maggie and the Canadian midwife describe intuition as intensely physical, Maggie's "cone of power" adds a spiritual dimension as well. When we asked many of our interviewees where intuition is located, we received the following responses: "All through the body"; "It's cellular"; "It's in my stomach"; "It's inner knowledge—you don't know where it comes from"; "Your heart, your dreams"; "Your connection to the universe"; "My higher self"; "My heart, my chest, my throat"; "I'm very auditory—I hear it as a voice coming from deep inside." We can conclude that for our interviewees, intuition seems to involve the body, psyche, and spirit, but not the rational mind.

The midwives say they experience the kind of openness described by Maggie and Elizabeth, and the connectedness it facilitates, as essential to receiving intuitive messages. If they are closed—"shut down," "disconnected"—they cannot hear that inner voice, and must rely on their extensive intellectual knowledge and accumulated expertise. While they see nothing wrong with this, they do seem to regard it

as a qualitatively different type of care, as will be evidenced in the following section.

Learning To Trust

In formal interviews and casual conversations we heard midwives express strong familiarity with biomedical diagnostic technologies. Their in-group jargon is filled with technomedical terms, their midwifery bags bulge with technologies,¹² and their homebirth charts look quite hospital-like, with maternal temperature and blood pressure and fetal heart tones duly recorded at proper intervals. Yet these same midwives who are so competent at using the jargon and the diagnostic tools of technocratic medicine often perceive the information thus obtained as a highly adulterated blessing, perhaps a source of as many problems as it solves. As Elizabeth explained:

What I see going on in a lot of midwifery training programs is the idea that here's this body of knowledge, and one needs to be schooled, and one needs to be tested—the idea that the student is empty and waiting to be filled, and the knowledge is there, and after you stuff it in, then the student is “qualified.” But in midwifery, no amount of that is ever going to compensate for a lack of self-confidence or an ability to blend critical thinking with personal responsibility. What makes a really good midwife, I think, are those inner-based qualities of analysis and discernment, the emotions that she stays in touch with because she does not divorce her *self* from the process of learning, so that the feelings of self-respect, and self-love, and self-trust blend to make her humane and to keep her connected. I think in birth, if you're not part of the process, you're a threat to the process.

The other midwives interviewed were in complete agreement with her. For all of them, being part of the process of birth, being connected, constituted the primary ingredient of their success—an ingredient far and away more significant than their albeit considerable technical diagnostic skills. One of them even went so far as to say the following:

- A: Assisting women at birth—that's all it is, is intuition. I listen to the baby's heartbeat, because, you know, I listen to the baby's heartbeat, but I don't really care about it, because I have this inner knowing that everything's fine.
- Q: Do you also know when everything isn't fine?
- A: Sure you know, there's an energy there.
- Q: Has there ever been a time when the stethoscope told you one thing but your intuition another?
- A: No. If I detect a problem with the baby's heartbeat, there have already been signs that I'm suspecting there may be a problem. The heartbeat almost never tells me anything, except it looks nice on a piece of paper to document it. I do that for the lawyers. [Jeannette Breen]

It is a working hypothesis of ours that the more intensely midwives are trained in didactic models of medical care based on ratiocinative processes, the less they will trust in and rely on their intuition. Since our interviews to date have focused on midwives who demonstrate their commitment to holism by attending MANA conferences, we have been unable to investigate the truth of this hypothesis. To do so we would have to interview equal numbers of more medically oriented CNMs.

All of our interviewees report that learning to trust their intuition is an ongoing process. Our data do however indicate some differences in the ways that medically trained CNMs and empirically trained midwives (who learn their skills through the one-on-one interaction of apprenticeship) experience this process. The CNMs seem to begin by regarding intuition with mistrust, then move into trust through lived experience. The empirically trained midwives seem to begin by trusting intuition and then move into confirmation of that trust through lived experience. Consider the following story told by a hospital-based CNM from the Midwest about her first salient experience with intuition at birth:

Last year I [was] seeing a Laotian Hmong woman. She came when she was about four months pregnant from a refugee camp. The very first time I met her I felt like there was something that was not right, but, although I kept looking, I couldn't find anything, ever. . . . Well I happened to be on call the night she was in labor, and her interpreter called me and told me she was going into the hospital and I asked the interpreter if she was coming and the interpreter said no, and—I had had this feeling all along, this voice that was telling me something bad was going to happen, and I thought, it's a mistake for the interpreter not to come, but I didn't say anything—I respected their plan.

And the woman got to the hospital and she was complete with a bag of water that was bulging and a high presenting part. And the nurse said to me, "I think she should go to the high-risk birth center," and I knew that this woman would not be protected—I knew there'd be residents—and so I pushed aside the part that had been telling me something was wrong, and admitted her to the alternative birth center. And when I got there, about five minutes after she arrived up there, she was pushing already, and I [started to check her] and the bag of water broke with her next contraction, and my whole hand filled with umbilical cord.

She'd been in labor all day at home, and I don't know how long the cord was prolapsed, but as soon as I found it we tried to get her to push through, but she wouldn't push, so I pushed the baby's head up and we did a cesarean section, and we got the baby out pretty fast but the baby has only lower brain stem function. Even though we did things right, we did things fast, it was a terrible outcome. And I think, had I listened to that voice, [the translator would have been there and could have convinced her to push] or she would at least have been admitted to a unit where things could have been done faster, and I don't know if there would have been a better outcome or not, but it's the strongest message of intuition I've ever had and from it I learned a lot about listening. I had never been raised to believe in the inner voice, but now I listen, when I slow down enough to hear those things. [Donna Hartmann]

Donna's difficulties with learning to listen to her inner voice are echoed in Fran's story:

I went to nursing school, and before I finished my CNM I attended a number of homebirths with a midwife who was not a nurse and watched her make decisions based on intuition and just connection with the client. The nurse-midwifery education that I had didn't teach us that—it was very linear and very objective and taught us to make decisions based on very objective and very specific criteria. In the last few years I've had some very high-risk births, very scary outcomes and have felt in my heart, in my chest, in my throat that things were going to be okay, and have gone against my physician back-up and said "Let's keep going for just a little while," and ended up with lovely babies, even with lots of meconium¹³ and

with strong decelerations.¹⁴ And quite recently I was in a situation where I had all the objective criteria for a really nice birth. The strip [electronic fetal monitor printout] didn't look very bad and we had no meconium. But the whole time my heart and chest were telling me "Things are not going right." And I was trying to get my physician back-up to intervene and he was saying, "Based on these objective criteria, things are going to be okay" and they were not . . . the baby was born with Apgars of 2 and 2.¹⁵ I think we need to listen to our intuition and we need to keep apprenticeships so that we can watch each other and talk to each other during these decisions. If you can say to other midwives you're working with "I'm having a bad feeling about this," even though everything else—all the objective criteria—look good, you need to trust those feelings. That's what I've learned.

Recounting her early years of homebirth midwifery practice, empirically trained midwife Elizabeth Davis introduced the following story by saying, "This is the experience that first got me interested in the role of intuition in birth." In contrast to the two CNMs quoted above, her first reaction to a strong intuitive experience was not to resist or ignore, but to act upon it:

I had received a call that someone was in labor and [I lay down to unwind and open myself], and I heard this voice—I'm pretty auditory, and that's one of the ways my intuition shows up—and the voice said, "She's going to have a partial separation." I immediately fought back the voice—I think a lot of us, when we get intuitive messages, will argue back with our rational minds and refute them—we're schizo enough to do that . . . and that's what I did. I went over her history in my mind, and there was nothing that would indicate any risk for postpartum bleeding. And the voice said "No, sorry, this is going to happen." Then I responded with great confidence and said, "Well that's okay, because I've handled this before—I've done manual removals." But after that it came back, "No, you've never done this. You've never had to go this far up and you've never had this much bleeding." I was really scared, but I thought, "Well, this is my fear, and I'm just projecting, God only knows why."

But I told my partner about it, and at the birth I drew up a syringe of pitocin in advance, and pushed fluids by mouth, and the kinds of things that I would do if I anticipated a potential problem with bleeding.

