



THE TECHNOCRATIC BODY: AMERICAN CHILDBIRTH AS CULTURAL EXPRESSION

ROBBIE E. DAVIS-FLOYD

Department of Anthropology, University of Texas at Austin, Austin, TX 78712, U.S.A.

Abstract—The dominant mythology of a culture is often displayed in the rituals with which it surrounds birth. In contemporary Western society, that mythology—the mythology of the technocracy—is enacted through obstetrical procedures, the rituals of hospital birth. This article explores the links between our culture's mythological technocratic model of birth and the body images, individual belief and value systems, and birth choices of forty middle-class women—32 professional women who accept the technocratic paradigm, and eight homebirthers who reject it.

The conceptual separation of mother and child is fundamental to technocratic notions of parenthood, and constitutes a logical corollary of the Cartesian mind–body separation that has been fundamental to the development of both industrial society and post-industrial technocracy. The professionals' body images and lifestyles express these principles of separation, while the holistic ideology of the homebirthers stresses mind–body and parent–child integration. The conclusion considers the ideological hegemony of the technocratic paradigm as potential future-shaper.

Key words—childbirth, mythology, technocracy, professional women, home birth

INTRODUCTION

Technology is a universal function of human society, but *technocracy* is a culturally specific system of myth and ritual, developed and disseminated in Europe and North America from the 17th to the 21st centuries.

Peter C. Reynolds

Stealing Fire: The Mythology of the Technocracy

Although a society's core value system is visible in many areas of cultural life, it is nowhere more evident than in the cultural treatment of the human body, most especially when that body is giving birth to the new social members that will ensure the future of the society into which they are born. Ensuring a society's future means ensuring not only its physical continuation but also the continuation of the belief system that shapes the way its members cognize the world around them. Some part of that belief system is bound to deal with the question of how that society defines itself in relation to the natural world and to the natural reproductive forces upon which its continued existence depends. Thus we might expect to see this belief system intensively exhibited in the cultural arena of birth.

As shown in a previous article of mine in this journal, "The Role of Obstetrical Rituals in the Resolution of Cultural Anomaly" [1], obstetrical procedures are rituals that attempt to resolve certain conceptual dilemmas with which American society is confronted by the natural process of birth, thereby enabling us to continue to place our faith in the fragile model of reality that constitutes the central mythology of our culture. The present article concentrates more specifically on the paradigm of birth that

derives from this mythology—the mythology of the technocracy—which I have called the technocratic model of birth [2].

Like all cohesive and hegemonic mythologies, the technocratic model functions as a powerful agent of social control, shaping and channelling individual values, beliefs and behaviors. After describing this model, this article investigates the relationships between this model and the individual belief and value systems of 40 women, 32 of whom gave birth in the hospital in complete accord with technocratic mythology, and eight of whom gave birth at home in complete resistance to it.

TECHNOCRATIC MYTHOLOGY: THE ONE-TWO PUNCH

In *Stealing Fire: The Mythology of the Technocracy* [3], Peter C. Reynolds analyzes modern high technology as emergent from a mythological system that depends on the ritual transformation of nature to conform to culturally constructed images. In Reynold's analysis, "technological progress" is a folk term for the ritual process of replacing 'natural' bodies, conceptualized as primitive, terrestrial, 'female,' and polluting, with man-made bodies, conceptualized as advanced, purified, celestial and 'male.'

Reynolds uncovers the primal act of ritual transformation in technocratic culture, labelling it simply the "One–Two Punch." Take a highly successful natural process (e.g. salmon swimming upstream to spawn). Punch One: render it dysfunctional with technology (dam the stream, preventing the salmon from reaching their spawning grounds). Punch Two: fix it with technology (take the salmon out of the

water with machines, make them spawn artificially and grow the eggs in trays, then release the baby salmon downstream near the ocean). Reynolds identifies this One-Two Punch—destroy a natural process, then rebuild it as a cultural process—as an integral result of technocratic society's supervaluation of science and technology over nature [3, pp. 3–5]. He explains that

technocracy [denotes] the ideology of modern industrial society, in which social policy and political debate presume scientific models of nature and society, and knowledge itself is reduced to scientific research and description [3, pp. 10–11].

And the essence of scientific research and description is *separation*—of elements from the whole they compose, of humans from nature, of mind from body, of mother from child. Such conceptual distinctions are implemented through ritual acts that produce physical embodiments of the underlying worldview:

If we think of the human body as a kind of machine, doctors of the future will be like mechanics, simply replacing those parts that can't be fixed . . . Succeeding generations of artificial devices will perform as well as their natural counterparts and may prove more reliable. For instance, gains in microelectronics will lead to a bionic heart with an internal power pack . . . The circuits controlling man-made limbs and hands will be packed with more computing power, making the prosthetics increasingly dextrous . . . Tiny TV cameras mounted on eyeglass frames will transmit electronic images directly to the visual cortex of the brain, bringing limited vision to the sightless [4, p. 57].

Prosthesis is a term used in medicine for artifacts that replace lost bodily functions and parts, but in technocratic rituals, the culture first produces the mutilation of nature that the prosthesis is designed to replace. For example:

In a recent article on what the authors refer to as 'the top 10 coming attractions' in biotechnology, among the innovations listed are genetically engineered crops that contain genes for making pesticides—mutilation and prosthesis folded into one; and genetically engineered bacteria that will clean up oil spills and chemical dumps by eating the pollutants—a man-made fix for man-made mutilation. In some cases, both phases of the One-Two Punch are implemented by the same organization. In an advertisement for the DuPont corporation, one of the major purveyors of munitions in the Viet Nam War, a Viet Nam veteran plays basketball on artificial legs manufactured by DuPont. Industrial society is a master of the One-Two Punch: send nature reeling with a hard Right, then finish it off with the Left. Industrial society destroys natural cycles with one hand while building fabrications of them with the other, but the integrated operation of these two disparate processes is almost invisible to people [3, p. 5].

Reynolds shows that when the One-Two Punch of mutilation and prosthesis is culturally recognized, as in the building of the salmon hatcheries, it is usually dismissed as an accidental byproduct of industrialization or embraced as a compromise solution to unfortunately competing demands. But taking off from Ellul [5], who pointed out that "technological society" is not defined by its tools and techniques at

all, for these are always changing, but by the system of values that organizes the underlying process of technological development, Reynolds demonstrates that "the dominant value of contemporary industrial society is in fact the One-Two Punch itself" [3, p. 7]—the creation of dysfunctions in nature through technical intervention and their replacement by fabricated analogs of natural processes. I suggest that the cultural management of American birth is a perfect example of the One-Two Punch, and that as such, it is a complete cultural expression of our technocratic core value system.

MUTILATION AND PROSTHESIS: THE TECHNOCRATIC MODEL OF BIRTH

The uterus is a muscular organ that is covered, partially, by peritoneum, or serosa. The cavity is lined by the endometrium. During pregnancy, the uterus serves for reception, implantation, retention, and nutrition of the conceptus, which it then expels during labor.

Cunningham, Macdonald and Gant
Williams Obstetrics, 18th edition

I present this overview to contextualize the experiences and statements of the professional and homebirth women whom I will describe below. This overview will thus be but a brief and bare-bones description of the technocratic model of birth, which I have described in great detail in earlier works [1, 2, 6]. Before I begin, I wish most emphatically to acknowledge that there are many medical practitioners and health care professionals working within the technocratic system to humanize and otherwise transform that system. There is simply no space in this short section to allow the multiplicity of their dissenting voices to speak.

As I and others [7–9, 12, 14, 15, 27, 28] have shown, the technocratic model of the body has been differentially applied to women and men, so that the male body is metaphorized as a better machine than the female body. In form and function it is more machine-like—straighter-lined, more consistent and predictable, less subject to the vagaries of nature (i.e. more cultural and therefore 'better'), and consequently seems less likely to break down. Males, because they are the most machine-like, not only set the standard for the properly functioning body-machine, but also are thought best-equipped to handle its maintenance and repair.

Because of their extreme deviation from the male prototype, uniquely female anatomical features such as the uterus, ovaries and breasts, and uniquely female biological processes such as menstruation, pregnancy, birth and menopause are seen as inherently subject to malfunction. It is thus understandable that the woman in whose body such degenerative processes take place is often seen, under the technocratic model, as better off without them. As a number of physicians and social scientists have pointed out, our medical system has done a thorough job of

convincing women of the defectiveness and dangers inherent in their specifically female functions [8–14]. The hysterectomy is the most commonly performed unnecessary operation in the United States (one out of every three American women has a hysterectomy by the time she reaches menopause [8, p. 287]), with the radical mastectomy in second place [11]. It has been a recurrent theme in American medicine that to remove a woman's sexual organs is to restore her body to full health and greater potential for productive life. In short, under the technocratic model the female body is viewed as an abnormal, unpredictable and inherently defective machine. During pregnancy and birth, the unusual demands placed on the female body-machine render it constantly at risk of serious malfunction or total breakdown. This belief, the foundation of modern obstetrics, can be found behind the lines of much early obstetrical literature:

It is a common experience among obstetrical practitioners that there is an increasing gestational pathology and a more frequent call for art, in supplementing inefficient forces of nature in her effort to accomplish normal delivery [17, p. 531].

