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Authoritative Knowledge and Birth Territories in Contemporary Japan

In Japan, as in the United States, the change from home to health care institution as the location of birth has been marked by depicting the obstetrician as having authoritative knowledge about birthing. The obstetrician's access to and control over specialized obstetrical technology reflect and legitimate his authoritative status. In Japan a prevailing cultural view of birth as a natural and healthy event places a value on using the least possible amount of obstetrical intervention in the birthing process. This results in the valuation of the potential, rather than the actual, application of obstetrical technology. In contemporary Japan midwives remain integral participants in maternity care and attend normal deliveries in the hospital setting. But because of the culturally depicted potential for pathology at the time of birth, the obstetrician—the birthing specialist who controls the more complex technological tools—is viewed as having greater authoritative knowledge than the midwife and the woman giving birth. [authoritative knowledge, birth, Japan, obstetrics, midwifery]

It is trivial to raise the point that birth takes place somewhere, be it in the bush, in a hut in the jungle, or in a modern hospital. What is not quite so trivial is to consider that birth, by the mere fact that it is located somewhere, inevitably takes place on somebody's territory. [Jordan 1993(1978):67]

In this article I address issues of authoritative knowledge and territory in contemporary Japanese childbirth. By territory I mean both the physical and the social environments of birth. Indeed, a primary focus of this article is the ways in which the physical location of birth reflects and creates social territories, which in turn powerfully affect the physical processes of labor and birth and the woman's experience of those processes.

I consider in this article the relationship between the definition of birth and the territory of the birthing process, which includes both the physical location of birth and the professional paradigms of care associated with different locations. I focus on two contrasting institutional settings: a hospital (the most common health

care institution for birth in Japan) and a midwife-operated clinic (the least common one). These two locations illustrate differences and similarities in the social structuring of the experience of birthing according to location and its corresponding paradigm of care. A central difference between each location is that care in each is institutionally structured around different assumptions: in the hospital setting care is structured to facilitate potential obstetrical intervention, whereas in the midwife-operated clinic care is structured by the assumption that obstetrical intervention will not be necessary.

In hospital births in Japan the obstetrician's access to and control over certain technological tools and techniques reflect and legitimate his¹ ultimate authoritative status over the midwife who delivers the baby and the woman who is giving birth. This occurs despite the obstetrician's limited direct physical involvement and, in most uncomplicated births, his limited use of obstetrical instruments. Jordan has similarly observed that in births in the United States it is the control of specialized obstetrical technology, and not necessarily the extent to which it is used, that reflects the "hierarchical social position of birth participants in medical settings" (1987:39).

Jordan suggests that a general property of technological systems is a tendency toward the upscaling of technology in response to a problem: "when different levels of technology are available, the solution to problems that arise at one level is almost always sought on the next higher level and rarely on the next lower level" (1987:39). In Japan the prevailing cultural definition of birth is that it is primarily a healthy—albeit potentially dangerous—physiological event. Such an understanding, however, does not obviate the need for obstetrical intervention; rather, the cultural value placed on minimizing such intervention results in the view that obstetrical technology is valued more as a potential than as an actual application. This, however, does not interfere with the view that the obstetrician is the source of authoritative knowledge.

Background

Jordan has asserted that in the United States there is "concomitant change in the location of the event (moving from home to hospital), in personnel (which changes from nonspecialist to specialist attendants), and in the distribution of authoritative knowledge" (1987:39). This pattern is evident in the case of Japan. The Japanese birthing system underwent a rapid and dramatic structural change in the late 1950s and early 1960s (see Table 1). In the course of ten years the location of birth shifted from the home to a health care institution, and the obstetrician became the designated holder of authoritative knowledge for birthing. By 1991, in national-level statistics, obstetricians were listed as the primary attendants in 98.1 percent of all live births (Ministry of Health and Welfare 1992). Yet despite the fact that they have for the most part ceased to be independent practitioners attending births in the home or their own clinics, midwives continue to play integral roles in hospital births and are the primary managers of births that do not require obstetrical intervention. (The role division of labor between obstetricians and midwives is discussed later in the article.)

As the location of birth switched from home to institution, some midwives initially established their own freestanding clinics for birthing (see Table 2).² In 1965, 12.9 percent of all live births occurred in a midwife-operated clinic. Since

TABLE 1
Live Births in Japan by Location and Attendant, 1950–91.

	1950	1955	1965	1975	1985	1991
Location						
Home	95.4%	82.4%	16.0%	1.2%	0.2%	0.1%
Institution	4.6%	17.6%	84.0%	98.8%	99.8%	99.9%
Primary attendant						
Midwife	90.1%	79.6%	28.8%	8.9%	3.1%	1.8%
Physician	5.2%	16.2%	70.7%	91.1%	96.9%	98.1%

Source: Adapted from Ministry of Health and Welfare 1992:30.

then, however, the number of births occurring in midwife clinics has steadily declined. By 1991, 99.9 percent of all live births occurred in some type of health care institution. Only 0.9 percent of these births, however, took place in a midwife-centered institution; 99 percent occurred in an obstetrician-centered institution, either a hospital (55.7%) or an obstetrician-operated clinic (43.3%). The reasons for this decline shed light on similar processes in other countries and constitute a rich subject for future research.

Methods

The data presented in this article come from a larger body of field data, which I collected primarily in Tokyo from 1987 to 1990 and during a three-week interval in 1991, for a study on social support for pregnancy and childbirth. The main focus of my research was the examination of the traditional practice of *satogaeri* (home-coming) childbirth in contemporary Japan, the custom of women returning to their natal home for support at the time of their birth. Data presented here are based on observations of care at the time of labor and birth, the videotaping of two births

TABLE 2
Live Births in Japan by Health Care Institution, 1950–91.

