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CHAPTER

\textit{Buscando La Forma}

An Ethnography of Contemporary Maya

Childbirth in Yucatan\(^1\)

The Ethnographic Record

The peninsula of Yucatan, Mexico—its archaeology and people—has been an object of anthropological investigation for many years. The largest body of ethnographic work for this area was done almost sixty years ago by investigators connected with the Carnegie Institute of Washington (Shattuck 1933; Redfield and Villa Rojas 1990; Redfield 1941; Steggerda 1941, 1943; Villa Rojas 1945. See also Gann 1918; Redfield 1950; Reed 1964; Thompson 1974; Press 1975; Elmendorf 1976; Jones 1977). However, not many of these authors inquired into childbirth practices, and of those who did, none had the opportunity to be present at births. Robert Redfield, who gives a fairly extensive account that is widely quoted, found that the Maya midwife he attempted to interview was "uncommunicative." His description of birth is based on information gained from native male informants, amplified by the report of Kathryn McKay, a nurse associated with the Carnegie project. Nurse McKay did not see a birth either, but she interviewed several native midwives. Her account appears as Appendix D to Robert Redfield and Alfonso Villa Rojas' (1990) ethnography.\(^2\) No firsthand reports of births in Yucatan existed in the literature before the publication of the first edition of this book in 1978.

\(^1\) This chapter was coauthored by Nancy Fuller, who was my collaborator in Yucatan from 1972 through 1980. The use of the plural pronoun "we" throughout this chapter is intended to acknowledge her collaboration.
Fieldwork Conditions

It seems appropriate, in view of the nature of the event under discussion, to outline our relationship with the women whom we attended and with Doña Juana, the Maya midwife who has been our principal collaborator. During our first stay in the community where Doña Juana practices, we had become acquainted with her through the introduction of one of our Maya neighbors. She is about sixty years old, of imposing stature, dignified, with a deep voice and a ready laugh. Doña Juana is proud of her work, and runs her affairs with competence, foresight, and humor. She is head of an extended matrifocal household, the composition of which changes from year to year. Typically, it might consist of the midwife, her son, her son’s wife and their three children, her son’s three children from a previous marriage, her grandson with his wife and two children, a recently married granddaughter and her husband, and another granddaughter with her husband and four children. Most young couples live with the man’s family until they accumulate enough resources to buy a piece of land of their own, but if mother-in-law and daughter-in-law don’t get along (or for a variety of other reasons) they may opt to move in with the woman’s family.

Doña Juana’s husband, a mild-mannered and kind old man, died during the summer between our first and second stays. He had been a milpero (subsistence farmer) and a hammock-maker, but had been ill on and off during the preceding year and had pretty much depended on her for support. She spoke of her difunto esposo (deceased husband) with affection, but also with a sense of duty fulfilled and a burden lifted. Since one of us is divorced, a topic she likes to discuss with us is whether she should buscar otro hombre (look for another man). Her general feeling is that she is independent now and doesn’t need one. A typical line of musing goes something like this:

Look at it this way. Yesterday I did an inversion (turning the baby in utero) and I made fifty pesos. Then a sobada (massage) for a senora who lives on the main street—fifteen pesos. Then fifteen pesos for something else. When I came home, there was a senora waiting for me. Ten pesos for a sobada. And another one at night. So I made one hundred pesos. I am free now. What do I need a man for, just to wash his pants?

The men of the household are frequently away, either working in the fields or doing wage labor, and after a short time we found that we had become, in many ways, a part of the daily round of female activities in Doña Juana’s compound. We spent much time there, sitting around drinking cokes together,

doing tejido, making tortillas, playing with the children, hauling water from the well and, inevitably, talking. In the course of this daily interaction there developed between us a mutual liking and an appreciation of the others’ personality characteristics and outlook on life. These bonds were cemented through the many hours we spent together—often cramped, hot, and tired—waiting for a baby to be born; and they became visible in the almost daily mutual visiting and in shared activities such as going to the market together or a joint pig-buying expedition. We were often invited to stay for meals and sometimes, when a birth was imminent, we would sling our hammocks in Doña Juana’s back house and stay overnight.

Doña Juana was pleased with the interest we took in her profession and was always ready to talk about el trabajo (the work). We, in turn, explained our own work to the women as wanting to find out how people in different countries do certain kinds of things (such as having babies or weaving hammocks).

2 All names, of course, have been changed.
3 This chapter is written in the ethnographic present.

*Tejido,* primarily but not exclusively a women’s and children’s activity, is the braiding of strips of palm leaves to be sold to sombrero makers for petty cash.
However, when Doña Quiti (the Yucatecan women’s name for Brigitte Jordan) became involved in assisting during births, they began to treat us, in many ways, as if we were learning to become midwives—in spite of our persistent explanations that we were neither *doctoras* (physicians) nor *parteras* (midwives) but anthropologists. Even Doña Juana, who knew more about our work than anybody else in the community (having been the recipient of innumerable questions not only about birth but also about their way of life in general) did not take our protestations entirely seriously. Once, when it looked like two births might occur at the same time, she suggested that she would take one and Doña Quiti should take the other. When Doña Quiti refused politely the midwife said, “You know how to do everything now. The only thing you still have to do is catch the baby.”

In spite of our persistent attempts to convince them otherwise, the women saw our interest as existing on the object-level, rather than on the meta-level, a pervasive problem in crosscultural communication (Jordan and Fuller 1975). In other words, they never quite understood that we were there to study their ways of doing birth, but rather assumed that we were learning to become midwives ourselves.