So she gives birth to this gorgeous little girl, the labor was uneventful, nothing strange, and she's holding her baby, and this bleeding starts. I follow up the cord to see where the placenta is and suddenly there's so much blood, and my hand is continuing from that point of exploration on up inside the uterus—I'm on automatic pilot, doing this manual removal as it was foreshown, and my partner is injecting the syringe of pitocin. Just going ahead and doing what was necessary without wasting time really kept her blood loss to minimum, even though it was considerable. We didn't have to transport, she didn't have to be transfused, she didn't go into shock, and that was amazing to me. Everything worked out great, I think because of the immediacy of the response and the complete lack of double guessing myself.

Reason versus Intuition: Accuracy and Source

Bastick's (1982) comprehensive list of the qualities of intuition (see above) includes the possibility that an intuition may be incorrect. With this most of the midwives in our study would disagree, as they tend to define intuition per se as inherently accurate (see also Vaughn 1979). Many of them told us that the trick,

each time the inner voice speaks, is how to know whether or not it is a “real” intuition, and the struggle is to learn the difference between the inner doubt and debate that accompanies ratiocinative thinking, and the true voice of intuition. Their unwillingness to assume that an intuition can be wrong, we find, comes from their consensual belief that intuition finds its source in the spiritual realm or their own “higher selves,” which by definition cannot be wrong, or from the deepest recesses of their bodies, which, according to the holistic model, are essentially energy fields operating in connection with all other energy fields, and therefore cannot be wrong either.

In contrast, reason/ratiocination, which is site-specific to the neocortex, *can* be wrong, and often is so. Thus if a midwife has what she thinks may be an intuition, but it turns out to be wrong, she is likely to conclude that it must not have been an intuition in the first place, but a product of her “rational mind.” This is not to say that midwives devalue reason and ratiocination. They tend to be comfortable with their ratiocinative abilities, and keenly aware that these are culturally privileged. The voice of reason is loud and aggressive; the harder task, as the midwives see it, is to identify and heed the truths spoken by the still, small, and culturally devalued inner voice. The worth of this enterprise is attested to by the outstanding safety record that contemporary homebirth midwives are achieving—a record that compares most favorably with the interventionist, expensive, and often iatrogenic “active management” of labor and birth in many hospitals.

The midwives we interviewed for this study reported that they averaged a 90 percent or higher success rate for the home or birth-center births they have attended, the vast majority of which took place without drugs or other technological interventions. They transferred 8–10 percent of their clients to the hospital during labor; fewer than 4 percent ended up with cesareans; and their perinatal mortality rates averaged 2–4/1,000. These statistics contrast with the extremely high percentage of women in the hospital who receive drugs during labor (over 90%), the near-universal technological interventions in hospital birth, the national cesarean rate of close to 23 percent, and hospital perinatal mortality rates of 7–9/1,000. (For an excellent review of all available recent studies on midwifery birth outcomes, see Goer 1995:297–347.)

Maggie’s Story: A Case Study in Reliance on Intuition

Although all these midwives know “the rules,” the protocols of standard midwifery practice, they often circumvent or ignore them completely in the actual doing of birth. Clearly they do not consider such protocols authoritative *per se*. Jordan (1993[1978]) has said that authoritative knowledge is interactionally displayed knowledge on the basis of which decisions are made and actions taken. How far into actions and interaction can intuition take a midwife? Given the external diagnostic technologies at her command, including those of the hospital to which she can transport her client, how authoritative can she consider that inner voice to be? What happens when something that voice tells her conflicts with more culturally accepted external parameters of “normal,” with standard protocol? We take as a case study a birth attended by midwife Maggie Bennett, president of the California Midwives’ Association, which took her far beyond medically accepted standards, right out onto the ragged edge of intuition and trust:

[Once I had a client named Jane] . . . it was her third pregnancy and she was 39. Her first pregnancy . . . was complicated, and that child had some physiological problems. Her second labor began prematurely, and she was delivered by cesarean section—the baby was six weeks premature and had cerebral palsy. Her father is an obstetrician. So she came to me feeling that hospitals and doctors offered her nothing as far as safety. She was also a VBAC [vaginal birth after cesarean] at a time when VBACs were new to me, and she also had a vertical scar, exterior and interior—a no-no.

Maggie has so far listed no fewer than five factors that, from a medical point of view, would define this woman as far too high risk for any midwife to take on for a homebirth: two previous problematic births, both with pathological outcomes, a father who is an obstetrician (a strong indicator for a medically oriented daughter and a potential threat to the midwife's ability to continue to practice), and a woman who wants to give birth vaginally at home, but who happens to have the kind of scar, on both her abdomen and her uterus, that is most likely to rupture during a subsequent labor. But, she continued,

What she did have going for her was God. She was a born-again Christian, and believed that this was of God's design, and so she had a lot of power from that source. So the first thing that happened was that we got close to term—37, 38 weeks, and her baby was breech. And we kept waiting for it to turn on its own, and we did crawling and slant-boarding¹⁶ and all sorts of things but the baby didn't turn. So we decided that the baby had to be turned. And the baby was really hard to turn, and it didn't go easily, and at one point I felt that we should stop, because it was just too difficult. But then I had this intuition that the baby could go head down, but that I was blocking the process.

One of the things that was happening was that the woman wanted to have a beer [to help her relax] and I wouldn't let her do that because I wanted her 100 percent present and in her body, and I wasn't willing to let her check out while I did this procedure on her. I just wouldn't allow it. [But then she began making these statements that semi-equated me with the devil, and finally I realized that my refusal was causing a lot of unpleasant tension between us.]

And so I let go of my beliefs about the alcohol, and I called her husband and said, "You need to pray." I had to let go of my being righteous about my own belief system—I am not a Christian—and about religion and about alcohol, and let this woman be in her body the way she had to be in her body, and be in her beliefs the way she had to be in her beliefs. And if that meant that I had to bow my head and pray, then that's what I had to do—so it was as much about me as it was about her.

So she had a glass of wine and a half a beer, and I had a half a beer, and my partner had a half a beer, and we mellowed out a whole bunch, and she laid down on the slant board again, and the baby just went around. So again, it was the intuition about knowing that the baby wanted to turn around, and looking at what everybody had been doing that was stopping that from happening.

In her willingness to compromise her own religious and health beliefs to facilitate the turning of the baby and to maintain connectedness with the mother, Maggie demonstrated the malleability of the midwife, her willingness to go the distance with the mother on the mother's terms. Maggie as practitioner-in-charge could have retained her authority to deny the woman alcohol by insisting on the authority of her "knowledge" that alcohol would be harmful. Instead she gave up

that claim altogether, gladly surrendering authority to what she saw as the higher good of connectedness and trust.

Yet another opportunity to give up authority quickly arose: hospital guidelines and many midwifery protocols state that babies must be born within 24 hours of the rupture of the membranes, as the danger of infection of the baby rises significantly thereafter. This rule of thumb has sent many would-be homebirth mothers to the hospital and has resulted in many cesareans, as it is very common for labor and birth to take far longer than 24 hours (indeed, as midwives know, normal labors can take up to five or six days; during that time, if left unpenetrated, ruptured amniotic sacs will often reseal). But a cesarean was not to be Jane's fate. Maggie continued:

So she goes into labor four days later, but she doesn't just do it normally—she has premature rupture of the membranes for 24 hours, 72 hours, four days she has premature rupture of the membranes, and you better believe that intuition played a role every single day, because I had to reexamine where we were going with it all the way along. But the answer was always the same—her waters were clear, she had no temperature, and she still had God. She was filled with her faith in God that that baby was safe. And I was able to participate in that faith. . . .

So on the fourth day [after her membranes ruptured], after she is finally in labor, her backup doctor called to check on her, and someone told him that she was in labor and was out walking with her husband. . . . So now the *doctor* knows that she's in labor. And remember that I told you that her father was an obstetrician in a town about four hours away? Well *he* calls up and finds out that she's in labor, and then he starts calling every three hours. And he starts to say, "What's going on there? That baby should have been born by now."