	1950	1955	1965	1975	1985	1991
Institution						
Hospital	2.9%	10.8%	36.8%	47.4%	55.5%	55.7%
Obstetrician-operated clinic	1.1%	4.5%	34.3%	44.2%	42.4%	43.3%
Midwife-operated clinic	0.5%	2.4%	12.9%	7.2%	2.0%	0.9%

Note: Percentages do not add up to 100 because the table does not include live births occurring in the home.

Source: Adapted from Ministry of Health and Welfare 1992:31.

(that I use for an in-depth analysis according to location of the structure of care at the time of birth), and interviews with specialists and nonspecialists about their experiences with birthing.

I observed care at a number of clinical settings to obtain contextual information on maternity health care delivery services. My entry into these various health care settings was facilitated by the fact that I was a registered nurse with a total of eight years of experience in women's health care, five within a labor and delivery unit. This professional identity, more than my identity as a Ph.D. candidate in anthropology, was instrumental in gaining entry to the usually restricted territory of hospital-based obstetrical units. For an eight-month period in 1988 and 1989 I observed for eight-hour intervals, three days a week, the care provided in the obstetrical unit of a large national hospital located in downtown Tokyo. During this period I was given free access to all areas of the unit, including the prenatal clinic, prenatal classes, the labor and delivery area, the nursery, the communal breastfeeding room, and the postpartum ward. For comparative purposes I also observed for several days per week for two- to three-week periods the care provided at a private maternal and child hospital also located in downtown Tokyo, and at a midwife clinic in the neighboring Kanagawa prefecture. At these two locations as well I was allowed to observe all aspects of routine care with relatively few restrictions. In addition to observations of care I toured the maternity units of various hospitals and clinics in Tokyo, Iwate prefecture, and Yamagata prefecture.

During a three-week return trip in 1991 I videotaped two births in Tokyo: the first at the private maternal and child hospital where I had observed care, and the second at a midwife clinic that I had previously toured. Time constraints and the convenience of the clinic staff dictated the days designated for videotaping; although I made no attempt to obtain "representative" births, given my previous observations and interviews I was able to assess that these were fairly typical births. These videotapes provide the data for a major section of this article.

While observing care at the above institutions I had the opportunity to conduct more than 25 informal, unstructured interviews with health professionals, patients, and patients' family members. Moreover, during tours of clinics and hospitals I was able to question the health professionals who served as my tour guides about the structure of maternity care at their institutions. I draw on these informal interviews for supplementary information.

In addition I conducted a series of open-ended, semistructured interviews with 12 patients in the prenatal care clinic regarding their past and current pregnancy and childbirth experiences. I subsequently followed these women as much as possible during prenatal health visits, labor and birth, and the postpartum period, which included their adjustment at home after discharge from the hospital.

The data collected from the above interviews formed the basis of a structured interview schedule on ideal sources of social support for pregnancy and childbirth. During 1989 and 1990 I conducted (with the help of a research assistant) structured interviews with a sample of 48 women. This was a nonrandom sample that was obtained from various sources, including a public health well-baby clinic and a parenting support group. These interviews elicited women's attitudes about specialist and nonspecialist (i.e., family and friends) social support during pregnancy, labor, and birth. They revealed women's differing attitudes about specialists and

nonspecialists as sources of information, emotional support, and physical support. I draw heavily on these interviews in this article.

Professional Territories and Paradigms of Birth Care in Japan and the United States

Human cultural definitions of childbirth have regarded it as a normal physiological or social event, an event fraught with danger, and even as illness and pathology (Ford 1945; Jordan 1993[1978]; Kay 1982; Mead and Newton 1967). As Jordan has noted,

for any particular domain a multitude of ways of knowing exist, some of which, by consensus, come to carry more weight than others, either because they explain the state of the world better for the purposes at hand ("efficacy") or because they are associated with a stronger power base ("structural superiority"), and usually both. [1992:2]

Social scientists who study childbirth in the United States have conceptualized two opposing paradigms of birth care: the "medical" model and the "midwifery" model (Lichtman 1988; Rothman 1984); or, as Davis-Floyd (1992) has thought of them, the "technocratic" model and the "holistic" model—terms that draw attention to the manner in which these paradigms of birth care mirror opposing movements in the wider society. As in the American cultural arena, in Japan the medical or technocratic model of childbirth has assumed dominance or authoritative status.

The two paradigms outlined above represent different "ways of knowing" about the universal physiology of human childbirth. They operate in distinct professional territories, which in turn structure the physical process of birth in opposing ways. In the medical or technocratic model birth is viewed as inherently pathological, or more precisely as a problematic mechanical process in danger of constant malfunction. Such a view engenders a high degree of technological monitoring of and intervention in the birth process. Proponents of the midwifery or holistic model, in contrast, perceive birth to be an inherently normal physiological process with powerful emotional and spiritual dimensions—a perception that underlies a nurturant, noninterventive approach to birth care, and a belief that birth should most properly take place in alternative birth centers or the home. The medical or technocratic model uses a classifying, separating approach to the process of labor and birth, treating the woman as an object and her body as a machine. Furthermore, this model dichotomizes the mind and the body as well as the mother and the infant. The midwifery or holistic model, in contrast, assumes a holistic, integrating approach that treats the woman as a subject and does not produce a dualistic separation between the woman's body and mind or between the mother and infant (Davis-Floyd 1992; Rothman 1984).