More recently, the 1985 issue of the *New England Journal of Medicine* includes an editorial on the potential advantages of universal prophylactic Cesarean section [18]. The authors question whether, since birth is such a dangerous and traumatic process for both woman and child, the best obstetric care should perhaps come to include complete removal of the risks of 'normal' labor and delivery. A still more recent article in *Female Patient* asserts that natural childbirth is associated with "maternal death, infant death, and maternal tissue destruction . . . Some practitioners are asking whether an even higher Cesarean rate may be appropriate. Should we not offer the ultimate in pelvic and birth-canal protection to the mothers?" [19].

Although most modern obstetrical texts do give lip service to pregnancy as a natural and intrinsically healthy process, this is usually done in a paragraph or two. For example, the 18th edition of *Williams Obstetrics*, the preeminent text in the field, states:

The expectant mother has been commonly treated as if she were seriously ill, even when she was quite healthy. All too often she has been forced to conform to a common pathway of care that stripped her of most of her individuality and much of her dignity . . . Too often the expectant mother has felt that her fate and the fate of her baby were dependent not so much on skilled personnel but upon an electronic cabinet that appeared to possess some great power that prevailed above all others [20, p. 6].

Meanwhile, most of the next 900 pages are devoted to a detailed discussion of everything that could possibly go wrong and of how to use the 'electronic cabinet' to solve these problems. This electronic cabinet serves, in Reynold's terms, as a prosthetic device that has become integral to the mutilation and

prosthesis of birth—in other words, to its technocratic de- and reconstruction.

Punch One is accomplished by birth's dissection into components—the stages of labor—and by the application to these components of standardized measurements and rules (e.g. Friedman's curve) that say how each stage should proceed, plus diagnostic technologies (e.g. external and internal electronic fetal monitors) that investigate whether or not these stages are proceeding as they should, plus remedial technologies (pitocin, episiotomies, Cesarean sections) to make them proceed as they should if they aren't. (See Ref. [2] for detailed description and analysis of obstetrical procedures as rituals that enact the technocratic model of birth.) Birth is thus a technocratic service that obstetrics supplies.

The most desirable end product of the birth process is the new social member, the baby; the new mother is a secondary by-product:

It was what we all were trained to always go after—the perfect baby. That's what we were trained to produce. The quality of the mother's experience—we rarely thought about that. Everything we did was to get that perfect baby. [38-year old male obstetrician].

This focus on the production of the 'perfect baby' is a fairly recent development, a direct result of the combination of the technocratic emphasis on the baby-as-product, the multiplicity of new technologies available to assess fetal quality, and the powerful economic and legal incentives to use them. As Rothman has pointed out,

Diagnostic technologies, from the most routine ultrasound to the most exotic embryo transplant, work toward the construction of the fetus as a separate social being . . . 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 . . . It is very very hard to conceptually put back together that which medicine has rendered asunder. I find that I have a harder and harder time trying to make the meaning of connection, let alone the value of connection, understood [21].

The conceptual separation of mother and child chartered by the technocratic mythology of birth parallels the Cartesian doctrine of mind-body separation. This separation is given tangible expression after birth as well when the baby is placed in a plastic bassinet in the nursery for four hours of 'observation' before being returned to the mother; in this way, society demonstrates conceptual ownership of its product. The mother's womb is replaced not by her arms, but by the plastic womb of culture.

This idea of the baby as separate, as the product of a mechanical process, is a very important metaphor for women because it implies that the technocracy ultimately can become the producer of that product, as of so many others. The current cultural debates over surrogate motherhood and fetal vs maternal rights dramatically illustrate how fundamental is this separation to technocratic notions of parenthood. Moreover, as Rothman points out

above, mind/body//mother/child separation forms the ideological basis of the new reproductive technologies, from court-ordered Cesareans to artificial wombs [8, 33, 44]. For example, the February 1989 cover story of *Life* magazine, "The Future and You," predicts "Birth without Women":

By the late 21st century, childbirth may not involve carrying at all—just an occasional visit to an incubator. There the fetus will be gestating in an artificial uterus under conditions simulated to recreate the mother's breathing patterns, her laughter and even her moments of emotional stress [4, p. 55].

Although current magazine advertisements tout a smorgasbord of options for birth, from jacuzzis to home-like birthing suites, in fact the vast majority of birthing women are constrained by the basic processes of the technocracy to the same realities faced by the dammed up rivers and those thousands of salmon trying to swim home. The question arises, if this One-Two Punch of technocratic de- and reconstruction is in fact so integral to American society that it must be enacted a thousand times a day in the ritual production of new social members, to what extent does it define women's own perceptions of the proper cultural treatment of their pregnant bodies? women's own conceptualizations of those bodies? In other words, how do the women to whose bodies these technologies are applied think about the relationships between their bodies and these technologies? And given that as conscious human agents they may have more choices than the salmon and the rivers, what do they choose?

THE TECHNOCRATIC BODY AND THE ORGANIC BODY: DIFFERING CULTURAL MODELS FOR WOMEN'S BIRTH CHOICES

In recent works, Emily Martin [7, 22] shows that middle- and working-class American women hold contrasting images of the body and birth that center around the issue of control. The middle-class women in Martin's study sought to wrest control of birth away from the medical establishment, striving not only for control of their birth settings and attendants, but also, and most fundamentally, for control of themselves as they labored and gave birth. Meanwhile, their working-class sisters rejected this middle-class emphasis on self-control, saying "They were talking about breathing and panting and—what are you talking about? It hurts!"

The differences between the two groups in my study are more extreme, perhaps because they stem from philosophical differences even more fundamental than those between Martin's middle-class and working class groups. The women in both of my study groups are all relatively affluent members of the white middle-class between the ages of 28 and 42: the fact that they hold so many other things in common makes all the more noteworthy the dramatic contrasts in their images of body, birth and motherhood, and in the relationships of these images to the technocratic model.

When I first began research on American birth in 1981, most women I spoke with said they wanted some form of "natural childbirth in the hospital," in resistance to the consciousness obliterations their mothers experienced as they gave birth from the 1930s to the 1960s. Given this desire for natural childbirth, I expected to find, as Martin did, that most women would resent and resist the increasing number of impersonal intrusions of technology into birth, and what I and others [23–28] perceived as women's concomitant loss of their power as birth-givers. But when that initial study was completed several years later, I instead found that 70% of my 100 interviewees, if not exactly thrilled, were at least rather comfortable with their highly technologized obstetrical experiences, and were not much interested in resistance [2].

Of these 70 women, nine seemed especially to have actively sought and been personally empowered by the technocratic interventions in their births [29]. Although this earlier study did not specifically focus on occupation, I noted that these nine women were all high-powered professionals in positions of prestige and authority. When they hired an obstetrician, they were hiring another professional to perform a service. From him or her they expected the same sort of professionalism and competence in matters of the body as they expected from themselves in their own areas of expertise. They seemed to see technology as integral to all areas of American life, and they fully expected that the very best in the modern technology of the body would be brought to bear on their pregnant bodies and the babies within them in order to ensure that their births were competently managed and controlled, and therefore safe.

I was both surprised and intrigued by the attitudes and desires these professional women expressed, and by their ability to manipulate technocratic mythology and procedures to their advantage. On the other hand, I was equally intrigued by the near-total resistance to such mythology of the women I came across who had chosen to give birth at home. I was fascinated to see that the women in both these categories actively defined themselves, in myriad ways, as future-shapers. It seemed to me that these two groups represented fruitful ground for further study. From 1988 to 1991, I conducted in-depth interviews with both professional women and homebirthers, focusing on the physical changes of pregnancy and the symbolic aspects of motherhood in relation to their conceptions of body and self [30]. I chose these particular groups as a means for exploring the notion of the technocratic model as an agent of social control because they represent the extremes of women's responses to that control—from total acceptance to total resistance—and thus define the spectrum. Throughout my analysis, I utilize italics to highlight the correspondences with or divergences from the technocratic model as they emerge in these women's words.

The technocratic body of the pregnant professional

When it came time for Susan Blume to deliver her baby, she was blessedly calm. No sweat soaked her brow, no pain lined her face. She uttered not a sound. As the baby squeezed down the birth canal, Blume [anesthetized by an epidural] lay placidly on her side, reading *People* magazine and robbing the gods of one more woman bringing forth children in sorrow.

Elaine Herscher
San Francisco Chronicle

The 32 professionals who chose hospital birth hold a wide range of occupations. Four are mid-level managers for banks, and three for insurance companies, two head up fund-raising for political campaigns, one is a museum curator, two realtors, two are physicians, three college professors, two regional sales managers, six managers or directors of large government agencies, one is a CPA, one a high-level manager for a major airline, and five own their own companies. Most of them make as much or more money than their husbands.

The professional/personal split. During the interviews, it quickly became apparent that these women live their lives in terms of a fundamental and clearcut distinction between the personal and professional realms. How these women primarily define themselves in relation to society at any given moment is usually a function of what realm they are in. In the professional realm they *are* their roles: professor, division manager, CEO. Secure in their professional identities, in the personal realm many of these women seem to actually be amused to define themselves as "John's wife," or "Suzie's mother," almost as if being John's wife or Suzie's mother was a sort of game that they played sometimes.

Presence in either the personal or professional realm is expressed through bodily adornment. Leah explained:

I see [the body] as a way to have people respond to you . . . The way I dress reflects the level of professionalism that I have and the type of response I get from other people. I don't dress in flounces and frills, I dress very tailored and that is reflected even in the glasses I wear. They are pretty much straightforward and businesslike . . . I like to give a straightforward presentation so that people can deal with me straight.