Doña Juana’s mother had been a midwife too, but she herself did not begin to practice until some years after her mother’s death, when she was about forty years old. It is not clear how much of her knowledge was handed down by her mother. Doña Juana says that she learned how to attend women in childbirth from a Doctor Sanchez who provided her with instructions and equipment. Doctor Sanchez is long dead, but he functions for her somewhat like a mythical ancestor who can be called upon to legitimize what she does. Especially during the early phases of our relationship, she would frequently cite the authority of *el difunto Doctor Sanchez* (the defunct Dr. Sanchez) when questioned about her procedures. (See McClain 1975 for similar claims by indigenous midwives in another part of Mexico.) Comparison with the report of Nurse McKay, however, shows that much of what she and the women do predates the defunct doctor.

Doña Juana also attended a course for midwives given by a government agency in Mexico City some years ago. She is generally considered the best midwife in town and is on mutually respectful terms with the chief of the town’s small hospital. She told us, for example, that he had come to her house, embraced her in greeting, and asked her to go to Mexico City for the course. We also heard about the time when she took a woman to the hospital and then squarely put the blame for the ensuing complications on the doctor. She quoted herself as saying to him, “Of course there is trouble. You ruptured the membranes [reventastes la bolsa—note familiar form of address], so what do you expect?” There is no particular deference in her interactions with medical doctors. She acknowledges their expertise in certain areas (e.g., manual removal of the placenta), but she is also aware of her own special expertise,
videotaping requires assistants for transporting the equipment, extra space for setting it up, and watchful management of the confusion engendered by boxes of tape, auxiliary batteries, stray cables, and the like. It is thus considerably more intrusive than our initial data collection with paper, pencil, and tape recorder. Nevertheless, we have found extensive cooperation and willing accommodation to the special requirements of the technology. We have videotaped births as well as perinatal customs and procedures such as prenatal massages, the external version of a malpositioned baby, the bath on the third postpartum day (taken in an infusion of herbs to make the milk come in), and the massage on the twentieth postpartum day during which the woman’s pelvic and head bones are “tied” in order to return them to their prepregnant state. As in the United States, Holland, and Sweden (see chapter 4), women in Yucatan were not at all resistant to the creation of a visual record of their births.

The Birth Setting

Births in this community typically take place at home, either in the woman’s own compound or, especially for a first birth, in her mother’s. A Yucatecan compound constitutes the family’s private living space. It is set back from the road behind a stone wall and contains several structures. There is a main house that might be of the modern type, built of stone with a corrugated metal roof, or else it may be constructed in the traditional way, with wattle-and-daub walls and a steep, palm-thatched roof. Either way, it is likely to be a one-room house. The traditional house is oval, has a floor of pressed dirt or tile, and two doors but no windows.

Formal visitors are entertained in the main house. During the day, this is a place for embroidery or hammock-weaving, a quiet nap, children’s marble games, and the like. At night, several hammocks are let down from the rafters and the house serves as the family’s sleeping quarters. A child may be born in the main house or in an auxiliary building, of which most compounds contain several. Such huts serve a variety of purposes: from storage to extra sleeping space to business enterprises such as hat-making, shoe-making, embroidery, pottery, tailoring, or rope-making.

In every compound there is also a separate cooking hut with an open fire and, near the well, a raised trough—often sheltered by a palm-thatched roof—for the daily clothes-washing. Sometimes there is a small bath house built of sticks interwoven with palm leaves in which household members take their daily bath with water heated over the kitchen fire. A walled-off area in the back serves as the outdoor privy. Pens and coops for chickens, turkeys, and pigs complete the inventory of the compound’s structures.
What is most striking about life in the compound is the extent to which the various activities intermingle. There are specialized use areas (such as the tortilla-maker’s place next to the cooking fire), but there is little or no private space. Instead, the whole compound constitutes an extended living area where compound residents, visiting family members, neighbors, and participants in various kinds of business transactions find appropriate spots for now separate, now joint, enterprises.

Inside the windowless house, daylight filters through the palm thatching; at night a single electric bulb provides some illumination. The furnishings generally include a narrow wooden table up against a wall, several low stools or chairs, a wooden chest or wardrobe, a few cardboard boxes, and perhaps a religious shrine or a television set. Hung from the roof beams or from wall hooks are the hand-woven hammocks that are let down at night. During the day, when not in use, they are slung up out of the way.

When a woman is in labor, various arrangements are made to separate the birth area from public space. A blanket may be hung from the rafters, screening the woman’s hammock from the rest of the room, or the entire house may be held off-limits to all but the midwife and the expectant mother’s “helpers” (ayudantes). When a birth is in progress, the daily life of the family continues outside the birth area. In a house that has been partitioned, women who are not directly involved in the birth may be sitting on the public side, chatting and doing the inevitable tejido; a child may be napping in a hammock, and outside, older children may be clamoring for attention. People attending the birth are frequently called to deal with outside events (a proposed trip to the market, for example, or the unloading of a truck full of rocks for the foundation of a new house in the compound). The familiar sounds of everyday life surround and permeate the scene: radios blaring, the noise of roosters, pigs, turkeys, passersby, and every so often a distant truck or motorcycle.

**Prenatal Care**

By the time the family sends for Doña Juana during the early stages of labor, she has already seen the expectant mother several times. The first prenatal visit is somewhat special. At this time the pregnant woman and the midwife determine the probable date of birth: nine calendar months from the day following the completion of the woman’s last menstrual period. They assume that conception is most likely to occur in the immediate postmenstrual period, a notion that follows logically from their belief that menstruation is the point at which the uterus opens to release the accumulated blood that has been dripping in it steadily throughout the preceding weeks. Immediately after the menses, the uterus is thought to be still open and, therefore, women believe that they have the greatest chance of becoming pregnant at that time (cf. Snow and Johnson 1977). If it should happen that the child is born after the projected birth date, Doña Juana conjectures that the husband must have been out of town and that consequently conception must have occurred later than the first postmenstrual day.