The distinctions drawn by Lichtman, Rothman, and Davis-Floyd between these two approaches to birth provide a useful background to highlight the differences in the Japanese approach. In the United States the two models differ in the extreme; in Japan they do not. Thus in this article I use the terms *obstetrical model* and *midwifery model* to describe approaches to birth in Japan. The obstetrical model denotes a more physiological approach to birth than is practiced under the medical or technocratic model in the United States—in short, rather than assuming that birth

is an inherently dysfunctional process, this model assumes that until proven otherwise birth is normal.

Lock (1993) has observed that female life-cycle transitions are generally less medicalized in Japan than in northern Europe and North America. She attributes this to different representations of the female body. Whereas the discourse on menopause in Japan situates a woman's aging within the family, in the West it is situated within the individual. Similarly, the life-cycle transition of childbirth is viewed as being situated in the family as evidenced by the common occurrence of *satogaeri* (homecoming) childbirth in contemporary Japan. Nonspecialists and specialists alike acknowledge the importance of a new mother's being in her natal home after discharge from a hospital or a clinic and receiving care and support from her own mother in the postnatal period. In an uncomplicated pregnancy and birth the mother-daughter bond is considered to be stronger than the specific obstetrician-patient bond; thus most obstetricians do not discourage a woman from returning to her natal home even when the return requires a change in health care providers and health care institutions in the last trimester of pregnancy. Obstetricians only discourage a woman from returning to her natal home when complications are present. This is further evidence of the view of childbirth as a primarily normal physiological event.

Such a view fosters a less interventive approach to birth than is found in U.S. hospitals. For example, it is common for Japanese women to eat and drink during labor and to walk from the labor room to the delivery room; it is uncommon for them to routinely have analgesia, anesthesia, or operative intervention during birth. The cesarean section rate for hospitals and obstetrician-operated clinics in 1990 was 11 percent and 8 percent, respectively (Japanese Ministry of Health and Welfare 1992:114); in the same year the cesarean section rate in U.S. hospitals was 23.5 percent (Taffel et al. 1992:21).

Use of the term *obstetrical* emphasizes the professional territory from which this model is derived and which it represents in contemporary Japan. It also reflects the historical development of obstetrical domination over normal pregnancy and birth in Japan and the influences of American obstetrical practices. Today, Japanese childbirth practices more closely resemble those of western Europe and England, where midwives remain an integral part of the maternity care system, albeit with some loss of autonomy and responsibility. (They, like Japanese midwives, primarily practice in the hospital in a role viewed as auxiliary to that of obstetricians.)³

In spite of their structural subordination, the continuing involvement of midwives in the Japanese obstetric system has worked to facilitate the definition of birth as normal. In contrast to the pathologizing technocratic approach to birth that is dominant in the United States, the Japanese obstetrical model sees birth as being primarily physiological and only potentially pathological. The obstetrical orientation focuses on the potentiality rather than the actuality of pathology; thus birth is defined as a vulnerable time that requires medical consultation or supervision, but not necessarily routine medical intervention. In Japanese hospitals midwives carry out labor support and attend all normal deliveries; obstetricians do not appear during labor, but they are always present in the delivery room to perform any interventions that may be required.

In the United States insurance coverage of routine technological interventions in uncomplicated births supports a pathological definition of birth. In Japan the economic infrastructure does not support such a definition. Under the Japanese national health insurance system birth, until proven otherwise, is defined as a health rather than as an illness. Thus in the absence of documented complications birth is not routinely covered by health insurance. While the presence of the obstetrician at the time of birth is considered essential should a complication develop, in the absence of demonstrable pathology, birth is viewed as best handled with a minimum of obstetrical technological intervention.

Other important factors in maternal and child health in Japan are universal, early, and regular prenatal care. Prenatal care in Japan is promoted through a state-mandated maternal and child health program. The focal point of this program is a maternal and child health handbook (*boshi kenkō techō*) that is issued by local government offices to all expectant mothers in Japan. This handbook contributes to a considerable degree to the standardization of the experience of pregnancy and birth. It is designed to function as a source of health information (e.g., the prescribed frequency of prenatal examinations), and as a detailed health record of the results of those examinations. That the handbook remains in the possession of the pregnant woman is significant. Whether the empowerment of the woman by the Japanese government is intentional or not, the fact remains that Japanese women are entrusted with agential participation in their prenatal and birth care. In the United States women are not regarded as competent to possess this information and are denied access to their medical charts, with the result that the obstetrician's authoritative status is enhanced.

The initial, general instructions in the handbook are titled "Becoming a Good Mother to Your Baby." In this section pregnant women are instructed to "consult a doctor, midwife, public health nurse, or nutritionist for guidance concerning [their] daily life, nutrition and environment to maintain good health during pregnancy and to have a safe delivery" (JOICFP 1988:2). The handbook does not limit options for appropriate care to the obstetrician. Complications of pregnancy, however, are considered to be the exclusive domain of the obstetrician, and women are instructed to notify an obstetrician immediately with various "warning symptoms" associated with complications of pregnancy.⁴

While the guidelines provided in the maternal and child health handbook consider a range of health care providers to be appropriate (from independent midwives to hospital-based obstetricians), most women nevertheless receive prenatal care from an obstetrician. In the hospital setting the obstetrician is the primary provider of care for all pregnant women during the prenatal period, regardless of the presence or absence of complications. This is in contrast to the period of labor and delivery, during which the midwife is the primary provider of care for uncomplicated cases; the obstetrician is notified during labor only if a complication had developed during pregnancy or if one arises during labor. For all births, however, an obstetrician is called just prior to delivery in case an obstetrical intervention is necessary.