I found it noteworthy that when I interviewed these women in their homes, they almost invariably would glance down at their casual sweats and tennis shoes and laughingly comment, "You are seeing my other self, my home self"—but when I went to their offices, they never said, "You are seeing my professional self." For most, the professional self was the primary self.

In general, any overlap between the personal and professional realms went one way: personal aspects, like children, relationships, emotional display, did not belong at work, while professional aspects, like paperwork, faxing and phone calling, often were taken home. Enforcing the boundaries of this one-

way street did not present much of a problem for most of these women at first; even those who dated and/or married male colleagues were usually able to keep these relationships separate from their everyday professional activities.

Pregnancy as a violation of the professional/personal split. Pregnancy perforce entails a violation of the conceptual boundary separating these personal and professional realms of life. Sexuality and children are plainly part of the personal domain; they do not belong at work. But pregnant women visibly and obviously not only take their children into the workplace, but also to even the most important meetings! Predictably, many of these women worried about how this boundary violation would affect their work relationships with their colleagues and superiors:

[Q. Were you worried about how your colleagues might react to your pregnancy?]

Yes, that's an unqualified yes . . . they look at me as the President, and I . . . was worried that they might start thinking about me not as much as a professional, but as a woman, and that shouldn't necessarily be bad, but I was worried that it might affect the respect level . . . it's kind of more obvious that you're a woman, I think, if you're pregnant . . . It wasn't something I wanted them to think about, because I wanted them to think about me as a business kind of guy.

However, in contrast to what I had originally expected to find, very few of these women found their fears to be justified. Only three reported that they suffered any sort of job discrimination as a result of their pregnancy, while most others reported the joyful discovery of unexpected benefits from their physical blurring of the personal/professional distinction:

When I was pregnant for the first time, I was working in a large corporation. Always it was to dress for success—you were very much on guard as a woman. As soon as I revealed I was pregnant, people who were not friends of mind, executives many levels up on the corporate ladder, just opened up their personal lives. They identified so strongly with being a father or having a wife who was pregnant . . . I was stunned at how open and personal everything became when they were around a woman who was bearing a child.

As it evolved for most of these women, the conflict between work and pregnancy was not between their pregnant bodies and their male colleagues, as most had expected, but between their own expectations for their work performance and the biological realities of those pregnant bodies. Catherine said:

I hated it that people were always wanting to have personal conversations with me about how I was feeling. I was not interested in that at all, and so I made it very plain right at the start that . . . when I'm at work I am strictly business. I think the reason I didn't have any problems with how I was treated . . . was that I made it so clear that there was no difference.

[Q. Did pregnancy pose any problems at all for you at work?]

I would sometimes get so tired that I would tell my secretary to hold my calls, and put my head down on my desk and just sleep for an hour. But I never let anyone know about it, and I made sure that I always got just

as much work done anyway, even if that meant I had to say there longer.

The centrality of control. This tension between the professional and personal domains is often heightened by the woman's own perception of herself in relation to her body. Just as with the middle-class women in Martin's study (1990), an overriding concern of these professional women is *control*. They hold the strong belief that *life is controllable*, and that *to be strong and powerful in the world, one must be in control*. As long as these women feel in control, they are "happy," "everything is fine." They achieve control over their *lives* through careful planning and organization of their time and activities [31]. Control over their *bodies* is achieved through regularly scheduled exercise—most were very athletic in school. They achieve control over their own *destinies* through reaching positions of independence and importance in the wider society. Interestingly, those who admitted to wanting and enjoying power insisted that it was not power over others that appealed to them, but power to make things happen in the world. Lina said:

I didn't want to be like my mother . . . I didn't want to be picked on by my husband all the time, and be powerless. [Q. What did you do to be powerful?] I got a Ph.D. and a job.

The self/body split: pregnancy and birth as out-of-control. These professional women seem to judge every situation by the degree of control they feel they can maintain over it. Even their pregnancies are usually carefully controlled, planned to occur at just the chosen time in their careers. But once those processes were set in motion, they became uncontrollable, and thus presented these women with a division within their most treasured notions of self, between the cultural, professional parts within their control, and the personal, biological processes outside of it. Lina experienced this division so intensely that she could hardly believe it when she became pregnant:

Deep down inside of me I believed that I had desexed myself by being the successful professional . . . I thought I would have a hard time getting pregnant because I thought I would have to pay for what I had gotten away with . . . I have succeeded at a man's game . . . A couple of my male faculty colleagues, when they would see me on the campus with the baby, would constantly say, 'I can't believe you are a Mother, I can't believe you are such a good mother—you are like my mother. I can't believe it.' What they were really saying to me is, 'I thought you were a guy.'

This separation of self from biology is clearly reflected in the body concepts held by many of these women. I asked each one, "How do you think about your body? What is your body?" I was interested to notice that most, instead of giving me a definition, immediately began to talk about how they judged their bodies—as too fat, not in good enough shape, or healthy, in good shape. Such statements reflect their shared belief that *the body is imperfect*:

I think it's pretty functional [but] . . . it's fat around the middle, and my boobs are too small. [Lou]

Women, unless we've had it greatly enhanced by plastic surgery, I don't think we like it. I don't know anybody who *likes* their body. [Louise]

The words of most of those who did provide definitions expressed the additional and equally fundamental belief that *the body is separate from the self*:

You know, I think there is me and then there is what I'm like physically which can be changed or modified—clothes, makeup, exercise, hairstyles, food. [Georgia]

My body is a vehicle that allows me to move around, a tool for my success in the world. [Joanne]

A vehicle. Something that moves me from place to place. A repository for thought, for creation, for beliefs, philosophies. [Leah]

My body is the recipient of the abuse from the lifestyle that I choose . . . It's my weakest link—it's like you have to pay the price somewhere—I'm out of shape, overweight and not eating right—my body to me is what has paid the price for this career. [Q. Can you describe your relationship with your body?] Abusive. [Beth]

Predictably, then, the physical state of pregnancy was problematic at best for some of these women. For intrinsic to the notion of the *body as a vehicle*, a *tool for the self*, are the corollary ideas that *the body is worth less than the self it houses*, which, *being worth more, should control the body*, should be "in charge." Concomitantly, most of these hospital birthers experienced the bodily condition of *pregnancy as unpleasant because it is beyond the control of the self*, or, as they put it, "out of control." Here is how they expressed that feeling. Linda said:

I think there are a lot of women who love being pregnant and they would say that. My sister, the Earth Mother, did. Especially before I got pregnant, I thought, 'Maybe I'll get into it.' But I didn't get into it. I felt bad and large and awkward and nauseated. And oh, I love having the baby, but I wish there were an easier way.

To the question, how did you feel about your body while you were pregnant? Linda responded:

I didn't like it. It just overwhelmed me, the kinds and the variety of sensations, and the things that happen to your body because of the pregnancy. I didn't like it at all. I felt totally alienated from my body.

Even Leah's positive experience of pregnancy is expressed in terms of separation and a feeling of lack of control:

I really did feel very healthy. It was different being so focused in my body. That's what was so curious. I was watching all this happening. It was something taking control all over me and it was all good. To a certain extent I try to live outside my body so it doesn't control me. Only in this case it was very much controlling me. And that's ok—it was guiding me.

Joanne added:

I was real apprehensive about going into labor. It kind of terrified me, mostly because I like to be in control . . . and you don't have any control when that happens. I used to have nightmares about standing in front of the president and making a presentation and having my water break.

And here is how Beth experienced birth:

I mean, it's like a demon to me. There's another being in your body that has to get out and it's looking for a way to get out. And all of a sudden, it's like my center of control left my brain and went to this, this thing in my body ... I like to think that I can control whatever happens. But ... all I was doing was lying there—I had to do whatever this other being said was going to happen. And it was my body that it was happening to. That was the thing I liked the least.

As they viewed the body as a vehicle for the mind or soul, so these women tended to see *the pregnant body as a vessel, a container for the fetus (who is a being separate from the mother) and to interpret its growth and birth as occurring through a mechanical process in which the mother is not actively involved.* (Sarah flatly states, "You're just a vessel. That's all you are, just this vessel.") These beliefs were behaviorally expressed in myriad ways during pregnancy. For example, the evidence these women relied on for proof of the baby's health and growth was objective, coming primarily from ultrasound photographs and electronic amplification of the fetal heart rate. They understood the importance of nutrition, and knew that they had to eat well so the baby would be well-nourished. But, unlike the homebirthers, they saw this in terms of a simple, mechanical cause-effect relationship. If they ingested good foods, the necessary nourishment would travel to the baby through the placenta, enhancing overall development and especially brain growth. Excessive ingestion of alcohol or junk food, however, might result in a child with less-than-optimal brain capacity. Thus, eating well was a mother's duty to her unborn child and one of the most important things, along with ultrasound and amniocentesis, that she could do to ensure optimal growth conditions. Although most experienced giving up alcohol and junk food as something of a burden, to them it was also a logical necessity, something they did as a matter of course. But it did not, conceptually speaking, entail their active participation in growing the child. It merely made them into the best possible "vessels."