Doña Juana carries a notebook in which she usually enters the names and due dates of the women, and later on, the outcome of the birth (male or female, live birth or stillbirth). However, we have been present at some births that did not appear in the notebook. The notebook, then, seems to function in a similar way to that of other specialized objects in her “tool kit”: it is available when necessary (if, for example, somebody should ask her a question like: “And do you keep a record of the births you attend?”) but as long as it is used sometimes, there is no great concern with consistency and completeness. 6

If Doña Juana and the expectant mother are not already well acquainted—in many cases Doña Juana has attended previous births in the family—it is during these prenatal visits that they get to know each other. In addition to the woman’s reproductive history, Doña Juana finds out about family relations and attitudes, more through her presence in the woman’s compound than by direct questioning. Informally, she learns such things as who can be counted on to be present as a “helper” during the birth, whether the husband has experience in assisting his wife, and in general, what sort of a person the pregnant woman is. Doña Juana forms an estimate of how well the woman will be able to withstand pain, whether she is apt to complain for trivial reasons, how important considerations of modesty are to her, whether she is reassured by traditional practices (such as the reciting of prayers, or the burning of rosemary under the bed to ward off evil spirits?) and so on. The pregnant woman, in turn, becomes accustomed to Doña Juana’s way of handling

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5 This is equivalent to Nagele’s Rule, which computes the expected date of confinement (EDC) by adding 7 days to the first day of the last menstrual period (LMP), subtracting 3 months, and adding 1 year. EDC = LMP + 7 days - 3 months + 1 year (Benson 1971:47).

6 During a subsequent fieldtrip, we did a thorough check of her records for the past few years. It turned out that while she is not particularly conscientious about entering births into the notebook immediately, there is every reason to believe that she always does so eventually. We found entries for all the births we knew about and found, furthermore, that she is able to remember the outcome and circumstances of particular births in great detail, even after several years. We also discovered that she could give us the locations of the almost three hundred births that she had attended in the last three years with only very minor inconsistencies. (Among these three hundred consecutive births, there were two stillbirths recorded.) Thus, her memory appears to be extremely accurate, and our initial assumptions turned out to be wrong—an ever-present danger in anthropological research.

7 Maya folk belief divides most substances into “hot” and “cold.” Rosemary is “hot,” and serves to dispell the evil, “cold” spirits that can come in from the bush and might do harm to the woman and child.
problems, to her explanations in the form of stories and case histories and, during the routine sobada (massage), to the comforting touch of her experienced hands.

The massage is an integral part of Doña Juana’s skills. She gives not only prenatal massages but also various types of curative and diagnostic massages to both men and women. Thus, she will apply her skilled hands to sore muscles, sprains, abdominal trouble, and non-specific complaints, as when a person “just doesn’t feel well.”

On one occasion we had the opportunity to experience a Yucatecan massage ourselves. On the gleeful instigation of the women of the household, it was decided that we would exchange massages: we would give Doña Juana what we called a “sobada California,” while she would do a “sobada Yucateca” on us. We noted that there were two interesting features of this massage which differ from the prenatal massage described below. With a diagnostic massage, Doña Juana does extensive abdominal manipulation that involves locating an ethno-anatomical organ called the tite and rearranging internal organs in relation to it. 8 Secondly, we found out that she is able to palpate (to examine by touching) a non-pregnant uterus externally by pushing a rolled-up blanket under the woman’s hips. She said that this is particularly important in cases of infertility.

The sobada is the most important component of Doña Juana’s prenatal visits. Structurally, such visits consist of three segments: greetings, massage, and leavetakings. Almost all of the “business” that needs to be done is transacted in the course of the massage. Negotiations with the senior household woman, determination of the date of the next visit, and similar items occur in the leavetakings. This is in strong contrast to our own society’s structure of prenatal interaction between pregnant woman and practitioner, where there

8 The tite, according to Dona Juana, is “the machinery that makes the body work,” the central organ that pumps blood into the four quadrants of the body. Belief in the tite is widespread in the region because it is an integral part of Maya folk anatomy (Mary Elmendorf and Alfonso Villa Rojas, personal communication). In a healthy person, the tite is located directly under the navel, where one can feel it pulsating (the Western biomedical explanatory system identifies this pulsating as the abdominal aorta), but during pregnancy and birth, during heavy exertion, and for a wide variety of other reasons, it may get displaced. This is an extremely serious matter which must be corrected as soon as possible by massaging it back into place. Otherwise the affected individual will suffer from general malaise, headaches, gastro-intestinal disturbances, anemia, insufficient milk, and the like (see also Villa Rojas 1980). The existence of this ethno-anatomical structure is unknown to practitioners of Western medicine in the region, even though it is one of the reasons why Maya women are tremendously resistant to Cesarean sections and tubal ligations. Within the Maya system, surgery in the area where the tite is located is equivalent to brain surgery in our culture, certainly not something most women would want to undergo for having a baby or for contraceptive purposes.

