UC Santa Cruz

UC Santa Cruz Electronic Theses and Dissertations

Title

Labor of Care: Spectacular Fetuses, Healthy, Smart Babies, And Cosmopolitan Pregnancy in Middle Class Beijing

Permalink

https://escholarship.org/uc/item/2883s6kp

Author

Higgins, Anna Moore

Publication Date

2015

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA SANTA CRUZ

LABOR OF CARE: SPECTACULAR FETUSES, HEALTHY, SMART BABIES, AND COSMOPOLITAN PREGNANCY IN MIDDLE CLASS BEIJING

A dissertation submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in
ANTHROPOLOGY
by

Anna Higgins

June 2015

	The Dissertation of Anna Higgins is approved:
	Professor Lisa Rofel, chair
	Professor Megan Moodie
	Professor Gail Hershatter
Tyrus Miller	

Vice Provost and Dean of Graduate Studies

Copyright © by

Anna Higgins

2015

TABLE OF CONTENTS

List of Figures	iv
Abstract	V
Acknowledgments	vii
ntroduction	. 1
CHAPTER 1 mmaterial Labor? The Affective Production of Smart, Healthy Babies	.35
CHAPTER 2 Ultrasound Wands and Ping Pong Balls: Assisted Reproduction Reconsidered	89
CHAPTER 3 Making the Healthy, Smart Baby: Fetal Education, Fetal Personhood and Fetal Testing	.128
CHAPTER 4 Making Reproductive Cosmopolitanism	184
Conclusion	239
Bibliography	244

LIST OF FIGURES

Figure 1: Maternacare Baby Wall	89
Figure 2: Maternacare marketing brochure	92
Figure 3: Fetal Education Table.	146
Figure 4: 20 Weeks of Pregnancy Illustration	171
Figure 5: 32 Weeks of Pregnancy Illustration	171
Figure 6: "Too Loud!"	172
Figure 7: Poison Formula	203

ABSTRACT

Labor Of Care: Spectacular Fetuses, Healthy, Smart Babies, And Cosmopolitan Pregnancy In Middle Class Beijing

Anna Higgins

In early 21st Century Beijing, in the context of the One Child Policy and the developing market economy, middle class women undertook extraordinary measures to have children of the highest possible quality. A baby making industry, comprising private maternity hospitals, providers of prenatal nutrition, imported formula, and supplements, emerged. Women used *taijiao*, or fetal education, fetal testing and myriad forms of pregnancy management as part of a project of having the smartest, healthiest baby possible.

Based on two years of fieldwork in reproductive contexts in Beijing, this dissertation seeks to untangle the complicated relationship between reproduction, state population policies, parents, fetuses, and babies. It argues that the caring labor of hospital workers, sometimes categorized as immaterial, is in fact very much material, in that it creates particular kinds of persons, and that the materiality of this labor demonstrates that material and immaterial are not useful categories. It considers the "non-spectacular" tools of patient education and fetal education alongside spectacular tools of visualization. It argues that technologically assisted reproduction is not exceptional, but rather is on a spectrum with more everyday tools and techniques for influencing pregnancy, such as low-tech educational equipment,

stories and metaphors, and fetal education. The dissertation argues that emergent practices of reproduction, specifically the simultaneous use of *taijiao* and fetal testing, especially the ultrasound, are producing new kinds of fetal personhood, a partial personhood wherein a fetus is both a person and not a person.

ACKNOWLEDGMENTS

I am deeply grateful to everyone in Beijing who so graciously let me into their lives, especially the Patient Education Department at Maternacare Hospital.

Thank you to Lisa Rofel for unflagging support and guidance, and to Megan Moodie and Gail Hershatter for thoughtful reading and invaluable feedback. Thank you to Susan Harding and Stacy Kamehiro for providing inspiration and support in both scholarship and teaching.

Thank you to my writing team, Amber Dipietra, Brandy Doyle, Peter Leykam, Seth Lunine, and Philip Ringler.

Finally, thank you to my family and friends for all your love and support along what has been a longer, more complex path than I could have imagined.

INTRODUCTION

Section 1: The Puzzle of the Fetus

This dissertation is an exploration of how, and why, in Beijing in the first decade of the twenty-first century, many middle class women undertook extraordinary measures to have children of the highest possible quality. In the context of the One Child Policy and the developing market economy, a baby making industry emerged. The industry comprised private maternity hospitals, supplement companies, providers of prenatal education and fetal education materials, and baby formula importers. Patients at private maternity hospitals used fetal testing and myriad forms of pregnancy management as part of a project of having the smartest, healthiest baby possible.

I did fieldwork at one of these private maternity hospitals from 2007 to 2008. Two major questions emerged. How do we untangle the complicated relationship between reproduction, state population policies, parents, fetuses and babies, and kinship? Second, what are the multiplicity of roles and meanings being attributed to the fetus? The fetus appeared in many different roles. In population planning discourse it was an object or problem to be managed and vetted. In pregnancy literature it was an object of management, but also a subject with a rich and independent life in the womb. To parents it was an object of management, but also already a member of the family. The multiplicity of roles of the fetus hinted at bigger questions about reproduction and the production of persons and personhoods in

middle class Beijing. How is the fetus imagined, and what is the relationship between the imagined fetus and the fetus that is managed into being, during a middle class pregnancy? What is the relationship between these recent reproductive practices and the emergence of a middle class in Beijing with the resources to spend on pregnancy management?

And the puzzle of the fetus felt familiar.

My semi-rural Central Florida childhood and adolescence coincided with the full flush of the anti-abortion movement in the South. In an area saturated with Southern Baptists and Pentecostals, the fetus was everywhere. It was represented in pro-life billboards and t-shirts, and in the Chick books, comic book gospels with a lurid damnation bent, left in phone booths and waiting room coffee tables. Ghoulish photos of disarticulated and bloody fetal limbs adorned the signs of the protesters outside the town's one women's clinic. Protesting at that location was a feat of dedication and endurance, as the narrow sidewalks outside the clinic directly faced the oncoming traffic making a left turn at one of the busiest intersections in town. Despite these challenges, the sidewalk was often crowded with protestors.

The lurid nature of these protest images belied a romance in the representation of the fetus. While the visual language of anti-abortion was harsh, the visual language of pro-life was soft and romantic. "Abortion stops a beating heart." "It's not a choice, it's a child." These messages were paired with the ethereal image of a fetus

floating in utero, ¹ or with photos of large-eyed babies, or rarely with a soft-focus photo of a mother and child. It must not be a coincidence that a fetus, being unborn, is not yet contaminated by original sin. Its innocence paired with its vulnerability compounded the poignancy of these images of life. Caught between the two regimes of representation—the bloody images of anti-abortion and the sentimental images of pro-life—the fetus was simultaneously half-dead because of the peril of abortion, and hyper-alive because of the insistence of pro-life rhetoric that life begins at conception. In the midst of these contradictions the fetus, half dead, living and speaking through the voices of others, took on a ghostly quality.

Neither live nor dead, the fetus took on layer after layer of symbolic freight. In anti-abortion rhetoric the fetus was categorically vulnerable, perfect and blameless. These qualities were unadulterated by the context of conception (rape, maternal age or health) or its physical qualities (genetic illness, whether incompatible with life or not). Absolutist abortion politics made the fetus into a vulnerable hero with a political voice, and a ghostly imaginary life as a symbolic Christ figure. The unborn, in aggregate, were a political demographic that could be protected, moralized over, strategized over, and made social. The unborn also existed in aggregate as a "holocaust." Reports of statistics of the number of abortions per year often used the word. Sometimes they were referred to as "unborn Americans," made by abortion into a lost national resource, a lost segment of citizenry, and curiously, political

¹Ironically, the iconic images used in these materials come from a series of photos that staged a dead fetus as if it were living (Morgan 2009: 216).

subjects with interests they were unable to speak.

The rhetoric of vulnerability and blamelessness animated rhetorics and relationships beyond abortion. Sin, rebirth, and the living death of Jesus, so much like the living death of the fetus, were everywhere. There were purity rallies in middle school. Sexual innocence was a currency exchangeable for approval from adults while sexual knowledge that was wrong, but plausible, was a currency of social approval from other kids. Girls who barely had breasts received roses in a school virginity assembly to symbolize their intact hymens. A few lucky boys caught t-shirts fired into the bleachers that said, "I'm a virgin and I'm proud of it!" Round bellies of pregnant classmates were looked at and not looked at as objects of shame for some, objects of desire for others as they rounded then disappeared from school. Although, by preserving the fetus at the expense of other interests they may have had, these girls were doing right by the standards of local Christianity and the pro-life/anti-abortion movement, they were not celebrated for doing so as their fetuses were fetuses out of place.

A fetus was a person, too, both a potential child and an already existing, unborn person. Ultrasound portraiture did not yet exist, but 2-D ultrasound was just coming into widespread use in healthy pregnancies. These images circulated in antiabortion media as evidence of not just life, but personhood, within the womb. The fetus had a voice: "Mommy, please don't kill me." The Florida "Choose Life" license plate has finger-paint handprints on it.

Consequently, when I arrived in China for fieldwork in 2006, I was primed to see the complexities of the social life of the fetus. The question of who legitimately gets to reproduce, and why, and under what circumstances, were the same, although of course the answers were very different. Instead of, "It's a child, not a choice," there were many multiples of fetal personhoods existing at once, sometimes in the same pregnancy. Abortion was not stigmatized, and there were no bloody posters outside the women's hospitals and clinics where the surgery was performed. Abortion, like any surgery, was considered to be hard on the body, and therefore best avoided if possible. It was also considered to have some potential for emotional and moral consequences. Nonetheless, it was generally considered a useful reproductive tool in China, used by young, unmarried women to avoid single parenthood, which is rare and very stigmatized, as well as by married women who weren't ready for children. At the hospital where I spent most of my time in the field, abortion was an important tool pregnant women used when they feared that the fetus they were carrying—who would most likely be their only child—might not turn out to be a child of the highest possible quality.

When I first arrived in China to do fieldwork my dissertation project was on the relationship between vernacular conceptions of kinship and genetic models of inheritance amid the bioscience renaissance happening in research centers like Zhongguancun, a science park on the outskirts of Beijing, and Qinghua University. I had spent the previous summer living with a family in Beijing and had become

fascinated with the stories the parents told about the origins of their son's traits, especially the way they blended genetic inheritance, and the circumstances of pregnancy and birth, with ideas about inheritance that I had never heard before, such as sons' intense love for and resemblance to their mothers over their fathers having a genetic basis. On that same trip in 2005 I had made contacts at a genomics lab. That fieldwork site fell through. In the meantime, however, I had become fascinated with the baby formula ads I saw in nearly every subway station in Beijing. Each featured variations on the same glowing male child with thick, glossy black hair and bright, intelligent brown eyes, or the same white, blue eyed, blonde baby boy with chubby folds on his arms and legs. The child was always in the center of the ad, actively engaged in a task, dimpled, and fat. The text extolled the intelligence and health of babies fed by the formula, their nutritional qualities, and their miracle ingredients, usually DHA.² The child in these images looked not so much like a child in himself but a representation of a healthy, smart child, full of an excess of life that could be shared through consumption of the formula. It was an arresting image, the excess life, the repetition, and the power of the child's gaze.

One winter evening my first few months in Beijing I was standing on the chilly sun porch of a friend's apartment, looking down at the second ring road and discussing my growing interest in the images of the babies in formula ads which seemed to follow me around the city. After listening to me express my frustration

Docosahexaenoic acid, a fatty acid found in fish oil, sold as a supplement for brain development.

that I couldn't find the right field site, he pointed down the street at a pink sign on the side of a shop front ringing the square, where I had sometimes noticed elderly women doing late afternoon calisthenics and tai qi, and an unusually large number of women with babies hanging out on the benches. The pink sign was lit from the inside and would have been visible from the moon, yet I had never noticed it. "Do you know about Ai Baobao?" he said. The store was so ubiquitous a neighborhood presence that anyone would have assumed I already knew about it. The next day I visited their show room. Ai Baobao is a company operated by American entrepreneurs, most notably the former CFO of a major American pharmaceutical company. Their main business is importing and selling formula and supplements, a particularly lucrative business after the 2005 deaths of 11 babies in Hunan Province from adulterated formula. They have a series of prenatal education classes that seem almost an afterthought to the formula and supplement business, as well as a series of classes for early childhood intellectual enrichment. Ai Baobao became my first field site. I talked to the staff, got to know some of them, attended some of the prenatal education classes, and received permission to do fieldwork at the center. In the prenatal classes my knowledge of fetal education transformed from a footnote in the ethnographies and histories of reproduction I had read to a living contemporary practice.

After spending a few weeks at the company, however, it was clear that my interactions with staff were going to continue to be limited and my interactions with

³ Ai Baobao, like all names of institutions and persons in this dissertation, is a pseudonym.

customers would be seriously discouraged. I had begun to formulate questions about the context of the glossy babies on subway walls and billboards, the intense pressures on pregnant women and mothers of infants, and the complexity of the concept of "care"—the link between the labor of mothers, the labor of female service workers, and the labor of mostly female health care practitioners—in reproductive contexts.

Luckily, just when I was feeling the limits of Ai Baobao as a field site, a pregnant friend, Wang Xia, was in the process of shopping for a maternity hospital. At about sixteen weeks along she had just signed a contract with a place in the near suburbs, Maternacare, for prenatal care and delivery. Maternacare advertised itself as American style maternity care in a Chinese cultural setting, a place where all the equipment was imported, the staff was internationally trained, and mothers could get papava soup after delivery. She gushed about how peaceful and pleasant it was, how there was a sun porch where you could sit, and drink juice, and wait for your appointment or test results; how it was clean, and quiet, and everyone was nice. She told me that Angélica, the Portuguese nurse who worked with foreign patients, had just gotten married, and was moving away with her new husband at the end of the month. They needed a foreigner around, she said, so why not you? A bossy and persuasive journalist, Wang Xia talked the head of HR into turning Angélica's job into my fieldwork project. I could do research and help foreign patients navigate the hospital; best of all, they didn't need to pay me a salary, but they could provide me

⁴ Papaya soup is a Traditional Chinese Medicine treatment for encouraging breast milk production.

with a place to live nearby. Working as the coordinator for foreign patients' care, and as the resident translator/English fixer/consultant on how to deal with foreigners, and how things worked "guowai" (abroad), was the best possible fieldwork role I could have fallen into. I learned all the systems at the hospital—file protocol, the order of exams during a pregnancy, institutional structure, ultrasounds, and billing. I did quite a bit of the same service work and emotional labor as the customer service workers and nurses did, and I was yelled at a few times by angry patients or their partners. I spent time everywhere from the delivery room to the administrative office and witnessed every medical procedure performed at the hospital except surgical abortion and IUD insertion. I translated ultrasound and lab reports until I had every configuration of results memorized. I translated in clinical interviews, and got to know the facial expressions the doctors used when giving bad news, and when they were trying hard not to lose their tempers. I got to know doctors, nurses, secretaries, and marketing staff as informants, colleagues, and sometimes friends. I experienced the altered physical state of losing sleep during long nighttime deliveries, and the surreal bodily phenomenon of involuntary uterine contractions while witnessing labor. The baby on the subway platform became the baby in the healthy pregnancy book, the photograph on the bulletin board in the hospital hallway, the image on the ultrasound, the photo in the hospital's marketing materials.

Through fieldwork I came to understand that the mysterious fetus with its multiple public, private, and moral lives and the healthy, smart baby of the billboard

and subway platform, were more alike than their appearances would suggest. Both are a public representation of a reproductive dream, or a reproductive nightmare. Both are vulnerable, and more precious because of their vulnerability. The American anti-abortion fetus is vulnerable because it is possible to kill it. The Chinese healthy, smart baby is vulnerable because of the many obstacles to its attainment: inadequate maternal nutrition, inadequate breast milk, tainted formula, polluted air, food and water, stress during pregnancy, parents' inadequate *suzhi* (social or moral quality) and tizhi (physical quality).⁵ Both are vulnerable to "bad" mothering, maternal neglect, and maternal indifference. Both can cease to exist if mothers are not vigilant. Both have a cost. The cost of the preservation of the anti-abortion fetus is the mother's agency, body and reproductive rights. The cost of the healthy, smart baby is labor upon labor upon labor, the work of mothers and health care practitioners, the emotional labor of pregnant women and service workers, money spent on enrichment, fetal education, imported supplements and formula. The pressure put on women in both cases is extraordinary.

Reproductive politics in contemporary China are about the quantity and quality of births, who should reproduce, and the quality of the nation. My initial, general fieldwork questions about reproduction led me to ask how pregnancy practices at Maternacare fit into the larger whole of the emergent middle class and the One Child Policy. How do the extraordinary pregnancy management practices at

⁵ I will discuss these terms, and the significance of quality in population discourse and policy, in more detail in Chapter 3.

Maternacare relate to reproductive politics and other facts of daily life such as the return of kinship to the center of social life and the continuing development of a market economy? How, and why, are the multiple and partial personhoods of the fetus made throughout pregnancy? How did parents understand, and navigate, the multiplicity of the fetus? What, exactly, is reproductive technology, and is reproductive technology always high-tech? These are the questions my dissertation seeks to answer.

Section 2: Cultures of Reproduction

Although this dissertation is not an explicitly comparative project, it begins with the parallel intensity of fetal symbolism, value and vulnerability in both US abortion politics and middle class Chinese reproduction practices, an intensity that calls attention to fetuses themselves as ethnographic subjects. The similarity is uncanny, considering the differences in reproductive cultures on a national scale. Chinese population discourse, backed by a network of policies making population matters a high national priority, is concerned with limiting quantity and augmenting quality. In the United States, population control, whether focused on quantity or quality, has been a politically untouchable subject for some time; the bodies of undocumented immigrants are currently the only bodies of "excess or deficiency" (transposing Anagnost's [1995, 2004b] argument into a U.S. context) that matter. Abortion in China is a standard birth control tool, widely available and reasonably affordable. Abortion in the United States is politically contentious, increasingly hard

to get, and expensive; the discourse against it is characterized by the romance of the fetus described above. Given such different circumstances, what is the origin of the similarities?