Most of the women I interviewed selected the obstetrician rather than the midwife as the ideal source of information. To the extent that the obstetrician can verify the presence or absence of pathology, he is considered an invaluable source

of information and emotional support. However, many women also perceive that access to this specialist's time is limited. Consequently, they try by consulting with a friend or family member to determine if their specific concerns and questions warrant the obstetrician's involvement. With the medicalization of pregnancy and birth, however, the distinction between medical and nonmedical concerns has become difficult for women to make.

Women tend to view midwives as ancillary specialists who function as intermediaries, interpreting and explaining the obstetrician's diagnoses and recommendations. Since most obstetricians are male and all midwives are female, midwives are also viewed as good supplementary sources of information and emotional support because of their experiential understanding of birthing.

In popular perception the midwife in independent practice is more structurally similar to the obstetrician than the midwife who practices in the hospital setting. This is illustrated by the use of the term *sensei* to refer to obstetricians and midwives in independent practice.⁵ Midwives who are dependent employees in a hospital setting are not referred to as *sensei*. Thus the use of this term marks the birthing authority and the associated body of "knowledge that counts" in each institutional setting.

Territories of Birth and Paradigms of Care in the Hospital and the Midwife Clinic

In this section I utilize data from videotapes of two births to describe how birth is structured differently in a hospital and a midwife clinic.⁶ While the midwife is the one who delivers the baby in both locations, she operates under different paradigms of care. In the hospital setting, the obstetrician is the holder of authoritative knowledge and the obstetrical model prevails; in the midwife-operated clinic the midwife is the holder of authoritative knowledge and the midwifery model of care, which assumes that obstetrical intervention is not necessary for most births, is practiced.

In both locations videotaping was started after labor had already begun (approximately one hour prior to birth) and continued until the end of the initial infant care period and the beginning of the woman's recovery period. Both women were giving birth to their second child. Neither had complications during pregnancy. In the hospital the woman's labor was artificially induced. In the midwife clinic the labor started spontaneously. Both births were considered to be "normal" in the context of their setting. The following four sections present a description and a comparative interpretation of the two videotaped births.

Settings

The videotapes clearly show that the woman assumes a passive role in the hospital. During labor she is in bed, wears a hospital gown, and is attached to specialized obstetrical equipment. In the midwife clinic, in contrast, the woman wears her own clothing throughout the labor and birthing process. She is active and experiences labor in a room without specialized obstetrical equipment. The "labor room" is a Japanese-style "bath-room," a room with a deep bathtub. The woman

alternates between sitting in the tub or kneeling on all fours on the floor outside of the tub.

In the hospital and the midwife-operated clinic labor and birth each occur in two different rooms. In the midwife clinic the delivery room is actually a multipurpose room. It serves as an examination room for antepartum, intrapartum, and postpartum examinations, and as a delivery room. There is also the option of giving birth in a *tatami* room (a room with straw floor matting) with a *futon* (quilted cotton bedding), which gives flexibility in positioning for birth. Thus the birth on the videotape represents the high end of complexity of birth technology in the midwife clinic. The delivery room in the hospital birth, in contrast, is a specialized room that is used for delivery only. In the hospital it represents the low end of technological complexity; the operating room, used for cesarean births, is the high end.

In both locations the woman walks (rather than being transported by wheelchair or stretcher) to the delivery room. This move occurs at essentially the same point in labor—when the cervix is approximately eight centimeters dilated. In both cases birth occurs on a “delivery table,” with the woman lying in a dorsal position; and in both cases a midwife “catches” the baby.

Birth Technology and Attendants/Support Systems

Birth in the hospital is supported by a great deal of complex technology during labor and birth (e.g., a hospital bed during labor, an IV and a pump to infuse an oxytocic agent to induce labor contractions, an electronic fetal monitor, and suction equipment to clear mucus from the baby’s nasal and oral passages). The woman’s connection to the hospital staff is also mediated through specialized equipment (i.e., an intercom/call bell system).

In the videotaped hospital birth the woman is alone most of the time during labor. Only specialists are in attendance (husband-attended birth was available, however, at this hospital).⁷ The midwife who cares for the woman during labor and who attends her birth comes into the labor room periodically to check on the woman’s condition. Because she is not with the woman continuously the midwife relies on the electronic fetal monitor printout, the woman’s report of her bodily sensations, and vaginal examinations to assess the woman’s progress in labor. When the midwife enters the room for a periodic check, she looks at the electronic fetal monitor printout first before she asks for the woman’s depiction of her bodily experience of labor. In this instance the electronic fetal monitor takes precedence over the woman, revealing technology as a location of authority. When the woman uses the call system to summon the midwife, however, the midwife attends to the woman before the machine.

Although the woman walks to the delivery room in the hospital, she again assumes a passive role after mounting the delivery room table. She is reconnected to the electronic fetal monitor, and the fetal heart sounds are more audible than in the labor room. In the labor room the monitor served as an electronic attendant that provided an ongoing record of labor in the midwife’s absence. In the delivery room, however, even though at least one midwife is always present, no one directly attends the woman most of the time. Thus the monitor continues to act as an attendant that provides an auditory alarm of changes in the baby’s heart rate and that notifies the health care specialists. Otherwise, preparations are conducted *around* the woman.

When the woman has contractions the midwives often loudly perform the patterned breathing with the woman but without interrupting their activities.