9 The huipil is the traditional embroidered Maya dress. Alternatively, a woman may wear a sleeveless city-style shift, depending on whether she considers herself a mestiza or a catrina. In local use, these terms refer only to styles of clothing, and not to racial or ethnic background. Mestiza women wear the huipil, rebozo (shawl), and fustam (long white cotton underskirt); catrinas wear city dress. Dona Juana, herself a mestiza, attends both mestizas and catrinas. Furthermore, it is not unusual for clothing styles to be mixed in a given family, according to individual preference.

10 The vitamin B complex she prescribes is to be taken during the first three months of pregnancy and is available in both liquid and injectable form. One injection consists of 100 mg of B1; 1 mg of B2; 50 mg of B3 (nicotinamide); and 5 mg of B6. In this community, injections of vitamins, penicillin, and the like, are liberally prescribed and often self-prescribed. There are many people who know how to administer them and will do so for a small fee, the equivalent of five oranges.
to the woman and the midwife. Rather, anybody who might happen to be present, most typically other women from the compound, can join in. It is worth noting that, in contrast to births, related men, such as a father or brother-in-law, as well as children are not excluded from the midwife’s prenatal visits. We have not, however, observed teenagers at that time.

After a few minutes of light circular movements, the midwife “lifts up the uterus” by pushing her fingertips into the woman’s side underneath the pregnant uterus and pulling it towards her. They say this has to be done so that, in the end, the afterbirth won’t stick. Doña Juana then moves over to the woman’s other side and lifts the uterus from that side too.

The next component within the prenatal sobada is a back massage. The woman turns on her side and Doña Juana applies firm and even pressure to her back, moving the palm of her hand downward from the woman’s spine. Then the woman turns over and the same movement is repeated for the other side of her back.

During the last phase, Doña Juana raises the woman’s knees so that her feet are flat on the ground close to her buttocks, grasps her hands, and pulls her to a standing position. After the massage, the woman is expected to rest in her hammock for a while.

If the midwife has determined in the course of the massage that the baby is in a breech (bottom-first) or transverse (side-lying) position, she will do an inversion, an external version of the baby in utero. She locates the baby’s head and hip and by applying strong, even pressure to these parts, shifts the baby’s body into the more favorable head-down position. This procedure is sometimes painful but since the perceived alternative is a Cesarean section in the hospital, the women much prefer to tolerate a few minutes’ discomfort at home. Doña Juana will do a version as often as necessary from the eighth month on, up to the time of birth. She attempts to avoid a breech birth if at all possible and is expert at turning the baby even during labor, as long as the breech is not yet engaged (i.e., as long as the baby has not yet become firmly wedged in the birth canal in the breech position) (Jordan and Fuller 1979). Breech births do happen on occasion, but when we asked what to do in such a case, she gave us not a series of actual case histories (her usual mode of explanation) but a general set of instructions like: you would have to watch that the arms come down alongside the body and if they don’t, you would have to pull them down. However, since Doña Juana does not do vaginal examinations and believes that the midwife’s hands should stay out of the birth canal, we doubt that she would attempt such a procedure.

Interestingly, external cephalic version was widely performed in the United States until the 1950s and is commonly employed by traditional midwives the world over, as well as by trained midwives and physicians in Europe. In the United States the standard management strategy for breech and other malpresentations is Cesarean section. (See Jordan 1983, 1984, for a comprehensive review of the biomedical literature on external version.)
The Birth Event

When a messenger (most likely the woman’s husband) arrives at Doña Juana’s compound to tell her that one of her enfermas\(^{11}\) is in labor, she picks up her case of equipment and walks to the woman’s house to assess the situation. In her case she carries a sheet of clear plastic to place under the expectant mother; a heavy clear plastic apron that she will put on during the later stages of the birth; a gown, cap, and face mask acquired during the Mexico City course; a metal box with a syringe and two needles; and two stainless steel bowls, one for washing her hands and the other for “sterilizing” the scissors used to cut the umbilical cord. Also stored in the case are a rubber squeeze bulb for extracting mucus from the newborn’s nose and mouth, eye drops, a glass jar of cotton balls, a metal soap box, a small hand brush, and a closed glass jar in which the waxed thread for tying the umbilical cord is soaking in alcohol.

When Doña Juana arrives at the woman’s house, there is a friendly exchange of greetings with the family. She asks about the frequency and strength of contractions and has the mother lie down for a massage, during which she feels for the baby’s head to see if it is engaged or still moving freely. If she decides that it isn’t time yet, she may return home or go on to visit another enferma in the neighborhood, stopping on the way to make a purchase or to chat with someone she knows. If it appears, on the other hand, that labor has begun in earnest, she arranges her case on a chair, washes her hands, and settles down on a wooden chair in front of the woman’s hammock.

Some of the births we attended were easy on the mother, with little pain and steady, even progress. Doña Juana says that most babies do come fast, “like a jet” (in fact, we missed several births because there was no time to summon us). For example, when we arrived at Doña Lola’s house just before noon, she joked with us about getting the baby to hurry up so she could watch the afternoon soap opera on television. Confidently, she explained to us that this baby would be a girl, since all her girls had come the very same way: with the bag of waters unbroken and very quickly (her boys, on the other hand, had been difficult, and one of them had died shortly after birth from “convulsions”). As it turned out, by the time four o’clock came around, Doña Lola’s little girl was, in fact, lying in her mother’s arms; we had been fed

\(^{11}\) We want to caution here against interpreting the use of the term enferma (which comes from enfermedad, illness) as indicative of an illness view of pregnancy among Maya women. Experientially, this is simply not the case. The parallel with illness may lie, rather, in the fact that both illness and birth are stressful times associated with ritual and physical danger. A detailed investigation of the relationship between pregnancy and illness remains for further research.
a meal and had settled into hammocks to watch the show.\textsuperscript{12}

Other births we attended were less predictable, longer, and more painful. In easy births the repertoire of birth practices appears in attenuated and abbreviated form. We found especially that the full extent of the support system becomes visible only in difficult births, and it is for this reason that difficult (though locally normal) births proved most instructive.