In keeping with these attitudes, most of these women did not view the processes of labor and birth as intrinsic to their feminine natures. Said Linda, "If my husband could do it the next time instead of me, that would be just find." Added Joanne:

Even though I'm a woman, I'm unsuited for delivering ... and I couldn't nurse ... I've told my mother—I just look like a woman, but none of the other parts function like a mother. I don't have the need for the desire to be biological ... I've never really been able to understand women who want to watch the birthing process in a mirror—just you know, I'm not, that's not—I'd rather see the finished product than the manufacturing process.

The mind/body split: mind over biology. Emergent in Joanne's words we see the technocratic notions that *birth is a mechanical process* and that *there is no intrinsic value in giving birth "naturally," because technology is better than nature anyway.* Thus we can understand when Joanne says that she enjoyed her

Cesarean birth because her anesthesiologist explained what was happening step by step, and because, since she felt no pain, she was able to be so *intellectually* present to the birth that she could watch the time to see which of her many friends who had placed bets on the time of the birth would win the \$18 in the pot. She stated:

[I liked that because] I didn't feel like I had dropped into a biological being ... I'm not real fond of things that remind me I'm a biological creature—I prefer to think and be an intellectual emotional person, so you know, it was sort of my giving in to biology to go through all this.

Here Joanne expresses a view common among the women in this group: *The ideal, whole woman is intellectual and emotional, but not necessarily biological.* (Some behavioral ramifications of this notion will be discussed later on.)

Like Joanne, Katie preferred the sense of control provided by a Cesarean, and in no way saw this as a disempowering loss, but only as an empowering gain because it was something *she* had caused to happen. When her baby was two weeks overdue and labor had not begun, she told her doctor, who was arguing restraint, "I am really getting sick of this. Please schedule [the Cesarean]." In response to the question, "How did you feel about yourself after the birth?" she responded, "I felt pretty special. Proud ... I felt as if I had accomplished quite a bit."

Kathy, who also described her Cesarean as personally empowering, said:

I don't feel like I missed out on anything. With my first two I was put to sleep. With my third, Bryan. I was given an epidural. Heaven! I would never do it any other way. A Cesarean with an epidural. I was awake, everything. Ah, it was just wonderful ... I would have to say, hey, I participated in it. I was awake and I felt the pulling and the tugging. I did not push or anything. But I was definitely a part of what was going on.

Elaine summarized:

Well they induced labor and I wasn't very good at my relaxation techniques and my breathing and after about four hours of labor I decided I would prefer to have a Cesarean and so that's what we did ... I know some women get all uptight about that, that it wasn't a normal delivery, but I didn't feel the least bit cheated and I feel my birth experience was just as happy as it would have been. I was very happy when I heard my baby cry, and it was a very pleasant experience.

In their words we hear again the belief these women strongly hold, that *the mind is more important than the body*, that *as long as their minds are aware, they are active participants in the birth process.* We hear this expressed even in Clara's recounting of her rapid and unmedicated vaginal delivery:

Travis came in a little over an hour and that was just not enough time to get mentally prepared. I felt ... my body was pushing me into having this baby. My mind was not there to work with it. I needed more time to be able to get on top of it and be there.

As a corollary of the idea that technology is better than nature, most of the hospital birthers in this study

felt rather strongly that *labor is naturally painful*, that *pain is bad*, and that *not to have to feel pain during labor is good and is their intrinsic right as modern women*. To the question, what did you want out of the birth experience? Joanne responded:

Out of the birth experience itself I wanted no pain. I wanted it to be as simple and easy and uncomplicated as most everything else has been for me.

Said Leah, "I made the decision—I had two hits of Demerol in the IV. I controlled the pain through that." Beth, who "had planned for but did not end up with natural childbirth," was nevertheless very pleased to feel that she also was in control of the decisions that were made. She had expected a long labor with little pain. When the pain became severe, she asked for relief, "and you know, even though I hadn't planned on an epidural, they were very responsive when I said I wanted one." The next time around, Beth planned for an epidural:

When I got there, I was probably about five centimeters, and they said, 'Uh, I'm not sure we have time,' and I said, 'I want the epidural. We must go ahead and do it right now!' So, we had an epidural.

And Elaine stressed:

Ultimately the decision to have a Cesarean while I was in labor was mine. I told my doctor I'd had enough of this labor business and I'd like to have a Cesarean and get it over with. So he whisked me off to the delivery room and we did it.

In keeping with this *high value on making their own decisions*, the major discontents these women expressed with the medical handling of their labors and deliveries resulted not from the administration of anesthesia, but from its withholding. Kay reported:

I [asked] for an epidural at one point, but they said they didn't have time to do it . . . I was awfully uncomfortable and I had remembered how wonderful it was [with my first birth] and that I had instantly felt terrific . . . I was mad that I was in so much pain, and then they would tell me something like 'we don't have time,' you know—that just drove me wild. I didn't like that at all—I wanted to have it when I wanted to have it.

Another woman expressed outrage that a friend of hers in advanced labor had been denied anesthesia for the same reason as Kay, saying earnestly, "No one has the right to tell you that you have to go through that kind of pain." Although a good bit of evidence exists on the depressive effects of analgesia and anesthesia on the baby during labor and birth [2], most of these women felt very strongly that they had an absolute right to the mind-body separation offered by such drugs, especially the epidural. Lina spoke for the majority:

I read all this stuff that told me I would be a complete asshole to have an epidural and I revolted. [The books said that] I would be able to see that it's much better for the baby and it's a natural experience, and there's just all this *pressure* . . . I quit smoking, ate meat, drank milk for months and months—I had been such a good girl. A couple of hours of whatever an epidural was going to do to me, tough. You can put up with it, kid.

Later on Lina insisted that her physician would be the one to know if the drugs used in labor posed any dangers. She and many others stated firmly that they did not believe that their doctors would let any harm come to their babies. In this belief is illustrated yet another technocratic precept: *Medical knowledge is authoritative* [32, 33]. In contrast to the home birthers, as we shall see in a moment, none of the 32 hospital birthers reported much respect for or reliance on their own intuition or "inner knowing."

The separation of mother and child. About leaving her six-week-old baby at a day care center, Linda the pediatrician had this to say:

[Q. Do you feel that it would be better for your baby to be with you?]

Possibly. On the other hand, I also feel like I probably wouldn't be very happy. I'd probably start climbing the walls, and in a way that would be a bad thing to do to him, to say well alright, I'm going to throw away twenty years of education to stay home with you so that you can be the perfect child.

Thus we arrive at a central question for most of these women: where are they going to put their bodies, carriers of their selves, in relation to their children, the products of those bodies? The answer in general is that as the children were thought of as separate in the womb, so this separation achieves near-immediate geographical reality after birth. The majority of these women work 10-hr days, and so see their children only for a maximum of 1½–2 hours per day. This situation is a logical extension of their own body images and is in perfect harmony with the chartering mythology of the technocracy, based as it is on the separation of wholes (a river, the birthing body, the family) into their component parts, and on the cultural management of the parts (damming the river, sectioning the body, enculturating children at school). Their perceptions and experiences of this parent/child separation are varied, and, due to space limitations, will be addressed in future publications. I will simply add here that to rationalize the time/attention differential between work and parenting, most of these women hung their hats on the popular notion of "quality time"—a notion that easily lends itself to interpretation as a prosthetic device for the technocratic reconstruction of the continually deconstructed (mutilated) American family [34].

Home-birthers and the organic body: a cultural alternative

The contractions kept coming. Each one of them pushed . . . I tried joining in, very carefully. I pushed with my stomach muscles, just a little . . . but whoa, my uterus grabbed me and drove me along with itself. I couldn't push just a little. It had to be a lot . . . It was so powerful and uncontrollable. I might push myself inside out if I went too far. But who cares? I didn't try to hold back any more. I pushed hard. I grabbed onto Vic, onto the folds of his clothes. I held my breath and pushed as hard as I could and it felt good. It felt better. The contractions didn't hurt as much any more. It was exciting. I'm pushing!

Janet Isaacs Ashford
Doing It Myself

We will turn now to consideration of the body images and worldviews of the eight home birthers in my study. Four of these—Kristin, Ryla, Karen and Liza—were the most extreme proponents of what I have called the holistic model of birth [2]. These four, like Linda's sister, were the sort of women that Linda would call 'Earth Mothers.' They did not have professional careers in the business or academic worlds, but worked out of their houses as "New Age" counselors and rebirthers, and devoted a large proportion of their waking hours to motherhood. The other four—Tara, Susa, Elizabeth and Sandra—are professionals of the same ilk as the hospital birthers (Tara and Susan run political campaigns, Elizabeth teaches at a university, and Sandra manages a store.)

Self/body integration. Interesting differences emerge between the body images of these two subsets of home birthers. The women in the first group (the home-workers) place no distance between self and body, saying "I am my body," or "My body is the physical expression of me." In so saying, they are expressing the very un-Cartesian notion that *self and body are One*.

Differing in many ways from these 'Earth Mothers,' the four professionals in this study who gave birth at home share much with their hospital-birth sisters, most notably including their desire to be in control and their feelings that body and self are separate. Yet somehow they sense that these notions are inconsistent with their choice of birthplace and the philosophy that accompanies it, as well as with their lived experiences of pregnancy and birth. You can hear them struggling with this inconsistency in the way they discuss their relationship with their bodies. Tara gets herself halfway toward wholeness, saying "I think that probably 50% of who I am is my body." And Susan shows us how her lived experience of pregnancy contradicted and changed her former notions. She stated:

I used to see my body as the vehicle in which I can run around and project myself to the world . . . I never thought about my body as being me until I did get pregnant. And then you feel very much in tune because you can feel everything that is going on . . . and now I am so much more comfortable with my body, and more and more I see it as part of my Self.