So I have a woman who's four days with ruptured membranes, who's been in labor for about 18 hours with contractions about five minutes apart. . . . And while I was out for a few minutes picking up food for everybody,¹⁷ I ran into her backup doctor at the restaurant and he said to me, "I just want to know is the baby coming out above or below?" and I said—this was an intuition, come to think of it—"The baby's coming out normally."¹⁸

The pressure builds. Maggie is attending a woman with significant risk factors from past and now this present birth; two physicians are aware that she is in labor and are trying to monitor the situation from afar. Every midwife knows how fraught with personal peril such a situation is, and that there is also peril for the mother, as the tension induced by such pressure can easily stop or slow labor. Maggie's response at this point to "all this energy, this highly political birth," is that of guardian and protector of the natural process: she pulls the plug on the telephone. She said:

I think that every time a midwife goes to the edge, it is the intuition that everything is all right that takes her there. I had to keep examining with this woman whether or not it was all right for us to continue, and every single time was an internal process about—we have these signs, and this is not "the rules," but I *know* the baby's all right, and I *know* that the mother is all right, so we can go on from this point.

So eventually, she begins to push the baby out, and the waters broke [again—the bag had resealed] just as she began to push and there was slight meconium staining. And she begins to have a slight temperature, like maybe 99, but this is all right [according to protocols] because she has begun to push.

Guess what? She doesn't push the baby out in one hour, she doesn't push the baby out in two hours, not even in three hours. She takes a rest at four hours.¹⁹ She finally gets that baby out in five hours . . . squatting . . . little by little by little by little. . . . And the baby actually breathes spontaneously and has Apgars of 7 and 8.

So in the end, in retrospect, it was just a challenged birth—a challenged pregnancy, a problem in late pregnancy, a challenged labor all the way along. And I couldn't have done that birth if I had followed *my own* protocols.²⁰ And there was a point where I had to say, "I am called midwife, and I am in here for whatever happens, because I have to let go. I have to absolutely let go of my desire to control this, because I can't."

Some perspective on the value Maggie places here on letting go of control is provided by an earlier study carried out by Davis-Floyd on differences between home and hospital birthers (1994). She found that the hospital birthers placed high value on control, while the homebirthers felt that giving up control was far more valuable in birth and in life than trying to maintain it—a philosophical position they arrived at through lived experience. As Liza explained it:

I was brought up in the mainstream, and I used to knock myself out trying to control everything. Then I got sick, and I realized that I actually can't control anything or anyone. As soon as I let go of trying, and just began to surrender to what is, everything in my life started to work. I got well, I got married, I had a baby. And if the lesson needed reinforcing, labor did it. That is a force beyond control, a powerful wave that will drown you if you fight it. Better then to dive into it, to relax, let it carry you. Whenever I tried to control my labor or myself during labor, I was in agony. But when I let go and surrendered to the waves, they carried me. [quoted in Davis-Floyd 1994:1133]

Maggie reinforces this philosophical position of surrender at the same time as she indicates how difficult it is to maintain this view in a society that supervalues control in most aspects of life:

You know, I would never have the audacity to go to a birth and think that I could control everything that happened, for either the safety or the outcome. Sooner or later, I, along with the mother, have to give up the control. You would think after seventeen years [of attending births] I would know that, but I have to relearn that at almost every birth, over and over again.

We asked Maggie, "How do you feel about staying the course with that birth?" She responded, "I feel that it was a great gift, a great learning, and I am so incredibly inspired by the woman, and the goddess that she is (she would hate me for saying that)—that I was able to witness that miracle." In calling this woman a "goddess" Maggie expresses an attitude toward women that is held by many midwives who tend to see the birthing woman as a powerful creatrix—a birth- and lifegiver. Such midwives espouse the principles of ecofeminism, which link the fate of the planet, metaphorized as Gaia, the Mother Goddess, to the cultural treatment of the female body (see, for example, Diamond 1994; Diamond and Orenstein 1990; Starhawk 1988, 1989, 1993). Much as they interpret intuition as both spiritual and embodied, they honor the Goddess as a spiritual reality embodied in the earth, and as a metaphor of and for women's creative power, of which birth is but one expression.

As Maggie pointed out, to serve the Goddess is to learn to give up one's desire for control, to surrender to the ebb and flow of Her inscrutable rhythms.

Spirituality is a strong component of independent midwifery, but there is a great deal of variation in spiritual orientation. While most midwives in MANA actively celebrate the Goddess or are quite comfortable with the Goddess-as-metaphor, some have a strongly Christian orientation toward birth. Christian midwives tend to interpret birth not so much as a manifestation of the woman's own personal power but of God's power flowing through the birthing woman. This is the view held by Maggie's client Jane, and the reason why Jane would not appreciate Maggie's calling her a Goddess, which for Maggie is the highest compliment she can give to express her appreciation for Jane's profound inner connectedness and strength.

At this point in Maggie's recounting of this birth, the question of protocols and external diagnostic technologies again came up. The high authority that Maggie placed on her inner knowing during this birth was clearly demonstrated when she said that she never made a decision based on anything that was written on Jane's chart—her blood pressure, urinalysis, information about rate of dilation and progression of labor, and so on—because, as she put it, “it wouldn't be neat, it wouldn't add up, it wouldn't follow any kind of progression that was any kind of normal anything.” I asked: “So why didn't you make an effort to make this labor conform to normal by transporting her?” Maggie answered:

Because every time I [checked with Jane, she would tell me that she was fine and that she knew the baby was fine]. And every time I looked at her, and every time I looked inside myself, and every time I saw that—whatever it is—the place where the baby was—the baby was safe. . . . Inside my head I saw the baby safe—and this is my own metaphor, I realize, but I saw the baby surrounded by sparkling light, kind of like glittery flecks of amniotic fluid. [*Q: So your inner vision of the baby corresponded with the mother's?*] Yes!

This correspondence of Maggie's inner vision with the mother's is a prime example of the kind of connectedness that midwives see as essential for the emergence and the credibility of intuition. Our other interviewees generally agreed on the persuasive power of such correspondence of intuitions.²¹

We explored with Maggie in further conversation the mystery of why, in some cases, she will urge a woman to transport in the face of a minimum of indicators, while in a case like Jane's she would stay home in the face of a maximum of indicators for transport. We asked, “Is that a matter of intuition for you every time?” She replied:

Yes. You see, I don't know about where it all goes together, because I keep charts, and I do signs, and I check dilation, I look at the color of the amniotic fluid, I take blood pressure—I do those kinds of clinical things. . . . But . . . one month I realized that I had been to five births within a month, and only one of them fit within protocols. And I had to look at myself and say, I think of myself as a conservative midwife, but what's wrong here if four out of five births are out of protocol, am I a radical midwife, am I a dangerous midwife—what's going on here?

And I really had to evaluate, and look at my charts with somebody else, before I could come up with a picture of me as a midwife, and what I resolved for *me* is

that *where birth is not normal, part of a midwife's job is to return it to normal*. For example, in the case of a VBAC, which is regarded medically as high risk and almost universally by midwives as not high risk, what we're doing in that case is returning birth to normal. And when we go four, five, six hours of pushing, we are also returning birth to normal, a normal that says if the woman pushes for three hours and she's exhausted, then she can take a rest, and maybe in a couple of hours, she'll get her strength up, and then she'll be able to push again—she *will* get her baby out. When we do things like that, we're returning birth to normal.