If initially it appears that progress might be slow, we might have time to go home briefly, or we might have a meal of frijoles and tortillas with the family in their cooking hut, possibly joined by the expectant mother. The woman may get up every once in a while during early labor, not only to eat, but also to urinate, or to feed a child, or to take care of pressing household business. Most of this time, however, she rests in her hammock, chatting with her helpers. While the contractions are weak and far apart, the talk that fills the long hours of waiting has to do with everyday concerns, rambling perhaps from divorce to the high cost of living, or from community affairs (like the upcoming fiesta) to building a new house for the growing family ("There are ten hammocks in here at night. We’re packed like sardines.").

When contractions become stronger and more frequent, talk begins to focus on the business at hand. Stories are told about such things as miscarriages, abortions, the horrors of hospital deliveries, and especially the birth experiences of the women present.\textsuperscript{13} Some instruction will take place at this time if this is a couple’s first child. In that case, neither husband nor wife will know much about labor and birth, since men are allowed only at the birth of their own children and women can attend other women only after they have given birth themselves. Typically, explanations and directions are given during labor, in the situation where they are relevant, rather than hypothetically.

At some time during the early stages, Doña Juana explains the progress of labor. She describes how the contractions will come closer and closer together, how the woman will finally have to push, and how the baby will be born. Whenever possible, her teaching is demonstrative rather than verbal. She will, for example, lay a chair on its side, sit down on its legs, and hold onto an imaginary rope, demonstrating birthing position; or she will get into a hammock and show the couple how the woman should throw her arms around her husband’s neck for support. She not only tells the woman that she will have to push with all her strength but shows her, and so realistic is her performance that invariably somebody will make a joke about Doña Juana being the one who is having the baby. Often the woman’s attendants join in too, each one of them demonstrating her own favorite method of giving birth. Doña Juana says that every woman must buscar la forma (find her own style). For her, the midwife’s function is to assist with whatever method the woman comes to find best.

In Yucatan, the woman’s husband is expected to be present during labor and birth. They say he should "see how a woman suffers." This rule is quite strong and explicit and we heard of cases where the husband’s absence was blamed for the stillbirth of a child. In addition to the husband, the woman’s mother should also be there, and mothers sometimes travel considerable distances for their daughters’ births. If the labor turns out to be long and difficult, other women will appear: mothers-in-law, godmothers, sisters, sisters-in-law, close friends, and neighbors. This group of helpers substantially contributes to a successful birth. Jointly and by turns, they give the woman mental and physical support. They encourage her, urge her on, and sometimes scold her, always letting her know that she is not alone, that the business of getting this baby born will get done. It will take time and work and pain, to be sure, but "we have done all this before and this baby will arrive, soon now."

During this time, the expectant mother is lying crosswise in her matrimonial hammock,\textsuperscript{14} her feet propped in its folds, her legs slightly drawn up and comfortably apart. She is wearing a short, loose huipil and is covered from the waist down with a cloth. Doña Juana has arranged a sheet of heavy plastic under her. If the woman complains of backache, a short length of cloth-covered

\textsuperscript{12} Most of the pictures appearing in this book are from this particular birth. Generally, the mounting tension and involvement make camera flashes an unthinkable intrusion and disturbance. In this case, however, the birth was very easy, the woman extremely confident, and we had spent so much time laughing and joking together that we felt it would not be inappropriate to ask for permission to take pictures. When she heard that we had returned the following year, Dona Lola made a point of inviting us for a meal of pig’s ear stew. At that time she requested that we take another picture of her and the baby sitting in the same hammock in which she had given birth, "so that you know what we really look like." After that, we visited her every time we went to Yucatan, and she never failed to express her hope that we might attend another parto (birth) of hers.

\textsuperscript{13} The nature of topics admissible during birth deserves detailed investigation, since such talk can be expected to convey not only pragmatic and instructional information but also is likely to contain symbolic messages regarding the meaning of the event. Death is one topic that participants seem to need to deal with in such situations. In American culture, death is hardly ever permitted to be addressed directly. It nevertheless crops up regularly, in more or less disguised form. For example, in one homebirth we recently videotaped in Michigan, the topic of conversation shifted from encyclopedia salesman to a funny rendering of a promotional scene for cemetery plots. The story ended with the intended buyer replying to the salesman’s pitch, "Oh that’s just great. You’ll never believe this, but my uncle just died today." This introduced (and dismissed in the participants’ joint laughter) the question of “dying today”—a pervasive, unspoken issue in every birth.

\textsuperscript{14} Yucatecan matrimonial hammocks stretch out to a width of eight feet and are designed to sleep several people. The term "matrimonial" is actually a misnomer. Husband and wife do not normally sleep together at night; rather, each has one or more small children in the hammock with her or him.
board or a folded blanket, or perhaps a rolled up pair of stiff jeans\textsuperscript{15} may be tucked under her back.

As the mother begins to feel some discomfort, a helper takes her or his place on a chair behind the hammock, at the woman’s head. (In what follows we will use the feminine personal pronoun because, especially during a difficult birth where there is much turn-taking, this position is most frequently taken by women. It should be noted, however, that the husband also takes an active part.) With her arms under the woman’s shoulders, the “head-helper” supports the woman’s hammock-encased body on her lap. The hammock’s flexible compactness permits her to pull the woman up at the height of a contraction, raising her almost to a sitting position. As the contraction fades away, she gently lets her down again to rest. Meanwhile, the midwife and another helper are occupied with rubbing her abdomen, her back, and her legs, and pressing down on her thighs whenever a contraction comes on.