These homebirthers, like Martin's working class women [22], tended to reject medical definitions and value judgments in favor of their own lived experience. Experiencing the body as the self, or as part of the self, they came to stress in belief and behavior the body's *organic interconnectedness*, as opposed to its mechanicity, and to view *the female body as normal, attractive, and healthy*:

Before, I was very uncomfortable with my body—the way I looked, the way I felt, just everything. Since I gave birth, it's just not a problem any more . . . I kind of like the way I look. [Susan]

These homebirthers felt deeply and strongly that *female physiological processes, including birth, are healthy and safe*:

[She] . . . said 'Sandra, are you still thinking about having this baby at home? . . . I think you're absolutely insane. What if something happened?' I said, 'Are you not going to drive your car because you could have a wreck? You've got a higher risk doing that than having a baby at home.' My friends think I'm crazy. But I think they are. I mean really, *they are*—they're the ones that have missed the whole birth experience, not me.

Letting go of control. In dramatic contrast to the high value placed on control by the hospital-birthers, the non-professional, spiritually-oriented Earth Mothers in my study felt that *giving up control was far more valuable in birth and in life than trying to maintain it*—a philosophical position again arrived at through lived experience. Said Liza:

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.

Again, we see Tara and Susan moving in that philosophical direction through their lived experience. To the question, "How important it is to you to be in control?" Susan responded:

You know the answer to that! It's more important than it should be. Because I get very carried away with it sometimes, and [I need to learn to let it go]. I've been a lot happier since I started practicing that.

Tara put it this way:

I always had in my mind that morning sickness was psychological and that basically I could control all these things. If I did things right, ate the right things and treated my body the right way then I wouldn't have to worry about kinds of morning sickness that people have and I could have a quick and easy labor. I exercised a lot, you know, I paid attention to my diet and everything and I realized, finally, after nine months and a birth, that there are a lot of things you just don't have control over. But it took me that long to admit it.

Tara's kinship with the professional women discussed in the prior section is reflected in her early desire for control over the birth process, and her belief that she could achieve such control by doing all the 'right' things in preparation for the birth. Her holistic view of birth kept her from wishing to utilize the technocratic forms of control so important to her professional sisters. Unlike them, she was willing to give up her desire for control to the experience that such control was not and had never been hers.

Pregnancy as integration. As we might expect, Tara and Susan, like Linda's 'Earth Mother' sister, enjoyed pregnancy's constant changes, and came to value their lack of control over these changes. Tara declared, "I loved being pregnant. I just loved all of it. I like looking at my body in the mirror. I couldn't wait to see what would happen next." Susan said,

"I was in awe . . . Being pregnant was fascinating . . . It isn't when you're barfing in the toilet bowl every morning, but when that part is over, you feel good. You feel better than you ever had in your life."

To the direct question, "Other women I have interviewed experienced their body changes during pregnancy as being out of control, meaning that they didn't have control. Why didn't you?" Susan responded:

Whenever anything like that happened to me, I had already read up or talked to midwives and I knew it was coming. I knew that that was going to happen next and it was all part of this wonderful experience of getting pregnant. It felt like it was natural. It was what your body was supposed to do. One step closer to having that baby there.

This response and others like it show that these home birth women place just as much importance on their minds as do the hospital birthers in this study, but in a rather more integrated way that sees the body and its changes as equally important, and holds body and mind to be equally important parts of the whole.

According to the holistic model espoused by these homebirthers, like self and body, *mother and baby are essentially One—that is, they form part of an integrated system that can only be harmed by dissection into its individual parts*. Much more than a passive host, or "vessel," *the mother sees herself as actively growing the baby*. Susan said:

Especially when you're actually actively doing all the exercises you're supposed to be doing and you're actively eating and drinking what you're supposed to be eating and drinking, then you really feel like you are nourishing and growing the baby.

For Kristin, this feeling of active involvement in pregnancy combined with experiences that generated in her sensations of, and then belief in, the reality of *active communication, unity, and partnership with her unborn baby*:

When I was about two months pregnant . . . suddenly, from somewhere inside of the front of my head I heard these words, 'I'm here, I'm a girl, and my name is Joy Elizabeth' . . . One night [much later on], I had a Braxton Hicks contraction and I heard a voice inside say 'I'm scared.' I told her I was scared too and that everything would be okay because we were partners and we would do this thing together.

Elizabeth described her experience of active communication and sense of partnership with her unborn as follows:

Two weeks before he was born, he was still breech. My midwives felt confident about a breech delivery, but I . . . very much wanted him to turn. I went to a therapist who was good at visualization, and asked her to help me get in touch with him. We did the visualization . . . I could see him so clearly . . . and I asked him to turn. By the time I woke up the next morning, he had completely turned, and he stayed that way until he was born!

Mind-body integration: active agency and inner knowing during birth. For these homebirthers (as, in their very different way, for the hospital birthers) this active and participatory role was key. Near the

beginning of her first pregnancy, during her very first interview with an obstetrician, Susan became angry because his response to her questions was, "You don't need to worry about that. I'll take care of that." She said, "He thought he knew more about it than I did!" When I asked her, "Why didn't you assume that he did know more than you?" she replied:

Well, I didn't consider having a baby something I wasn't supposed to take part in. That I was just there to grow this baby and he was going to take it out of me . . . I knew better than that, I knew that it was me 100% that was going to get this baby through the birth canal and out into the world. That was my job, and I wanted somebody who would work with me to do the best job I could.

Just as these homebirthers see themselves as actively growing their babies, so they also see *labor and birth as hard work that a woman does*. This holistic view that does not separate the woman from the process of labor accepts *pain as an integral part of that process*. To eliminate that one part would interfere with the systemic whole, and would begin a cycle of interference that might have unforeseen results. When I asked, "Did it mean anything to you that you went through the pain?" Tara responded:

Oh yes, it's part of the whole experience . . . Even though during labor I remember feeling it was almost unbearable, it never entered my mind to wish I had 'something for the pain' . . . I wanted the pain to stop, but not because somebody gave me something . . . Wonderful physical and emotional stuff goes on at the same time as the pain. If you took drugs for the pain, you would change all the rest of it, too.

Brigitte Jordan defines authoritative knowledge as "legitimate, consequential, official, worthy of discussion, and useful for justifying actions by people engaged in accomplishing a certain task or objective" [35, p. 319]. Under the technocratic model, only technologically obtained medical knowledge is said to be authoritative. But homebirthers operating under the holistic model often regard *a woman's intuition or "inner knowing" more highly than the objectively obtained information of tests*.

For example, late in labor Elizabeth's midwife became concerned because the baby's heart tones were dropping, and muttered under her breath about possibly going to the hospital. Elizabeth heard her, and was "flooded with the total certainty that her baby was fine." She leaned forward between pushing contractions, and whispered this inner knowing to the midwife, who immediately and visibly relaxed. Later, when asked about this response, the midwife replied, "Over my years of doing home birth, if I have learned anything it is to trust what mothers know."

On the subject of whose knowledge to trust, Susan expressed herself very strongly. She said:

I went to an OB when I found out I was pregnant. And I told him, son of a bitch, that I was pregnant, and he said, 'Let's test you and see.' And I said, 'No, I am pregnant and I'm trying to pick an OB.' And he said, 'Let's pee in the little cup and let me see.' And that infuriated me . . . [And then I called a lay midwife] and we just hit it off like

that. Instantly I knew that this was what you were supposed to do. This was the way to have a baby.

In technocratic reality, not only are mother and baby viewed as separate, but the best interests of each are often perceived as conflicting. In such circumstances, the mother's emotional needs and desires are almost always subordinated to the medical interpretation of the best interests of the baby as the all-important product of this "manufacturing process." Thus, individuals operating under this paradigm often criticize homebirths as "selfish" and "irresponsible" for putting their own desires above their baby's needs. But under the holistic paradigm held by these homebirths, just as mother and baby form part of one integral and indivisible unit until birth, so *the safety of the baby and the emotional needs of the mother are also One. The safest birth for the baby will be the one that provides the most nurturing environment for the mother.* Said Tara, "The bottom line was that I felt safer [at home]. It seemed strange to me that some people feel safer with drugs." Elizabeth confirmed, "My safest place is my bed. That's where I feel the most protected and the most nurtured. And so I knew that was where I had to give birth." And Ryla added:

I got criticized for choosing a home birth, for not considering the safety of the baby. But that's exactly what I was considering! How could it possibly serve my baby for me to give birth in a place that causes my whole body to tense up in anxiety as soon as I walk in the door?

