The Sciences, 26(6): 6-8, 1988.

Melvin Konner

Milton Avery Maternity, *1950*

Birth Rites

A woman in her early thirties, pregnant for the first time, is well into her ninth month and rather tired of waiting. She wants to spend a day or two relaxing with her husband in the mountains, three hours from the hospital, and they ask their midwife for permission. Although the woman is, in the terminology of obstetrics, an "elderly" primigravida, she is healthy, and the pregnancy has gone well. There is little chance that a first labor would have progressed very far within three hours of the first clear signs, so permission is cheerfully granted.

The couple considers childbirth a natural process and has gone to a midwife in reaction against its "medicalization." The midwife will deliver their baby in a hospital, with a trained obstetric surgeon sleeping down the hall, but the surgeon will not be called unless needed. Otherwise labor and delivery will go as the pregnancy has gone: with respect for the risks, with, as doctors say, "a careful, watchful waiting pose," but with strict avoidance of unnecessary medical meddling.

They stay on a gentle nonworking farm in the rolling foothills of the Green Mountains, brushed now, in early fall, with the oranges, reds, and purples of a gathering wave of change. A good omen appears: in the afternoon light, near the pond, a Canada goose with five goslings toddles imperturbably through the green and yellow grass. Later that day, the woman has a cramp or two, but she recognizes them as Braxton Hicks contractions, the classic false alarms of the latter part of pregnancy; the uterus is flexing its powerful muscle in preparation for the main event. They cook a meal, take some playful photographs in a mirror (in one, the pregnant belly disappears behind the man, and the woman looks as she did nine months earlier), and talk about the future.

At eight the next morning, the cramps begin in earnest. Even the first one doesn't seem like a false alarm, and by the third (they are equally spaced, twenty minutes apart) the man and woman get into their car and are on their way. There is a bad moment in a gas station when the gas cap is stuck (it would be funny, if this were a movie), and the contractions are increasingly painful all the way home. Still, the breathless arrival at the hospital doesn't impress anyone. Examination reveals a typically slow first labor, with only a centimeter and a half or so—one finger—of dilation. The midwife shows them into the birthing room and notes that there is medicine for pain on hand. She seems to be preparing them for a long haul.

The midwife, as always, offers the medication apologetically. All her patients are people like these, dedicated to natural childbirth. They have attended classes that blur the colossal distinction between the roles of the man and of the woman; thus, "they" have exercised, been taught to breathe rhythmically (one way during the contractions, another way between them), learned that conquering pain is a matter of mind over body, and all in all come to mistrust the intervention of obstetricians as intrusive and self-serving. In medical terms, they conceive of pregnancy and childbirth as physiological, not pathological.

The distinction is an interesting one. "It's physiological" is a phrase physicians reserve for what they think of as normal functions, even though patients may not: the growing pains in the joints of teenagers; the bulky stools of a high-fiber diet; the occasional extra beat, then pause, that feels disturbingly like a heart malfunction. Much is implied by the phrase: "This is not a symptom of illness"; "Let nature take its course"; "Stop worrying and learn to live with it." Only when the phrase "It's pathological" is invoked can the power of medicine—with all its attendant

risks—be brought to bear on the process.

The couple waits for nature to take its course. Dilation progresses by millimeters. Contractions get longer, stronger, and closer together. After nightfall, fatigue sets in, and there is little sign of progress. There is back labor—pain referred from the uterus to the lower back—and the man presses on the sore spot, as instructed, with all his might, but to no avail. The breathing exercises increasingly seem to him a paltry device. One A.M., two, three. Dilation has progressed only five or six centimeters. The pain is tremendous. Medication is offered and refused again and again. No monitor is attached to the fetal scalp to ensure that the baby is weathering this assault in good condition—"obtrusive technology." Instead, a stethoscope is pressed against the mother's belly. Finally, one concession is made: the obstetrician, invited in for a consultation, advises rupturing the membranes, and the advice is taken. Fluid gushes from the vestibule, and the baby's head, pressing directly against the cervix, can now be more effective in stretching it.