First, both cultures of reproduction are linked by participation in global biomedicine, most notably by the use of similar tools such as ultrasound and fetal monitoring. There is a connection too in the way Chinese popular maternity culture looks to the United States as resource and inspiration for modern, safe and effective pregnancy and childbirth. Most important, however is that in both China and the US reproduction is animated by capital and capitalized relationships. Reproductive cultures in both places are entangled with market concepts of value, production, reproduction and labor. The anti-abortion fetus is constructed against market logic, and held up, in a language of Christian personhood, as a victim of feminism, modernity, the decline of the family, and worldliness. The Chinese healthy, smart baby is a middle class being, brought into the world through medical expertise, careful consumption, and labor. The healthy, smart baby can compete in the market, and must compete in the market, since she is the only child of her extended family. The anti-abortion fetus is only rarely mourned for its market value as a worker or consumer, or its ability to compete. Indeed, if it could compete, it would lose its status as a symbol of absolute and abject vulnerability. Yet both the healthy, smart baby and the anti-abortion fetus are defined in relationship to capital and kinship.

As the comparison of the anti-abortion fetus and the healthy, smart baby

shows, capital, biomedicine, and kinship shift as they travel. This dissertation seeks to unravel some of the complexities raised by looking at reproduction and capital in a Chinese context that makes itself global through translation and adaptation of practices from elsewhere. Maternacare, my primary field site, prides itself on its translation of medical practices from the United States, Canada, and Europe. The hospital advertises its practices as coming from the United States. While the existence of the hospital is heavily informed by the hospital president's time in the U.S. as a graduate student and corporate executive, many of the day to day translations of practices such as Lamaze came from a nurse from Hebei Province who trained in Canada, and a Portuguese nurse who worked in several European countries. Other internationally trained nurses worked in New Zealand, Sweden, Saudi Arabia, and Ghana. These nurses and administrators translated and adapted medical practices of pregnancy to work in the setting of Maternacare and appeal to Chinese middle class mothers.

As I will discuss in Chapter Four, these practices undergo dramatic shifts in substance and meaning as they travel. So too do the tools of biomedicine, especially the ultrasound, which I will discuss in Chapter Three. I examine the intersection between traveling biomedicine and medical culture, capital, and technology at a hospital where spectacular testing technology and self-conscious cosmopolitism form a complex relationship. Studying one of the most spectacular of biomedical tools, the fetal ultrasound, allows me to draw a map of this crossroads.

Section 3: Kinship and Reproductive Technology

There is a rich literature in feminist anthropology and science studies that examines technologies of reproduction, especially the relationship between reproduction, technology, and kinship. Scholars such as Casper (1998), Franklin (1995, 1997, 2003), Franklin and Lock (2003), Ginsberg (1989, 1999, 2002, 2007), Ginsberg and Rapp (1995), Martin (1992), McKinnon (2005), Morgan (1996, 2009), Rapp (1999, 2001, 2003), Taylor (2005, 2008) and Thompson (2000) have explored the making and remaking of kinship and reproduction in the context of cultural interconnection, technological complexity, and capitalist modes of production. The more technologically focused of this literature has shown links between new types of reproductive technologies and new types of personhood. Taylor's work argues that the visibility of the fetus created by the fetal sonogram has led to both fetal personhood and the creation of a consumable fetus available for parents to experience for emotional bonding and even entertainment (2008:131-4). Franklin (1995: 332) describes the new sense of bodily permeability created by technologies of visibility, such as the ultrasound and a new understanding of "the facts of life" created by the legibility of genes. Franklin concludes that among the many new reproductive facts created by new reproductive technologies, one of the most notable is that the clinic is no longer a facilitator of reproduction, but a creator. During in vitro fertilization, for example, it is medical workers who fertilize the egg and implant the zygote.

My research contributes to this conversation on the effects of biomedical

technology on reproduction. I believe, however, that there is too much emphasis in feminist ethnography of reproduction on new reproductive technology as a completely new and exceptional phenomenon. Maternacare is indeed, as Franklin (1995) points out in her work about reproductive clinics in general, a site of reproduction, not just the management of it. Spectacular tools of visibility such as fetal ultrasounds are a major attraction for patients. They reassure, they inform, they entertain, and sometimes they contain information that leads to the end of a pregnancy and the beginning of another.

Alongside ultrasounds and fetal testing and imported equipment, however, are simpler, more vernacular tools for shaping and seeing pregnancy. Fetal education, which will be discussed in Chapter Three, not only senses the fetus and structures interaction with it, but also shapes it. The non-spectacular, low-tech, metaphorical teaching tools of prenatal education classes, which will be discussed in Chapter Two, shape the body as it goes into labor. The emotional labor of pregnancy is no less real for being physically immaterial. The visibility of the fetus enabled by new reproductive technologies is indeed spectacular, but not without precedent.

One of my main arguments in this dissertation is that reproductive technology exists as a spectrum that includes non-digital, non-visual, and non-biomedical tools. As Morgan's (2009) history of fetal visibility shows, each stage of refining the degree of fetal visibility from anatomical specimen to photographic object to ultrasound brought a new concept of the fetus as an entity. Spectacular tools such as ultrasound,

and low-tech tools such as fetal education, each have effects on the practice of pregnancy, and maternal and cultural concepts of the fetus. The maternal body itself is a tool employed in the management of emotions encouraged by fetal education, and in the management of fetal quality by choosing the right time for conception-oriented sex (Furth 1999). There is pleasure in a normal, healthy ultrasound, especially one with face or genitals visible, as there is pleasure in expressing one's love to the fetus, as mothers do while practicing fetal education. Both amniocentesis and counting fetal kicks per hour, as mothers are advised to do in the third trimester, are knowledge practices based on empirical observation. All tools of prenatal care have the effect of shepherding a pregnancy, or a series of pregnancies, towards the result of a healthy, smart baby, whether or not they are technologically sophisticated tools.

The way the literature on reproductive technology seems to define "technology" specifically as complex technology inaccessible outside medical and scientific institutions, seems related to the way much of the literature on reproductive technology and kinship is focused on the category of nature. Much of the literature on reproductive technology and kinship has focused on the category of nature: transcending it, opposing it, relying on it as a foundation for kinship (Franklin 1995; Franklin and McKinnon 2001; Strathern 1992a, 1992b; Thompson 2000). Although it is common to think of medicine and the management of pregnancy in relationship to nature, it is a perilous line of thinking to apply at Maternacare. As Strathern (1980, 1992) points out, the nature/culture divide is particular to European thought. Little

reference to nature as an absolute existed at Maternacare, which I found confusing when I began fieldwork, but which gradually came to make sense. This contrast between the literature and my fieldwork experience is not as surprising as I first thought, considering how much of the ethnographic research on nature in the context of reproduction and technology is done in Euroamerican contexts. The body as conceived by Traditional Chinese Medicine (TCM), despite the widespread use of biomedicine, is the dominant concept of the body in China. In TCM, the body is not separate from nature. Patients and doctors were concerned with health and bodily integrity, and concerned with the fact that surgery disrupts the body's energy systems, a significant concern at a hospital with a 60% or higher C-section rate. 6 Concerns about surgery, and other medical interventions with serious effects, however, were not grounded in fears of violating nature. There was ambivalence among patients about C-sections, not on the grounds that they were dangerous (doctors and nurses talked about the dangers of C-sections but patients were more concerned about the dangers of vaginal delivery) but that the lack of vaginal compression on the baby's way into the world might leave him with a bad sense of balance, and that giving birth surgically represented a loss of an important human experience.

Nothing about fetal development went unexamined or was left to chance, but the concept of risk filled in where nature might be expected. Risk happened in the few minutes of vaginal birth when the baby was in transit from the uterus through the

⁶ There was not an official rate available from the hospital. Doctors, when asked, consistently gave a rate around 60-70%.

vagina, and the fetal monitor didn't work. Risk was the cord wrapped around the neck, which usually led to a C-section even though most nuchal cords didn't interfere with a safe vaginal delivery. Risk was an indeterminate result on an AFP test⁷ that resulted in an abortion just to be safe. Risk was the unknown effect of the few glasses of beer drunk before pregnancy was known. Rather than seeing pregnancy as a process of enculturing or rejecting nature, at Maternacare the measuring and managing of pregnancy was a process of making the unknown known and domesticating risk. Through the labor of staff and mothers the vulnerable, at-risk, contingent fetus was transformed into a healthy, smart baby.

Kinship is the mediating link between technology and reproduction in these literatures. Kinship, in the literature of technology and reproduction, takes many different forms. It is the raw fact of DNA (Franklin 1995) the bonding and fantasy enabled by sonographic windows into the womb (Taylor 2008) and the management process of surrogacy. At Maternacare, kinship is made through management of the physical quality (*tizhi*) of the fetus through testing and fetal education, and through bonding via ultrasound and fetal education. Biological relatedness is very important, but the physical fact of the fetus is not as important as the result of the healthy, smart baby. The continued existence of the fetus itself, its development from contingent physical entity to kin, is dependent on the vetting of blood tests, ultrasounds, and

⁷ The wrong amount of AFP (Alpha-fetoprotein) present in a pregnant woman's blood can indicate spina bifida, ancephaly, or chromosomal abnormalities such as Down Syndrome.

growth charts. Ultrasound has a double function of both vetting the fetus to make sure it will become kin, and making it kin by enabling bonding. Later in pregnancy, after quickening at the fourth month, when the fetus can hear sounds outside the womb and the pregnancy feels more knowable by the mother because she can feel movement instead of just seeing it on the ultrasound screen, kinship is nurtured through talking to the fetus, playing it music, and perhaps giving it a special name.

In addition to those anthropologists and feminist science studies scholars, I draw on Raymond Williams' (1977) concept of structures of feeling, particularly as guidance for orientation to time. Present, past and future are deeply entangled categories at Maternacare, where healthy, smart babies are molded for suitability for their roles as successful members of a market economy and sustainers of their kin networks. A structure of feeling is an emergent way of being; a sense that something new is happening that is producing new kinds of people, new social structures, and new ways of experiencing the world. It describes a tentative and complex emergence of emotions, personhood and practices that are future oriented, even as they exist in the present. At the same time as it anticipates the future, it draws selectively from the past, using elements of the past as construction materials for the present and future.

Williams' description of this orientation towards time describes perfectly the orientation towards time at Maternacare. The pregnancies there, as perhaps pregnancies are in many places, are about the future as much as the present, and their management is future oriented even as it happens in the present. The management of

pregnancies, and biomedical cosmopolitanism, look back to the socialist era, mainly in opposition to it. Yet there is a strong, if minor, counter-current to the opposition to the socialist past in an element of nostalgia for socialist era obstetrics among some of the staff, especially for midwifery skills that most obstetricians had prior to the advent of non-emergency C-sections, and have now lost. There is also a nostalgic critique of contemporary pregnant women by their mothers, mothers-in-law, and middle-aged doctors. The older generation complains that the younger generation is afraid of labor, afraid of pain, and doesn't know how to give birth. The past is looked to to explain problems and deficiencies, the present is groomed and managed, and the future is a fantasy. The main current of feelings, relationships and practices emerging as a structure of feeling among the middle class women and doctors who care for them at Maternacare is a sense that to meet the future and preserve the family, the following three practices should prevail: 1) the world outside China, particularly the US and Western Europe, must be looked to as a resource, 2) that technologies of visualization and testing are essential tools for ensuring fetal quality, and 3) that emotional labor is as important to pregnancy as physical labor, if not more.

Section 4: Historical context

4.1 Economic Reform

The reproductive and kinship practices at Maternacare belong to a particular segment of middle and upper class Beijing, a social world that did not exist a generation ago. How that world came into being is part of the story of Chinese

economic reform.

The social and economic changes in China beginning with the end of the Cultural Revolution and continuing into the present day, known as economic reform (1978—present), created new kinds of social and economic class divisions, new economic expectations and possibilities, and reconfigured ideas about gender, kinship, and parenting. These changes also created the possibility for the new kinds of pregnancy and personhood visible at Maternacare.

The Cultural Revolution (1966-76) was an era of violence and socialist fervor that left China with social instability and a crisis of political legitimacy. Deng Xiaoping, one of the leaders to emerge from the reorganization of the Chinese Communist Party at the end of the Cultural Revolution, and his faction within the party, focused on economic reform as the best way to rebuild both the nation and the Party's legitimacy. Public disillusionment with class struggle and continuous revolution, two tenets of Maoist socialism which had inspired widespread violence sanctioned by the state, but carried by individuals, necessitated that the state move away from Maoism to maintain power. The state encouraged public criticism of the political excesses of the Cultural Revolution and began a process of economic reform.

The state shifted focus towards economic reform. At its beginning in the early 1980s, economic reform included dismantling the two main features of the socialist economy: central economic planning and state owned enterprises. Unlike socialist economic planning, which operated through systematic implementation of long-range

plans, the process of reform was experimental. The fractured nature of Deng's power within the CCP meant that reform had to proceed in bits and pieces. Over time his faction, and the mandate for continued reform, grew stronger, both as a result of the accumulation of reforms changing the political and economic landscape, and as a result of the ongoing public critique of Maoist socialism (Rofel 2007: 7; Wang 2006).

Economic reform was uneven and experimental, but had three consistent elements. 1) Decollectivization and 2) privatization had massive consequences for the daily lives of workers, household organization, and family life. In the early part of reform the focus was on dismantling the agricultural communes of the countryside, with land remaining the property of the state. Later in the 1980s the State Owned Enterprises (SOEs) of the cities underwent a process of privatization that had many of the effects of decollectivization without eradication of the institutions themselves. Finally, the state promoted 3) the gradual establishment of a market economy.

Economic reform was carried out in two phases. Rural reform came first, and was followed by urban reform. In the socialist era urban and rural life were split by policies that bound people economically, and to some extent physically, to their agricultural collective, or in cities their *danwei*, a work unit, which was an institution comprising work, housing, distribution of food and other goods, political and community life, and health care. The *hukou* system of registration bound rural residents to their collective, and to their place of origin. Urban/rural inequality was, and continues to be, significant. The famine of the Great Leap Forward, for example,

which killed millions, was concentrated in the countryside. Even under socialism, rural residents did not have the same access to medical care that urban residents did.

The state began with rural reform (1978-1984) which was intended to not only be a process of economic reform, but also to address urban/rural inequality. First, and most importantly for both economic production and changes in daily life, came the dismantling of agricultural collectives, and the transfer of land to families in the form of long term leases. Then came partial decentralization of power from the central government to local governments. Rural industrialization and the establishment of rural markets were also designed to address inequality as well as change the economic structure. Rural reform had unintended consequences with profound social effects. It decreased urban/rural inequality, but increased inequality within rural areas. It incentivized corruption by giving cadres, who recently had received increased resources from the decentralization of state power, power over the industrialization and decollectivization process. Decollectivization led to rural migration to the cities for the newly opened short term contract jobs at privatizing SOEs (Rofel 2007: 8, Wang 2006: 49).

In 1984 the focus shifted to urban economic reform. Urban economic reform operated on the principal of "the devolution of political and economic power (fangquan rangli)" (Wang 2006: 50). This began with privatizing the SOEs that employed urban residents and provided the "Iron Rice Bowl," or the expectation that a job would provide lifelong security. During the socialist era, lifelong employment

at a SOE came with housing, medical care, and food distribution, a system which organized urban residents into work units, or *danwei*, that were important for ordering daily life and urban space. The end of the Iron Rice Bowl was a drastic change in production, consumption and patterns of everyday life. This system was gradually dismantled as the SOEs were privatized. This led to the separation of production and consumption, as urban residents no longer received goods through their *danwei*, but through the market (Fleischer 2008: 290; Rocca 1999; Rofel 2007:9).

In addition to the weakening of the *danwei* system, urban economic reform had some unintended side effects similar to the ones rural reform was having. The social security system was weakened. Public employees like teachers and doctors felt economic insecurity as public wages stayed the same and benefits shrank. Income inequality grew in the cities just as it had in the countryside. Throughout the 1980's social stability existed only because the state managed it into existence (Wang 2006: 56).

The June 4th Movement of 1989, or Tiananmen Square, was a movement against the socialist state but it was specifically a protest against the state as it went through the process of market economy focused reform (Rofel 2007: 9, Wang 2006). It was a result of the "crisis of legitimacy" (2006: 56) resulting from the state's withdrawal from socialism coupled with social instability and inequality. The June 4th Movement was an important moment in the development of the market economy in China. Monetary policy, contract policy, rules about foreign investment, all

became tools of social control as the state used them to calm social instability at the same time as they used violence to shut down the protests (2006:56). After Tiananmen, the social and economic changes such as privatization and decrease in public benefits that spurred the protests intensified. Deng Xiaoping used June 4th as a legitimization for his policies (Rofel 2007: 10). In 1992 Deng Xiaoping went on the "Southern Tour" to advocate for the policies. In speeches during the tour, he argued, "planning and market forces are not the essential difference between socialism and capitalism." He called consumption "the engine of reform" (Croll 2006: 30).

While consumerism had been part of economic policy since at least 1980 (Davis 2000: 1, Croll 2006: 29), the years after Tiananmen, and 1992 in particular, were the beginnings of heavy public emphasis on consumer culture in China (Rofel 2007: 10). Throughout the 1990's income inequality and consumerism grew exponentially. Manufacturing, export, and the Special Economic Zones in the South exploded. In cities, per capita income doubled between 1978 and 1990, then increased fifty percent between 1990 and 1994. Suddenly, it became routine to have a refrigerator, washing machine and a cell phone (Davis 2000: 2).

When China joined the WTO in 2001, it again accelerated many earlier changes. Foreign-private economic cooperation had been legal since 1999 (Rofel 2007: 11). After China joined the WTO, foreign investment in China increased exponentially. Post-WTO China has become a heavy investor in foreign countries, including US federal debt. China has also become a heavy consumer of oil, metals,

natural gas and minerals, and has invested heavily in natural resources in Africa.

Wealth and income inequality have both continued to grow, engendering change in every area of social life.

4.2 Class and consumption

From the founding of the People's Republic of China in 1949 to the Cultural Revolution, firmly defined class categories were important in structuring access to jobs, housing, and political status. Those who had owned property or had power before the revolution were politically suspect, especially during the Cultural Revolution, when having had parents who owned property was suspect and could lead to violence. During the Cultural Revolution class-related categories like soldier, worker, and peasant were valorized. Kinship as an economic institution was deemphasized, and the religious practices surrounding it were discouraged in public life. With the end of the Cultural Revolution, and the beginning of economic reform, social life, especially as it related to work, class, and consumption, changed dramatically. Long-term employment at a publicly owned institution was no longer a path towards success, at least as success was defined in the new model.