Rather than de- and reconstruct labor to fit abstract and narrowly drawn technocratic parameters of normal—a process that often results in major surgery as the final reconstructive step—what Maggie and her sister midwives do is to continually redraw the parameters, processually expanding their definitions of normal to encompass the range of behaviors and signs actually exhibited by pregnant women as they labor and birth. In short, these midwives are willing to expand protocol parameters to reflect the realities of individual labors rather than reshape labor to fit protocol parameters. They see a labor that is unlike other labors, not as a dysfunction to be mechanistically normalized according to the standardized technomedical system of authoritative knowledge, but as a meaningful expression of the birthing woman's uniqueness, to be understood on its own terms.²²

Normalizing Uniqueness: The Connective Dance

The midwifery normalization of uniqueness must be understood in the context of the technomedical pathologization of uniqueness. The technocratic model of birth defines as “normal” only those births that fall within specific parameters—12 hours for labor, cervical dilation of one centimeter per hour, steady fetal heart tones, and so on. Labors that take too little or too much time, cervixes that remain “stuck” at four centimeters for hours on end, heart tones that speed up or slow down, meconium in the amniotic fluid—all are defined as dysfunctional “deviations from the norm.” Aware of technomedical parameters, midwives must constantly weigh their trust in and acceptance of women's individual rhythms against the consequences of straying too far outside of the medical protocols that are regarded as authoritative in the courts.

As in Maggie's story above, this tension between the technomedical pathologization and the midwifery normalization of uniqueness is reflected in the following story told by Vermont midwife Judy Luce:

A woman came to me . . . she was 39 and pregnant with her third child. The first child had been born by cesarean after 37 hours of labor. [The child had a severe genetic defect and died at the age of three.] And within eight months of that her second child was born, prematurely—a vaginal birth but 31 hours of labor, 4 hours of pushing, and a forceps delivery for a six-pound, ten-ounce baby. So she's due at the end of September, and wants to have a homebirth. She is an artist, she does huge oil paintings, brilliant . . . incredible intensity, vibrant colors, and she did a whole series that tell stories of her first child's birth, of the sickness, the dying, the death, and the grieving. Just a whole series which were so amazing and intense. So, the weight—the birth felt very *heavy* to me. There was a lot staked, not just on having another child, but also on what the birth was going to mean, and you know, the due date came and went and lots of early labor, but nothing happening. You know, it would begin—all night backaches—but never really taking off. . . .

Finally she called and said, "My water just broke, and it's really—it has brown meconium in it." So I go dashing over there again, and you know, the pad, her underpants, the floor, it's thick brown. And it's not thin—there's nothing thin about this. I listened to the baby through a couple of contractions, and the baby was wonderful, real reactive. . . . And I felt deeply, intuitively, that this baby was fine, but there was a weight around the whole birth. . . . If she had the baby in an hour, I could stay and deal with this, but [she was only two to three centimeters dilated, and] what am I going to do if it's 20 or 30 hours of labor, like the first two times? And how do you defend yourself in court, if the baby aspirates meconium, when you'd have to say, 20 hours ago, I knew this was here?

[So I call my physician backup, and then I talk the couple into going to the hospital.] And the mother felt too dirty and grungy to go to the hospital without a bath, so she got in the shower at about 6:08, and I go in, and she's standing there, trying to get out, holding her stomach and going "Unnnhhhhhh" [a common sound women make when they push]. So I get her in the bedroom and check her, and the baby's head is just coming into my hand. And at 6:28 she had an eight-pound baby girl, beautiful birth, no tearing. The baby was clear as a bell, but every bit of the fluid was just filled with meconium—you could just stir it around.

Afterwards, she said to me that when she got in the shower, out of this place she couldn't even touch, this immense grief came up and she cried, she just sobbed. Her husband said, "What's the matter?" and she said, "I just need to cry." And she opened, you know. That sobbing—everything opened. And that baby was born. And I think it's about holding on to the integrity of what you're feeling. It's not because you're *right*—there was a dance that went on between us about that decision making, and that space was big enough for that birth to happen. It was just immensely powerful.

Knowing that "there are no guarantees, even with intuition," Judy had been planning, "with grief," as she put it, to take the mother to the hospital in accordance with medical protocols, a decision to which the mother herself had acquiesced. Both of them apparently felt that the mutuality of the decision-making process left room enough, space enough, for the birth to happen at home after all. It was not a question of imposing authority, or even, in this particular case, of anyone holding the key to a particular kind of knowledge that either of them considered authoritative. They both knew that technomedical protocols indicated immediate transport in the case of thick meconium in the amniotic fluid, as the baby is in danger of aspirating the meconium. The midwife also knew from experience that meconium aspiration happens a good deal in the hospital (usually when the umbilical cord is cut too quickly, forcing the baby to breathe strongly before its airway can be completely cleared) but is rare at home (midwives usually wait until the cord stops pulsating to cut it). So, even though the midwife decided on transport, she was not anxious or nervous, but relaxed—her intuition told her the baby was fine, and her reason told her there was no cause for undue alarm, as even with meconium, the baby might be better off at home. The midwife's relaxed and accepting attitude allowed the woman the time and space to take the shower and thus to experience the emotional release she needed to be able to open up and give birth. Together, even as they both surrendered to the authoritative technomedical protocols that indicated transport, they still managed to hold a consensual space of connection in which the birth could happen at home—the "decision-making dance," as the midwife called it. In the eyes of midwives, birth has been made abnormal by technocratic medicine.

As Judy's story illustrates, the give-and-take of this "dance" is instrumental in midwives' ongoing efforts to normalize uniqueness in birth.²³

In a recent paper, Jordan, whom we honor in this collection, speaks of authoritative knowledge as grounded in a community of practice, adding that within that community

authoritative knowledge is persuasive because it seems natural, reasonable, and consensually constructed. For the same reason, it also carries the possibility of powerful sanctions, ranging from exclusions from the social group to physical coerciveness. [1992:3]

Certainly this is true of the authoritative knowledge of the technomedical community. But midwives who act on intuition do so in *opposition* to the cultural consensus on what constitutes authoritative knowledge in birth. Their protocols are their link to that larger biomedical system of authoritative knowledge; like physicians in the hospital, the farther they stray from those parameters, the more they place themselves at risk of the powerful sanctions of which Jordan speaks.

Yet within the midwifery community intuition does count as authoritative knowledge—to quote Jordan again, “the knowledge that *participants agree* counts in a given situation, that they see as consequential, on the basis of which they make decisions and provide justifications for courses of action” (1992:3). When Maggie shared her records with other midwives for peer review and evaluation, she was greeted with reassurance and acceptance; in spite of its devaluation, or simply nonrecognition by the larger culture, these midwives too valued intuition as authoritative.

Jordan points out that “to legitimize one kind of knowing devalues, often totally dismisses, all other ways of knowing, [so that] those who espouse alternative knowledge systems are often seen as backward, ignorant, or naive troublemakers” (1992:2). Her words capture in a nutshell what the larger technomedical culture has done, in this country and many others, to the alternative knowledge systems of midwifery. Hanging out on the ragged edge, far outside of the safety net of cultural consensus, these women of tremendous hearts find their courage not in the normalizing performance of standardized routines, but in their connectedness to the women and babies they attend. As Maggie put it:

Mothers and midwives mirror one another. I know that I get all of my courage from the mother. And I bounce it back to her, and she gets her courage from me. . . . It's a dance—the woman has to trust her midwife, and the midwife has to trust her woman for that bouncing back.

Sanctioning Intuition as Authoritative Knowledge

The midwife provides care according to the following principles:

Midwives work as autonomous practitioners, collaborating with other health and social service providers when necessary.

Midwives understand that physical, emotional, psycho-social and spiritual factors synergistically comprise the health of individuals and affect the childbearing process.

Midwives recognize that a woman is the only direct care provider for herself and her unborn baby; thus the most important determinant of a healthy pregnancy is the mother herself.

Midwives synthesize clinical observations, theoretical knowledge, intuitive assessment, and spiritual awareness as components of a competent decision-making process.

—Excerpt from MANA Core Competencies for Midwifery Practice (MANA 1994), a five-page document approved in final form by the MANA Board, October 3, 1994²⁴

Until recently, homebirth midwives' use of intuition as authoritative knowledge at births has been entirely informal, experienced in the uniqueness of the situation, talked about in wonder and awe among themselves and with the mothers²⁵ they attend, but not formally encoded as an official source of authoritative knowledge. With the finalization and approval-by-consensus of the MANA Statement of Values and Ethics (quoted earlier) at the MANA business meeting on November 13, 1992, in New York City, and the 1994 approval of the MANA Core Competencies quoted above, intuition received formal recognition from midwives themselves as an integral aspect of competent midwifery practice. Some new challenges thereby arose.