From time to time the midwife feels the perineum with a cloth over her hand, checking for indications of progress, such as blood-stained mucus or especially the breaking of the water. When the water does break, the fluid collects in the plastic sheet and is sponged up with dry cloths. Doña Juana never ruptures the membranes, and it is frequently the case that before the baby’s head is born, the fluid-filled membranes appear externally as a bubble about the size of a tennis ball. This bubble fills up at the height of a contraction and recedes as the contraction subsides, thereby cushioning the baby’s head and allowing a gradual stretching of the perineal area. Tearing, in fact, is very rare; none occurred with the women in whose births we participated though several were having their first baby. Doña Juana says she would call a doctor in such a case, but she gave none of her usual case histories.

When it appears that the time of birth is approaching, the midwife asks for boiling water which one of the women brings from the cooking hut. Doña Juana then takes out her stainless steel bowls and pours the hot water over the tongs, rubber bulb, and scissors, to “sterilize” them. She also puts on her gown, cap, and mask, as well as the plastic apron which she has swabbed with alcohol.

\textsuperscript{15} These jeans almost always belong to the husband, and serve a symbolic as well as a physiological function: it is a Maya belief that the husband can give strength to his wife as she gives birth. He is usually physically present, but even when he is not, his presence can be embodied in his clothes.
If the midwife and helpers become concerned about a drawn-out, desultory labor, the question of whether a problem exists and what should be done about it is discussed at length. If it appears after a while that some stimulation is needed, a common remedy is to give the woman a raw egg to swallow. Her mother gets it from the cooking hut, breaks it, and the woman swallows it with a shudder of revulsion. She immediately throws it up again and the retching usually brings on powerful contractions.

If this method fails, injections will be considered in due course. They consist of the same vitamin B complex that the midwife had prescribed prenatally. She says that injections should be unnecessary during labor if the mother had taken her vitamins earlier. In fact, she would rather not use them at all. If, however, the labor continues to be difficult and no progress is apparent, consensus will edge toward administering the injection. We saw her give an injection twice, and in those cases contractions did, in fact, increase and the baby was born a short time later.

When a woman needs encouragement to renew her flagging strength, helpers respond to her with what we came to call “birth talk.” At the onset of a contraction, casual conversation stops. A rising chorus of helpers voices pours out an insistent rhythmic stream of words whose intensity matches the strength and length of the contraction. “Ence, ence, mama,” “jala, jala, jala,” “tuichila,” “ko osh, ko osh” come from all sides of the hammock. With the “head helper” behind her, not only holding her but physically matching every contraction, the laboring woman is surrounded by intense urging in the touch, sound, and sight of those close to her.

Midwife and helpers watch for signs that the birth is imminent, such as trembling legs, blood-spotting, and increased pain and bulging in the vaginal area. At this time, the mother may move from her hammock to sit on the legs of a wooden chair that has been laid on its side. A rag may be used to cushion the hard wood. The woman’s feet are planted firmly on the dirt floor and when a contraction comes on, she can pull herself up by holding onto a rope or a rebozo (the traditional Maya shawl) slung from a roof beam. As before, she is supported by the arms and body of the “head helper” who sits behind her on another chair. Doña Juana, of course, occupies the low stool in front of her; on each side there is probably a helper keeping up a steady flow of encouraging talk and squatting down with each contraction to steady and brace the mother’s feet and knees in order to enable her to push more effectively. The house is filled with sounds of “birth talk,” rising and ebbing with the exertions of mothers and helpers.

The baby may be born while the woman is on the chair or on the hammock. (We saw one baby born while the mother was sitting on her husband’s lap.) Although Doña Juana will defer to the woman’s wishes in this as well as other respects, she prefers the chair which, she says, makes for easier delivery. For us, the chair had the added advantage that as we squatted on the floor near the midwife, we could see the baby emerge. In a hammock birth, visual access is restricted, and Doña Juana gauges progress by what she feels with her cloth-covered hand (“the baby is at the door”) rather than by what she sees.

![Birthing on a wooden chair laid on its side.](image)

While the mother is on the chair, the physical involvement of the “head helper” is at its most intense. Most of the weight of the birthing woman rests on her. When a contraction comes on and the woman begins to push, a matching exertion is visible in the helper’s body. She covers the laboring woman’s nose and mouth with her hand, holds her own breath, and pushes herself until they both run out of air. Or the helper may, for the length of a contraction, press her mouth on top of the woman’s head and blow into

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16 ence (Maya) = make it go down.
jaLatera (Spanish) = haul, like a laboring woman pulling down on a rope or someone hauling on a rope to draw water from the well.
tuichila (Maya) = the meaning of this term is unclear; possibly it derives from Maya tuch, navel.
ko osh (Maya) = come on, let’s go.
her hair to give her strength and endurance, or stuff a cloth (or the woman’s own hair) into her mouth to force her to push.

The intense physical and emotional involvement of the helpers in a long and demanding birth is mirrored in the strain on their faces and in the signs of fatigue that become evident in them as well as in the mother. It is our impression that compared to Western practices where pushing is delayed until the cervix is fully dilated, Maya women often push too early. Consequently, in a long labor a woman may endure more pain and exhaustion than necessary.