The new middle class comprised professionals, entrepreneurs, and some government employees. It cohered around common interests like property ownership, environmental concerns, finance, and health (Duthie 2005; Fleischer 2008). Middle class spaces of consumption and practices of consumption reconfigured social life

(Davis 1993, Davis and Sensenbrenner 2000; Efird 2006; Farquhar 2001, 2002; Fraser 2000; Gillis 2000; Schein and Oakes 2006; Veeck 2000; Wank 2000; Yan 2003; Zhang 2000). Malls and international fast food chains spread across East Coast cities, and luxury high rises replaced socialist housing blocks. While consumption was a marker of being middle class, it was not only for the middle class. Women who migrated to southern manufacturing cities to work in the factories consumed as a way of participating in modernity as well, using consumption to solidify their identity as *dagongmei* (working girl) (Fu 2009, Ngai 2003, 2005).

In addition to consumption, *suzhi* discourse became a second style of class differentiation in the 1990's. Having high *suzhi*, or personal quality, is the possession of a set of attributes such as health and attractiveness, good manners, good education, and intelligence, that differentiates the cultured, urban middle class few from the undifferentiated peasant many. *Suzhi* is not unlike money, in that it is a quality that can be built and stored in a person, especially a child, like an investment (Anagnost 1995, 2007a, 2007b, 2004b; Kipnis 2007; Kuan 2008; Yan 2003).

The existence of Maternacare, a private hospital for middle and upper class families, illustrates these changes in class and consumption. Parents of all classes seek to enrich their children's lives through consumption (Davis 2000). Pregnancy at Maternacare is a consumable experience in a private, aesthetically managed environment. The cultivation and accumulation of *suzhi* for the child begins with pregnancy (Kuan 2008, 2011). Treating pregnancy as a full time job, as many

pregnant women at Maternacare do, and parenting as a full time job after, is a marker of membership in an urban middle class.

4.3 Shifts in Gender Ideologies and Expectations About Motherhood

Rejection of socialist era practices was an important element of the reform era in many areas of life; gender was no different. Gender equality was part of socialist era ideology and policy, although in practice gender equality was not completely achieved (Evans 1995, 1997, 2007; Hershatter 2004; Honig and Hershatter 1988; Johnson 1985; Judd 1994; Wang 2005). In the socialist era, collective childcare and other collective support for daily life enabled women to return to work after giving birth and to have economic lives outside the family (Evans 1997, 2007). Yet the results of "state feminism" (Wang 2005) were uneven. Policies such as equal pay, for example, were circumvented in rural areas by creating higher and lower paying tiers of jobs, and tracking men into one, and women into the other (Evans 1997, Wang 2005). In the cities, Women's Federations were instituted to advocate for women's issues and provide education and support for women, but were set up to be isolated from official power in a way that other local organizations such as Neighborhood Committees were not (2005: 13). The result was that while women were considered workers and equal citizens, the expectation that women were responsible for the bulk of parenting and housework did not change.

Performance of femininity became an important practice during economic reform, as some argued that "natural" femininity had been repressed during the

Maoist era, making its return a restoration of the natural order (Rofel 1999). In the 1990's makeup and strongly gendered clothing, like motorcycle jackets for men and ruffled blouses for women, became popular in both cities and rural areas (Farquhar 2000:15; Honig and Hershatter 1988; Rofel 1999). Some middle class women became full time parents and housewives, which was considered shameful during socialism (Zhang 2010: 182). Femininity, makeup, and strongly gendered clothing continued to be popular in the early part of the twenty-first century, and are important elements of style in contemporary pregnancy care culture, especially among customer service workers.

In the 1980s, during economic reform, the family moved to the center of social life, and with it returned expectations that it was women's domain, a domain that women's natural femininity would enable them to master (Rofel 1999:227). The family's role as the producer of children became central. The One Child Policy was instituted in 1979, at the beginning of economic reform. The pressure families felt at having only one chance to have a healthy, successful child led to heightened anxiety around parenting and intensified public discourse around childhood and childrearing (Anagnost 1995; Greenhalgh 2005; Kuan 2008, 2011). In the beginning of the reform era those anxieties focused on nutrition and intelligence; in the 1990s and after they focused on *suzhi*, or quality (Kuan 2008:12, 2011). *Suzhi jiaoyu*, or education for quality, became a preoccupation of middle class families, leading to children participating in full schedules of enrichment activities such as English and music

(2008, 2011). Many middle class women became full time parents (Kuan 2008; Zhang 2010). Public discourse voiced concern about China raising generations of self-centered, immature, and overindulged "little emperors," including urban legends about parents calling their adult child's boss to complain about their child's treatment at work, and speaking to the judge for their adult children in divorce court.

4.4 Pregnancy and the New Structures of Feeling

This dissertation contributes to these literatures on gender, kinship and class in contemporary China, and demonstrates that the new structures of feeling around family and class have given rise to new reproductive practices. At Maternacare, the preoccupation of pregnant women and their families with the process of building suzhi, and making children who would easily navigate the market economy, demonstrates the establishment of new ideas about class, identity and work. Many of the middle to upper class women at Maternacare quit their jobs during the early months of pregnancy, and planned to be full time parents until their children began school. These women avoided types of activity during pregnancy that their mothers and grandmothers found completely routine, such as housework and riding bicycles. The mothers and mothers-in-law who accompanied pregnant women to prenatal care classes at Maternacare often commented that their pregnancies were much less fearful and more active than the current generation's. This demonstrates the extent of the change in gender roles that has happened since the 1980s, when women routinely worked through pregnancy and returned to work after birth.

Middle class families abandoning public hospitals for private hospitals, where patients receive epidurals, and fathers are able to participate in the birth, demonstrates the centrality of privatization and consumerism in middle class kinship and reproduction. The environment of the hospital is cultivated to make pregnancy itself into a consumable experience. The number of women who give birth at hospitals like Maternacare is very small, as is the number of hospitals, but it is growing. The first private hospital in Beijing, Beijing United Family, opened in 1997. In 2008 there were six private maternity hospitals in Beijing, including the VIP wing at Peking Union, which was state owned but functioned like a private hospital; in comparison, there were dozens of public hospitals in Beijing. By 2014, two of the private maternity hospitals had now expanded into chains with multiple locations in Beijing.

Section 5: Outline of Dissertation

The chapters of this dissertation reflect my concern with the entanglements of reproduction and birthing with the labor of mothers and medical workers, and questions of reproductive technology, fetal personhood, and cosmopolitan engagements.

Chapter One compares the emotional labor of mothers and the emotional labor of medical and customer service staff as they create the fetus, the baby, the family, and a consumable experience of pregnancy. I explore various forms of gendered labor at the hospital, both motherly and professional, including some motherly labor

that can only be described as heroic. I discuss the partial, messy division of hospital labor into aesthetic, affective, and medical. What does the word "care" mean at Maternacare when it is clear from its daily use that its meanings are multiple? What are the conditions and effects of private hospitals on pregnancy? What is the relationship of affective labor to class, gender and reproduction? I argue that ethnography of pregnancy care at Maternacare demonstrates that care work or affective labor, often categorized as immaterial labor, is material because it creates very particular kinds of fetuses, mothers, workers, and babies, and that the distinction between material and immaterial labor is not a useful one.

Chapter Two considers the "non-spectacular" tools of patient education and fetal education alongside spectacular tools of visualization. I discuss the hospital's prenatal education program, focusing on the tools, metaphors and stories used to teach pregnant women how to mother. Ethnography of learning to be pregnant and learning to mother raises questions about the boundaries of the category of reproductive technology, and calls into question the exceptionalism of spectacular, high-tech tools. I argue that technologically assisted reproduction is not exceptional, but rather is on a spectrum with more everyday tools and techniques for influencing pregnancy, such as low-tech educational equipment, stories and metaphors, and fetal education.

Chapter Three focuses on fetal education and fetal testing, exploring the ways the high-tech, imported and spectacular tools used to manage pregnancy merge and

entangle with fetal education, kinship, and capital. I describe the reinvention of fetal education as a tool for producing healthy, smart babies in the cultural context of the one child policy and capitalism. I discuss the use of diagnostic ultrasounds as part of a rigorous prenatal testing regime, and of portrait ultrasounds with their "bonding" properties, as part of the process of the fetus, whose existence is contingent upon proving its health and normalcy, becoming a baby. A new, contingent and partial form of fetal personhood and of kinship emerge from these practices.

Chapter 4 considers "abroad," or "guowai," as an object interest in cosmopolitan reproduction, and as a source of critique. Parents, medical workers, and others with an interest in reproduction have a complex relationship to cosmopolitanism; in public discourse about food safety and other issues affecting pregnant women and children two nations emerge: a nation comprising babies and children that are vulnerable and must be protected from the second nation, a corrupting source of danger in the form of contaminated food, unscrupulous doctors, and pollution.

Women at Maternacare and other sites who have cosmopolitan reproductive engagements have a complex relationship to *guowai*. The mothers and medical workers I interview in this chapter as well as many other women I talked to during fieldwork use medical, consumer, and other forms of cosmopolitanism to simultaneously build and critique the nation and as part of an ongoing debate about national quality.

Throughout I aim to bring attention to the ways that testing and managing and speaking to the fetus bring about a new form of fetal personhood: contingent on test results but paradoxically emotionally relatable kin in utero, flexible and competitive in a global capitalist market, measured always in terms of potential to become a healthy, smart baby. The physical and emotional work of pregnancy has, among the middle class women of Maternacare, become intensified to make this fetus come into being. New persons and new kinds of kinship bring other new persons and new kinships into being.

CHAPTER 1 Immaterial Labor? The Affective Production of Smart, Healthy Babies

It takes the labor of many different people, both paid and unpaid, to see a middle class pregnancy through from pre-pregnancy planning to birth. Much of that labor is affective. Affective labor is caring labor (Clough and Halley 2007; Hardt 1999; Lanoix 2013). It includes medical and psychological work, the dimension of customer service that draws on or evokes feelings, and care for children, elders and people with disabilities. It is central to contemporary capitalism; it "creates the world" (Hardt 1999). Despite its potent capabilities of production, it is typically classified as immaterial labor (Hardt 1999, Hardt and Negri 2000, 2004). This contradiction points out the limits of using material and immaterial as classifications for affective labor. The affective labor involved in bringing a pregnancy to term creates not just a flesh and blood person, but a specific type of person with traits dependent on the specific type of affective labor involved. Making a person is as material as it gets. In this chapter, I argue that classifying the affective labor involved in pregnancy care as immaterial labor shows that the distinction between material and immaterial labor obscures the materiality of affect and care.

The Affective Hospital

When pregnant women enter Maternacare, they walk through a pair of glass doors set into a glass wall, over a patterned marble floor, past prints of European watercolors, and finally past a large, white ceramic statue of Guanyin, a female

Bodhisattva. The statue is a still island in the busiest hallway of the hospital where patients pass through on their way to the clinic, ultrasound room, sunroom, and pediatrics. The statue is smooth, flowing and modern with long lines and minimal detail. Three children the size of babies but with adult proportions and motor control cling to her robes. Hanging on, they look like aphids on the stem of a dandelion. In winter, Guanyin and her children are surrounded with a halo of Christmas ornaments from Ikea.

Nothing in that lobby was placed without consideration. The story told by most of the internationally inflected furnishings is about wealth and cosmopolitanism. While the Guanyin sculpture fits in with the elegance of the other furnishings, it is an island of Chinese imagery in a space that draws on Euroamerican aesthetics. I asked around at the front desk why the sculpture was there. They told me a short version of one of Guanyin's many stories. Guanyin had many strong, beautiful children and was too proud of them. She was punished for her pride by losing the children in an accident. She went to hell to be with them. Ever since, whenever an infertile woman prays to Guanyin, she sends one of her children up from hell to be born human. She is a symbol of heroic maternal love. Heroic motherhood is a project taken on by many of the hospital's patients in the quest for a healthy, smart baby and family continuity and survival. Heroic motherhood is alive in pop culture narratives from soap opera to news stories. The hospital environment, and in the affective labor of its workers, provides it.

Guanyin's story and the division between world and underworld is a fitting metaphor for a hospital that, in grimy, noisy, chaotic Beijing, is a tiny, pink and white space of beauty and comfort. The hospital, however, is divided. Within the hospital, there are groomed and decorated spaces where the beauty of the space, and the emotional labor of nurses and other workers, care for and transform pregnant women. There are also hidden, bare and awkward spaces where staff eat, sleep, and do invisible forms of labor like paperwork and running the autoclave that sterilizes the surgical instruments.

Affective labor, also described as emotional labor (Hochschild 2003), is work done with emotions or to provoke emotions. It is often "women's work" like nursing, caregiving, and customer service work (Hardt 1999, 2003; Lanoix 2013). The language of maternity care marketing, and to a large extent its practice, are affective. The hospital and its employees use words like "will," "spirit," "care," and "love" to describe both the treatment of patients by staff, and the practice of routine pregnancy care by mothers themselves.

The blurred lines between professional and familial "care" creates a slippage between professional care and family and erases the medical dimension of what much of the staff does. Nursing occupies an unusual position between care and work where it is classified as both, but some of the work of providing care is read as authentic, uncompensated care—a gift. At the same time, workers take genuine pleasure in the cuteness and health of the babies born at the hospital. I would like to avoid creating a

binary opposition between compensated and uncompensated affect. The practices of familial affective labor and paid affective labor have much in common, and much to distinguish them. The differences are important, but not as important as the similarities, most prominently, the ability of specific kinds of affective labor to create a specific kind of baby. The central paradox of affective labor, which is that it erases its own visibility as labor, is true, whether or not it is paid.

With the exception of the departments like accounting, IT, supplies, laundry, and autoclave that never interact with patients, every kind of labor at the hospital has a substantial affective dimension. Customer service workers and nurses do the most affective labor. Doctors do a variable amount. The lower-ranking doctors are more concerned with clinical manner and with pleasing patients than the higher-ranking doctors, who are more aloof. Midwives are more goal-oriented, and less concerned with affect, in their approach to patients than nurses or doctors. A successful birth is a relatively short and medically uneventful one resulting in a healthy baby. Almost nothing that happens in the delivery room is comfortable, and the midwives lack the deferential manner of the downstairs nurses. Custodial staff does not interact with patients other than trying to appear invisible when cleaning hallways and patients' rooms. Their attempted invisibility is itself a kind of affective labor.

Why is it important to distinguish and identify the affective labor at Maternacare? First, women's caring labor is often taken for granted as innate. It is taken for granted, for instance, at the hospital that young women love babies, so

caring for them is both work and not work. Second, in most public hospitals in China, nursing work is quite different than at Maternacare with a much smaller affective component. Affective labor of the type available at Maternacare is an important dimension of a very specific type of middle to upper class pregnancy. The added affective component and affective labor is important in the marketing of private hospitals, and a major reason pregnant women and their families choose private hospitals. Finally, there is an ongoing debate in the social sciences, after the work of Hardt and Negri, about the category of immaterial labor. Affective labor is viewed as a type of immaterial labor; although it produces states of being and relationships, it putatively doesn't produce a tangible object.

At a maternity hospital where affective labor is heavily used, and the product is babies, it shows vividly that affective relationships are materially productive. Furthermore, the embodied nature of affective relationships makes me question whether the distinction between material and immaterial labor is a valid or useful distinction in any case. In this chapter I will discuss affective labor in all its dimensions at Maternacare. I argue that characterizing affective labor as immaterial, abstract, or intangible is inaccurate, and fails to take into account variant conceptions of the body. Assuming that production of bodies and of bodily states is immaterial—or that immateriality is a universal—does not fit the complexity of the relationships between bodies and labor at Maternacare.

The hospital, as a productive unit, has many products, but its first and most

direct is affect. In the first part of this chapter I will discuss the ways that labor at the hospital is affective, and how the physical design of the hospital, and even the appearance of the staff, are heavily reliant on affect. Here I will discuss the debate around the categories of material and immaterial labor, arguing that the classification of affective caring labor as immaterial is inaccurate. Affect, professional or not, is productive of bodies through fetal education, where experiences and emotions become a stimulus for development. I will demonstrate how the concept of care is used in both medical practice and hospital marketing. I also focus specifically on the labor of nurses, who have the most direct contact with patients and the largest affective component to their jobs.

In the second part of the chapter, I will discuss another dimension of affective labor in pregnancy care: the story of the Beijing quintuplets and the slippery distinction between "love" and "care" in care for and representation of mothers and babies. The televised birth story of the quintuplets shows the slippage between paid and unpaid caring labor as the doctor becomes the hero, and the mother becomes the villain. In television documentaries about the birth of the quints, the doctor is portrayed as if she were the real mother and author of the children, while the mother is portrayed as ignorant, irresponsible, and of low *suzhi* (personal quality). I will discuss how affect makes its way into stories of reproductive morality.

Throughout this chapter my argument is that affect produces substance. Its goal is to produce high quality fetal bodies and accelerated development, which

produces healthy, smart babies. Healthy, smart babies are supposed to be the material outcome of a string of capitalized, highly affective labor relationships.

Hospital Architecture: Affective and Aesthetic Labor

Patients, or "guests" as the staff is trained to call them, rarely navigate the hospital themselves. The front desk of the hospital is set up like the front desk of a hotel with three to five young women in skirt suits ready to check patients in and take them to the clinic. All the front desk workers are uniformly young women with degrees from regional technical schools in hospitality or English. They had moved to Beijing from Shandong, Hebei, and Inner Mongolia to take the job. Affective labor is central to their jobs. They are the first and last staff members the patient sees during each visit. After logging in the patient's arrival, the front desk worker grabs her file from a cabinet below the desk and escorts her to the clinic, smiling and making small talk. The patient is handed off to a nurse at the clinic to be weighed and have her temperature taken, and the front desk worker heads back to the lobby. When it's time for ultrasounds, a nurse from the clinic escorts the patient to the ultrasound waiting room. When fasting blood draws are complete, nurses escort the patient to the sunroom, an atrium with a translucent roof, padded wicker chairs, and large plants, for a glass of warm milk, a hard-boiled egg, and a pastry from the local French-Taiwanese bakery.