One of the most pressing issues facing postmodern homebirth midwives is that of certification and licensure. Midwives in many states have been lobbying for legalization and licensing for years, and increasingly are achieving these goals. Members of MANA have been well aware that if they do not establish their own testing and certification process, others—state governments, the American College of Nurse-Midwives, medical boards—will establish one for them. So MANA has created NARM—the North American Registry of Midwives—as a separate, non-profit corporation, and empowered the seven members of the NARM board to develop and implement a national certification process for direct-entry midwives, guided by a Certification Task Force of approximately 40 state representatives.

This in itself is a somewhat oxymoronic situation. MANA prides itself on its inclusivity, yet the essence of certification is some degree of exclusivity. When tests and standards are created that all midwives must meet, some will pass and some will fail, and, quite possibly, midwives who are competent at births will remain uncertified simply because they do not test well. In an effort to minimize this type of exclusionary outcome, which would limit homebirth midwifery to those who excel at ratiocinative thinking, the members of the Certification Task Force are trying very hard to create testing and evaluation systems that will be fair to all. Agreeing that written (ratiocinative) tests, while the easiest to administer, cannot provide the whole picture, task force members considered the idea of multiple options for demonstrating skill, including a simulated skills exam, in which the aspiring licensee could come to a central site and demonstrate her skills on plastic models of a birthing woman and child. When this idea was presented to the general membership of MANA, a common response was exemplified by one midwife who exclaimed in dismay, "My spiritual guides are the ones who tell me what to do at births, but they will not be there if I am working on plastic dummies!" Another midwife emphasized intuition's central role:

Let's decide how a midwife should be tested, and let's test her that way. Let's not kiss up to the standards of the medical profession in order to satisfy them that we are competent. Let's satisfy *ourselves* that we are competent—and we'll know that competency if our hearts are true, and if we're honest about our intuitive skills.

Intuition is often what makes us smart, what makes us do the work best, what makes us able to pick up problems earlier than anyone else and therefore deal with them more effectively. [Jill Breen, community midwife, quoted in Chester 1994:3]

In response to such appeals the task force's final certification proposal is balanced between the ratiocinative and the hands-on: it requires (1) that the applicant be checked off on a long list of required skills by her midwifery mentor, who will have many opportunities to see her demonstrate those skills during the course of her training in a connective context in which she can indeed listen to her guides and inner voices; (2) passing a challenging day-long written exam that tests the extent and depth of her knowledge; and (3) passing a hands-on skills assessment exam. The proposal's balance, as well as MANA's Statement of Values and Ethics and Core Competencies, indicates the increasing determination of these midwives to honor both ratiocination and intuition as communally sanctioned and respected sources of authoritative knowledge.²⁶

Conclusion

In this article we have sought to examine the phenomenon of midwives' occasional willingness to rely on intuition as a primary source of authoritative knowledge in a society that grants conceptual and legal legitimacy only to ratiocination. We have seen that the trust these midwives place in inner knowing is a seamless part of their overall philosophy, as expressed in MANA's Statement of Values and Ethics, and as exemplified in the stories they tell about their individual experiences with intuition and birth. In contrast to the technocratic model, which charters an ever-expanding plethora of separation-based diagnostic and remedial technologies, this holistic midwifery philosophy supervalues inter- and intrapersonal connection, and charters a range of behaviors expressive of that connective "dance."

Intuition, in these midwives' view, emerges out of their own inner connectedness to the deepest bodily and spiritual aspects of their being, as well as out of their physical and psychic connections to the mother and the child. The trustworthiness of intuition is intrinsically related to its emergence from that matrix of physical, emotional, and spiritual connection—a matrix that gives intuition more power and credibility, in these midwives' eyes, than the information that arises from the technologies of separation. That midwives nevertheless carry with them and freely utilize such technologies demonstrates not only that they also value ratiocination, but that they are becoming experts at balancing the protocols and demands of technologically obtained information with their intuitive acceptance of women's uniqueness during labor and birth. We submit that their deep, connective, woman-to-woman webs, woven so lovingly in a society that grants those connections no authority of knowledge and precious little conceptual reality, hold rich potential for restoring the balance of intimacy to the multiple alienations of technocratic life.

NOTES

Acknowledgments. We wish to thank Carolyn Sargent, Ann Millard, Gay Becker, and midwives Judy Luce, Karen Erlich, Penfield Chester, Anne Fry, Marimikel Penn, and Sharon Wells for their excellent editorial assistance, four anonymous reviewers for their useful

suggestions, and our midwife-interviewees for giving so generously of their time and experience.

Correspondence may be addressed to the first author at 1301 Capital of Texas Hwy., B128, Austin, TX 78746; 512/327-4726; fax 512/327-3459; davis-floyd@mail.utexas.edu.

1. It is common usage among mothers and midwives in the alternative birth movement to refer to birth at home as "homebirth"—especially when used as an adjective, as in "homebirth mothers"; we follow that usage here.

2. Non-nurse midwives in the United States used to be known as "lay midwives." But in recent years such midwives, including those who are apprentice-trained, have developed an extensive array of skills including the ability to use various high technologies (see note 11), have banded together in professional associations, and have organized politically to create a national certification program and to fight for state licensure. Thus many of them have come to think of themselves as professionals, and to resent the appellation "lay," which we do not use in this article.

3. The global scope of postmodern midwifery was evidenced by the attendance of over 3,000 midwives from 44 countries at the 1993 convention of the International Confederation of Midwives (ICM) in Vancouver, Canada. Members of ICM share in common a commitment to the midwifery ("with woman") approach to prenatal, natal, and postnatal care, and a growing concern for an increasingly compromised scope of practice. In Germany, for example, midwives may assist delivery but can do no prenatal care; in France they may do prenatal care but are greatly restricted in deliveries; and, as we have seen elsewhere in this volume, in the Third World the midwife's role is increasingly constrained by biomedicine. Generally, the ICM represents midwives with professional academic preparation, but its membership is increasingly beginning to reflect a determination on the part of midwives in both developed and underdeveloped countries to ensure the continued viability of the independent midwife able to assist birth in any setting, particularly the home.

4. In Hawaiian, *mana* means "an underlying, vital energy that infuses, creates, and sustains the physical body" (*MANA News* 1990). As one of our anonymous reviewers aptly pointed out, *mana* in Greek is the affectionate term for "mother." And, of course, in Hebrew and Greek *manna* means divinely supplied spiritual nourishment.

5. There have been and still exist sharp divisions and disagreements between ACNM and MANA over the nature of midwifery and the definition of what constitutes appropriate midwifery education and competent midwifery care. Nevertheless, these two organizations do both place high value on coexistence and cooperation, and have enacted those values for the past several years through the Carnegie Interorganizational Workgroup on Midwifery Education, created and funded by the Carnegie Foundation. This group included an equal number of representatives from ACNM and MANA. During lengthy deliberations the ACNM representatives agreed to accept the concept of another type of certifiable midwife besides the medically trained CNM. After enormous effort, group members reached consensus on the definition of the certified nurse-midwife (CNM) and the certified midwife (CM) in a "joint statement on certification" endorsed by both MANA and ACNM in 1993. This statement makes it clear that while educational preparation and accountability mechanisms vary, the CNM and the CM will share a common scope of practice: both will be certified to offer full-spectrum midwifery care. Since 1993 MANA members have been actively establishing verification and testing procedures for certification of the CM (see concluding section). (At a meeting of the Certification Task Force on October 4, 1994, by consensus, CM was changed to CPM—Certified Professional Midwife. The word *professional* had been the subject of debate in MANA over its exclusionary connotations; nevertheless, the 40 members of the task force came to consensus on its use, in part out of strong feelings that the competence of independent midwives has been fully demonstrated and that they deserve to claim full professional status equal, not subordinate, to that of CNMs.)