During labor the woman in the videotaped hospital birth is alone for most of the time until she transfers to the delivery room; the woman in the midwife-clinic birth is never alone. Specialists and nonspecialists are in attendance. Only one type of specialist (midwife) is present, while in the hospital setting there are two (obstetrician and midwife). The woman is accompanied by her husband during labor, by her husband and her daughter at birth, and additionally by a female family member after birth during early infant care.

Because birth in the midwife clinic is continuously attended by a midwife and the woman's husband, a jointly negotiated, ongoing assessment of the woman's bodily experience and the progression of her labor takes place. The husband times the contractions and the woman discusses her bodily sensations. When the contractions become closer and stronger, a joint decision is made between the midwife and the woman to go to the examination room to determine cervical dilation.

Structuring of the Birth Process

At the entrance to the delivery suite in the hospital, the midwife and the woman must stop to change from the hospital slippers or shoes into delivery room slippers; no such change of footwear takes place in the midwife clinic.⁸ In the hospital setting delivery room slippers may serve two functions: keeping outside pollution from entering the delivery room and also keeping the pollution associated with birth within the confines of the delivery room area.

In the hospital birth action on the woman intensifies upon her arrival in the delivery room and as the moment of birth approaches (similar to descriptions of hospital births in the United States [Davis-Floyd 1992; Jordan 1987]) in anticipation of the presence of the obstetrician and possible obstetrical intervention. Much of the preparation centers around first spotlighting and then cleaning, shaving, and isolating the woman's perineal area, preparations that ritually separate the upper and lower halves of a woman's body and isolate and demarcate the lower half of the body as the domain of the specialist.

In the midwife-clinic setting demarcation occurs but to a limited degree. Fewer sterile drapes are used; the woman's feet are not strapped into foot rests; her perineal area is not shaved; and her bladder is not emptied with a catheter. A bright overhead light is turned on shortly before the birth, but no spotlights are directed on the woman's perineal area.

In the midwife clinic, numerous efforts are made to integrate the woman's upper and lower body and to integrate the physical and social experiences of birth. For example, the midwife repeatedly informs the woman and her family about what is happening to her body (e.g., how far the baby has descended in the birth canal and how much she can see of the baby's head). A mirror is held by one of the assistant midwives so that the woman and her family can watch as the baby's head emerges. The midwife directs the woman to reach and feel the baby after it is almost halfway out and then encourages her to lift the baby up on her abdomen.

In both births the specialists direct the women's actions to achieve an optimal birth; their different perspectives on birth, however, lead them to behave in contrasting ways. In the hospital setting, after the lower half of the body is isolated

and marked, a mechanistic approach to the management of birth prevails—an approach that is maintained by the midwives themselves, who conform to obstetrical notions of how birth should be conducted. The hospital-based specialists expect the woman to maintain a position that does not impede their actions, and they ensure that she does so by strapping her feet into place. In addition, she is told repeatedly to keep her legs spread open and her buttocks in close range of the midwife's hands. In the hospital birth the midwife on ten different occasions tells the woman to open her legs widely. But the woman's knees invariably come back together, thus demonstrating that the mechanistic approach is not effective in these instances.

The obstetrician echoes these directives when he enters the room. He dons surgical gloves and loudly instructs the woman, "Slide your buttocks down more to the foot of the table. A little faster. Move down a little more. More, more. Slide down. More, more, more. Slide, slide." As the birthing authority, he also supplies the rationale for his directives. He tells the woman, "The baby is in pain so move down quickly. Spread your legs open. That's it, that's it. You'll be giving birth."

In the midwife clinic birth the emphasis is on having a slow, controlled birth rather than on having a speedy one. As in the hospital, the midwife tells the woman to spread open her legs. But she also uses various indirect means to achieve this goal, such as encouraging the woman to do a circular, butterfly-like motion with her hands, extending them from her chest toward the ceiling and then fluttering them outward toward the walls. This arm movement is synchronous with her patterned breathing and suggests openness and relaxation. The midwife also encourages the woman's husband and young daughter (who are close to the woman at the head of the delivery table) to make motions synchronous with the woman's own butterfly-like arm movements.

As in the hospital, the "birthing authority" in the midwife clinic provides the rationale for the model of care in operation. As birth become imminent, the midwife tells the woman, "The baby is about to be born. Slower is better. It's a shock for the baby to come out too quickly."

The midwife talks continuously to the woman, using two interwoven "voices." One is the voice of "birthing authority." When one of the assistant midwives uses a fetal doppler (with the volume loudly audible) to check the baby's heart rate, she uses this voice to comment on the condition of the baby, saying such things as: "Fine. What an excellent baby!" She also comments on the progression of labor: "I'm starting to see the baby. I can see about two centimeters of the body!" This voice also directs the actions of her two assistants.

The midwife's second voice reflects an "empathetic identification" (Suzuki 1986) with the baby about to be born. She addresses the woman as *okāsan* (mother) or *mama*, the husband as *otōsan* (father) or *papa*, and the couple's daughter as *onēchan* (older sister). These terms of address do not accurately reflect the relationship between the midwife and the woman and the woman's family members but rather include the midwife as if she were a family member. Through this voice, the midwife situates the birth event in the family domain.⁹ The midwife's use of an empathetic voice reflects a major difference between the midwifery model and the obstetrical model.