The pain becomes worse. The man has long since decided that medication is in order, but his wife continues to refuse. Since the cervix appears to be stretching lopsidedly, the woman changes position, which seems to accelerate labor. When the head crowns, it looks so purple and misshapen that the husband is sure it is malformed. But at six-thirty, after more than twenty-two hours of labor, as the sun comes up over the river near the hospital, a perfect baby girl is born, introduced to her mother (who is now grinning instead of cursing), and put to the breast.

Although it was eight or ten hours longer than the average for a first labor, the ordeal was not beyond the acceptable range, and no decision made by the midwife or the obstetrician was objectionable. Yet, in many hospitals, medication would have been virtually forced on the laboring woman. In most large hospitals, fetal monitoring would have been performed, to make sure that the fetus was not suffering from oxygen deprivation or some other complication. And some physicians would have done a cesarean section, lest prolonged labor injure mother or child. This was a marginal case; it turned out well, but it needn't have.

The various risks that this couple averted are summed up in a venerable epigram of obstetrics: Childbirth may be physiological for the species, but it's damned near pathological for the individual. In other words, childbirth, seen from an evolutionary perspective, is a normal, clearly essential process, but for the mother it can be painful, sometimes traumatic, even fatal. In this paradox lies the tension between the old-fashioned approach, with the attendant needles and drugs, and the newer, low-technology approach, with its abiding faith in nature. And in it lies the question of whether the return to "natural" childbirth has been carried too far.

Watching dogs and cats give birth seems to underscore its naturalness. Rarely does the mother need assistance, and the same is true for nearly all other mammals. Among many primates, though, things are more difficult, partly because evolution has endowed them with such large brains. (Primates typically have a brain-to-body weight ratio of twelve percent at birth, as against six percent for other mammals.) The problem is not just that large brains imply large skulls, which pass through the birth canal only with difficulty, but that larger and more complex brains—and, indeed, larger and more complex infants—call for a longer gestation period; and the longer the gestation period, the more difficult the birth can be. The sophistication of mammalian placentation—the biological intimacy of the connection between mother and fetus—increases as gestation progresses. In monkeys, the placental tissue (genetically a part of the fetus) so thoroughly invades the maternal domain that part of the uterine wall itself must be sacrificed in the afterbirth. A substantial number of mother and infant monkeys die as a result of cephalopelvic disproportion—heads that are too big for birth canals.

The great apes—chimpanzees, gorillas, and orangutans—suffer much lower rates of cephalopelvic disproportion, and birth for them is usually easy. They hold their infants, greet them, put them to the breast, and begin to forge the most advanced form of that peculiar mammalian invention, the mother–infant bond—most advanced, that is, except for the human version. And, incidentally, they frequently eat the placenta, a behavior that appears to have important consequences: estrogen and progesterone, placental hormones, may play a role in returning the reproductive organs to prepregnant condition and, perhaps, in promoting lactation and maternal behavior.

Why do the great apes have it so easy? They expel the fetus at a relatively early stage in its development and thus avoid the crunch faced by monkeys, albeit at the expense of having a more fragile infant to care for. But the apes in this sense are an evolutionary island. The hominids, our post-ape ancestors, seem to have followed the monkey model; their rise was associated with an incredibly rapid advance in brain size, much of it achieved in utero. To further complicate matters, those ancestors began to walk upright, and the pelvis was thus being selected for weight-bearing: it became shorter and stubbier, and the birth canal narrower and less pliant, while the fetal head became larger. For a time, it appears, this tension between the anatomy of mother and of child was eased in the manner of the great apes: fetuses were expelled proportionately earlier. But that trend could go only so far, and it never compensated fully for the growth in head size. We have ended up with an uneasy balance—a newborn infant of questionable viability and an unprecedentedly difficult birth, longer and riskier even than that of monkeys.