Many spaces of the hospital perform aesthetic and affective labor. The sunroom, one of these spaces, is the geographical center of the hospital and central to

the hospital's aspect of pleasure and consumption. The lobby is glossier, with an emphasis on visual presence, but the sunroom is meant to be felt and experienced. An attendant sells pastries, espresso for the fathers, and juice for the mothers from a café counter near the glass walls looking out on a small patio with an ornate birdbath. Nothing medical happens in the sunroom. There are no meetings between doctors and patients, and no paperwork. It is a space of eating, relaxing, and waiting for ultrasounds. Because there are only two ultrasound machines in the clinic, waiting for the exam creates a rare bottleneck in patients' flow through the hospital for routine appointments. On ultrasound appointment days, pregnant women sit at the wicker tables with some combination of their husbands, mothers, and mothers-in-law, or sometimes alone. Off to one side of the sunroom is a small shop run by an independent contractor full of imported baby supplies, including breast pumps and a small selection of European maternity clothes from stores like H&M. They also sell real, branded Crocs, which in 2007 were trendy internationally. In their knock-off form, Crocs were a large part of nurses' uniforms, and the only shoes anyone working in the labor and delivery rooms wore. The hospital director, whose style was dressy, sometimes wore shoes from the store in the sunroom.

Although many of the medical spaces in the hospital are meant to be seen, enjoyed, and experienced, exam areas are meticulously private. A prominent feature of public hospitals in China is that when speaking to a doctor, waiting for a lab test, or having their weight taken, patients are together. In the OB/GYN department at

Fulong Hospital in Dongcheng district, for example, up to three doctors use an exam room at once. During busy times of the day, three patients are in there at once. The tables with stirrups sit behind a partition, hidden from view of the main room, but when occupied, feet in stirrups are visible from the doorway. The two exam tables are side by side and although the doctors try to avoid examining two patients at once, sometimes the volume of patients makes it necessary. By contrast, at Maternacare, most of the interactions between doctors and patients, not just exams, happen behind closed doors.

The first floor of the hospital, where the lobby, sunroom, and the outpatient clinic are located, could be mistaken for a high-end bathhouse or hotel if not for signs pointing to the ultrasound room and pediatrics. The outpatient clinic's business is about 80% prenatal exams, with the other 20% consisting of gynecology and postnatal checkups. It comprises four exam rooms, each the size of a large bedroom. Except for the smaller gynecology exam room, each one is large enough to hold three or four family members during a prenatal checkup. Each room contains a large desk, chairs, and a gynecological exam table imported from Germany, along with cabinets full of exam supplies. Doctors leave the tape measures used to measure fundal (or uterine) height out on the counter, along with the fetal heart Doppler, a small device reminiscent of a toy microphone used to listen to the fetal heartbeat. They keep swabs, liquid suspensions for vaginal discharge samples, and other obviously medical accouterments hidden away in the cabinets. The exam rooms have Monet's lilies on

the walls. Unlike at public hospitals, the doctors and nurses use "nin" (the formal "you," the form of the word that a child would use to address an elder) to address the patients. Nurses hold patients by the arm to stabilize them in the last few weeks of pregnancy as they walk around the hospital. Signs in the hallway point ambitiously to a beauty salon and body-sculpting center that was built with a sauna, showers, and a sunlit lounge but never opened. The administration repurposed it as a staff shower room and conference room.

The distinction between aesthetically managed spaces for patients, and staffonly spaces designed with function and economy in mind, is striking. Spaces without
the regular traffic of patients are free of the meticulous attention to design notable in
the lobby, the sunroom, and the outpatient clinic. It is immediately apparent on the
fourth floor, where labor and delivery happen, that the aesthetic and affective rules
are different than they are downstairs. The upper floors of the hospital appear almost
to be part of another building. The fourth floor is institutional and uninviting.

Outside the operating room, there is a bland family waiting room filled with beige
couches and baby supply catalogs, and a set of locked, unmarked file cabinets full of
old medical records. Most families wait out deliveries and surgeries in the private
patient rooms on the second and third floors, so the room is usually empty. The view
from the window of that waiting room is the hospital parking lot and the windowsill
pigeon cages of the apartment complex next door. Outside is an undecorated hallway
full of unmarked doors. Behind the doors on the left are the upper management's

offices, and the nursery set up for the assistant director's son. The day surgery operating room is at the end of the hall, behind a door, then a double sliding metal door. The room is used most often for abortions, but also for gynecological surgeries including laparoscopic fibroid removal, and infertility treatments. On the outer wall is a door that used to be a window. It leads to the roof, where the hospital has constructed an addition used as the employee locker room. This room is freezing in the winter, and staff has to walk across the roof to get to the locker room. The door is so thin, and the air outside so cold, that it is covered with a large insulating quilt in winter. The thrown-together, crowded, and inconvenient quality of this changing room, the administrative offices on the first floor in a second, cramped addition, and the cafeteria, offer further evidence that the design of the patient sections of the hospital are central.

The innermost part of the hospital is behind an unmarked door with a wire mesh reinforced glass window. The door is guarded by key card. Only fourth floor workers—midwives, obstetricians, anesthesiologists, and senior custodians—have cards. Anyone entering the door must take off her shoes and exchange them for a communal pair of blue Crocs off the Ikea shoe rack, then step across a sticky mat on the floor to trap any remaining dirt on the shoes. This is the part of the hospital with

_

Among the many parents who worked at Maternacare, the assistant director was the only one with a nursery, and the only one to care for her baby on site. She belonged to a very small number of upper management who did not wear uniforms, were rarely seen outside the fourth floor offices, and rarely had any contact with patients.

the birthing rooms, the medical storeroom, and the staff room where the nurses, doctors and midwives sit chatting, texting, and napping when they're not needed in the birth rooms. There are infant nursing rooms for baths and massages, and two rooms full of bunk beds for night shift staff. At the end of the hall, past another series of locked doors and sterile barriers, is the main operating room for C-section deliveries, and the elevator, which also requires a key card.

The delivery rooms are a hybrid space. They share design elements with the downstairs exam rooms, such as soothing paintings and hiding medical equipment whenever possible. The oxygen tank is hidden in an Ikea wall cabinet behind the bed. The marketing department uses pictures of the delivery room in much of their advertising and describes it in detail on the tour they give to potential patients, who aren't allowed on the upper floors for sterility concerns. The hospital only has private rooms and no group ward, distinguishing it from other maternity hospitals in Beijing.

The sensory details and the movement of patients through the hospital are engineered by the administration to a minute degree. The upstairs is separated not just physically from the rest of the hospital, but also aesthetically. The upstairs is a maze of hallways and machines, freezers full of pathology samples, offices, and autoclaves. Downstairs is plush and modern. The lobby and sunroom could be inside a nice hotel. Downstairs, the windows look out on mature hemlocks and a fountain, while the upstairs windows overlook the roof and the parking lot.

The building was designed to create the neutral, serene emotional state

recommended by fetal education experts. Fetal education, or taijiao, a practice of curating the fetal environment through communication, mood management, and enrichment, is performed in hopes of a smart, well-adjusted and closely bonded child. Fetal education is said to work because everything the mother feels and experiences is transmitted to the child. Her thoughts and feelings, the impressions of the environments she sees and the sounds she hears, and especially her voice are all, after four months gestation, believed to be not just transmittable, but also legible to the fetus. The hospital environment is to the mother as the mother is to the fetus, imparting sights, sounds, tastes, sensations, and moods. It is balanced, soothing, calm, modern, high-tech but not stridently so, organized, and efficient. It is run by a well-disciplined and attractive force of nurses, receptionists, cashiers, and doctors who manage guests through regimens of procedures planned as rationally and precisely as a fetal growth chart. The aesthetics of the building and the aesthetics of the staff are believed to have an effect on the fetus that, like affective labor, translates into material results.

The Affect of Staff Aesthetics

Like the effect of the aesthetics of the building, the aesthetics of staff presentation is designed very deliberately to provoke an affective response. Although there is some overlap in staff between outpatient and delivery/surgery, delivery room nurses and midwives rarely work in the clinic, and clinic nurses rarely work upstairs. In the clinic, the uniforms change seasonally. When the hospital opened, the

uniforms were classic white nurses' dress uniforms. The spring and summer outfit in 2007 was a pastel, floral printed, old fashioned nurses' dress with a deeply darted, fitted waist, worn over pants and topped with a folded and peaked nurses' hat. It was almost theatrically feminine. That fall, the uniforms changed to a forest green long sleeved shirt and pants. They looked like a fitted and feminine version of scrubs. In spring and summer 2008, they changed to a short-sleeved version of the green scrubs. The customer service staff changed their uniforms on a regular schedule, too. In 2007, they wore blue wool pantsuits with short-sleeved button down striped shirts. In spring 2008, they changed to charcoal gray shell dresses with cap sleeves, and cropped jackets. The dresses were pocketless, and so tight that the front desk staff complained they had to re-learn how to walk and sit. One of the nurses complained that the administration played dress-up with them as if they were dolls.

The staff's appearance changed as they settled into their jobs. The front desk staff all started with demographic similarities—they are all young women and all waidi ren (migrants), recently arrived in Beijing. In contrast to the middle class and wealthy patients they served, their parents were farmers and workers. Their appearance became more uniform over time, as they spent more time in the hospital environment. On their first day, they started out wearing a loaner uniform, a blazer that didn't fit and a big white nametag with "Intern" instead of a name. They looked awkward and uncomfortable behind the desk, and even more uncomfortable with patients. By the time they graduated to answering phones and accompanying

patients they had undergone a transition. They learned the girlish-professional cadence of voice, good posture and body language, and persistent politeness required for the front desk jobs. Some of them started wearing a little makeup. They smiled more and made small talk.

The hospital engineering of staff affect and appearance was another form of creating beauty and aesthetic uniformity as a form of affective labor. Makeup offers an example of the intense attention the administration paid to nurses' and customer service staff's appearance. In spring 2008, the hospital held a makeup seminar. Very few workers at the hospital habitually wore makeup. Some of the nurses were confused when they arrived to find a conference room with a makeup artist setting up a demo, because they thought they were showing up for an infectious disease seminar. Instead, they arrived to see a male instructor dressed, as with many young Beijing hair and makeup stylists, like a member of a boy band.

The instructor taught the class as if the students had never worn makeup at all. His teaching style included diagrams and emphasized uniformity and systematicity. He started with eyebrows. He drew a diagram on the white board with a face, with a vertical line up one side of the nose and the inner edge of one eyebrow, and made a triangle from the nose to the other side of the eyebrow. He said that the degree of the angle is different in whites and Asians, and that the students should be certain not to use eye makeup advice written for white women. He then dispensed a list of rules for eyebrows and eyelashes. Eyebrows should be round and soft, not thin and hard. Thin

eyebrows look old. The bigger the face, the bigger the eyebrows should be. Chinese have both single and double eyelids. Eyebrows and eye makeup should account for those differences. Use eyeliner near the roots of your eyelashes, not across your lid. If you put mascara on too thick you make it look like your eyes lack depth. Japanese brands are good for Chinese skin. Don't use mascara that costs 5-10 yuan. Apply makeup more lightly after you turn thirty. Use colors that match your skin tone so your makeup is invisible. The emphasis of his instruction was on creating enhanced femininity and polish that appeared effortless.

Su Fang, a customer service worker in her early twenties, who routinely wore mascara and lip-gloss and had pierced ears, was chosen as a critique for eyebrow shaping by the makeup instructor. He held her chin and pointed her face back and forth and up and down. He said, in a complementary tone, "Her eyebrows are a little short, but they're freshly styled." He pulled out an electric eyebrow trimmer and started shaving underneath the brow to give them a cleaner line. Through the whole class, the younger workers sat near the front looking attentive, and the older workers sat in the back giggling, teasing each other about looking beautiful, and playfully hitting each other. The younger women who worked upstairs were sitting in the back with the other midwives.

The younger women who work at the hospital, both customer service workers and nurses, wear little makeup, making any additional makeup use seem atypical.

Almost all of them trim or pluck their eyebrows, and use face wash and lotion. Like

most Beijing women, they avoid sun exposure as much as possible. The minority who wear makeup wear light mascara, and maybe a little lip-gloss. A nurse who worked at Maternacare for a few months wore heavy blue eye shadow every day. She was fired, in large part for her attitude and for not fitting in with the rest of the nursing staff. She wasn't fired for her appearance, but her appearance was part of a larger pattern of not fitting in with the look or feel of the hospital. One of the midwives, whom of all the upstairs employees was most liked by patients because she was cheerful, friendly and energetic, had tattooed eyeliner that had turned from black to a dark green. In general, the appearance of the first floor nurses and customer service workers was already young, pretty, feminine, and well groomed. The makeup class encouraged a greater degree of these qualities, which were such an important part of the aesthetics of the hospital.

The varying interest shown at the makeup seminar by clinic workers and delivery workers highlights the different roles appearance played in their jobs. Clinic and customer service workers managed their appearance in dress, grooming and body language. They appeared manicured and feminine. The emphasis on appearance in their jobs corresponded to their interest in the makeup seminar. They were the ones who watched and listened intently during the seminar, asking questions and taking notes. Among all aspects of appearance in play these workers at Maternacare, makeup is particularly meaningful because it capitalizes on the appearance of young women working in a job where their affective labor is not just an enhancement but the

core of their work.

Delivery and surgical workers have less emphasis placed on their appearance; as a consequence, they move with more ease and physical freedom, wear their hair in messy ponytails, and spend their days in plain scrubs or other clothes that are loose and easy to move in. As a rule they don't wear makeup. Midwives, of all the lessvisible workers, had the least emphasis placed on their appearance. They worked only in the inpatient areas of the hospital, with patients who had already been admitted for labor and delivery. Midwives were in their thirties, and up. Their body language exuded competence and purpose rather than accommodation and "care." They wore plain scrubs rather than the more feminine uniforms of the downstairs nurses. They often had dark, puffy eyes from working night shifts, and complained about the effect of night shifts on their health and their weight. Some of them wore jade pendants tied on red cord, a popular style of necklace that wasn't allowed for clinic staff because it clashed with the uniforms. The lack of emphasis on their appearance corresponded with their lack of interest in the makeup seminar. Although the delivery room was constructed as an aesthetically engineered space for patients, and the labor of midwives and nurses in the delivery room had an affective dimension, appearance was a much less important part of the job, and the hospital administration paid less attention to it. In the delivery rooms upstairs, and even in the second floor inpatient rooms, the nurses were older, more experienced, and less fashionably uniformed. They were scrubs in the delivery room, not tailored outfits

with little white caps, and had confident, almost aggressive body language rather than the carefully cultivated deference of the first floor staff.

Nursing, Hospital Privatization, and the Materiality of Affective Labor

Liu Hong, a former nurse who is currently a public health researcher at Beijing University, spent time at Maternacare researching a book on nursing at private hospitals. Her conclusion about nursing in China is that no one wants to be a nurse, even at private hospitals; it's a difficult, low status job that doesn't receive the respect it deserves. When she was at Beijing University as a student, two thirds of her classmates from the basic nursing class didn't go into nursing. Most became secretaries. Everyone in the nursing class was there because they didn't get into another program, including Liu Hong, who wanted to do optometry, but wasn't admitted. After graduating from nursing school she wanted to go straight to a master's program but had to work for two years before she could apply. She worked as a nurse because she didn't have an alternative. She told me that her experiences with ambivalence about her profession are common.

The reasons Liu Hong cites for ambivalence, and unwillingness to go into the field, that it is physically and emotionally demanding. Those difficulties are compounded by the fact that it is not respected or well compensated. In her analysis, nurses are considered interchangeable. It doesn't matter which school their degrees are, from or which degrees they have. The older they get, the less money they make. After thirty-five, no one wants to hire them because hospitals believe that the job can

be done by anyone, so why not a young girl? The structure of the medical system does not give nurses professional independence; there is no such thing as a nurse practitioner, and nurses don't make notes in patient charts. Rather than dreaming of further education or specialization, Liu Hong says, nurses dream of becoming Head Nurse and not working the night shift. It is a profession with a low level of continuing education, because nurses do not feel that it is worth it to continue their educations beyond the Bachelor's degree. Since nurses have more contact with patients than any other medical professional, their own lack of knowledge about medicine means lost opportunities for educating patients, who are not usually knowledgeable about medicine. Furthermore, Liu Hong believes that nursing is too isolated from other health fields and from academic research. The majority of nurses have the same educational background, a Bachelor's degree, and don't have professional experiences in other fields such as public health or science. For that reason, Liu Hong believes that nurses don't think critically about systems or effectiveness, only what's in front of them.

Liu Hong's views on nursing as an insider in the profession echo some of the ungenerous popular stereotypes about nurses as uneducated and disempowered.

Once, I heard an obstetrician complain that the hospital was treating her like a "little nurse" when she was feeling undervalued and underpaid. Nurses don't receive particularly favorable treatment in the media; Nurse Li from the Patient Education Department once said that the reason there are no hospital dramas made in Mainland

China is that no one would believe in *ER* or *Gray's Anatomy* style heroism from medical workers. Although Liu Hong emphasized the structural difficulties nurses face in furthering their educations beyond the basic Bachelor's degree in nursing, as someone who had worked in nursing and gone on to another, more prestigious career, there was an element of her critique that seemed as if it were aimed at nurses themselves.

Liu Hong's path out of nursing was to study abroad. She went to Japan and got a Master's degree in economics. She focused on healthcare oversight organizations, effectiveness of care, and healthcare benefits. She spent ten years in Japan in school and then doing research and working in public health. She now works as a professor in the medical school at Beijing University, teaching healthcare management. She is interested in improving nursing as a profession in China by increasing educational opportunities, and opportunities for nurses to work with more independence. She looks to nursing practices from abroad for inspiration, and private hospitals as an opportunity for change.

Liu Hong believes hospital privatization is good for nurses. The salaries are higher. The hospital has more control over how nurses do their jobs, leading to more standardized care for patients. I spent some time in public hospitals both as an ethnographer and a patient. Nurses were competent and reasonably friendly, but clearly, the intensely warm and solicitous treatment the Maternacare nurses give patients was not part of their jobs. The difference in appearance was also noticeable.

Not only were the Maternacare nurses performing an extra level of affective labor, Maternacare hired prettier, younger nurses. They wore stylish, carefully designed uniforms. Some of them wore makeup in the style the make-up instructor had shown them how to use. They performed the affective labor the hospital required of them, and the aesthetic labor the hospital performed through them. Public hospital nurses, on the other hand, performed patient care and administrative tasks, as well as a lesser degree of affective labor. At Maternacare, the whole staff filled out surveys evaluating other workers in their departments before Spring Festival, a practice ironically similar to the labor evaluations filled out in collectives in the Mao era. High scores on evaluations increased the New Year's bonus. Along with efficiency, knowledge, service, treatment of patients and attitude, appearance was also a criterion for evaluation.