The midwife directs the woman's actions to include her in the act of birthing the baby. Prior to the emergence of the baby's head, the midwife encourages the woman to do the patterned breathing and associated arm movements to achieve a slow, controlled birth. After the baby's head is out, but before the rest of the body emerges, the midwife tells the woman to reach down to feel the top of the baby's head. When the baby's shoulders are out the midwife encourages the woman to reach out with her hands to pull the baby toward her. The midwife continues to support the baby's body with her hand. The baby's body still has not completely emerged; the feet remain in the woman's vagina. After the baby cries the midwife pulls out the rest of the baby's body from the woman's vagina and places the baby on the woman's abdomen. The midwife emphasizes a slow, controlled birth with the direct participation of the mother by encouraging her to control the speed of the birth herself.

Interpretation

Although the structural features of care differ widely between the two births, the women in both locations are beseeched to comply with the birthing authority's directives and both are told of the negative effects that noncompliance have on the baby, rather than on the woman herself. In the hospital setting the woman is directed to comply with a fast birth because the baby is "in pain"; in the midwife clinic she is advised to go slowly and that it is "a shock" to the baby to be born quickly. In neither location is the woman given primacy as a woman; rather, she is perceived as the producer of a child.

Martin (1987) and Davis-Floyd (1992) have emphasized that in the United States the primary focus during birth is on the production of the new social member, the baby. In the United States, as in Japan, it is not uncommon to suggest implicitly or explicitly that women's lack of compliance with the birth specialists' directives will have a negative impact on the baby. In both places the woman is perceived to have little authoritative knowledge about the baby's condition or her own.

In the United States (as Davis-Floyd and Davis show in this issue), independent midwives and many nurse-midwives often go to great lengths to respect the mother's authority of knowing about her birth. What constitutes authoritative knowledge in birth can be constructed interactionally between the mother and midwife during labor, as it is in Yucatán between the midwife and the mother's older female relatives and friends (Jordan 1992). But in Japan, as evidenced by these two videotaped births in differing institutional settings, the midwife who owns and operates her own freestanding clinic, like the obstetrician in the hospital, assumes the role of sensei and does not hesitate to consider herself, at least in relation to the mother and her family, the authority and the authoritative possessor of the knowledge that counts.

"Ownership" of the Necessary Tools of the Trade and Authoritative Knowledge

In this section I demonstrate, based on a case study of another birth I observed, how the control of obstetrical technology—"necessary tools of the trade"—reflects and legitimates the obstetrician's authoritative knowledge in the delivery room in

the hospital setting. Much as Jordan (1993[1978]) found that “normal” but “difficult” births were instructive for understanding the full extent of the support systems, it was through the observation of a difficult birth that I gained greater insight into the local definition of what constitutes pathology in birth and into the role divisions of midwives and obstetricians in the hospital setting. As illustrated in this section, the definition of pathology as an abnormal condition requiring obstetrical intervention is fluid. The marker of pathology in birth is the use of specialized obstetrical technology.

The case presented in this section is one I observed shortly after arriving at the obstetrical unit of the large national hospital where I observed care for an eight-month period. I was told by the head nurse to go directly to the delivery room, where I observed a patient who had been pushing for a long time. The woman was lying on her back while she pushed during contractions, turning to her right side to rest between contractions. She had an intravenous line, was connected to an external monitor, and had oxygen flowing through a nasal cannula. The baby’s head remained high and delivery required that a forceps or vacuum extractor be used (depending on how far the baby had descended in the birth canal). The obstetrician who was responsible for performing the delivery had already been notified.

No family members were in attendance. Because this was considered a difficult birth the room was filled with specialists, both attendants and observers. In addition to the midwife who had been managing the birth there were two assistant midwives, a junior staff obstetrician, a pediatrician, two student nurses, and me. The junior staff obstetrician was standing by the main midwife and holding forceps. Everyone awaited the arrival of the obstetrician.

When he arrived he assumed the position of birth agent; the midwife stepped aside. The obstetrician administered a local anesthetic, cut an episiotomy, and applied the forceps. With the next contraction, one of the assistant nurse midwives applied fundal pressure and the obstetrician, with relative ease, delivered the baby’s head. After the baby’s head was out, the obstetrician stepped aside and the midwife resumed her position as direct birth attendant. Replacing one type of specialized equipment with another, the obstetrician placed the forceps on the instrument table and picked up the suction catheter to await the delivery of the rest of the baby’s body. The midwife, using her gloved hands, finished the delivery. At birth the baby was limp and not crying. While the midwife clamped and cut the umbilical cord, the obstetrician suctioned the baby’s nose and throat. The midwife rubbed the baby’s back and slapped the soles of the feet until the baby gave a slight cry. The baby was then removed from the delivery room and placed in a heated bed in an adjacent room, where the pediatrician and a midwife did the initial infant care.

Interpretation

This was not a “normal” delivery. It was perceived to require the intervention of the obstetrician and the use of specialized equipment for delivery. Also, it involved the attendance of additional personnel. (The pediatrician is not summoned to the delivery room except in abnormal cases.) For normal births usually only one obstetrician and one assistant midwife are present. Furthermore, observers such as myself and the two student nurses were encouraged to attend.

Although this birth was deemed "abnormal" (i.e., requiring the intervention of the obstetrician), this designation was not fixed. After the obstetrician delivered the baby's head with the forceps, he stepped aside instead of continuing and delivering the rest of the body. Forceps are used to deliver only the baby's head. Because it is the widest presenting part, once the head is out, the rest of the body generally comes out quite easily. Thus when obstetrical equipment was no longer needed, the case was no longer "complicated," and the midwife resumed her position of command, using her hands to deliver the rest of the baby.