Still, for millions of years, we have managed to get ourselves born. Strategies have varied from one human society to the next. Frequently, birth is assisted, sometimes by an expert, a woman who, after attending many births, becomes the equivalent of a midwife, but sometimes only by an older female relative, and sometimes by someone in between—a grandmother or aunt with considerable experience. Such approaches have been found in societies as diverse as the Jicarilla Apache and the Zuni of the American Southwest, the Mansi of Siberia, and the Bang Chan of Southeast Asia, among others. But not so among the !Kung San, hunter-gatherers of northwestern Botswana. Nearly all !Kung women are assisted by female relatives for the first birth, but thereafter they are expected to try to go it largely alone, and by the fifth or sixth child most give birth entirely alone. The !Kung insist that a major cause of difficulty in childbirth is fear; for this reason, perhaps (though there probably are others), they have demanded of themselves a truly extraordinary courage.

The !Kung and other primitive peoples have accepted levels of infant and maternal mortality that we neither can nor should tolerate. Yet until quite recently we had to. During the nineteenth century, in Europe and the United States, most babies were delivered at home by midwives, and, though tragic outcomes were less frequent than among the !Kung, the difference was not great. Into this ancient tradition stepped obstetrical physicians, who began taking deliveries away from midwives and bringing laboring women into hospitals, where they could be efficiently followed. The results were disastrous. Obstetricians created hospital epidemics of childbed fever by unknowingly carrying microbes from bed to bed. During the 1840s, in the predawn light of the germ theory, two physicians—Ignaz Phillipp Semmelweis, in Austria, and Oliver Wendell Holmes, in the United States—announced, correctly, the cause of the disease and were widely ridiculed.

Of course, their viewpoint eventually won out; precautions were taken, death rates declined, and by the early twentieth century, obstetricians had largely taken

over from midwives the management of childbirth. Antiseptic procedures, pain medication, the availability of transfusions, resuscitation, and cesarean section: these and other assets made the hospital obstetrics ward the safest place to have a baby.

By midcentury, American obstetricians were fully and firmly in charge of childbirth. They were overwhelmingly male, and they had intervened decisively in a process once controlled by women. They had begun by eliminating midwives and had ended up largely eliminating the mother herself. The popularity of twilight sleep—analgesia, induced by morphine, and depression of the cerebral cortex, induced by scopolamine—enabled most women to enter a pleasant, dreamlike state and emerge from it no longer pregnant, with the baby somewhere out of sight. Consciousness during childbirth, the rejection of pain medication, the presence of husbands in the delivery room, home births: these were strictly forbidden. They were considered not quaint but stupid and dangerous. Cesarean section became a common response to complications. The hormone oxytocin was intravenously infused to speed up or initiate labor (and labor was induced for the convenience not only of parents but also of doctors, sometimes merely to avoid weekend deliveries). The process of having a baby had been completely medicalized. Childbirth was considered unquestionably pathological, and, so, was nobody's business but the physician's.

But by the late 1960s, the physician's authority was under fire. Good scientific evidence was accumulating about the disadvantages of delivery medications; some babies even appeared drowsy after birth under anesthesia. And, if the anesthesia was turning out to be a bad idea, what about induced labor? What about the obligatory insertion of an intravenous line in case blood transfusion or medication was necessary? And the shaving of the pubic area? The stirrups confining the woman to one, standard posture? The cutting of the mouth of the vagina, known as episiotomy? The separation of the baby from the mother right after birth? The exclusion of the father from the delivery room? And was the steady growth in the number of cesarean sections really warranted? The very success of modern obstetrics in reducing mortality had made such questions possible.

An alternative-childbirth movement arose. Women began to pressure obstetricians for change. They wanted to be fully awake. They resented drugs that might make their infants groggy. They wanted some say in deciding on the posture they would assume during the ordeal. They wanted a husband or a friend with them in that cold white room full of strangers. They wanted to look into their babies' eyes after birth, to hold them, to put them to the breast. There were even recipes for placenta casserole being passed around.