According to the technocratic model, the uterus is an involuntary muscle, and labor proceeds mechanically in response to hormonal signals. All eight homebirths were attended at home by midwives who see *the uterus as a responsive part of the whole*, and who therefore believe that *the best labor care will involve attention to the mother's emotional and spiritual desires, as well as her physical needs.* The difference between these two approaches is clearly illustrated by the responses of a physician and a midwife to the stopped labor of a client. The physician said, "It was obvious that she needed some pitocin, so I ordered it," and the midwife said, "It was obvious that she needed some rest, so she went to sleep, and we went home." Here is Susan's story:

Nikki [the midwife] kind of got worried towards the afternoon, because it just kept going on and nothing was changing. And she took me to the shower and said, 'Just stay in there till the hot water goes away.' And then Nikki asked my friend Diane, 'What's the deal with Susan? Is she stressed out about work?' And Diane said, 'Well, yeah, I think she's afraid to have the baby . . . that she's not going to be able to go back to her job.' So when I came back out Nikki said, 'Right now your job is not important. What you have to do right now is have this baby. This baby is important.' And I just burst into tears and was screaming at her and crying and I could feel everything just relax. It all went out of me and then my water broke and we had a baby in thirty minutes. Just like that.

It is important to understand that the holistic ideology held by these women both potentiates and

explains these dramatic experiences of mind-body and mother-child connectedness. Such experiences are common in the narratives of home-birthers [2, 36–38], as are experiences of birth as enhancing that integration. Kristin said:

Pregnancy and birth changed my whole view of myself. I had never valued myself as a woman. I valued the masculine aspects of my personality, but I considered my womanly traits weak and counterproductive. [Birth was] an incredible discovery of the power of my intuition, and of the value of trusting myself.

Integration as a life principle. Just as so many domains of life for the hospital-birthers in this study are chartered by a mythology based on separation, so the principles of integration and interconnectedness that these home-birthers internalize through pregnancy and birth spill over into many other areas of their lives. Many of them work in family enterprises centered around the home and some also homeschool their children. (One told me that she often thinks of her children as little moons in constant orbit around her sun, with all of them together, including the big planet, her husband, encompassed within the body of one solar system.) Even those who work in the professional world do the best they can to minimize the separation of the personal and professional realms; for them, that separation is a not a fundamental organizing life principle but a "necessary evil." For example, Susan reports that she is learning to utilize the principle of giving up control in the office, and is finding that the results include lowered stress levels and improved relationships with subordinates, who feel freer to innovate and take on more responsibility as she becomes less controlling, less separating of herself and her position from them. Elizabeth began experimenting with the same principle in her teaching, and finds that when she gives up trying to control her students by making them see things her way, potential confrontations transform into mutually productive discussions. Likewise, when her children become ill, Elizabeth rarely takes them to a doctor:

Since I learned so much about mind-body integration from giving birth, I know that most of the time, they can heal themselves, if I can just listen well enough to help them figure out what's really wrong emotionally. Once we handle that, usually their bodies can quickly take care of the rest.

Susan uses her experience of birth to conceptualize more concretely her link to all of life:

I would prefer that birth remain as natural as possible . . . Birth is what ties us to other forms of life, creates a bond between human women that goes back hundreds of generations, and bonds us to other species as well. The more technological birth becomes, the more it differentiates us, and the more unlike other species—and other members of our own species—we become.

Some commonalities

In my efforts to make clear the profound differences in how these two groups of women relate to the dominant technocratic model, I have no doubt

overemphasized the polarities which, although real, can obscure some important commonalities that need to be acknowledged. Most salient, I think, especially regarding the concept of the technocratic model as an agent of social control, is the fact that all of these women are far from resembling the passive victims of technocracy that many of their mothers may have been. All were active agents in their birthing, albeit in radically different ways—and in their relationships, pro or con, to the hegemonic technocratic model. For both groups, curiously enough, that agency took the form of control. We have seen the importance of control to the hospital-birthers; we might also note its importance to the homebirthers. For although they gave up trying to control their bodies, they very actively sought to retain control of other sorts of things, most particularly of their birthspace. “Nosy neighbors,” “nervous patients,” and “medical types” were to be kept out; besides partners and children, only carefully selected midwives and certain friends were allowed in. As Elizabeth put it, “I had to control my birth environment, so that nobody would control my birth.”

I find other important commonalities: the separation so pervasive in the lives of the professionals was also an issue for the homebirthers, some of whom had to deal with the same issues of separation from their children during working hours, even when they were working at home. Concomitantly, the integrative

principles so important to the homebirthers were also much in evidence in the lives of some of the professionals. Their techniques of integration included breastfeeding and bringing their children to the office both before and after birth. Most, even if they devalued feminine biological processes, did place high value on what they saw as the feminine qualities of nurturance and emotionality, and sought to bring these qualities into the workplace in order to “humanize” the office environment. For example, Louise, when asked what she thought about applying corporate strategies to family life, replied that it was more a question of applying family strategies to the business world:

I treat my clients as if they were as important to me as my family, and it pays off. They really respond, and I have turned this business around from losing to making money in less than a year because of it.

When Janis was head of the electric customer service office, she often worked intensively one-on-one with delinquent bill payers to help them develop an overall economic plan that would work for them. She said,

I still get visits from people who tell me that I turned their lives around for good, because instead of being their adversary, I nurtured them, and I'm proud of that. I think being a mommy makes me a better professional.

These women's integrative efforts not only included creating more personalized relationships with clients

Table 1. The technocratic and holistic models of birth compared. This table presents a comparison of the basic tenets of the hegemonic technocratic model and the alternative holistic model as they have emerged from the words and behaviors of the women in this study

The technocratic model of birth	The holistic model of birth
The body is imperfect, and separate from the self.	Self and body are One.
The body is mechanical—a vehicle, a tool for the self.	The body is an organism, intimately interconnected with the mind and the environment.
Life is controllable.	Life is not controllable.
The self should control the body	The body cannot be controlled.
Pregnancy is out-of-control, and therefore unpleasant.	Pregnancy is uncontrollable and pleasurable.
The pregnant body is a vessel for the fetus, who is a separate being.	Mother and baby are essentially One—that is, they form part of an integrated system that can only be harmed by dissection into individual parts.
Fetal growth is a mechanical process in which the mother is not actively involved.	The mother actively grows the baby.
The desires of the mother and the needs of the baby can and often do conflict during labor and birth.	The safety of the baby and the emotional needs of the mother are the same. The safest birth for the baby will be the one that provides the most nurturing environment for the mother.
Birth is a mechanical process.	Birth is hard work a woman does.
Technology is better than untrustworthy nature.	Nature is best, and can be trusted. Technology should support but not interfere.
The mind is more important than the body.	Mind and body are One—organically interconnected.
Active participation and control in life are good.	The most active participation can involve giving up control.
As long as a woman's mind is aware, she is an active participant in birth.	A woman gives birth with her whole being.
Pain is bad. Not to have to feel pain in labor is a modern women's intrinsic right.	Pain is an integral part of the labor process. To eliminate that part interferes with the systemic whole.
Medical knowledge is authoritative.	Intuition and inner knowing are authoritative.
To be strong and powerful, one must be in control.	Strength and power come from letting go of control.

and employees, but also friendlier environments—they redecorated sterile office buildings with softer colors, warmer lighting, conversational areas, artwork, and potted plants, finding that such efforts repeatedly paid off in increased productivity and enhanced intraoffice relationships.

THE TECHNOCRATIC MODEL AS AN AGENT OF SOCIAL CONTROL/PROFESSIONAL WOMEN AS AGENTS OF TECHNOCRATIC CONTROL

We recognize that the kinds of liberatory fantasies that surround new technologies are a powerful and persuasive means of social agency, and that their source to some extent lies in real popular needs and desires.

Constance Penley and Andrew Ross
Technoculture

Both anthropologists and feminists have interpreted birth practices as involving control over women's bodies, postulating a dichotomy between control by women and control by male-dominated institutions. But for the women in my study, this dichotomy misleads. The homebirthers see the letting go of bodily control as essential to giving birth, whereas the professionals define their bodies as separate entities that need to be controlled. They do not see *themselves* as being controlled by the medical establishment, but rather as manipulating its technocratic resources to control their own bodily experiences. Emily Martin suggests that such feelings of being "empowered and in control" are illusory, and that "losing control" in birth "can mean having one's body physically penetrated, as the Cesarean section rate . . . is now over 20% in many states" [22, p. 309]. But for these professional women (one of whom scheduled her Cesarean to take place between conference calls), having a Cesarean is not losing control but gaining it—given the models of reality they individually hold. Regardless of how they came to believe in the value of technocratic control, the fact that they do believe in and value such control is not an illusion, and their feelings of empowerment when they achieve such control through the agencies of the professionals they have hired for that purpose—their physicians—are not illusions either. Although I may personally perceive technocratic birth as disempowering for birthing women, as an anthropologist I know that those who participate most fully in a society's hegemonic core value system, as these women do, are most likely to feel empowered by and to succeed within that system, as these women have.

In *Society and Sex Roles*, Ernestine Friedl postulates that

in any society, status goes to those who control the distribution of valued goods and resources outside the family . . . Only as managers, executives, and professionals are women in a position to trade goods and services, to do others favors, and therefore to obligate others to them. Only as controllers of valued resources can women achieve prestige, power, and equality. Within the household, women who bring in income from jobs are able to function

on a more nearly equal basis with their husbands [39, p. 218].

Certainly, these professional women confirm Friedl's hypotheses—they are highly successful in the wider society as controllers of "valued goods and resources," and at home all but one reported that their marriages were extremely egalitarian. (While the 'Earth Mothers' in my study define themselves as successful, the criteria of the technocracy would judge them less so than the professionals, as they are not in general controllers of 'valued goods and resources,' although they do enjoy egalitarian marriages with husbands who share the same alternative worldview as they.) These highly successful women are in large part so successful because of that emphasis on control—in spite of the inevitable setbacks, they do seem to succeed at controlling much of what they set out to.