6. This issue of apprenticeship is a major impediment to continued consensus between MANA and the ACNM, which honors only formal educational training as an appropriate route to midwifery, and insists that apprenticeship is not a valid educational route. (See Jordan 1993[1978]:ch. 7 for a detailed discussion of the differences between experiential and didactic learning.) The question of apprenticeship has proved to be so divisive that it has resulted in a fresh controversy between these two organizations. In June 1994 the ACNM voted to accredit direct-entry midwives, which in this case means midwives with no training in nursing who are educated in university-based midwifery programs. At the time, members of MANA perceived this as an act overtly subversive of their efforts to create their own certification process for the CM—certified midwife—who can qualify for certification through either formal schooling or hands-on experiential apprenticeship training (or a combination of both). The fact that they later agreed by consensus to change CM to CPM reflects their strong belief that both competence and professionalism can be achieved through either route. One of us (Davis-Floyd) is presently engaged in research and writing on this highly contested issue in postmodern midwifery.

7. Copies of the MANA Statement of Values and Ethics can be obtained from Signe Rogers, Editor, MANA News, P.O. Box 175, Newton, KS 67114.

8. Contemporary CNMs, many of whom are or wish to be in independent practice, seriously question the limitations imposed by their structural subordination to physicians. Some members and officials of the American College of Nurse-Midwives are currently contemplating a focused effort to re-create nurse-midwifery as an independent primary health care profession, subject not to nursing but to autonomous midwifery boards.

9. Breastfeeding constitutes a good example of the pragmatic ramifications of insisting on the value of connection: 98 percent of American women give birth in hospitals; less than 50 percent of them breastfeed their babies during the early months of life. Of the 2 percent of women who give birth at home or in freestanding birth centers—in other words, in accordance with the connection-based holistic model of birth—close to 100 percent choose to breastfeed (Arms 1994:201). That connectedness also facilitates birth itself has been amply demonstrated by the doula (labor assistant) studies, which show beyond a doubt that the nurturing presence of a woman companion during labor reduces length of labor, lessens perceptions of pain, and improves birth outcomes, both physical and emotional (Kennell et al. 1988; Sosa et al. 1980).

10. The importance of the web metaphor to the members of MANA as an expression of their lived experience was demonstrated during the closing ceremonies of the 1993 San Francisco conference. Four hundred fifty midwives formed a giant circle around the edges of an otherwise empty ballroom. They passed balls of yarn in many colors around the circle; each participant looped each color of yarn that came to her around her wrist, until all were physically connected. Then they tossed many more balls of yarn across the floor to each other, tying those around their wrists also, until all that yarn formed a giant rainbow-hued spider web that filled the ballroom floor, linking everyone to everyone through myriad connections. Spontaneously lifting the giant web into the air by lifting their arms, the midwives quickly discovered that, if one person moved her arm, the whole web would move in response. And if a ball of yarn got stuck in the middle of the floor, at least 30 people had to move in synchrony for one person to retrieve it. This of course was a perfect ritual and symbolic enactment of the high value these midwives place on human interconnectedness.

11. Interviewees Maggie Bennett, Jeannette Breen, Elizabeth Davis, and Judy Luce insisted on being identified by their own names, in keeping with their strong beliefs in the value of their work and of their intuitive experiences. All other names following quotations are pseudonyms.

12. Items that a typical postmodern midwife carries with her to a homebirth include a pager and/or a cellular phone; a blood pressure cuff; a stethoscope; a fetoscope and a Doppler—an electronic amplifier of the baby's heartbeat (for monitoring fetal heart tones);

sterile gauze; antiseptics—alcohol, peroxide, betadine, or hibiclens; alcohol prep pads, alcohol swabs; Q-tips and cotton balls; flashlights; urinalysis strips (to test for glucose, ketones, pH, blood, and protein); Fleet enema (rarely used); nitrazen paper (to test for leaks in the amniotic sac); culture tubes (for taking a baseline culture of the amniotic fluid); equipment for drawing blood to send to a lab for a white count (to check for infection); urinary catheter kits; sterile KY jelly; a variety of herbs, tinctures, and homeopathic remedies, including rescue remedy (for severe stress), goldenseal (for drying the cord stump after it is cleaned with alcohol), amica salve (for skin swelling and trauma), black and blue cohosh and colophyllum (for enhancing contractions), evening primrose oil (for assisting cervical dilation), spirits of peppermint (for assisting bladder function—often can be used instead of a catheter), angelica (for assisting placental expulsion), shepherd's purse (for preventing postpartum hemorrhage), Crampease (a mixture of herbs) for afterpains, black haw (for postpartum cramps), and valerian (for relaxation); olive oil for perineal massage; a birthing stool; an amni-hook for breaking the waters if they are still intact when the baby crowns (so that they won't break all over the midwife—AIDS can be transmitted through the amniotic fluid); waterproof pads and sheets; an oxygen tank, mask for the mother, and infant resuscitation bag and mask (rarely used); special scissors for cutting an episiotomy (rarely used); syringes and drugs (injectable pitocin, injectable methergine, and oral methergine) to stop a postpartum hemorrhage; IV lines and fluids; instruments and sutures for repairing vaginal tears; sheets to create a sterile barrier field while suturing; a tensor or desk lamp (for visibility during suturing); a local anesthetic (xylocaine or 1 or 2 percent lidocaine) for pain relief during suturing; a heating pad to assist in warming the baby; a bulb syringe (for suctioning the baby's airways) and DeLee suction catheters (for sucking amniotic fluid out of the deeper respiratory passages of the newborn—rarely used); assorted hemostats and clamps; special scissors for cutting the cord; scales for weighing the baby and a tape measure; oral vitamin K; erythromycin ointment (to place in the baby's eyes to prevent blindness from venereal disease—a requirement in most states); footprint pads in multicolors (for taking the baby's footprint for the birth certificate); sitzbath herbs (for soothing the woman's vaginal area postpartum); red-top sterile vacuum tubes (for collecting umbilical cord blood for testing); and a file full of papers for charting, preparing the birth certificate, and so on. Most midwives carry enough supplies with them at any one time to attend three births in a row without repacking.

Some midwives also carry physician-prescribed antibiotics, and Phenergan suppositories for stopping violent vomiting; a laryngoscope (for looking into the baby's trachea and larynxes if there is reason to believe the baby may have aspirated meconium) and sterile saline (to wash the baby's vocal chords if necessary)—these are very rarely used; breast shields (for cracked nipples) and breast shells (for helping the nipples to become more prominent so the baby can more easily latch on to the breast); and a newborn screening kit (this kit consists of a syringe and a specially treated piece of paper, on which the midwife places samples of the baby's blood to be sent to the health department and checked for metabolic disorders). The above information was gleaned from a questionnaire handed out in January 1995 to 30 (and returned by 25) homebirth midwives, all of whom are members of MANA, and most of whom serve on the CPM Certification Task Force (see note 5).

13. Meconium is the baby's first bowel movement. If present in the amniotic fluid, it is sometimes associated with fetal distress, which is usually also indicated by fetal heart patterns. It is generally recognized, even in most hospitals, that thin or light meconium staining during labor is not problematic, especially when the heart rate patterns fall within a normal range. Heavy, thick, and chunky meconium in the amniotic fluid is usually indicative of fetal distress.

14. *Decelerations* of the fetal heart rate, as recorded on the electronic fetal monitor, are sometimes indicative of fetal distress.

15. The Apgar score provides a standardized means by which birth attendants can assess the baby's condition at birth. Signs rated at two points each on a preprinted chart are skin color, muscle tone, breathing attempts, heartbeat, and response to stimulus, such as a touch or pin-prick. Babies are rated twice, at one minute after birth and again at five minutes, because many babies, especially anesthetized ones, take some time to turn pink and begin full breathing on their own. Ten is the highest obtainable score. Babies with Apgars of 2 and 2 (2 at one minute, 2 at five minutes) are severely distressed.

16. "Slantboarding" is a midwifery technique that often proves effective in getting breech babies to turn before delivery. The mother must get her head lower than her pelvis. A bean-bag chair can be used, or an ironing board (or door) can be placed against a sofa or heavy chair at a 45-degree angle; the pregnant woman lies on her back, head down on the board with her feet pointing upward for 15–20 minutes, two or three times a day. During this time she is encouraged to relax and to visualize the baby turning. (For other such techniques, see Kitzinger 1991:98.)