The study Liu Hong was doing at Maternacare was for research for a new book, but also as a consultant for the hospital. The administration wanted to know how to increase the level of patient care, and how to document the mode of operation (*moshi*) to make it portable. The administration was planning to open another hospital and, according to Liu Hong, wanted to standardize their practices, like McDonald's.

The hospital administration called doctors and nurses the "software" of the hospital. Unpacking the metaphor, the software/hardware distinction creates a binary. The software runs the machines. The software manages the processes. Defining

doctors' and nurses' labor as software reveals the way in which the hospital administration imagines its systematic quality. This systematic quality is, nonetheless, supposed to incorporate features of "care." Indeed, what is being systematized is the care. There are many aspects of doctors' interactions with patients that make them difficult, but not impossible, to function interchangeably. Nurses' work is made as systematic as possible so that nurses are as interchangeable as possible, even as they are supposed to express emotions associated with spontaneity.

For example, the outpatient nurses were studying for a test on bathing infants required by the administration. Bathing infants is something rarely done by the outpatient nurses, since the babies who are bathed are newborns in their first two days after birth. The hospital processes manual had recently changed, however, and all nurses, inpatient and outpatient, were being tested on the new procedures. One nurse, Zhou Mei Yang, went upstairs to watch an inpatient nurse bathe a baby. It was choreographed like a dance. As she went through the routine she narrated: fill the tub, check the temperature, unwrap the baby (at which she and I laughed because we both thought the baby was a girl until she unwrapped it and its penis popped out), wipe the eyes, shampoo the hair, put it into the water bottom side down, turn the face down, stroke clean with water. Put it on a large paper towel, move to the table, massage with lotion, forehead, face, arms, torso, legs, toes, front, back, counting strokes, fingers and toes. When Nurse Hong, the inpatient nurse, talked to the baby, in between narration for Nurse Zhou, she told her not to cry while she was in the

water, then not to sleep when she was being dried and massaged.

Care, as given by nurses, is both standardized, as in the tightly managed procedures for bathing infants, and the product of seemingly spontaneous affective interactions. The repetitive medical procedures that make up a substantial portion of a nurse's work day, such as blood draws, taking vital signs, administering the fetal Non-Stress Test, changing the dressings for C-sections, and changing IV bags, are all standardized. Both standardized and seemingly spontaneous care are necessary for nurses' jobs and both happen routinely in interactions between nurses and patients.

The differences between nursing and midwifery highlight the extreme affective qualities of nursing at Maternacare. Nursing at Maternacare includes almost no work without an affective dimension. Large parts of the workday are spent in activities that don't appear medical at all, like escorting patients through the hospital – unless the effect that affect has on the body and the fetus is considered. The line between "care" and "medicine" is blurry. The work of midwives, on the other hand, includes less affective caretaking and more concern with the mechanics of birth. Midwives have an enthusiasm for the physically intense and medically high stakes part of their work, elements that are missing from clinic work. They do very little of the type of customer service work that involves saying "nin" and smiling. The process of giving birth involves quite a bit of intense physical contact between midwives and patients. During deliveries, midwives lock their focus on the mother, her vital signs, her contractions, the next step in the delivery, assisting her physically

in pushing, making sure the placenta comes out right away, and sewing up any vaginal tears. The difference between the two roles is primarily the degree of affect, not degree of medical labor.

Midwives make dark jokes about birth defects and the gore that accompanies childbirth, and occasionally made dirty jokes about patients. In one instance, for example, after a difficult delivery lasting many hours, in which the baby's heart rate had fallen dangerously low, the delivery team discovered that the culprit was a double knot in the umbilical cord. No one present had ever seen one before. The only place in the delivery room large enough to lay out the placenta and cord for photos was the floor, where it was placed on a sheet of plastic. All the midwives at work that day, not just the ones involved in the delivery, came into the delivery room to see the placenta, and most touched it with a gloved hand. Some of them were giddy with the excitement of seeing a pathology specimen they had never seen before. The midwives took turn posing for pictures with the placenta, making rabbit ears and grinning.

Very little of the work of any of the nurses, especially those who worked at the clinic, was medical in the same way as the physical labor done by midwives, and all of it took place in circumstances less pressured, less physically messy, and less intense. It was all, however, affective. In the circumstances of maternity care, especially given the belief of both mothers and staff that the emotional environment has material effects on the health and future life of the fetus, it is hard to separate

medical and non-medical. Care labor is medical, and medical labor is done with care. The act of accompanying patients and guiding them through the hospital, which itself was designed to play the role of a caregiving environment, *is* medical.

The quasi-industrial nature of systematizing care work at Maternacare is evident not just in the labor of nurses, but also in that of doctors. Dr. Cong, the ultrasonographer, is not harsh with patients, but is certainly not warm. Of all the doctors in the hospital, her work is least visible as "care," in the hospital marketing sense of warmth and solicitousness. Dr. Cong spent most of her career in the Army, and then moved on to work in the same maternity hospital in Central Beijing that many of Maternacare's original staff came from. More than anyone at the hospital, her work is similar to industrial production. To use an industrial metaphor, she is a quality inspector. Her job is incredibly repetitive. She recites the same measurements to the nurse who transcribes her reports every time. She measures the same structures and organs in the same order every time. The difference between her reports is mostly due to different gestational ages. Special ultrasounds, such as to diagnose a specific problem, happen relatively rarely. Even when she tells parents the sex of the fetus, she is matter of fact. She doesn't gush like an outpatient nurse would, and she never baby talks.

Even with her industrial approach to ultrasounds, she performs affective labor. First, when she tells parents the sex of the baby, it is an affective relationship. She shows them the genitalia on the screen, calling it a "*jiji*" or "*hanbaobao*" (chicken or

hamburger). The parents cry, or hold hands, or giggle, and she relaxes and even smiles a little, affected by their display of emotion, almost every time. Her prestige as a highly competent and experienced ultrasonographer, who has been working in the field since its beginning in China, is in play as part of the relationship; parents trust her because she knows what she is doing, and perhaps her mildly stern demeanor is part of that trust. The "care" aspect of her job is complex. She does not care for the fetus, she evaluates it. The care she gives is not to a specific fetus, exactly, but to the ideal of a healthy, smart baby; an outcome, rather than an object. She is caring for the parents in an abstract sense, since she is creating information that will help them achieve the family and the healthy, smart baby of their dreams.

Thinking of the hospital as a whole, as it produces healthy, smart babies by influencing every stage of development, "material" and "immaterial" labor are further intertwined. Liu Hong, the consultant brought in by the hospital to improve patient experience and nursing, pointed out that this kind of hospital is a little like McDonald's. Every nurse and customer service worker, especially, is trained to do everything the same way, to have the same demeanor. The way nurses bathe babies could be synchronized to music, as they are trained and tested to do it the same way every time with every baby. They wear uniforms. They are instructed to say "nin" on the phone, and to answer the phone the same way every time. The hospital wanted to expand (and since 2008 have opened two more campuses, one a larger hospital in the same neighborhood as the original, and one in East-Central Beijing in a

neighborhood with an international flavor). Yet the industrial, Fordist model of baby production is achieved by maximizing the affective element of every patient-staff relationship. What is industrial about the production of babies at Maternacare is also affective. Like Yanagisako (2013) found in her analysis of the labor of Italian textile producers, affective labor and industrial labor can be seamlessly related.

Production and affect are inseparable. There is material and immaterial labor in pregnancy. Middle class women treat pregnancy as a management project, a form of immaterial labor. Sometimes, as I discuss later in the chapter, when there is a problem pregnancy, the doctor performs management of the unruly pregnancy (immaterial labor) and then surgery (material labor). The management of the mother is a form of immaterial labor. The work between mother and doctor, affective or not, is collaborative; the work itself creates a relationship. The doctor's job is to manage the mother and the baby as much as it is to perform specific forms of medical care.

While babies themselves are not commodities, the experience of being pregnant and giving birth at Maternacare is a commodity with material and substantial effects on the baby created through the process. The conditions of production of "care," both the management of nurses' appearance and the routinization of hospital procedures, are more or less invisible to patients. In their interactions with patients, nurses present care by being kind, warm, and flawlessly polite. The building itself—the space, the paint, the paintings on the walls, the sunroom, and the softly upholstered furniture—is an agent in the production of this

commodified experience, and part of the product. Along with the labor of nurses, the commodified experience includes infant swimming experiences, photography of mother and child by the customer service staff the day after birth, and the excellent quality of inpatient food. The conditions of the production of care are made invisible at the same time as they are made. The conditions at the hospital are like other places in Beijing such as restaurants, where migrant laborers produce an experience for the middle class.

Nursing at Maternacare has much in common with other kinds of service work, like restaurant jobs. Nursing at Maternacare sells a self and a skill at the same time. Nursing in public hospitals is primarily about medical labor, and skill. The job is changing an IV, or a catheter bag, or administering medication, and interacting with and evaluating patients. The main goal is to meet the patients' medical needs.

Nursing at Maternacare is about these skills, but it is also about care as a feeling or mood that patients can imbibe, an overall appearance of the hospital, and a whole host of attributes that are not strictly medical. The affective labor of caring for pregnant women, however, has a highly sought after material outcome: the creation of smart, healthy babies whose bodies and characters are affected by their mothers' experiences during pregnancy.

Affective labor

Hardt and Negri's (1999, 2000, 2004) analysis of the contemporary era of capitalism as an omnipresent, dominant system characterized by immaterial labor (as

opposed to the industrial era's material labor) is important because it has been widely adopted in the social sciences in general, and anthropology in particular, as a way of reading cultures of capital. In their analysis, affective labor like the caring labor that happens in medical care is central to contemporary capitalism. Hardt asserts that affective labor creates society (1999:89). In their analysis, affective labor is part of immaterial labor, a form of labor that defines the contemporary era of mega capitalism. Immaterial labor defines the present, as material labor defined the industrial age. Immaterial laborers are in a position, as part of "the multitude," to overthrow the system. Immaterial labor has political possibilities.

In anthropology, their analysis has also been critiqued as first, being universalizing without evidence or consideration of complicating evidence (Rofel 2001), as Eurocentric (Rofel 2001, Yanagisako 2012), as unnecessarily and inaccurately dividing material and immaterial labor into a binary that doesn't make sense (Yanagisako 2012, Lanoix 2013, Camfield 2007, Dyer-Witheford 2001), as defining labor by its result rather than its practice (Camfield 2007), and of privileging knowledge workers' experience, and universalizing the experiences of white men in first world countries (Camfield 2007, Lanoix 2013, Rofel 2001).

I have a critique to add to the conversation. Hardt argues that medical labor is immaterial because its product, health, is immaterial (1999: 95). I disagree. Babies are material. Care work in general, and its affective dimension in particular, creates certain types of babies and certain types of people. As Chapter 3 of this dissertation,

which focuses on fetal education, shows in the context of reproduction in middle class Beijing, babies do not come into being without many, many instances of affective labor on the part of both mothers and medical workers. The relationships created by affective labor are collaborative in creating, at Maternacare, a certain type of child, the ideal of the healthy, smart baby. In the hospital, care labor is not the only type of affective labor. Decorating the hospital creates affect with material results. The foreign education of some staff, and the obvious rural origins of others, also create affect.

Affective labor in particular is what, according to Hardt, makes the world. I agree. Affective labor produces relationships, emotions, and ideas about interpersonal interactions. Society is made up of encounters, and the encounters between teachers and students, doctors and patients, nurses and patients, hairdressers and clients comprise a substantial sum of those interactions. Caring labor is a sub-set of affective labor. Caring labor is nursing, home health care, and parenting—anything that is hands on, embodied, and cares for another person. Care is an important concept at Maternacare: it's even in the name. When patients sign up for a maternity package they are buying three things: cosmopolitan, high-tech medicine from doctors educated abroad, a comfortable and glossy environment, and care. Care is both medical and non-medical. It is the customer service staff guiding patients

_

⁹ For a discussion of the other kinds of kids produced by other kinds of affective labor, see the section on the Beijing quintuplets later in the chapter. The affective labor of both doctor and journalists created the mascot-like quints, rehabilitated from the unruly origins of a poor rural mother receiving illegal IVF.

between areas of the hospital and it is the gentle, routine touch in exams such as measuring the fundal, or uterine, height. It is always labor and it is always embodied even though it is not always strictly medical.

Hardt says: "what affective labor produces are social networks, forms of community, biopower" (1999: 96). I agree. But he also says "this [affective] labor is immaterial, even if it is corporeal and affective, in the sense that its products are intangible: a feeling of ease, well-being, satisfaction, excitement, passion—even a sense of connectedness or community" (1999: 96). This is where I disagree. My issue with the division between material and immaterial in the case of maternity medicine is that it is inaccurate on a material and practical level. The affective labor at Maternacare focuses on manufacturing humans. Furthermore, it is manufacturing a specific kind of human—healthy, smart babies—who are imbued with a set of desirable qualities through caring labor performed by mothers and health care workers. In middle class Beijing, emotions change the body. The production of bodies, and of bodily states like health and illness, which emotion, affect and care labor can engender, is not an immaterial process.

Camfield's (2007) critique of Hardt, which is a thorough reading of many of the theory's problems, goes beyond the theory of immaterial and affective labor, and calls for a more careful and less universalizing approach to theory. He unpacks the implications of the split between material and immaterial labor, and the further split of affective labor as a sub-category of immaterial labor. To repeat, affective labor, to

Hardt, "produces or manages affects such as a feeling of ease, well-being, satisfaction, excitement, or passion" (2007:23). To Hardt, affective labor is done by low-paid, low status women workers who are alienated from their work. Immaterial labor is material, in that it is done in the world with bodies and objects, but the products are immaterial. Affective labor, in particular, is a form of biopolitical labor, which produces social life. The problem with this theory, according to Camfield, is that all labor produces social life. The main conceptual problem with immaterial labor, however, is that it classifies labor by its product: "The provision of services in contemporary capitalism is often industrial in the sense that workers are organized through a detailed division of labor in a labor process to which not just machines but technological systems are central" (2007: 39). This suggests that it is the processes of labor, not the products, that most influence its character. Drawing on EP Thompson, he broadens his critique of Hardt and Negri to include all overly broad theory:

This kind of idealism, since it prohibits any actual empirical engagements with social reality, is delivered, bound and gagged, into the hands of the most vulgar empiricism . . . [and so] the theoretical practitioner proceeds in gigantic bounds through the conceptual elements, with the most gracious of curvatures of thought; and while he is bounding he performs the most elegant acrobatic twirls and he paws the air with sublime gestures. But every so often (since the law of gravity cannot be disregarded forever) he comes down: bump! But he does not linger on this assumption, sniff it, taste the grass. Hop! He is off into the air again." (Thompson, E.P. 1978 The Power of Theory and Other Essays. New York: Monthly Review. P 24)

He also makes the point that Empire's assessment of contemporary capitalism is very much like the one in business literature, privileging white, male, Euroamerican knowledge workers and envisioning a world of seamless flows of capital (2007: 39).

Lanoix (2005, 2010, 2013), an ethnographer of care work, argues that immaterial labor as a concept doesn't explain care work, even thought it purports to include it under the auspices of affective labor (2013: 86) According to Lanoix, care labor is highly embodied, and involves materiality, even though it doesn't produce materiality. A product, whether material or immaterial, has use value and cultural currency (2013: 88). Lanoix defines immaterial labor, after Lazzarato, as "the labor that produces the informational and cultural content of a commodity" (2013: 88) Lanoix splits immaterial labor into informatized industrial production, labor of analytic and symbolic tasks, and production and manipulation of affect. The commodity is not just an object that is bought, used and discarded, but also a social agent with lasting social and cultural effects. Lanoix argues that there are several problems with classifying care labor as immaterial. First, care work is at the center of society, and this theory puts it at the periphery. Theory focuses on the informatized top end of immaterial labor, not the affective labor, which is far more common (2013: 90). Second, affective labor is heavily embodied. Focusing only on the immaterial product of the labor misses out on the embodied practice of it (2013:91). Lanoix draws on Marx's classification of intellectual labor into two types, one, like painting, where the product is distinct from the producer, and the other, like singing, where the product is not separable from the act of doing it. Care labor is like music. It is no less material for being inseparable from the person performing it (2013: 97). Furthermore, she argues that all labor is relational and that forgetting its relationality

is a bad start for any kind of analysis. (2013: 97).

Yanagisako (2012) analyzes the work of Hardt and Negri, and attacks the basic premise that immaterial and material labor can be divided, or that it is new to the twenty-first century. Industrial labor of the 19th-mid 20th centuries is used by Hardt as the modern age of material labor, to contrast with the postmodern age of immaterial and affective labor. Yanagisako argues that not only is the split between material and immaterial labor inaccurate in the present, there never was such thing as pure material production in the past. Goods and services are not distinguishable, and neither is material and immaterial labor. Besides being inaccurate, the distinction legitimates social hierarchies and wealth differentials between classes and between nations by creating a distinction between mental and manual labor. It universalizes the European experience to the rest of the world.

According to Hardt and Negri, the network is the organizational paradigm of postmodern capitalism. But Yanagisako argues that twentieth century Italian manufacturing was already networked (2012: 19). Technicians and foremen used managerial skill, affective bonds, and communication (immaterial labor) to become owners rather than workers. It was those workers who broke away from wage labor and became managers and owners who were hegemonic, not industrial workers in general (2012: 21). Yanagisako concludes that in the present, industrial labor is crucial to informational economies. The material/immaterial distinction causes harm to workers by putting Euroamerican knowledge workers in a hegemonic position.

Furthermore there is a gendered character to Hardt and Negri's distinction between communicative human relations and economic production (2012: 22).

Following Yanagisako, I would also like to argue that separating the material and immaterial parts of the labor process doesn't make sense for because they are so deeply embedded. Yanagisako argues that industrial production relies on affective labor and relationships and has done so since the industrial revolution. Similarly, he production of babies relies both on the "material" labor of medicine as the babies are tested and evaluated and supplemented and the "immaterial" labor of the care of nurses and customer service workers as they do the everyday caring labor of guiding patients through the clinic, bringing them breakfast after blood draws, and taking pictures of their newborns. These types of labor are intertwined under the umbrella of fetal education and also practically, as nurses and doctors in particular perform "material" and "immaterial" labor simultaneously or at least in the same clinical encounter.