While some American women find value in the ideal of surrendering to the natural process of childbirth, these particular professionals do not. They want plenty of education and personal attention, but not when it is framed under a holistic paradigm; in fact, they perceive the holism of the homebirthers described above as frightening, irresponsible, limiting and disempowering. While homebirthers see the hospital as out-of-control technology running wild over women's bodies, these professionals experience the hospital and its technology as a liberation from the tyranny of biology, as empowering them to stay in control of an out-of-control biological experience.

In Reynold's analysis of technocratic mythology [3], the purified 'male' body is constructed through a series of ritual acts that cut off the 'natural' and polluting elements and replace them with scientifically chartered prosthetic devices. The effect of these rituals is to split holistic processes into a hierarchy of conceptually distinct parts arranged on a scale of 'primitive' to 'advanced.' The technocratic mythology enacted in these rituals thus produces an increasingly fragmented world in which intellect is separated from body, one's own body from other bodies, and human bodies from the rest of organic nature.

Proponents of a mythological system tend to both create and experience the world in its image. Childbirth educators and midwives today often speak of the nineties as the age of the 'epidural epidemic'—an apt metaphor. The deeper we probe into the correlations between technocratic mythology and the beliefs of these professional women about birth and their female bodies, the more we can understand why this is so. As the epidural numbs the birthing woman, eliminating the pain of childbirth, it also graphically demonstrates to her through her lived experience the truth of the Cartesian maxim that mind and body are separate, that the biological realm *can* be completely cut off from the realm of the intellect and the emotions. This microcosmic mirror of our technocratic society casts its reflection in ever-widening

ripples in the pond of social life. As the babies so mechanically birthed are carried off to the nursery and placed in their separate bassinets, and spend much of infancy in their separate cribs and plastic carriers, so in later years they will be carried off to day care and to school. Ours is a nation founded on principles of separation, and we enact and transmit those principles to each other in the spatial and interactional patterns we have developed between mind and body, mother and baby, parents and child.

CONCLUSION: THE TECHNOCRATIC MODEL AS A TEMPLATE FOR THE FUTURE?

The technocratic model of nature and society . . . is a folk system of belief, with no more claim to universal validity than any other theory created by savages.

Peter C. Reynolds

Stealing Fire: The Mythology of the Technocracy

In American hospital birth, socially constructed categories of gender have been reified by Western medicine both through the definition of pregnancy as a dysfunctional mechanical process and through the selective application of medical technologies for the de- and reconstruction of that process—the One–Two Punch. Thus, the medical management of birth has become a cultural expression of the core values of the technocracy. Fortunately, birth itself is an amazingly resilient natural process. Midwives can guide and nurture its natural course, or physicians can dissect and technocratically reconstruct it; either way, it will still turn out well almost all of the time. The real issue is not what is “best” in any absolute sense, but what aspects of culture are expressed and perpetuated, what cultural lessons are taught and learned during the production of new social members. (As I have shown in an earlier work [2], the issue is not even one of safety—planned, midwife-attended home birth does not increase risk.) Salmon will still spawn either way, but those ways have vastly different meanings. One exists apart from us and the other because of us. It is easy to see which one infuses our own existence with the most meaning. In the first situation, we are, as in the Native American view, a small integral part of a vast systemic whole—God’s creation. In the other, we are the creators, we *are* god. To technocratize a natural process is to create it in the image we have chosen as the guiding metaphor for our own evolution, and thus to confirm that evolutionary path as the right one. In other words, Punch Two reifies our cultural system and deifies us, allowing us the illusion of a degree of control heretofore unknown on the planet.

As feminists, we have fought for the right to make our bodies our own, to metaphorize, adorn and technologize as we please. Our culturally shaped and embedded choices have granted us huge successes in technocratic society and highly technocratized bodies in which the biological processes of pregnancy, birth and motherhood can take place at some distance

from our emotional and nurturing selves. The intensifying quest of many women for distance from these processes leads inevitably to the question: as women increasingly try to break out of the confines of the biological domain of motherhood, will/should our culture still define that domain as primarily belonging to women? What do we want? As we move into the 21st century, will the options opened to us by our technology leave equal conceptual room for the women who want to *be* their bodies, as well as for the women for whom the body is only a tool? In the new society we are making, will the homebirthers and the homeschoolers, the goddesses and the Earth Mothers, have equal opportunity to live out their choices alongside those who want to schedule their Cesareans, and those who want their babies incubated in a test tube? As researchers like Ehrenreich and English [9, 40], Corea [8], Rothman [27, 41], and Spallone [42] have shown, the patriarchy has been and is only too willing to relieve us of the necessity for our uniquely female biological processes. To what extent do we desire to give up those processes that since the beginning of the species have defined us as women, in order to merge into the technocracy and succeed on its terms?

When asked about her vision for the future of American birth, Joanne, the professional who did not want to “drop into biology,” spoke of the benefits of genetic engineering, saying, “I think people in the future are going to expect medicine and science to have more answers.” Her prediction is echoed in *Life* [4, p. 57]:

Nothing will have more of an impact on the future than medical science . . . Anyone thinking of starting a family will begin with a Sears catalogue of options: A woman wishing to postpone childbearing for career development may want to freeze a few eggs for later use; a woman who is unable to conceive may want to ‘adopt’ an embryo deposited by an anonymous donor at a frozen embryo bank, then carry it in her own body.

In contrast to such futuristic scenarios of separation, Tara’s vision for the future makes an explicit connection between the ecological principles of the environmental movement and home birth:

How do we change this trend toward more drugs for birth, more machines? . . . If we get back to caring about the Earth, being caretakers, it would be difficult not to translate that into other parts of our lives. Sooner or later people will ask themselves how they can give birth drugged and hooked up to machines, when they are trying to stop treating their own Mother Earth that way.

Ryla, an ecofeminist like Tara, is engaged in research on water birth, and on swimming in the ocean with dolphins in order to tap the potential of interspecies communication—two futuristic extremes she was drawn to by the holistic model’s emphasis on interconnectedness. Others such extremes of interconnectedness are represented by those who attempt to conceive babies consciously [43] and to enhance psychic communication between mother and child [44]. Many

such holistically-oriented individuals are consciously attempting to counterbalance the disembodied future towards which the technocratic model seems inexorably to be leading us.

Extremes, on both ends of the spectrum, play an important role in defining the outer edges of the possible and the imagined. Most especially, those at the extreme of conceptual opposition to a society's hegemonic paradigm—the radical fringe—create much more room for growth and change within that society than would exist without them. How much more technocratic might hospital birth look, if no one in this country believed that mother and baby are One, that there is an inner knowing that can be tapped, that fulfilling the emotional needs of the mother is the best approach to the health of the child?

But as Reynolds points out, the technocratic paradigm *is* intrinsically hegemonic, and it sees its own survival in an endless and accelerating race to transform nature into man-made analogs. Technocratic assumptions pervade medical practice and guide almost all reproductive research, so no middle-class woman who gives birth at home can fail to be aware that she is battling almost overwhelming social forces that would drive her to the hospital. The homebirthers in my study who espouse the holistic model do so in direct and very conscious opposition to the dominant technocratic mythology and its ritual One-Two Punch. They represent the fewer than 1% of American women who choose to give birth at home. I suggest that the importance to American society of this tiny percentage of alternative model women is tremendous, for they are holding open a giant conceptual space in which women and their babies can find mythological room to be more than mechanistic antagonists. Homebirthers I have interviewed use rich images to describe pregnancy, labor and birth that work to humanize, personalize, feminize, and naturalize the processes of procreation. They speak of mothers and babies as unified beings, complementary coparticipants in the creative mysteries, entrained and joyous dancers in the rhythms and harmonies of life. They talk of labor as a river, as the ebb and flow of ocean waves, as ripened fruit falling in its own good time. They search for myths from indigenous cultures that honor the deep, dark, bloody secrets of birth:

For example, Changing Woman dancing with the bloody scalp evokes an immediate image of the bloody birth opening through the pubic hair. That this image is evoked as a dance of triumph and joy, rather than as a loss of body and soul integrity, is healing. Death in this image is depicted as integral to birth. What can occur in the birthdance is a dying to the Self, a transcendence of the egoic control that forever seeks to separate us from our experience. So freed, the birthing woman now has the possibility to experience the Mystery [45, pp. 13–14].

Homebirthers in the United States are an endangered species. (As part of a fundraising effort, a group of local midwives is selling T-shirts with whales painted on the front; the caption underneath reads "SAVE

THE MIDWIVES!") Should they cease to exist, the options available in American society for thinking about and treating pregnancy, birth and the female body would sharply decrease, and our society would be enormously impoverished. Should they thrive, we will continue to be enriched by the alternative mythologies they are actively engaged in creating.

The potential significance of those mythologies is heightened by the conclusion of *Stealing Fire* [3]. After a careful review of technocratic developments in physics and biology, Reynolds ominously notes:

A logically consistent eschatology, couched in the terminology of biological science, is currently building in the subculture of laboratories, medical institutions and government agencies, both in the United States and in other countries with a heavy commitment to the imagery of technocracy. Although the system is not yet institutionalized ... [its] constellation of beliefs can be summarized as follows:

- Human nature must be superseded if the species is to advance, so we need to take control of the evolutionary process by means of molecular biology.
- However, sexual coupling between men and women for reproductive purposes is a primitive technique that perpetuates sexist relationships.
- To be liberated from sexism, women must abandon childbirth in favor of asexual reproduction based on more modern, scientific procedures.