17. Hospital labors are usually artificially speeded up with drugs, episiotomies, forceps, or cesarean section. Homebirth labors, which are allowed to take their natural course, tend to take far more time than hospital births do. During a long labor, it is essential for a mother (and indeed, her birth attendants) to keep up their strength by eating and drinking plenty of nutritious food and fluids. Homebirth midwives recognize that contractions that have been going on for 18 hours and are still 5 minutes apart mean that the mother is still in "early labor"—"active labor" has not yet kicked in—and there is plenty of time for the midwife to go out for food.

18. Note Maggie's refusal to adopt the physician's technomedical discourse here—a discourse that simultaneously reduces the differences between cesarean and vaginal birth to a matter of geography and subtly expresses the value that this culture consistently places on "above" in relation to "below."

19. Hospital practitioners generally allow one, and a maximum of two, hours for pushing, after which a cesarean will usually be performed. Homebirth midwives accept a wide range of pushing stages, but more than four hours of pushing is rather unusual, even at home.

20. Following is a brief summary of Maggie Bennett's personal protocols:

To qualify for staying at home for the birth:

Mother:

Blood pressure has to be no more than 20 pts. diastolic above her baseline.

Dilation should take place at the general rate of 1/2 cm./hr. after 4 cm.; one 3-hour plateau (in which no dilation takes place) is acceptable. *[Authors' note: Hospital protocols usually call for birth to take place within 26 hours of entry into the hospital, period. For many women, it can take days of "early labor" to reach 4 cm. If such women enter the hospital, they end up with cesareans.]*

Good labor should be established within 24 hours after rupture of membranes.

Birth should take place within 72 hours after rupture of membranes.

[Hospital protocols call for birth to take place with 24 hours of rupture of membranes, due to the danger of infection, which is increased by the frequent vaginal examinations performed in the hospital. Midwives at home avoid performing such exams as much as possible in cases of prematurely ruptured membranes.]

Birth should take place within 4 hours from the time the mother learns to push. *[As noted above, hospital protocols generally allow a maximum of two hours for pushing, and do not mention the mother's "learning to push." Here again, we see the midwife's woman-centered focus, her respect for the mother as active birth-giver.]*

No temperature. Not too fatigued.

Baby

Fetal heart between 124–160 and in accordance with baby's baseline.

Good beat-to-beat variability. No heavy meconium—light OK.

21. Our interviewees also agreed that, in the rare instances in which the mother and the midwife have conflicting intuitions about a potential problem during labor, they are clearly *not* connected. In such a situation, they feel that transport is essential, as this “total lack of synergy” seriously impedes their ability to provide good, empathic—that is, connected—care.

22. It is important to note that this appreciation of women's uniqueness can extend even to crises and complications that midwives cannot handle at home, as is evidenced in the following story from Elizabeth:

Sometimes if a woman has had a difficult birth, part of the reason why it's been difficult is that things have come up for her that she has not worked through. . . . I think of a Japanese woman with a Chinese husband who was culturally supposed to have a son, and it was a girl, and you can bet that nothing I said or did stopped her trickle bleeding from a partially separated placenta that finally took us to the hospital. When she felt safe enough in the hospital, she staged this massive hemorrhage, and rallied her husband to her side, where he had not been since he saw the sex of the baby.

So you know, the choreography of the woman's expression of need is something that's really beyond the practitioner—it's really none of your business. But it *is* your business to maintain the parameters of safety, as we say, so some part of your attention has to turn to doing as much as you can *in advance* to raise those issues, and help a woman cope with them. It's a fine line—permission to have your birth be whatever it is going to be, and the midwife's skill and also her need to have a safe outcome. I think really most of us struggle with that.

23. As one anonymous reviewer aptly pointed out, the words *normal* and *abnormal* may not even be appropriate when talking about birth from the standpoint of intuitive knowing, as the concept “normal” “has long been grounded in a worldview that is based on ratiocinative reasoning and the averaging of all experiences into one standardized experience. . . . Foucault's concept of ‘normalization’ might be an interesting springboard here.” Space does not allow us to further address the issue of midwives' efforts to normalize uniqueness versus medicine's efforts to pathologize it as “deviance,” but it is an issue deserving of scholarly probing, and we call attention to it here in the hopes of stimulating further research and analysis.

24. Copies of the MANA Core Competencies can be obtained from Signe Rogers (see note 7).

25. Homebirth mothers themselves often have rich intuitive experiences worthy of anthropological study in their own right, as do mothers in general, about birth, about childraising, and so on. We call attention to this understudied subject in hopes of generating more academic research into women's perceptions of and experiences with intuition. Additionally, we call for more research into how midwives negotiate childbirth with their clients and the role that intuition plays in these negotiations. What difference does it make, for example, when women hire midwives to save money rather than because of a shared worldview?

26. This national certification process is now in place and functioning, making national certification for direct-entry and independent midwives a reality for the first time in United States history. Several hundred midwives have taken the NARM exam; the first to successfully pass through the complete certification process was Abby J. Kinne, who was formally certified as a CPM on November 10, 1994. As of April 1, 1996, approximately 100 midwives have become CPMs. This first group to pass through the first phase of the certification process consists primarily of experienced midwives who have been in practice for at least

five years. The next phase is about to begin: NARM is poised to process applications from entry-level midwives; at present, 120 entry-level applications are pending.

REFERENCES CITED

Arms, Suzanne

1994 *Immaculate Deception II: A Fresh Look at Childbirth*. Berkeley, CA: Celestial Arts Press.

Bastick, Tony

1982 *Intuition: How We Think and Act*. New York: Wiley.

Beth, Easton, and Jean Piaget

1966 *Mathematical Epistemology and Psychology*. Dordrecht, Holland: D. Reidel.

Bryden, M. P.

1982 *Laterality: Functional Asymmetry in the Intact Brain*. New York: Academic Press.

Chester, Penfield

1994 *Sisters on a Journey: Portraits of North American Midwives*. Master's Thesis, Graduate Program, Vermont College, Montpelier.

Clifford, James, and George E. Marcus, eds.

1986 *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.

Davis, Elizabeth

1987 *A Guide to Midwifery: Heart and Hands*. New York: Bantam Books.

1988 *Energetic Pregnancy*. Berkeley, CA: Celestial Arts.

1989 *Women's Intuition*. Berkeley, CA: Celestial Arts.

1994 *Women's Sexual Cycles*. London: Little, Brown, and Co.

1995 *Woman, Sex, and Desire. Exploring Your Sexuality at Every Phase of Life*. Alameda, CA: Hunter House.

Davis, Elizabeth, and Carol Leonard

1996 *The Women's Wheel of Life: Thirteen Archetypes of Woman at Her Fullest Power*. New York: Viking Press.

Davis-Floyd, Robbie

1987a *Pregnancy and Cultural Confusion: Contradictions in Socialization*. In *Cultural Constructions of Woman*. P. Kolenda, ed. Pp. 9-71. Salem, WI: Sheffield Press.

1987b *Obstetric Training as a Rite of Passage*. *Medical Anthropology Quarterly* (n.s.) 1:288-318.

1990 *The Role of Obstetrical Rituals in the Resolution of Cultural Anomaly*. *Social Science and Medicine* 31(2):175-189.

1992 *Birth as an American Rite of Passage*. Berkeley: University of California Press.

1994 *The Technocratic Body: American Childbirth as Cultural Expression*. *Social Science and Medicine* 38(8):1125-1140.

1995 *Introduction to Holistic Midwifery: A Comprehensive Textbook for Midwives in Homebirth Practice*. Portland, OR: Labyrs Press.

Diamond, Irene

1994 *Fertile Ground: Women, Earth, and the Limits of Control*. Boston: Beacon Press.

Diamond, Irene, and Gloria Feman Orenstein

1990 *Rewaving the World: The Emergence of Ecofeminism*. San Francisco: Sierra Club Books.