As everybody becomes weary, the helpers’ involvement may take the form of scolding in response to the expectant mother’s moans or lack of strength. At one of the births we attended, the woman in labor irritably pushed her mother’s hand from her nose and mouth, wailing and twisting her head. For an instant, her mother’s hand lifted as if she were about to swat an exasperating child. Immediately the other helpers moved in. One came up on one side and firmly clamped down on the woman’s nose and mouth; another approached on the other side so that she found herself completely surrounded by helpers, urging, encouraging, scolding, demanding that she get back to work.

Having a baby is clearly regarded as work. The mother is always expected to do her part, though she may become discouraged, even somewhat panicked. Although the expectation is of a quick, fairly easy birth, at least some pain is recognized as a normal part of bearing a child. It figures in the birth stories that have been told all along, preparing the mother for what is to come. Consequently, she receives little sympathy if she complains. In a typical instance, late in one of the births we attended, the mother cried wearily that she just couldn’t push any more; surely she was going to die. Her mother and the midwife laughed, “Listen, if you’re not lazy, how could you possibly die? You push hard enough and the baby will come out all right.” A woman’s pain and weariness are more likely to be interpreted as indications of progress than of problems, since the baby, it is said, is born “in the very center of the pain.”

As the baby’s head begins to show (sometimes still covered by the unbroken membranes), the tension in the little house reaches a new high. Birth talk is continuous, punctuated only by the midwife’s progress reports. She will tell the mother that the baby is “at the door,” she might make an estimate of how many more pushes will be required, and she might report that she can see the baby’s beautiful hair. Finally the head crowns, and with the next contraction or two the focus of all this effort emerges in a splash of blood-tinged fluid. Sometimes the baby begins to cry as soon as the head is born, but in any case Doña Juana is quick to suction the mucus from its nose and mouth to facilitate breathing.

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17 *En el centro del dolor.* The Spanish word *dolor* means both pain and contraction (cf. German *Wehe*).
If the mother is on the chair, Doña Juana slides the baby into her plastic-aproned lap. If she is on the hammock, she lays the newborn on the mother’s abdomen. The mother, smiling and weary, looks down at her baby. Doña Juana announces whether it is a boy or a girl. After a few minutes when the cord has stopped pulsating, the midwife ties and cuts it, though usually she waits for the afterbirth to pass first. When the afterbirth comes, she shows it to the mother and to anybody else who is interested. She examines it to make sure it is complete before letting it slide into a bowl in which most of the blood and waste has been caught. If the placenta is not expelled in about half an hour, or is expelled incompletely, she says she would send for a doctor to remove it manually.18

When the afterbirth has passed, the midwife sponges the mother off with hot water and packs cotton between her legs. The women help her into a fresh huipil, then she settles back in her hammock in a lengthwise position and is covered with a blanket.

Next Doña Juana turns her attention back to the newborn, who has probably been lying in her lap or in the arms of the grandmother. By now the dirt floor under the hammock is a puddle of blood and fluid and the midwife’s dusty feet are spattered. The helpers clean up a bit while the midwife checks the baby over—head, hands, feet, and bottom. Then she gives the baby a bath (with Palmolive soap, “because it contains oil”) in a plastic washbowl set on the floor, or, if the family doesn’t have one, right in her plastic-aproned lap. Sometimes she cauterizes the umbilical stump with the flame of a candle—a practice standard among midwives in the region, though one that is under attack from the medical profession. (Doña Juana reports that babies treated in this way are less likely to die from “convulsions”—probably neonatal tetanus introduced through the umbilicus.) Then she powders the baby, packs cotton balls soaked in alcohol around its navel stump and maybe wraps a binder around its middle. She puts drops into the baby’s eyes, dresses it in a tiny shirt and diapers it with clean soft rags. Finally she swaddles the baby tightly in a cotton blanket, to make it feel “as secure as in the womb” and to ensure that “its legs will grow straight.”

Neither the midwife nor the family treat this newborn as particularly delicate. Doña Juana handles the baby matter-of-factly and familiarly as she gives it the routine bath. While holding the newborn, neither she nor the helpers make any special attempt to support its head. After swaddling, someone may give the baby a little water to drink from a gourd dipper before handing it to its mother.

18 This “half hour” is not to be taken literally. Until a couple of years ago, Doña Juana did not even have a watch. It is rather more likely that the need for a doctor would become clear after “too much time” had passed. In the case of a serious postpartum hemorrhage, the doctor would probably be too late anyway.

If the baby is a girl, she will have her ears pierced now, before she is sixty minutes old. It was explained to us that so soon after birth she doesn’t feel anything, whereas a day later she would be “paying attention.” Doña Juana dips a threaded needle in alcohol and draws it through each ear; then she cuts the thread and ties it into a loop. In about three days the baby’s first earrings, perhaps tiny family heirlooms, will be inserted.