Reynolds concludes that the technocracy is ultimately antithetical to both sexes, as it seeks to replace biological evolution, with its messy blood and mucous, with "a bloodless, fearless, and disembodied state in which 'nature' is transformed into radiant energy" [3, p. 201]. Reynolds predicts widespread disenchantment with technocratic mythology when it finally becomes apparent that this ultimate evolutionary step is forever beyond the abilities of science and technology to achieve. I am not convinced that the technocratic scenario will unfold as Reynolds suggests, but should such disenchantment come to pass, perhaps at that point our culture will turn toward those who never aspired to the technocratic goal for alternative mythologies—organic mythologies that can charter a vital and vitalizing dance to the music of an embodied earth.

REFERENCES

1. Davis-Floyd R. E. The role of obstetrical rituals in the resolution of cultural anomaly. *Soc. Sci. Med.* **31**, 175, 1989.
2. Davis-Floyd R. E. *Birth as an American Rite of Passage*. University of California Press, Berkeley, 1992. Birth practitioners and social scientists usually refer to this paradigm as "the medical model." In earlier works [1, 6, 21, 48] I have called it "the technological model" in order to stress its connections to the technologically-oriented core value system of American society. But all societies have technologies, and Reynold's work [3] has made me realize that the term 'technocratic' is a more precise representation. 'Technocracy' connotes a society that supervalues and organizes itself in terms of its technologies and is bureaucratic, autocratic, and hierarchical; thus this term is an apt referent for contemporary

- American society. *Websters* defines a technocracy as a "society managed by technical experts." American birth is likewise defined by its management by technical experts, and thereby the hegemony of the technocratic model is extended into the cultural shaping of childbirth.
3. Reynolds P. C. *Stealing Fire: The Mythology of the Technocracy*. Iconic Anthropology Press, Palo Alto, CA, 1991.
 4. Visions of tomorrow, *Life Magazine*, February, 50, 1989.
 5. Ellul J. *The Technological Society* (Translated by Wilkinson J.). Vintage Books, New York, 1964. (First published in French in 1954.)
 6. Davis-Floyd R. E. The technological model of birth. *J. Am. Folklore* 100, 479, 1987.
 7. Martin E. *The Woman in the Body*. Beacon Press, Boston, 1987.
 8. Corea G. *The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs*. Harper and Row, New York, 1985.
 9. Ehrenreich B. and English D. *Complaints and Disorders: The Sexual Politics of Sickness*. The Feminist Press, Old Westbury, NY, 1973.
 10. Leavitt J. *Brought to Bed: Childbearing in America 1750-1950*. Oxford University Press, New York, 1986.
 11. Mendelsohn R. A. *Mal(e)Practice: How Doctors Manipulate Women*. Contemporary Press, Chicago, 1981.
 12. Oakley A. *The Captured Womb: A History of the Medical Care of Pregnant Women*. Basil Blackwell, New York, 1984.
 13. Payer L. *Medicine and Culture: Varieties of Treatment in the United States, England, West Germany, and France*. Henry Holt and Co., New York, 1988.
 14. Wertz R. W. and Wertz D. C. *Lying-In: A History of Childbirth in America*, 2nd edn. Free Press, New York, 1989.
 15. Nolen W. A. How doctors are unfair to women. In *Culture, Curers, and Contagion* (Edited by Klein N.) Chandler and Sharp Publishers, Inc., Novato, CA, 1979.
 16. Abramson M. and Torghele J. R. Weight, temperature change, and psychosomatic symptomatology in relation to the menstrual cycle. *Am. J. Obstetrics Gynec.* 81, 223, 1961.
 17. Ritter C. A. Why pre-natal care? *Am. J. Gynec.* 70, 531, 1919.
 18. Feldman G. and Freiman A. Prophylactic Cesarean section at term? *New Engl. J. Med.* 312, 19, 1264, 1985.
 19. Beecham C. T. Natural childbirth: A step backward? *Female Patient* 14, 56, 1989.
 20. Cunningham F. G., Macdonald P. C. and Gant N. F. *Williams Obstetrics*, 18th edn. Appleton and Lange, Norwalk CT, 1989. For a detailed cultural analysis of the first seventeen editions of *Williams Obstetrics*, see Hahn R. A., Divisions of labor: Obstetrician, woman and society in *Williams Obstetrics*, 1903-1985. *Med. Anthropol. Qrtly* 1, 3, 256, 1987.
 21. Rothman B. K. Plenary Address, Midwives Alliance of North America Conference, New York City, November 1992.
 22. Martin E. The ideology of reproduction: the reproduction of ideology. In *Uncertain Terms: Negotiating Gender in American Society* (Edited by Ginsburg F. and Tsing A. L.), pp. 300-314. Beacon Press, Boston, 1990.
 23. Arms S. *Immaculate Deception*. Bantam Books, New York, 1981 (orig. pub. 1975).
 24. Hazzell L. D. *Commonsense Childbirth*. Berkeley Medalion Books, New York, 1976 (orig. pub. 1969).
 25. Haire D. The cultural warping of childbirth. International Childbirth Education Association, Minneapolis, MN, 1977.
 26. Romalis S. (Ed.) *Childbirth: Alternatives to Medical Control*. University of Texas Press, Austin, 1981.
 27. Rothman B. K. In *Labor: Women and Power in the Birthplace*. Norton, New York, 1981. (Reprinted in paperback under the title *Giving Birth: Alternatives in Childbirth*. Penguin Books, New York, 1985).
 28. Shaw N. S. *Forced Labor: Maternity Care in the United States*. Pergamon Press, New York, 1974.
 29. The results of this study, reported in detail in *Birth as an American Rite of Passage* [2, Chap. 5] can be summarized as follows. Out of 100 women interviewed: 70 were comfortable with their technocratic births to varying degrees; 42 of them had started out with the expressed intention of "doing natural childbirth," but ended up with (and were quite accepting of) highly technocratic births instead; 28 wanted technocratic births to begin with, and were generally satisfied with the ones they got; 15 desired and achieved natural childbirth in the hospital; 9 desired natural childbirth but did not achieve it, and were seriously disturbed as a result; 6 gave birth at home.
 30. Fifteen of these interviews were conducted and transcribed by the following students: Kim Durham, Michelle Gomez, Melody Hatfield, Courtney Hollyfield, Lori Pressley, Erin Rogers, and Mark Thompson. I wish to express my appreciation to these students for their hard work, their enthusiasm, and their continuing inspiration, and to Adela Popp for her excellent tape transcriptions.
 31. I asked all of the professionals about the notion of applying corporate management techniques to family life, such as scheduling family summit meetings, etc. A few thought this strategy would detract from the unstructured flow that they saw as the essence of the personal, as opposed to the professional domain, but most heartily approved of the idea as 'time-efficient.'
 32. Jordan B. and Irwin S. The ultimate failure: court-ordered cesarean section. In *New Approaches to Human Reproduction* (Edited by Whiteford L. and Poland M.). Westview Press, Boulder, 1989.
 33. Jordan B. Technology and the social distribution of knowledge. In *Anthropology and Primary Health Care* (Edited by Coreil J. and Mull D.). Westview Press, Boulder, 1990.
 34. Please note that I am not preaching here, just analyzing—my own family life pretty well reflects this model.
 35. Irwin S. and Jordan B. Knowledge, practice, and power: court-ordered Cesarean sections. *Med. Anthropol. Qrtly* 1, 3, 319, 1987.
 36. Ashford J. I. *Birth Stories: The Experience Remembered*. The Crossing Press, Trumansburg, NY, 1984.
 37. Davis-Floyd R. E. Intuition as authoritative knowledge in midwifery and home birth. *Med. Anthropol. Qrtly*. Special Issue on *The Social Production of Authoritative Knowledge in Childbirth*, forthcoming 1994.
 38. Richards L. *The Vaginal Birth after Cesarean Experience*. Bergin and Garvey, South Hadley, MA, 1987.
 39. Friedl, Ernestine. Society and sex roles. In *Anthropology: Contemporary Perspectives* (Edited by Whitten P. and Hunter D.), pp. 215-219. Scott Foresman, Glenview IL, 1990 (orig. pub. 1978).
 40. Ehrenreich B. and English D. *Witches, Midwives, and Nurses: A History of Women Healers*. Feminist Press, Old Westbury, New York, 1973.
 41. Rothman B. K. *Recreating Motherhood: Ideology and Technology in Patriarchal Society*. W. W. Norton, New York, 1989.
 42. Spallone P. *Beyond Conception: The New Politics of Reproduction*. Bergin and Garvey Publishers, Granby, M. A., 1989.
 43. Parvati-Baker J. *Conscious Conception: Elemental Journey through the Labyrinth of Sexuality*. Freestone Publishing, Monroe, Utah, 1986.
 44. Peterson G. *Birthing Normally: A Personal Growth Approach to Childbirth*. Mindbody Press, Berkeley, 1981.
 45. Parvati-Baker J. The shamanic dimensions of childbirth. *J. Pre- and Perinatal Psychol.* 7, 5-22, 1992.