The Quints

The Beijing quintuplets offer a counterpoint to the production of healthy, smart babies at Maternacare. Born in 2002 and delivered by a doctor who practiced part time at Maternacare, the affective labor that went into forming their personhood was quite different. Unlike the management model of pregnancy followed by mothers at Maternacare, where pregnancy is a commodified experience, the rural mother of the quints, in the media narrative of her pregnancy story, was a

mismanager. Her irresponsibility in obtaining illegal IVF, and avoiding medical care until the pregnancy was too far along to cull surplus fetuses, created the conditions for giving birth to children who, in the media narrative, were both excessive and of low quality. The children, however, are healthy, and have become small-scale celebrities, dressing as the Olympic mascots and playing in a family band. The transformation from excess fetus to celebrity did not depend on the labor of the mother, however, whose labor was almost entirely written out of the accounts. The affective labor of doctors, teachers, nurses and journalists are portrayed in popular media as having created the quints as healthy, happy, intelligent kids.

On a rare slow day in the outpatient clinic, I spent the long afternoon behind the desk in the hospital lobby chatting with Rebecca. Rebecca, who always went by her English name at work, was the kind of person who perfectly embodied the service ethos of Maternacare. She was pretty, well groomed, had an impeccable phone voice, kept her uniform clean and pressed, had good posture, wore the tiniest bit of mascara and powder, smiled with her whole face, and kept her temper no matter what. These traits would eventually get her promoted to department supervisor. She was showing me a picture on her phone of the car she wanted to own some day, a silvery Audi. As we were talking, Dr. Zhou, one of the "Expert Professor Level" doctors who came in once a week to see patients, exited the front doors and got into a new silver Mercedes waiting at the bottom of the steps. Since she worked one day a week at Maternacare, and spent the rest of her work hours at Beijing OB/GYN hospital, a prestigious public

hospital, I had assumed that, like the other doctors at Maternacare, her income would be on the modest end of middle class. Some of the doctors and a few of the nurses had cars, or drove cars to work, but the majority came to work on the bus or electric bicycles. I commented to Rebecca that Dr. Zhou was driving a fancy car for a surgeon at a public hospital. Rebecca replied, "But she's really famous! She delivered the quintuplets. Didn't you hear about it?" She also pointed out that it was Dr. Zhou's face that was at the very top of the hospital's roster of expert doctors. ¹⁰ She told me about the TV news special dedicated to her miracle C-section delivery.

The 2006 CCTV 2 program, which I tracked down online later that afternoon, is a dramatically narrated morality tale. In 2002, according to the narrator of the program, a medically and reproductively careless woman from rural Hebei Province took an excessive dose of fertility drugs, and then avoided medical care until late in her pregnancy. When she arrived at the Beijing OB/GYN Hospital seven months pregnant, she received an ultrasound (shown as a still in the TV program) that revealed she was carrying five fetuses. The narrator explains that at seven months it is too late to *liutai* (abort, or cull) the fetuses to one or two. Her dangerous predicament is framed by the narrator as a logical consequence of both trying to game the system, and of going about it in a medically risky way.

Shortly after receiving the ultrasound and being admitted to the hospital, she

¹⁰ The fee to see an Expert Professor was 300 *yuan*, compared to an ordinary doctor's fee of 60 *yuan* and an expert doctor's fee of 100 *yuan*, a significant premium over the usual fee, but not nearly enough to explain the Mercedes.

disappeared for two days. At this point the program turns from morality tale to melodrama. A long shot of the empty bed and empty halls transitions to the Beijing streets. The program shows that she returns for delivery, but does not explain why she left. The surgery, which was filmed and shown obliquely from the door of the operating room, is presented as heroic. The narration emphasizes the difficulty and danger of delivering five babies at once, the fragile condition of the babies, who were both part of a multiple birth and premature, and the skill and competence of the surgeon, Dr. Zhou. In the interview with Dr. Zhou about the birth, she emphasizes the difficulty of the birth and the danger to both mother and babies. There is no interview with the mother. They do not say if she chose not to be interviewed, or if the producers chose not to put her in the program. The program frames the birth as melodrama, emphasizing the danger to both mother and babies that was narrowly avoided when she returned to the hospital, a tragedy caused by the mother's actions that was narrowly averted.

At the moment of birth the tone of the program changes from dark moralizing to celebration. The camera angles become more direct, the light becomes brighter and softer, and the parents of the quints look, for the first time, like they are being portrayed as people. The parents and nurses care for the babies competently and busily. Now that the fetuses are no longer theoretical, partial persons, now that the mother is not a wayward pregnant woman but a busy mother, the program humanizes them. The parents talk to the quints and hold them. The medical workers assist the

parents and interact with them just as they would with any other patients. The contrast suggests that the resolution for being a fetus out of place is birth.

A later story in 2009 on CCTV 9, the English channel, ¹¹ continues the process of humanization. Although the five children are shown more than the parents, much of the program is concerned with the heroic parenting required to care for five babies, and later five children. The warmly lit color photos of the smiling seven year olds behind school desks contrasts with the gray blobs on the ultrasound photo in the previous program.

Finally, in a 2011 program on BJTV, the mother speaks. This program is a talk show format that starts with the two hosts standing on a platform in the middle of a studio giving a condensed version of the story of the quints. Then the quints come on stage, five in a row, 3 girls in matching pink shirts and 2 boys in matching red, accompanied by their mother. Their mother stands with her head slightly down, hands behind her back, behind the row of her children, looking uncomfortable. The program uses clips of the original 2006 program to tell the story of their birth and origins, except that the parts of the original which were dark and moralizing are set to new, more upbeat music and narration that emphasizes the extraordinary nature of the pregnancy and birth over its deviant or immoral nature. After playing the clips, the hosts interview both the mother and Dr. Zhou. As in the previous videos, Dr. Zhou emphasizes the dangers of multiple births to both mother and babies, and reiterates

¹¹ CCTV 13 as of 2010.

that the surgery was one of the most difficult moments of her career.

The story of the quints is a mix of several elements of reproduction and personhood in twenty-first century China. First, the role of the doctor in this story is different than in other stories. Zhan (2011) has noted the prevalence of distrust of doctors. 12 Doctors at Fulong Hospital, a public general hospital in Beijing, talked about patients' distrust and their occasional derision as being a difficult part of the job. Dr. Zhou, on the other hand, is treated like a hero in this story. Her surgical skill and medical knowledge are an important part of the overall narrative of all three TV programs. Second, the transition from fetus to baby, from medical object and partial person to full person, is dramatic in its visibility. The fetuses and the ultrasound images appear during the darkest part of the program, when the mother is portrayed as deviant, and when the medical danger is emphasized. As a contrast, once born, the quints, both as babies and as older children, are shown with warmth, light, and happy music. Third, the program scolds the mother for her deviant reproductive choices by silencing her. The producers nearly erase her from the pre-birth portions of the program, and do not present her interpretation of the fertility process, pregnancy, or birth. Paradoxically, however, the deviant circumstances surrounding the birth of the quints is erased as they become children and their celebrity status as quints takes over. Their heroic birth was covered in the national news. Later media stories feature them as Olympic fuwa, the doll-like mascots of the 2008 Olympic Games.

¹² See also Cooper 2011.

They appear performing a lion dance on inline skates, playing "Happy Birthday" on horns and drums onstage at the Beijing Music Academy, and on the third TV program, by performing family piety by answering questions about how much they love and care for each other, and for their parents. In the course of being born, the quints' excess goes from deviant to spectacular. What is excessive and dangerous as a fetus is special and engaging as a child. The matching clothes, matching faces, and togetherness of the quints are lingered over by the TV programs and the print media about them.

The BJTV story from 2011 makes a lot out of the sibling roles based on birth order, a novelty in the context of the One Child Policy. One of the girls, the *laoda* (the oldest), is reduced to tears by the hosts when they ask her what it would be like if her parents weren't there and she had to take care of all her siblings. The hosts ask one of the two boys what they would buy for their parents if they could buy them anything. One of the boys answers "animals" and the host, clearly not a farmer, says, "to eat?" Another child says a car, and clothes. The hosts comment on what good sons and daughters they are because these are all things that would benefit their parents. The hosts try to pick out by looks who is *laoda* (oldest), *laoer* (second), *laosan* (third), who is a *meimei* (little sister), *didi* (little brother), *jiejie* (big sister), *gege* (big brother). Except for *laoda*, who has a clear and visible role in the family as the eldest sister, they do not succeed. These are not sibling roles, especially in multiple, that are common among children born since the '80s. The quints are all

named "fu," or fortune, suggesting that, to their parents, they are an abundance.

Returning to the doctor, it is clear that the medical labor in the quints' birth is heroic to the eyes of the producers of the TV programs and the hosts, and also to Rebecca at the front desk, who knows enough doctors and has been around enough births to know when to be impressed. Dr. Zhou's interview emphasizes the innate danger of the pregnancy, as well as the particular dangers to the mother since she didn't receive any medical care before seven months, and didn't follow instructions, even after she was at Beijing OB/GYN Hospital. The first film positions the camera at the operating room door, focusing on Dr. Zhou performing surgery, not on the patient. Is it the ability of medical labor to enforce order on the excess of the quintuplet pregnancy that is spectacular? The doctor turns this so-called disorderly and deviant peasant pregnancy into babies. She resolves the medical danger and the social danger in one blow. She is the instrument of the transition of the quints from ultrasound blobs out of place, to extraordinary babies and children.

It is clear from the first film that the mother is not the important figure here. She carries the babies and has the surgery. Later in the second and third programs, she mothers the babies and children. But in the first program she is silent and in the third one she is still shy, standing behind her kids and looking at the ground with her hands behind her back. Although in the third program, she says she avoided medical care not to avoid having to *liutai* any of the fetuses, but because her family did not yet have the money for medical care, her deviance is not totally resolved. Her kids look

like they belong on the Beijing TV studio stage, and she does not. The hosts have the look of most Chinese TV hosts: big dramatic hair, heavy makeup, unusual clothes. The female host is wearing a skirt that stands out like it has a crinoline under it. She, on the other hand is wearing pants and a sweatshirt and has her hair pulled straight back. Her kids look at home and she looks very awkward and very out of place. Her deviance is not remediated by surgery or medical heroism; it's almost as if the quints' delivery was done to save them from their mother. The overwhelming labor required to do a rigorous course of *taijiao* is virtuous, the resourcefulness required to get black market fertility drugs on a small-scale farmer's income is not. The type of labor the parents of the quints did to make the quints is not valuable or socially acceptable, even though the quints themselves are.

The affective labor involved in the case of the quints is very different from the affective labor involved in the production and care of the middle class pregnancies at Maternacare. The process of rehabilitation of the unruly fetuses, as they become first babies with personhood and later mascots and emblems of national and family piety, is done first by the doctor, as she releases them from the mother's body. It is continued by the narration of their life history in the media. The older they are in the media, the further they get from their origins, and the more personhood they are accorded.

Care

Care is what marketing language of the hospital calls affective labor.

Extraordinary acts of care were ordinary at Maternacare. Dr. Gao, one of the mid-level doctors who was full time at Maternacare, had a patient who had timed her pregnancy for maximum astrological benefit, and had timed the C-section accordingly. In the operating room, the doctors got everything ready. They made the incisions, opened the uterus, and waited until the mother, holding her cell phone with its accurate satellite time, said it was exactly 10:00 am. Then the baby was pulled out.

The meaning of "care" was apparently straightforward: the added layer of attentive bedside manner, unfailing politeness and warmth, and aggressive coordination of care between departments that went beyond medical competence. This kind of care was complicated by a few anomalies. In a Chinese-speaking environment, it was a word commonly said in English. In a hospital engineered to capitalize medical labor, previously the domain of state hospitals, and reframe pregnancy as an experience to be consumed, it was often obvious that "care" was a commodity. But many of the practitioners of care, like nurses and customer service workers, performed it in such a way that it was invisible as labor, as when the customer service workers cooed over babies in their strollers at their first postnatal visit to pediatrics.

"Care" was a marketing trope as well, a product, and complexly related to "love," which is what mothers do, and is not capitalized. "Care" and "love" are both affective labor; care is capitalized, and love, theoretically, is not. Following care

through advertising images produced by the hospital for both internal and external consumption shows complex entanglements between affective labor as the producer of care, a product, and affective labor as a labor of love within the family.

The "care" of the hospital and the "love" of the mother enrich and enhance the fetus. An important reason affluent women choose private hospitals is for the experience of "care," and the opportunity to experience pregnancy as a source of pleasure. Specialized public hospitals in large cities generally provide good care by competent doctors. They do not, however, offer private birthing rooms, epidurals for vaginal birth, private rooms for staying overnight after delivery, medicinal food, mood music in the halls, pastel decor, or perfect coordination between doctors, nurses and customer service staff so that the patient never has to carry her own files from department to department, or wait in long lines for tests. They certainly do not offer infant swimming, prenatal yoga, or pastries from a French/Taiwanese bakery as a breakfast after fasting blood tests. "Care," then, exists at the hospital both as an instrument to create a healthy, smart baby, and an experience.

Although the care the mother provides the fetus is usually referred to as "love" rather than "care," they have quite a bit in common. Women are under tremendous pressure during pregnancy. Both sides of their extended families are counting on them to provide a child to continue the family. Women are only pregnant once in their lives. The principles of *taijiao*, or fetal education, suggest that everything she does affects the fetus and will be reflected in her child. An affluent pregnant woman

under these circumstances is under as much pressure to provide "love" as an underpaid hospital customer service worker from rural Hebei is to provide "care." The provision of "love" is instrumental, just as "care" is. It is provided through physical and affective labor. In this instance, in fact, it is impossible to separate the affective from the physical as the impressions of the mother's moods and thoughts are transmitted through the body.

Advertising for hospitals, formula, infant enrichment products, and supplements is centered around the healthy, smart baby as an outcome of a virtuous, love and care filled pregnancy and sometimes almost as a commodified product. The fact that love and care are both instruments in the creation of the healthy, smart baby creates a marketing language that blurs them together. I will discuss two instances of this language. One is a wall in the hospital between the waiting room and the outpatient clinic covered in photos of babies born at the hospital. It is directed towards new and potential patients of the hospital. The other instance is a couple of pages of the hospital's glossy, full color, and thoroughly art-directed marketing book, available in the lobby to potential patients.

Conclusion: Images of Care

Figure 1: The Maternacare Baby Wall



The baby photo wall at Maternacare. I have deliberately chosen a blurry photo, since it was not possible to get permission from the parents of the babies pictured to publish their images.

The baby wall takes up the whole of a giant corkboard that stretches nearly floor to ceiling and is at least six feet long. It is covered in photos of newborns. In a hospital where everything is softly colored and of modern design, the chaos of the photos overlapping and spilling off the sides of the board stands out. The wall is situated between the lobby and the outpatient clinic so that everyone headed anywhere in the hospital sees it. Keeping it updated and tidy is the work of two of the senior customer service staff, Hong and Rebecca. When things were slow on the phones, at the clinic, or at the front desk, they sat in one of the offices and decided which pictures to put up. They took pictures of every baby born in the hospital the day after birth, and another picture during infant swimming a day later. They liked to show pictures of as many babies as possible. They said parents liked the babies that looked active, especially if they were male babies, and especially if they were making eye contact. If they were male, parents liked their genitals to be on display. If they were female parents liked them to be covered. As they told me this, they moved to the board and started hanging photos with pushpins, taking down older pictures and putting up the new ones. They laughed and cooed over the photos, baby talking to the chubby legs and wrinkly foreheads. I understood that by "parents like," Rebecca meant both the parents of the individual baby, and the parents who walked by the wall.

There are several forms of "care," or affective labor, happening in the construction of the baby wall. First, I was most struck by the genuine pleasure they

affective labor, since it was done away from patients' eyes, but they were performing affective labor anyway. It was required that they see through parents' eyes and standards to do their job, but not that they take parental pleasure in the chubbiness, sleepiness, or funny positions of the babies. The care they were performing both for and on behalf of the parents of the newborn--choosing pictures and hanging them as if they were their own babies, showing off the parents' babies--was very close to love. If love is what mothers do and care is a service, then it is unclear in this instance which one they were engaged in. This example complicates the distinction between care and love, affective labor and affect, and the differences between affective labor that happens inside and outside the family. The seamless relationship between care, love, and affect in the creation of the baby wall represents the hospital in the exact way that the hospital's external advertising does: as a place where care blends familial love with skilled medical and affective labor.

Figure 2: Maternacare Marketing Brochure



On this page of the marketing brochure there are two images of hospital staff caring for patients. On the left is a pregnant woman in the ultrasound room with an ultrasonographer faced away from the camera and her husband leaning over her, and an image of the 3-D ultrasound they are all looking at in the lower corner. On the right is a pregnant woman on the bed in a birthing room, with a nurse and her husband looking down on her. A few details in these pictures demonstrate that family drama and the display of care, as well as the blurring between family love and professional care are the most significant aspect of them.

The first sign that these images create a dramatic family story is the way medical staff and family are nearly indistinguishable. In the first image, the father and the ultrasonographer are wearing white and facing the ultrasound monitor along with the mother. The only indication that one is a professional and the other is not is the ultrasonographer's proximity to equipment. The fetus crowds in from the bottom to join the family. It is highly possible that the reason the ultrasonographer's face is not visible is that she was known for her professional skill and slightly severe demeanor. If she were not one of the best and most experienced doctors in Beijing, she may not have been at the hospital, as she didn't quite fit into the gentle, smiling, accommodating paradigm for staff. In this image it is also notable that looking at the ultrasound together is a mark of a relationship transcending simple exchange, or even affective labor. It is illegal for hospitals to show ultrasounds to parents to prevent sex selective abortion. Showing an illegal activity in publicly available marketing

material is a strong statement that the patient family is a virtuous family: modern and cosmopolitan, it can be trusted not to strive for a boy. It also shows that patients of the hospital are trusted and brought into an intimacy with the institution, which is strong enough to flout the law.

In the second image, again, the nurse on the left and the father on the right are barely distinguishable from each other. They are wearing the same clothes and beaming at the mother with the same benevolent smiles. Like the first picture, the visible faces are looking in the same direction. The professional and the family member are providing the same kind of care or love in the form of encouragement and gentle physical touch.