The mood in the small house is light with talk and laughter. Now that the baby has been pronounced normal, and has been dressed and laid in its mother’s arms, attention returns once again to more ordinary concerns. The midwife rinses off her apron and the sheet of plastic and places them with the other equipment in her bag. Her usual procedure, she says, is to boil her instruments at home, although we noticed that she does not always do this. A meal appears for the midwife and helpers if the time of day is appropriate; during its course, Doña Juana and the women may discuss the mother’s first meal. A chicken, for instance, is approved of—half for lunch and the rest for supper. Doña Juana also writes down the name of pain pills that can be bought at the local pharmacy if needed. As we prepare to leave, the mother thanks us for assisting (”muchas gracias por ayudarme”), and after a last satisfied look at the baby, we say our goodbyes. The payment of Doña Juana’s fee will be negotiated with the family, depending upon their circumstances.
also used this time to deliver a lecture on the importance of supplemental feeding of juices, vegetables, eggs, and fruit after the baby’s third month. 19 Generally, all babies are breastfed. Nursing begins early, sometimes within a few minutes after birth, and thereafter the baby is put to the breast whenever it shows signs of being hungry or upset. The notion of keeping a baby on a schedule is foreign to Maya women and the universal response to any sign of distress is to offer the baby the breast. Babies have almost continuous body contact from the time of birth, at first and for the most part with their mothers, but as time progresses, also with other members of the family. A baby is not put down unless it is asleep, at which point it might be laid into a hammock. At the first sign of awakening, it is picked up again. 20

Recently, bottlefeeding has increased dramatically. Bottles constitute a status symbol, an expression of the parents’ progressive attitude. Generally speaking, however, bottles are still seen as supplemental to breastfeeding, providing additional nourishment to the child, rather than as a replacement for the breast.

Twenty days postpartum, Doña Juana will administer another sobada. This postpartum massage is, in most respects, like the prenatal one except that it is concluded by a “binding” (amarrar). After the massage, and while the woman is still lying on the floor, the midwife and assistant (generally the woman’s mother) kneel on either side of her. They wrap a six-inch strip of cotton cloth around her abdomen, beginning in front and passing the ends to each other under the woman’s buttocks. Every time the bandage is passed, they brace one foot against the woman’s hip and pull, thereby cinching the faja (girdle, sash) as tight as the woman can stand it. After about three passes, the ends are knotted several times, forming a sometimes discernible penis-shaped bulge against the abdomen, to which the women would laughingly refer as pollo (this word has the same double meaning as the English “cock”).

Frequently, a woman’s breasts and head are also tied. This is done, they say, “to close up the bones that opened during childbirth.” Breast- and head-

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19 We had the impression that she felt, initially, a bit unsure about this routine. On the way to our first postpartum visit, she suggested that we do the explaining with the help of a booklet with pictures of proper food, given to her during the Mexico City course. Apparently, all instruction during the course had been theoretical, without practical or clinical experience (see chapter 5), and we had the impression that she was not quite sure about how to transfer what she had heard in the classroom to a face-to-face interaction. We did as requested, helped along by Doña Juana whenever we stumbled over a Spanish word. By the second time, she was taking over large parts of the explanation; she had quite creatively used us as a resource to show her how to do this kind of instruction.

20 In the hammock, the baby will be lying on its back or side. In contrast to babies in this country, Yucatecan babies never experience lying prone on a flat surface (such as a mattress or floor). Perhaps that is why Yucatecan babies skip the crawling stage. Before they are able to walk, they locomote, instead, by scooting in a sitting position, i.e., by using one leg to push themselves along while tucking the other underneath.
ties are taken off whenever they become uncomfortable, but many women wear the pelvic faja more or less full-time after they have had their first child. It is assumed to be particularly beneficial while lifting heavy loads, hauling water, and constantly carrying children (Fuller and Jordan 1981).

The twentieth-day sobada constitutes the formal termination of the childbirth process. After that time, the woman resumes her normal round of activities.

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That the final postpartum visit occurs on the twentieth day after the birth is interesting because 20-day periods are recognized subdivisions in the ancient Maya calendar, the tzolk'in, which consisted of 260 days in thirteen 20-day months. The 260-day year has been a puzzle in that it has not been possible to identify a natural phenomenon, astronomical or agricultural, that corresponds to this period. However, Griswold has proposed that the human gestational period might be the long-sought-for natural phenomenon. He cites the German linguist and ethnographer Leonard Schultze Jena (1933) who reports that the Maya informants thought of the traditional year as corresponding to the time of pregnancy. We find a possible further recognition of the period of intrauterine life in a ceremony performed for children at the age of nine months. This date would correspond to the first anniversary of their birth according to the Maya calendar (Griswold 1975). Although Western obstetricians use 280 days as the duration of pregnancy, it must be kept in mind that they count, for reasons of convenience, from the first day of a woman's last menstrual period, thus adding two weeks to the length of gestation as computed from mid-cycle, the most likely time of conception.

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The Crosscultural Comparison of Birthing Systems
Toward a Biosocial Analysis

The preceding account of Maya women's ways of doing birth gives some indication of the tremendous range of variation in the organization of birthing systems. Maya birth stands in stark contrast not only to conventional American practices but also, and frequently along different lines, to the Swedish and Dutch systems. Yet as long as systems are stable, they are generally experienced as appropriate from within. Interestingly, in spite of the magnitude of the differences between systems, a problem that specifically does not arise from within stable systems is a radical critical assessment of practices. Self-conscious examination seems to be a characteristic of systems undergoing change, a point to which I will return in chapter 5.

As I pointed out earlier, a feeling of appropriateness, even a moral requiredness vis-à-vis own-culture birth practices, is normally shared by all participants—the woman giving birth, her family, and her professional or lay attendants. It is therefore difficult to separate, within any given cultural setting, what is physiological necessity and what is social production. Doña Juana, for example, considers breaking the membranes dangerous and unnatural, while American obstetricians find this practice useful and routinely advisable in light of their conceptions of the physiology of the birth process. Neither practitioner has experience with the non-accepted method and each would have misgivings about doing what, within their own system, appears not to be in the best interests of mother and child. Given, then, that birth practices are so rigidly shaped and given that they are resistant to experimental manipulation from within, crosscultural investigation offers a way to shed some light on what cannot be seen from inside any particular system.

I have also pointed out earlier that the variables used for comparison in