Most obstetricians considered these trends ill-advised, and they resisted them as long as they could, but some women would not take no for an answer; they simply refused to be admitted to a hospital when labor began. Midwifery and home birth were starting to take hold again. It was as if the medicalization of childbirth had finally gone too far, and human nature itself had risen in protest. A threshold had been crossed beyond which even a further reduction of mortality could not persuade mothers, fathers—families—to relinquish any more of this dangerous but crucial rite of passage.

Today, the natural childbirth revolution has achieved many of its goals, and, in some sectors of society, at least, its tenets are the new gospel. Laboring women are no longer surrounded by medical technology. They are fully conscious during childbirth, and many of them love it—at least in retrospect. Nature, not convenience, determines the onset of labor. Medications are minimized and designed to avoid infant sedation. Fathers or other companions are encouraged to stay in the delivery room, and evidence suggests that their presence shortens labor. In some hospitals, birthing rooms—with pretty wallpaper, ordinary furniture, a picture or two brought in by the patient, and an assiduous avoidance of chrome and tile—are available as a substitute for the surgical delivery suite. Highly trained nurse-midwives work under the watchful eyes of obstetricians (many of whom, now, are women). Babies are presented to their mothers almost as soon as they are born, and some researchers feel that this enriches the mother–infant relationship, especially when that relationship is at risk—when the mother is poor or in her early teens, for example. Vaginal birth by a woman who has previously had cesarean delivery—once unheard of—now is not uncommon in major medical centers.

All this is well and good, but there remain reasons for questioning the revolution. The first is that, like any revolution, it has its excesses and its ideologues. There are those who insist on home birth, for example, and this simply is dangerous. In one study, twenty percent of normal pregnancies resulted in unpredictable high-risk births. And women who refuse to undergo episiotomy risk tearing tissue all the way from the vagina to the rectum during birth. As for fetal monitoring: though its usefulness has not been proved (it is not clear that what the monitor discerns are signs of real distress), the fear that it is cruel to the infant is unfounded; the pinprick of a fetal monitor, amid the brutal pressure of the uterus, is probably all but imperceptible.

More objectionable, perhaps, than any single practice favored by the natural childbirth school is the dogma that sometimes emanates from it. In some circles, women are ashamed to ask for painkillers of any kind, even in the most dire circumstances. Aside from the needless suffering that such asceticism entails, there is the risk that extreme pain could throw the woman into panic, making more difficult the birth and the treatment of any complications, such as profuse bleeding. Even if most births are more physiological than pathological, pathology is never far away, and it often appears on short notice.

But if the revolution in childbirth has gone overboard in some circles, it has not even reached others. All along, it has been primarily an upper–middle class phenomenon, and its benefits remain inequitably distributed. Though the rate of cesarean section may have dropped at some medical centers, nationwide it has continued to rise, and now it exceeds twenty percent. Even as some women reject all sorts of medical intervention, others blindly obey instructions, unaware that they have some say in the matter.

Whatever its shortcomings and excesses, though, the return of natural childbirth has been basically good and probably inevitable—our evolutionary heritage reasserting itself after a hundred years of growing technological intervention. I was the father in that twenty-two-hour birth, and it scared the living daylights out of me. Still, I would not have missed it for the world—and neither (or so she insists) would my wife. Later, as a medical student, I delivered thirty-six babies. Nearly all of them were born to conscious mothers, in the presence of fathers or other helpers. And, as I gazed across the site of what had been such intense pain—at the father, holding the baby I had handed him; at the mother, face to face with that baby for the first time—the smiles on their faces said as much as any obstetrics text. To be sure, the rite of passage we have evolved in the 1980s has its idiosyncrasies—as what ritual shouldn't? It belongs to our optimistic, overly romantic culture. But it also has something in common with the rites of passage in any number of ancestral human societies. And it echoes, too, certain rhythms of reproduction that must have surrounded the first live-born young as they wriggled out of the wombs of early mammals more than a hundred million years ago. •

MELVIN KONNER, author of THE TANGLED WING: BIOLOGICAL CONSTRAINTS ON THE HUMAN SPIRIT, *teaches anthropology at Emory University, in Atlanta, and is a nonpracticing physician.*