Jordan argues that "the 'ownership' of the artifacts necessary to accomplish the work at the same time defines and displays who should be seen as possessing authoritative knowledge and, consequently, as holding legitimate decision-making power" (1992:1). This case demonstrates that in Japan what constitutes a complicated birth requiring obstetrical intervention is a need for the use of tools (i.e., forceps, vacuum extractor, and other surgical instruments, in the case of cesarean sections), which only an obstetrician possesses the authoritative knowledge to command. When these tools are not needed the obstetrician is not needed as a direct player in the birth. While complicated births involve the use of specialized obstetrical "tools of the trade," difficult births that do not require the use of equipment are often handled by a midwife with an obstetrician's supervision. On two other occasions, for example, I observed midwives delivering twins and delivering a footling breech presentation baby, with an obstetrician who provided only verbal guidance during the delivery. In the United States these would be considered abnormal and risky births that required the physical intervention of an obstetrician. In Japan, however, because the obstetrician's tools were not needed he did not become physically involved with the birth.

This is typical of hospital births in Japan, where an obstetrician is in attendance but does not directly intervene during most births. The midwife is the direct birth agent until the placenta is expelled. At that point the midwife steps aside for the obstetrician, who performs an internal examination to check for retained placental pieces and for lacerations, and then does any suturing that is required. The midwife then cleanses the perineal area, applies perineal pads and the abdominal sash (*haraobi*), and begins the postpartum care of the woman. The physician's direct role thus ends when obstetrical tools are no longer needed.

Because of the prevailing physiological definition of birth in Japan, the midwife is the principal player in the minute-to-minute care during labor and birth. However, because potential for pathology is also considered to be significant, the obstetrician and his obstetrical tools are also perceived to be needed.

This case also demonstrates that the definition of normality and abnormality associated with birth in Japan is fluid. Normal births can acquire abnormal features that require the intervention of an obstetrician, such as a prolonged second stage or the slow descent of the presenting part. But a simple abnormality does not define the rest of the birth. When the obstetrician's intervention is completed (and presuming that no other intervention by the obstetrician is required), the birth is perceived as being normal and the midwife resumes the position of direct birth agent.

In the Japanese hospital setting the obstetrical model is the officially sanctioned approach. When a midwife practices in a dependent employee role and

ideological conflicts occur between the two models, the obstetrical model takes precedence over the midwifery model, a precedence reflected even in the way that national-level statistics are recorded.¹⁰ Unfortunately, however, national statistics do not reflect the conceptual and logistical importance of the midwife's contribution in contemporary Japan, as these statistics list the obstetrician as the primary attendant for nearly all births, regardless of the fact that the majority of babies are delivered by midwives with varying degrees of intervention by the obstetrician and limited application of obstetrical technology.

Conclusion

In hospital births the obstetrician's ownership and control of the "tools of the trade" demonstrate and validate his ultimate authoritative status over the midwife. In both Japan and the United States the obstetrician's superior cultural status reflects the supervaluation of sophisticated technologies. In the United States this supervaluation, combined with devaluation of women's bodies as defective machines (in need of constant manipulation and improvement by other, more perfect machines [Davis-Floyd 1992]), has resulted in technological interventions in nearly all hospital births. In Japan obstetrical technology is more laterally integrated, and there is a tendency to continuously reorient to the lowest level of technological and professional intervention due to two factors: (1) cultural definition of women's bodies and the birth process as primarily normal and healthy, and (2) a fluid view of complications during birth. There is a minute-to-minute microlevel propensity to define birth as normal and minimize technological intervention—a propensity much in evidence wherever midwives are the primary birth attendants. This helps to explain the relatively low use of anesthesia and analgesia, forceps, and cesarean sections in Japanese birth.

The coexistence of the midwifery and the obstetrical models of care in Japan serve to limit the widespread and routine application of obstetrical technology in hospital births. In contemporary Japan we see "just-in-case obstetricians" rather than "just-in-case obstetrics" (a term used by Arms [1977] to refer to the tendency of obstetricians in the United States to use unnecessary interventions in a preventive mode). But even though midwives continue to be integral participants in birthing (even as dependent employees in the hospital setting), the obstetrician's hierarchical position over the midwife remains based on his control of obstetrical technology and the dominance of the obstetrical model over the midwifery model remains the basis of authoritative knowledge.

NOTES

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1. The masculine pronoun is used for obstetricians because most obstetricians are male. In 1986, 11 percent of the physicians practicing gynecology and obstetrics were women (Ministry of Health and Welfare 1993:109).

2. Clinics are inpatient facilities that are smaller than hospitals. A hospital (*byōin*) is defined as an institution with 20 or more inpatient beds. Clinics, in contrast, have fewer than 20 inpatient beds and are privately owned and administered by a midwife (*jōsanin*) or an obstetrician (*sanin*).

3. It is noteworthy that in Japan, as well as in Sweden and Holland, the majority of births are attended by midwives, and perinatal and infant mortality rates are among the lowest in the world (Jordan 1993[1978]; Ministry of Health and Welfare 1992). Factors associated with low infant mortality rates in Japan (e.g., universal access to prenatal care, state support of breastfeeding through monetary incentives, postpartum home visitation programs by maternal and child health workers, and low rate of cesarean births) are similar to those in Western European countries and distinguish Japan from the United States (Korte 1992).

4. The warning symptoms of complications of pregnancy include the following: "edema, genital bleeding, abdominal pain, fever, diarrhea, constipation, unusual vaginal discharge, severe headache, dizziness, nausea, vomiting, fatigue caused by severe morning sickness, or lack of fetal movement" (JOICFP 1988:2-3).