Eisler, Rianne

1988 *The Chalice and the Blade*. New York: HarperCollins.

Fox, Renée C.

1975 *Training for Uncertainty*. In *The Student Physician*. R. Merton, G. Reader, and P. L. Kendall, eds. Cambridge, MA: Harvard University Press.

- 1980 The Evolution of Medical Uncertainty. *Millbank Quarterly* 58:1–49.
- Gaskin, Ina May
1990[1977] *Spiritual Midwifery*. 3rd ed. Summertown, TN: Book Publishing Co.
- Goer, Henci
1995 *Obstetric Myths versus Research Realities*. New Haven, CT: Bergin and Garvey.
- Goldberg, Phillip
1983 *The Intuitive Edge*. Los Angeles: Jeremy P. Tarcher.
- Hayward, John
1984 *Perceiving Ordinary Magic*. Boston: Shambala.
- Jordan, Brigitte
1992 *Technology and Social Interaction: Notes on the Achievement of Authoritative Knowledge*. IRL Technical Report IRL92-0027. Palo Alto, CA: Institute for Research on Learning.
1993[1978] *Birth in Four Cultures: A Cross-Cultural Investigation of Childbirth in Yucatan, Holland, Sweden and the United States*. 4th ed. Prospect Heights, IL: Waveland Press.
- Jung, Carl G.
1971 *Psychological Types*. Princeton, NJ: Princeton University Press.
- Kennell, John, Marshall Klaus, Susan McGrath, Steven Robertson, and Clark Hinckley
1988 Medical Intervention: The Effect of Social Support during Labor. *Pediatric Research* April: 211 (Abstract #61).
- Kitzinger, Sheila
1979 *Birth at Home*. New York: Penguin Books.
1990 *The Midwife Challenge*. London: Pandora Press.
1991 *Homebirth: The Essential Guide to Giving Birth outside the Hospital*. New York: Dorling Kindersley.
- Laughlin, Charles D.
1992 *Brain, Symbol, and Experience: A Neurophenomenology of Human Consciousness*. New York: Columbia University Press.
1997 The Nature of Intuition: A Neuropsychological Approach. *In* *Intuition: The Inside Story*. R. Davis-Floyd and P. Sven Arvidson, eds. New York: Routledge, in press.
- Lee, Peter R.
1976 *Symposium on Consciousness*. New York: Penguin.
- Leveno, K. J., F. G. Cunningham, S. Nelson, M. Roark, M. L. Williams, D. Guzik, S. Dowling, C. R. Rosenfeld, and A. Buckley
1986 A Prospective Comparison of Selective and Universal Electronic Fetal Monitoring in 34,995 Pregnancies. *New England Journal of Medicine* 315(10):615–619.
- Ley, R. G.
1983 *Cerebral Laterality and Imagery*. *In* *Imagery: Current Theory, Research, and Application*. New York: Wiley.
- Marcus, George E.
1993 What Comes (Just) after “Post”? The Case of Ethnography. *In* *The Handbook of Qualitative Social Science*. N. Denzin and Y. Lincoln, eds. Beverly Hills, CA: Sage Publications.
- Marcus, George E., and Michael J. Fischer
1986 *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. Chicago: University of Chicago Press.
- MANA News
1990 Article on the meaning of “MANA.” 8(3):1.
- Martin, Emily
1987 *The Woman in the Body*. Boston: Beacon Press.

McCutcheon-Rosegg, Sue

1984 *Natural Childbirth the Bradley Way*. New York: E. P. Dutton.

Merchant, Carolyn

1983 *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: Harper and Row.

Midwives' Alliance of North America (MANA)

1992 MANA Statement of Values and Ethics. *MANA News* 10(4):10–12.

1994 MANA Core Competencies. *MANA News* 12(1):24–27.

Poincare, Howard

1913 *The Foundations of Science*. New York: Science Press.

Prentice, A., and T. Lind

1987 Fetal Heart Rate Monitoring during Labor—Too Frequent Intervention, Too Little Benefit. *Lancet* 2:1375–1377.

Quinn, Daniel

1993 *Ishmael*. New York: Bantam and Turner.

Rooks, Judith P., Norman L. Weatherby, Eunice K. M. Ernst, Susan Stapleton, David

Rosen, and Allan Rosenfield

1989 Outcomes of Care in Birth Centers: The National Birth Center Study. *New England Journal of Medicine* 321(26):1804–1811.

Rothman, Barbara Katz

1982 *In Labor: Women and Power in the Birthplace*. New York: W. W. Norton.

1989 *Recreating Motherhood: Ideology and Technology in a Patriarchal Society*. New York: W. W. Norton.

Rubinstein, Robert A., Charles D. Laughlin Jr., and John McManus

1984 *Science as Cognitive Process: Toward an Empirical Philosophy of Science*. Philadelphia: University of Pennsylvania Press.

Sandmire, H. F.

1990 Whither Electronic Fetal Monitoring? *Obstetrics and Gynecology* 76(6):1130–1134.

Sargent, Carolyn

1989 *Maternity, Medicine, and Power: Reproductive Decisions in Urban Benin*. Berkeley: University of California Press.

Schlinger, Hillary

1992 *Circle of Midwives: Organized Midwifery in North America*. Independently published by Hilary Schlinger.

Shy, Kirkwood, David A. Luthy, Forrest C. Bennett, Michael Whitfield, Eric B. Larson,

Gerald van Belle, James P. Hughes, Judith A. Wilson, and Martin A. Stenchever

1990 Effects of Electronic Fetal Heart Rate Monitoring, as Compared with Periodic Auscultation, on the Neurological Development of Premature Infants. *New England Journal of Medicine* 322(9):588–593.

Singer, Linda

1992 *Feminism and Postmodernism*. In *Feminists Theorize the Political*. J. Butler and J. W. Scott, eds. New York: Routledge.

Slaatte, Harold A.

1983 *The Creativity of Consciousness: An Empirico-Phenomenological Psychology*. New York: University Press of America.

Sorokin, Pitirim A.

1941 *The Crisis of Our Age*. New York: E. P. Dutton.

Sosa, R., J. Kennell, S. Robertson, and J. Urrutia

1980 The Effect of a Supportive Companion on Perinatal Problems, Length of Labor, and Mother-Infant Interaction. *New England Journal of Medicine* 303:597–600.

Sperry, Roger W.

1974 Lateral Specialization in Surgically Separated Hemispheres. *In* The Neurosciences: Third Study Program. P. J. Vinken and G. W. Bruyn, eds. Cambridge, MA: MIT Press.

1982 Some Effects of Disconnecting the Cerebral Hemispheres. *Science* 217:1223–1226.

Sprenger, Jally, and George Deutsch

1981 *Left Brain Right Brain*. San Francisco: W. H. Freeman.

Starhawk

1988 *Dreaming the Dark: Magic, Sex, and Politics*. Boston: Beacon Press.

1989 *The Spiral Dance: A Rebirth of the Ancient Religion of the Great Goddess*. San Francisco: HarperSanFrancisco.

1993 *The Fifth Sacred Thing*. New York: Bantam Books.

Sullivan, Deborah, and Rose Weitz

1988 *Labor Pains: Modern Midwives and Homebirth*. New Haven: Yale University Press.

Susie, Deborah Ann

1988 *In the Way of Our Grandmothers: A Cultural View of Twentieth-Century Midwifery in Florida*. Athens: University of Georgia Press.

TenHouten, Warren

1978–79 Hemispheric Interaction in the Brain and the Propositional, Compositional, and Dialectical Modes of Thought. *Journal of Altered States of Consciousness* 4(2):129–140.

Vaughn, Francis E.

1979 *Awakening Intuition*. Garden City, NY: Anchor Books.

Wagner, Marsden

1994 *Pursuing the Birth Machine*. Camperdown, Australia: ACE Graphics.

Weil, Andrew

1972 *The Natural Mind*. Boston: Houghton-Mifflin.

Westcott, Alan

1968 *Toward a Contemporary Psychology of Intuition*. New York: Holt, Rinehart, and Winston.