Odd details in both pictures show how representation of affect rather than documentary accuracy was the main concern in the construction of these images. In the first picture, the pregnant woman is wearing an inpatient hospital gown and a head cover, which was never worn by any patient, in the outpatient ultrasound room. Inpatients have their ultrasounds either bedside in their rooms or on the table in the birthing room. In the second picture the woman in labor has pants on and her legs in stirrups, a pointless combination if there ever was one.

There are two conclusions to make from looking at the marketing of this hospital in this place and time. First, in discussions of affective labor (Clough and Halley 2007; Hardt 1999; Lanoix 2013), there is often a distinction between affect as capitalized labor and affect "for free." Clearly the relationship is more complex. It

seems worthwhile to investigate the circulation of capital and kinship without a presuming what is capitalized and what is not. Julie Chu (2004) has documented the entanglement of capital and kinship in transnational kinship networks and religious practice, with the conclusion that kinship and capital are inextricable. Asking similar questions about kinship and capital in the context of affect, labor and capital and medical care might be productive. Second, it is clear from these images in the context of Chinese popular culture that the hospital's marketing creates a loop of virtue: the family is virtuous, and the hospital is in the family, therefore the hospital is virtuous. This is yet another example of the entanglement between capitalized labor and the affectively familiar labor that supposedly happens "for free." It also makes capital virtuous. Looking at the slippery relationship between "care" and "love" reveals not just that they are kin but that their collective virtue has the power to bring capital into the family, if it weren't there already.

Whether or not it is done for a paycheck, affective kin relations and caring for others is already entwined with capital. Affective labor is not immaterial. The social relationships at Maternacare, including mother and child, mother and doctor, mother and nurse, child and nurse, produce a specific type of person, hopefully a healthy, smart baby. The materiality of babies shows that affective labor has material effects.

CHAPTER 2:

Ultrasound Wands and Ping Pong Balls: Assisted Reproduction Reconsidered

This chapter is an attempt to answer a question that started bothering me in the field, and only became more insistent over time. What is assisted reproduction? Since the 1980s, when in-vitro fertilization (IVF) was perfected and became available to women otherwise unable to conceive, IVF and other technologies for creating, screening and enhancing pregnancies have come to be understood as "assisted." A pregnancy that would not occur without technological intervention is the definition of assisted reproduction that I carried into the field with me. At Maternacare, however, women are not trying to have *a* baby, so much as a particular kind of baby, with a particular kind of personhood. To this end they use practices such as fetal education, nutrition, and fetal testing. While the existence of the pregnancy may not be assisted, the specific outcome and experience of the pregnancy was assisted.

I argue in this chapter that all reproduction is assisted reproduction.

Pregnancy at Maternacare is a large-scale management project employing a wide variety of tools and practices to shape the experience and outcome of a pregnancy.

Some of these practices, like fetal testing, are high-tech, expensive, and must be performed by experts. I will discuss this type of tool, particularly prenatal testing and fetal ultrasounds, extensively in Chapter 3. Some of these practices, like fetal education, are quite low-tech and can be practiced with little more than the mother's voice, DHA supplements, or homemade classroom teaching tools. These low-tech

tools and practices are the main subject of this chapter. Regardless of technological complexity or ease of access, all of these tools affect the process and outcome of pregnancy. Therefore, the tools of pregnancy are all forms of assisted reproduction. Pregnant women and medical workers at Maternacare employ a wide spectrum of assisted practices of pregnancy and childbirth. The use of these tools, both high and low-tech, together in pregnancy management plans suggests that all reproduction is assisted reproduction; when looking at assistance it is a matter of *how* a pregnancy is assisted rather than whether it is assisted.

Though all reproduction is assisted reproduction, there are still obvious differences between reproductive tools. Practices like IVF and surrogacy that lie on the technological edge of what is usually thought of as assistance, and low-tech practices like fetal education and prenatal teaching tools that draw from the practices and objects of everyday life, differ significantly in ease of access, expense, expertise required, and potential for physical harm to the mother or fetus. Rather than thinking of them as two different types of practices, I argue that both sets of tools are fundamentally assistance, but that it is useful to sort them out into tools that are spectacular and those that are non-spectacular. Tools that assist reproduction vary in their spectacular quality, or their elite technological qualities such as difficulty of access, expense, and complexity, and often visual interest, rather than their fundamental nature as tools of assisted reproduction.

In this chapter I discuss the low-tech, or non-spectacular, forms of assistance

practiced by women at Maternacare, of whom the majority have healthy, low risk pregnancies conceived without IVF. These tools include tools of learning and empathy taught in the prenatal education classroom, and infant swimming. Fetal education comprises another category of non-spectacular assistance that will be discussed in detail in Chapter 3, along with some spectacular tools like fetal testing and ultrasound.

Much of the ethnography of reproduction focuses on technology as a discrete category comprising complex tools, like ultrasound and other imaging methods, as well as newer medical interventions such as fetal surgery, genetic testing or epidural anesthesia. The particularities of these technologies and their effects on reproduction are well explored and documented in feminist ethnography of reproduction (Casper 1998; Ginsberg 2002, 2007; Ginsberg and Rapp 1991, 1995; Rapp 1999, 2001, 2003). This chapter is an attempt to build on these anthropologists' work on reproductive technology by linking high-tech interventions and low-tech interventions. In making these links I will consider reproductive technologies, both high-tech and low-tech, spectacular and non-spectacular, as having differences, but fundamentally acting in the same way as influences on the progress and outcomes of pregnancy. By doing so I will examine their effects, and the forms of personhood, they create, side by side. I draw inspiration from Mauss (2002) on this point. In his essay "Techniques of the Body," which draws on comparative ethnography, Mauss observed, "the body is man's first and most natural instrument. Or more accurately, not to speak of

instruments, man's first and most natural technological technical object, and at the same time, his first technical means, in his body." In the prenatal care classroom, especially, the body was often used as a tool for teaching mothers how to get through labor, and for teaching fathers what some uncomfortable parts of pregnancy feel like, to instill empathy. This chapter is an experiment beginning with the assumption that any and all tools, including the body, are technology, and all reproduction is assisted.

A pregnancy at Maternacare is a management project. Part of the project is managed by the hospital, where the administrators have designed an aggressive regime of medical care and testing. Part of the project is managed by the pregnant woman herself, as she practices self-care and applies the tools she learns. This management project brings tools like IVF, plastic pelvises, ultrasounds, and the body itself together. Sorting these tools into categories of spectacular (tools that facilitate otherwise impossible births, are often visually spectacular, and are difficult to access due to cost or legality), and non-spectacular (everyday technologies, like the ones used in the classroom) retains their very real differences, while acknowledging that they are all assistance, and all technology. Spectacular tools like IVF and 3-D fetal ultrasound are technologically complex, expensive, usually imported, performed by experts, and available only to the elite; they have an alluring glow of science and modernity. Non-spectacular tools like the body, the simple teaching tools used in the classroom, and the materials used in fetal education are simple and widely available. Both change the body, the pregnancy process, and the experience of labor.

This chapter examines some of the practices, technologies and techniques of pregnancy and birth, and the material changes they have on bodies, and on the course of pregnancies, at Maternacare, particular prenatal education. Prenatal education teaches students what techniques of the body will be necessary at birth. Classes are designed to shape the experience of birth. Nurses teach parents how to anticipate the events and experiences of labor and how to respond. As prenatal care classes look into the future towards labor, infant swimming, another technology, looks backwards, as it recreates the baby's time in the womb; it is a postnatal technology that, like fetal education, creates healthy, smart babies by connecting the world of the fetus with the skills needed in the infant's future. Throughout the chapter I consider these technologies as forms of assistance on a spectrum of assistance with more technologically complex technologies.

Mood as Technology

During each prenatal care class, the first tool introduced is always the ping pong ball and balloon. The ping pong ball and balloon together made an extremely abstract model fetus and uterus. Before class, the teachers put ping pong balls inside balloons by stretching the lip of the balloon over the ball. They leave the deflated balloons, with Ping-Pong balls inside them, sitting on the classroom seats for the students to find. As students trickle in the doors, they play with the balloons and wonder out loud what they were for.

During one class session, at the beginning of class, just after the instructors

introduced themselves, Nurse Zhan instructed the students to blow up the balloons. Most of the students looked at the balloons suspiciously. The Ping-Pong balls lodged in the cavities seemed slightly intimidating. The dads started blowing them up. A couple of women, who were with their mothers, or alone, blew the balloons up themselves. Soon, every couple in the room had a round, tight balloon with a Ping-Pong ball inside. Then, Nurse Zhan said, "Now, squeeze it out. Remember, giving birth is like this. Long, steady force, not short, hard force. Look what happens." She demonstrated the lesson by squeezing the balloon in short, jerky bursts. The ball dipped into the neck of the balloon with every push, then jumped back and came to rest at the top of the neck. She then applied several seconds of steady force with her hands flat and aligned straight against the sides of the balloon. The Ping-Pong ball shot out of the balloon and bounced off the wall. The empty balloon sizzled to the floor.

The students followed her lead, many of them tentatively trying short squeezes. One balloon burst and the room filled with laughter. After a few minutes of experimentation, Ping-Pong balls began to fly out of the balloons. When all the Ping-Pong balls were freed, Nurse Zhan returned to discussing the physics of labor, starting with the transit of a teddy bear through a plastic pelvis. The next exercise, designed to instill empathy for the pain of labor, used just the body as a tool. Women were instructed to squeeze their husbands' thighs as hard as possible for designated stretches of time, one minute or three minutes, to stand in for the length of

contractions in different stages of labor. After a round of that, full of laughter and mock anger at being hurt, Nurse Li taught some Lamaze breathing, then had them do the exercise again, using pain management techniques like focusing on an external object in the room. This time around, there was amazement among the students at how well it worked. When it was over, many of the men expressed relief. Nurse Zhan gently chided them that it was just a tiny taste of the labor pains their wives would experience.

The balloon and ping pong ball demonstration acted as assistance in two ways. Ensuring that students knew a technique for labor is a form of assistance with the potential to change the outcome of labor; by pushing more effectively students were more likely to avoid prolonging the pushing stage, and therefore less likely to need interventions. Bodily techniques of labor were, the instructors said, almost impossible to teach well in the limited time they had to teach them, making this a form of assistance that the instructors believed was partial and imperfect. More significant, though, was the change in mood brought about by the demonstration. Each time Nurse Zhan and Nurse Li used the balloon exercise, there was a dramatic shift in classroom mood by the end of the demonstration. The class as a whole went from quiet and polite, to animated. Individual students were visibly more relaxed. Pregnancy books, popular culture like TV shows and magazines, doctors, nurses, fetal education manuals, the prenatal care class instructors, pregnant women, and their families all emphasize mood as one of the most important influences on a pregnancy.

Mood strongly influences the baby's weight, health, and personality. Bad or volatile moods, especially anger, cause birth defects, miscarriage, and premature labor, and could complicate deliveries. Managing mood, then, is a form of assistance that directly changes the process and outcome of pregnancy. Techniques that manage mood are an important form of assisted reproduction. Done with very ordinary objects, they are the least spectacular of the non-spectacular tools of assisted reproduction.

In early spring 2008, Nurse Zhan decided to try something new. Many of her recent conversations with colleagues had been about her search for a way to liven up her prenatal education classes. She had spent time looking at pregnant women's chat rooms on Sina.com, and at professional literature, trying to find a solution. The problem was that most students were shy and nervous, making the first class awkward and difficult. The class that most concerned her was designed to help pregnant women prepare for the physical act of childbirth, and the surrounding days before and after. Many of the students found the class intimidating because of the seriousness of the topic, and the intimate subject matter. Both Nurse Zhan and Nurse Li, the instructors in the patient education department, believed strongly that relaxation is one of the most important influences on pregnancy and birth.

An hour before class, we assembled a miniature delivery room in the classroom. It was off to one side of the room, underneath a window, next to the lectern and projection screen used to teach the class. On a white plastic folding table,

we laid out a blue sterile pad, the type used in the delivery room to absorb bodily fluids. We laid out surgical scissors, a syringe with the needle removed, which was attached to a small gauge plastic tube, another thicker plastic tube, a fetal monitor on an elastic strap, several pairs of blue nitrile gloves, and a small pile of bandages on top of the pad. We moved another table, empty but draped in sterile blue paper, next to the supply table. On the broad window ledge behind the tables, we set out facemasks, surgical gowns and hats, and a baby doll with a small pillow sitting next to it. The room, an octagon with windows for the top third of the walls, made a natural theater, the dark winter branches of the elms and pines forming a back curtain. The "stage" was visible from every part of the room.

The class filed in, coats on and faces red, the usual mix of couples and a few mothers and mothers-in-law. One father stood at the bottom of the stairs having a heated cell phone conversation with someone at his office, unwilling to miss the class but unable to miss an important work call. Nurse Li ran down the stairs and showed him the way out to the courtyard so the class could start without interruption. When students saw the medical equipment next to the screen, they whispered to each other and pointed. When Nurse Zhan announced that the whole class was going to put on a play, the room lit up. When she announced there was only to be one male part—the pregnant woman—the class erupted into laughter and conversation. The men all pointed at each other, laughing and shaking their heads. Finally, the class settled on Roberto, the Italian husband of Deng Liping, a Chinese woman, to play the starring

role of the woman in labor. The other dads sat back and watched as the rest of the roles were passed out. Unlike the men, the pregnant women were eager to choose the roles of father, obstetrician, midwife, nurse, anesthesiologist, and second midwife, a role added on to accommodate the number of women in the class. They were excited and seemed to relish the role reversal of being a medical worker instead of a patient, after months of showing up at the hospital for test after test. The women put on gloves, surgical masks, and gowns, which strained to cover their pregnant bellies. They looked at the tools, and joked about how menacing they looked, looking meaningfully at Roberto as he slipped the doll and pillow under his surgical gown. The tables were pulled out into the center of the "stage. The play started.

The "mother" was in labor and had just arrived in the birthing room at the hospital. Her contractions were 20 seconds apart, and she was dilated 6 centimeters. Roberto, grinning, hopped up and down and made noises of pain. The first action of the medical team was to help the mother onto the table, and get him into the lithotomy position, with his feet in the stirrups. There were no stirrups, and his feet scrambled to stay on the table. He was very tall, and a poor fit for the relatively short table, making his assumption of the lithotomy position parotic. Again and again he slid down the table, and hitched himself back up. Once he was settled in, it was time to strap on the fetal monitor. The nurse strapped it around the widest point of his belly. When the strap was attached, the profile of the doll's head and feet were clearly visible under the gown, causing more giggles from the medical team.

Then it was time for the epidural. "Tell him to roll on his side," said Nurse Zhan. The anesthesiologist, Zhen Ying, said. "Roll onto your side." She pantomimed injecting his back, then attaching a rubber tube, and taping it into place with surgical tape. She guided him back onto his back.

"How do you know when he's ready to start pushing?" said Nurse Zhan.

"When he's dilated all the way," said the obstetrician. "What do you think, is he ready?" she said, modestly declining to look between his legs to check for herself.

The nurse, obstetrician, and midwife looked at each other and agreed he was ready.

Roberto pantomimed pushing by scrunching up his face and tensing up his body. The midwife, not standing between his legs, but to the side, let him go on pushing for a minute or two, then reached under the pillow on his belly and extracted the doll. She grinned, and cradled the doll in her arms. The dads clapped and cheered, and the medical team laughed happily. The "father" cut the cord, a rubber tube, with the surgical scissors (later in the class all the fathers would practice cutting this same tube, since they would likely do it in the delivery room). She handed the doll to Roberto. Everyone, audience and actors, clapped and cheered again with great enthusiasm.

Afterwards, the mother and the medical team took off their costumes, stacked the masks, piled up the gloves and facemasks to be thrown away, and put the tools back on the blue pad. When they sat back in their seats to listen to Nurse Zhan and

Nurse Li talk about labor and delivery there was a buzz and camaraderie in the room that had not been there before.

The play was successful at lightening the mood. The rest of the class proceeded as usual. The course covered what to do when labor begins, what not to do, and the possible consequences of poor decisions or bad luck. Some of the consequences were grim, including death and disability for mother, infant, or both. Some of the cautionary tales were based on common sense, and were meant to scare the mothers into mindfulness around the time of birth. They taught that it is a bad idea to ignore contractions until the last moment when an ambulance is needed, when you live on the fifth floor with no elevator. It is a bad idea to ignore the onset of labor when it's rush hour, you live in Haidian or Shunyi, and the hospital is across town. It is a bad idea to stay upright if your water breaks before you get to the hospital, because at the same time as you are losing fluids, you are also allowing your remaining amniotic fluid to oxidize, causing harm to the fetus.

Some of the stories and cautionary tales reinforce practices that require specialized knowledge, such as counting fetal movements per hour in the last trimester, especially close to full term. Dr. Chen, a semi-retired obstetrician in the patient education department who worked at Maternacare until 2007, had a set of terrifying cautionary tales she told to each new group of students. One of her favorite stories to tell¹³ was about a woman who lost two pregnancies very close to full term

¹³ I do mean favorite—despite thirty-five years as a full time obstetrician, a serious

because the fetus stopped moving, and she didn't notice until it was too late. She raised the specter of developmental disabilities, which mothers feared more than fetal death. The stark contrast between laughing about a man on the table giving birth and fetal death was not unusual for prenatal education classes.

The contrast between moods in the classroom made it visible that mood and stories were used as technology in the classroom. The nurses worked hard, through facilitating activities like the play that reversed roles, making women doctors and men mothers, by playing soothing music at the beginning of class, and by making jokes, to make patients as relaxed as possible despite the high stakes of pregnancy. Stories, including cautionary tales, passed on information for students to compare their bodily experiences of labor when it arrived. Stories and the moods evoked by classroom experiences changed the body, and by changing the body they changed the experience and results of reproduction.

Go ahead, you can't hurt it!

Dolls are tools that demonstrate the mood altering effects of non-spectacular tools. Their presence in the prenatal classroom provoked responses from students. Students were reluctant to touch them at first. When they did touch them they treated them carefully, as if they were babies that could be injured by touching roughly or

commitment to helping rural women with fistulas, cervical cancer, and other severe gynecological problems for free, and a generally friendly and helpful orientation to the people around her, she took a morbid relish in telling this and other stories of pregnancy catastrophes. When she told these stories, she had a look in her eyes that reminded me of someone telling ghost stories, which I suppose they were.

dropping. The teachers used the emotional charge of the dolls, and the change in mood that different ways of relating to the dolls provoked, as a teaching tool.