5. The term *sensei* is often difficult to directly translate into English because it is used to refer to a variety of respected persons, including, but not limited to, professionals such as teachers, doctors, dentists, writers, lawyers, and politicians. Furthermore, it may be used independently or affixed to the family name. In any case its usage implies respect and deference on the part of the speaker (Miura 1983).

6. The use of a video camera allowed me to be a more detached observer in a setting in which I had been a participant as an obstetrical nurse. By repeatedly reviewing the videotapes I was able to gain more insight into the structural aspects of obstetrical care, care with which I was very familiar. Furthermore, since I used a hand-held camera I could better understand both my biases (by viewing what I had selectively recorded) and the biases of the health care professionals (by considering the directions they gave me and the limitations they placed on me).

7. The option of having one's husband present in the delivery room at the time of birth is a recent one in Japanese hospitals, and is not widely and routinely available. At this particular hospital the option of having a supportive person present for birth is limited to the husband, which in Japan is equivalent to the father since few births occur outside of marriage.

8. Much in the same way that Japanese change from their "outside shoes" to their "inside slippers" upon entering a home, it is common to change from one's "outside shoes" at the main entrance of the hospital or at the entrance to a specific unit. These inside shoes or slippers are changed again upon entering the delivery room.

9. The use of family terms of address in extrafamily situations is not uncommon. Within the Japanese family terms of address tend to harmonize with the position of the youngest child. This is also extended to extrafamily situations (Suzuki 1986).

10. The dominance of the obstetrical model over the midwifery model in the hospital setting is exemplified by the omission in a class taught in the hospital by a midwife to new mothers of the diaphragm (*pessari*) as one option for postpartum contraception. The midwife teaching the class told me afterward that she did not include the diaphragm as an option

because the head of the obstetrics department felt that it was an old-fashioned means of birth control and did not want it included in the discharge teaching. This midwife felt differently, acknowledging that it was a method that was promoted in her midwifery training. She felt uncomfortable excluding it but also felt constrained to do so. In contrast, the midwife in independent practice often actively promotes the diaphragm as a method of contraception that she can independently provide and that a woman can control. The midwife practicing independently may not only exert more control over the content of practice, she can also establish a professional identity in the community by providing new approaches to birthing. These new methods, such as "active birth," may be adopted from other countries. In these cases the name of the method is written in *katakana*, the syllabary used primarily for writing words borrowed from foreign languages, and thus appears new and exotic. A midwife may devise her own method and apply her own name to it. One example is a method of breast massage used to facilitate breast-feeding called the *Okeitani* method, named after its originator.

REFERENCES CITED

- Arms, Suzanne
1977 *Immaculate Deception*. New York: Bantam Books.
- Davis-Floyd, Robbie
1992 *Birth as an American Rite of Passage*. Berkeley: University of California Press.
- Ford, Clellan Stearns
1945 *A Comparative Study of Human Reproduction*. New Haven, CT: Yale University Press.
- Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)
1988 *Maternal and Child Health Handbook of Japan*. Tokyo: JOICFP.
- Jordan, Brigitte
1987 *The Hut and the Hospital: Information, Power, and Symbolism in the Artifacts of Birth*. *Birth: Issues in Perinatal Care and Education* 14:36–40.
1992 *Technology and Social Interaction: Notes on the Achievement of Authoritative Knowledge in Complex Settings*. IRL Technical Report IRL92-0027. Palo Alto, CA: Institute for Research on Learning.
1993[1978] *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden and the United States*. 4th ed. Prospect Heights, IL: Waveland Press.
- Kay, Margarita Artschwager
1982 *Writing an Ethnography of Birth*. In *Anthropology of Human Birth*. M. A. Kay, ed. Philadelphia: F. A. Davis Company.
- Korte, Diana
1992 *Infant Mortality: Lessons from Japan*. *Mothering*, Winter: 83–88.
- Lichtman, Ronnie
1988 *Medical Models and Midwifery: The Cultural Experience of Birth*. In *Childbirth in America: Anthropological Perspectives*. K. Michaelson, ed. Pp. 130–141. South Hadley, MA: Bergin and Garvey.
- Lock, Margaret
1993 *Ideology, Female Midlife, and the Greying of Japan*. *Journal of Japanese Studies* 19(1):43–78.
- Martin, Emily
1987 *The Woman in the Body: A Cultural Analysis of Reproduction*. Boston: Beacon Press.

Mead, Margaret, and Niles Newton

- 1967 Cultural Patterning of Prenatal Behavior. *In* *Childbearing: Its Social and Psychological Aspects*. S. A. Richardson and A. F. Guttmacher, eds. Pp. 142–244. Baltimore, MD: Williams and Wilkins.

Ministry of Health and Welfare

- 1992 Maternal and Child Health Statistics of Japan. (Boshieisei no Omonaru Toukei.) Tokyo: Mothers' and Children's Health Organization.
1993 Health and Welfare Statistics in Japan. Tokyo: Health and Welfare Statistics Association.

Miura, Akira

- 1983 Japanese Words and Their Uses. Rutland, VT: Charles E. Tuttle Company.

Rothman, Barbara Katz

- 1984 Giving Birth: Alternatives in Childbirth. New York: Penguin Books.

Suzuki, Takao

- 1986 Language and Behavior in Japan: The Conceptualization of Personal Relations. *In* *Japanese Culture and Behavior*. T. S. Lebra and W. P. Lebra, eds. Pp. 142–157. Honolulu: University of Hawaii Press.

Taffel, Selma M., Paul J. Placek, Mary Moien, and Carol L. Kosary

- 1992 U.S. Cesarean Section Rates 1990: An Update. *Birth* 19(1):21–22.