The first of a new series of classes on infant care began with Nurse Zhan and Nurse Li laying out twelve dolls on two long tables, and putting Satie's Gymnopedie on the stereo. It was the beginning track of a fetal education CD they used for many of the classes, used in this instance as a relaxing background sound for the beginning of class. Like the play, music was another strategy to reduce anxiety and shyness.

That day was the first class series Nurse Zhan was teaching by herself. She had only been at the hospital a few months, and had only been promoted to teacher, instead of curriculum consultant, when Dr. Chen had left the month before. Her teaching style was very different from either Nurse Li or Dr. Chen. Her delivery was subtler, the humor drier, the information more concise, and the stories stripped to their core. She spoke to students warmly, but not as warmly as Nurse Li, whose body language was affectionate with everyone. Like Nurse Li she had been hired partially because she had lived abroad, and conveyed a sense of having wenning (culture). For this class she was elegantly dressed in a red, fine wool sweater and a black pencil skirt underneath her white coat. She always wore subtle makeup. She stood up very straight, and moved with grace. She was from a family that went back generations in the same corner of central Beijing. Dr. Chen was a Beijing native too, but while Dr. Chen spoke loudly in an accent heavy with the "errr" of working class Beijing, Nurse Zhan spoke in a standard Mandarin accent that sounded placeless.

The tables where the students sat during class were arranged in a V shape, with Nurse Zhan's table in the center. Her table was a small plastic table with a sink set into it, a doll laid out on a towel next to it, surrounded in shampoo, cotton balls, lotion, and diapers. It was the same set up used to test nurses on the procedure for washing newborns. The students' stations had dolls, but their sinks, rather than being recessed, were plastic tubs on top of the table. All the sinks were empty, since no water would be used in the class.

The students drifted in, voices lowered against the soft music. After introductions and welcomes, Nurse Li walked to her table, and picked the doll up by its feet. Next, she swung it back and forth like a pendulum over her workstation. The students, who while waiting for class to begin had not touched their dolls, giggled and whispered nervously, some quite loudly. Nurse Zhan said, "You can't hurt them! Mothers, pick them up. Fathers, pick them up." The students picked them up, tentative at first, then less so.

She then taught the students how to gently, precisely, and systematically wash and diaper the baby doll. Quietly, but holding the rapt attention of the whole class, she showed the parents how to hold the baby so that her head was always supported and always out of the water, how to gently shampoo the head and wash the face without getting water in the ears, mouth or nose, how to wipe the eyes, apply lotion, diaper, and finally how to dress the baby in a onesie. She led the class through two diaper changes, one for the mothers and one for the fathers. She used repetition to

help the parents over their fears of hurting the baby, encouraging them to play and experiment by dropping the babies in the water, and pick them up by their feet.

Unlike Dr. Chen and Nurse Li, she saved the cautionary tales for after the bathing and diapering lesson, and focused on the routine of bathing, and getting the students comfortable with the dolls. By the end of the exercise, most of the students had become comfortable with the dolls and no longer seemed tentative or frightened. One mother played with the head, feeling the difference in weight between a supported and unsupportive head, and rocked the dolls with the head unsupported to feel the weight as the head lolled back and snapped forward, with an air of rapt concentration.

At the end of the class came the cautionary tales. Nurse Zhan warned the students about bath time safety, and reminded them to chart diaper usage and food consumption to make sure their newborns were well fed and hydrated, and their digestive systems were working normally. Then the topic turned, as it often did near the end of class, to cautionary tales of the mysterious variety. She told a story about a family in her neighborhood. Nurse Zhan's family lived just east of the Second Ring Road, in one of the older multi-story complexes from the socialist era, where her family had been living since it was *hutongs*, neighborhoods of one-story courtyard buildings. Her neighbors had twins. Their mother couldn't figure out why each twin's eyes skewed to the side, or why his neck was slightly twisted. She was so afraid they both had been born with a neurological problem, she wouldn't go to the hospital to get them examined, which only made her fear worse. By the time Nurse

Zhan heard about the problem via neighborhood gossip, and went to look in on her, she was in a panic. While sitting in the living room and talking to the mother, Nurse Zhan noticed that the twins were lying in a crib with a TV behind them. Hearing the noise, and seeing the light in their peripheral vision, had made them strain their necks in opposite directions for a better view, like plants growing towards the light. Since the TV was on most of the day, their muscles, including their eyes, had become accustomed to the position, and held it even when the TV was off. Nurse Zhan told the twins' mother to move the TV to a place where they could see it or to turn it off. She followed her instructions. In a couple of months their eyes and posture returned to normal.

Mysterious stories, like the crooked-necked twins, were as much about presenting a problem that was solvable, and solved during the telling of the tale, as they were cautionary tales about parenting. In the stories, someone with experience showed up to help, and the problem was solved. Students listened with their whole bodies. They were visibly tenser during the story, and visibly more relaxed when it came to a resolution. When the ending came most of the class burst out in relieved laughter. The instructors explained to me outside of class that almost everyone having a baby in China is a first time mother. Their parents' generation gave birth under such different circumstances that many of their experiences weren't applicable to a contemporary middle class pregnancy, especially at a hospital like Maternacare. As instructors they could pass on their own experiences, and the experiences of the

patients who had come before. First time motherhood was a situation fraught with so much anxiety that it would be impossible to eliminate it entirely, but by doing everything possible to reduce it, patients would be able to have a healthier pregnancy and an easier birth.

Both mood and narrative functioned as technology in prenatal education classes. The instructors shifted back and forth between teaching through activities designed to shift the mood, like the play, and teaching through stories. They supplemented activities and stories with music and jokes designed to make students laugh and help them relax. The mood, emotions and memories brought into being by practice for, and anticipation of, labor were used as technology by the instructors to prepare women for birth. Students learned what to do when labor arrived; the skills for dealing with the stress and danger of labor are a technology of the body. In the next section I will continue the discussion of non-spectacular assisted reproduction in prenatal education classes, by discussing the tools and metaphors used to teach about the body in labor and delivery.

Non-spectacular Tools and Assisted Reproduction

The class with the dolls was the end of a long process of course development and participation, much of which was concerned with crafting custom teaching tools.

Nurse Li and Nurse Zhan came back from the market with bags bulging with dolls.

They had changed out of their white coats and into nice blouses, coats and scarves for the trip and came in from the snowy parking lot laughing with bright faces. The dolls

they showed off to the office staff were naked and segmented, their stiff arms and legs attached with tough, strained looking thread seams to tightly stuffed cloth bodies. Their plastic heads were pinkish beige and topped with blonde hair. The injection molded faces featured snub noses and double eyelids. Though their postures were that of newborns, their faces bore the self-assured smiles and direct gaze of much older children. Most of the human resources department, and half of accounting, went out to the parking lot to help them unload Nurse Li's van. When the dolls were unloaded and stacked horizontally in a pile against the far wall of the office, Xiao Ling, the human resources administrative assistant, commented that they looked creepy, like corpses. The human resources manager, Mr. He, picked one up walking by and held it in his arms. He joked that he had better start practicing how to hold a baby since his wife was seven months pregnant. Everyone laughed as he awkwardly tried to contain the arms and legs in his grasp. His worried facial expression was similar to the fathers in the prenatal education classes.

The nurses were planning their new series of classes, the prenatal education classes with the balloons and Ping-Pong balls discussed earlier in the chapter. Over several weeks, they amassed a collection of similarly ordinary objects purchased at wholesale markets around Beijing. They came back to the office from the yarn and fabric market near the North Fifth Ring Road with soft, peachy-colored cotton jersey, pink felt, stretch lace, elastic straps, and spools of thread. Nurse Zhan had a sewing machine, so the two of them went to her house one afternoon during work hours to

assemble and stuff the breasts they made from the fabric. Later on, they spent a few hours in the office hand sewing felt nipples to each breast and attaching stretch lace straps. The breasts embarrassed the male HR staff, so they were stored in opaque plastic shopping bags, in a cabinet behind Nurse Li's desk.

As the new class series drew closer, the cabinet filled up with more objects.

Ping-Pong balls and pink balloons sat in a box on one of the shelves. A furry

Totoro¹⁴ shaped backpack filled with twenty pounds of beans, used by fathers to simulate the weight of pregnancy, slumped against the side of the cabinet on the floor.

The plastic pelvis, a cast purchased from a medical teaching supply store, was the one specialty item that could not have come from any housewares market in Beijing. Its appearance of scientific austerity was reduced, however, by the fact that it was paired with a small teddy bear with "Maternacare" printed on its chest. The bears were marketing swag that every woman received when she signed up for a prenatal package. The bear had been resignified as a fetus, which would pass through the pelvis to demonstrate how the baby turns to navigate the birth canal. The bear had a long, striped jersey scarf tied around its neck to serve as an umbilical cord. When not in use, it sat on a shelf behind the desks. The bear's head peeked over the top of the circle of the pelvic bones, watching over the office.

These everyday objects—a Totoro backpack, a stuffed bear in a scarf inside a pelvis, home sewn breasts, and plastic dolls—are a proxy for the physical act of birth,

¹⁴ Totoro is a cartoon character from the Hayau Miyazaki film *My Neighbor Totoro*.

the experience of pregnancy, nurturance, and empathy. These objects stand in for states of being, and have material effects on the body by teaching physical skills, changing mood, and reducing fear. The effects the experience of learning and using these tools have on the body demonstrate that they are, indeed, technology. A stuffed bear has very little in common with a fetus, but it functions perfectly well as one in class. With the exception of the dolls, which have an emotional charge for students that made them reluctant to touch them at first, the use of these objects as teaching tools generally go unremarked upon by the students. In fact, it is the more specialized medical teaching tools, such as the bas-relief model of the cervix at different stages of labor, that students comment on as objects, even though they are the types of objects that one might expect to find in a hospital. From the fact that these objects go unremarked upon in class, and that they require little explanation to assume their roles, I surmise that these everyday objects are effective as metaphors and proxies for the processes of birth, and the work of mothering an infant. Their particularity as backpacks or plastic bones is less important than the principle they illustrate (that the weight of the belly while pregnant makes everyday life exhausting, or that the fetus does a half rotation on its way through the pelvis). The flesh and metaphorical encounters between the mothers and the tools are a form of labor foreshadowing the labor of birth, and the labor of mothering. In the context of the classroom, these objects are technology.

This understanding of the everyday objects used in prenatal education classes

as technology leads to a reconsideration of "assistance." Assisted reproduction, in popular use and in feminist studies of reproduction, refers to a specific set of practices involving extraordinary medical means, such as IVF and surgery. These practices are technologically complex, expensive, novel, and carried out by experts in lab and hospital settings. The non-spectacular nature of the everyday objects used in prenatal education suggests that technological complexity is not required for an object to assist pregnancy or birth. The spectacular technology of IVF, and the everyday technology of teaching tools, have important differences, but they have similar types of effects. Returning to Mauss, the body itself, laboring on itself, is the most notable of those tools and forms of technology in fetal education, and the kind of emotional and physical management pregnant women learn and use.

Learning to be pregnant, to give birth, and to parent were taught in the classroom at Maternacare with the assistance of tools that serve as metaphors and proxies for the experiences they represent. The relationship between the kind of assistance a mother received from an ultrasound machine and the assistance she received from a plastic pelvis is closer than it first appears. The use of both sets of tools are shaped by the same matrix of influences that shape the use of these tools at Maternacare--yangsheng, ¹⁵ or personal cultivation, fetal education, and new forms of biomedicine like fetal ultrasounds. The main differences between spectacular and

¹⁵ Self-cultivation, a set of practices comprising nutrition, exercise, Traditional Chinese Medicine, qi gong, and cultural education, which in practice is very similar to the practice of fetal education. *Yangsheng* will be discussed in more detail in Chapter 3.

non-spectacular tools are in the degree of technological complexity, novelty and difficulty of access. What makes the relationship between spectacular and non-spectacular tools particularly visible at Maternacare is the simultaneous practice of spectacular forms of assistance, such as the technologically complex testing and management of pregnancy, and the many, many non-spectacular acts of assistance embedded in acts of self-care, fetal education, and classroom education over the course of a pregnancy.

Reproductive Technology Reconsidered

Thinking about assistance in terms of non-spectacular and spectacular technologies, rather than assisted and non-assisted labor, makes visible the ability of educational tools such as mood, narrative and the everyday objects used in the classroom to change the body, and to change the experience of pregnancy and birth. Non-spectacular tools enable mothers to partially anticipate the physical circumstances of labor. Using those tools changes the body by diminishing anxiety, and provoking laughter. Their use directly engaged the body as mothers held or squeezed them. According to the tenets of fetal education, this kind of emotional shift is not just legible to the fetus, but acts upon it and transforms it. Tools used in such a way during pregnancy, then, are reproductive technology as much as an ultrasound machine, or a laparoscope for fetal surgery.

By categorizing these tools as reproductive technology I hope to contribute to literature about reproduction by questioning the universality of the concept of assisted

reproduction and reproductive technology. Much of the literature on assisted reproduction is based on fieldwork in the United States and Europe. I would like to contribute the specificity of the experience of pregnancy at Maternacare, where spectacular and non-spectacular tools are both vitally important to the experience of pregnancy and birth, and where *yangsheng* and fetal education contribute to mothers' experiences and interpretation of their bodies.

Using the concept of assisted reproduction as a global universal does the work of flattening, and making non-specific, our understanding of the borders of medical practice, and of pregnancy. The term "assisted reproduction" is often used without definition, as if the meaning were clear and universal. First, it presupposes natural and unnatural forms of reproduction by creating a binary between "normal" and "assisted." Second, it constructs a universal body that is primarily physical, and begins and ends at the skin, and is acted upon only by physical technology, disregarding, for example, the action of fetal education on the fetus, or on the physiology of the mother. Third, it privileges biomedical concepts of the body, and biomedical technology, over the myriad of other ways of conceptualizing bodies, medicine, and personhood. I argue that if any reproduction is assisted, then all reproduction is assisted.

I believe that separating types of reproduction into assisted and otherwise reproduces the split between culture and nature that anthropologists, especially feminist anthropologists, have been working for at least thirty years to untangle.

Strathern (1980: 181; 1992) sees the nature/culture split as a more extreme version of the distinction between domestic and wild; she characterizes the split as full of "ideological intention" to preserve the tension around the axis of nature/culture that upholds gender categories. Ortner (1974) makes a similar argument. The nature/culture split infiltrates concepts of "the body," conceived as a part of nature or a point of connection with it, as an ubiquitous common-sense category with the lure of apparent universality. Since feminist critiques of a precultural body introduced the insight that the body is a historical object, work on the body has focused on how ways of seeing define it (Strathern 2003); how categories like gender create the effect of solidity and transcendence of bodily categories like sex (Butler 2006); how performance of social life makes the body (Butler 2006, Mahmood 2004); and how the power differentials inherent in the colonial encounter have contributed to the meaning of the body (McClintock 1995; Stoler 1992). Although these works vary in focus, they all contend that there is no such thing as "the" body. This is especially true when it comes to literature on the body in China (Barlow 1994, 2004; Dikotter 1998; Farquhar 1994, 2002; Ko 2005; Zito 1994), where the body is consistently shown as a contingent object of specific historical and political situations. Reading the body as technology addresses both its historicity and non-universality, and the non-duality of nature and culture, or, as Haraway (2003) would put it, natureculture.

The idea of assisted reproduction ignores bodily technology, such as the Lamaze breathing taught at Maternacare, as well as other "non-spectacular"

technological mediation involved regularly in birth practices. It also obscures the social relationships that are involved in the "spectacular" tools, which are surrounded by the glow of modernity and science, seemingly apart from the "natural" sphere of "unassisted" birth. As with the nature/culture split, non-spectacular and spectacular tools appear gendered. The technologies employed by nurses and expectant mothers—affect and bodily techniques—are erased as "unassisted," while those employed by doctors—high-tech machines and IVF—count as the intervention against nature.

The concept of assisted reproduction has its place, however, in the discourse in the US about pregnancy and birth. There is an ethnographically documentable binary between normal and abnormal, normal and assisted, and body and mind in popular narrative around birth. It is a culturally specific concept used to describe the techniques used to create a pregnancy where one would not be otherwise, without specific kinds of interventions. What differs between the culturally specific definition and the universalizing definition is the assumption that it is certain kinds of interventions that create pregnancy where there would otherwise be none, and that biomedical technology is the only intervention that counts as assistance.

One concept I suggest as a replacement for assisted reproduction, comprising IVF, the sonogram, surrogacy, fetal surgery, and related techniques, is spectacular reproduction. Unlike assisted reproduction it has specific characteristics and can be tracked ethnographically. Spectacular reproduction describes the two characteristics

gestured to by the term "assisted reproduction": the creation of visibility and the creation of miracles. Spectacular reproduction is often visual, as doctors reveal interiors and turn them into exteriors, making the seemingly impossible, possible. Spectacular reproduction is used in hierarchical settings such as hospitals and clinics. Spectacular reproduction, like all reproduction, produces a new way of being human. I will return to the concept of spectacular reproduction in Chapter 3, which is about the use of sonograms and fetal testing to create babies with added *suzhi*, or quality, and greater viability in the globalized market economy.

Infant Swimming

Infant swimming is a postnatal practice that very closely resembles a prenatal practice. Like prenatal care and prenatal education, it is a tool designed to produce a healthy, smart baby with a specific kind of personhood. I am discussing infant swimming here because it is on the borders between prenatal and postnatal, and between non-spectacular and spectacular tools. In equipment and technique it is very much a non-spectacular tool. The only equipment needed is an inflatable, donut-like neck ring for the baby, and a large rubber tub of warm water. Yet in practice it shares a strong visual element with spectacular tools like ultrasound, in that it both produces and demonstrates health.

Infant swimming is a relatively new practice. It came into being in the last ten years, according to the nurses who carried it out. It is more popular in China than anywhere else. Infants as young as one day old have an inflatable ring fastened

around their neck and are gently lowered into a rubber tub filled with warm water. The water is 98.6, the temperature of the womb. The warmth, the water, and the sensation of floating are meant to sooth the newborn by recreating the environment of the womb. While the actual practice of it at Maternacare is festive, with customer service staff member snapping photos, and parents standing along side the pool, the name of it, "infant swimming," rather than "baby swimming," suggested it was serious, and possibly medical, rather than recreational. In the context of the hospital, where "baby" and "infant" are used not interchangeably, the use of "infant" lends it a sense of formality, and a medical and scientific flavor. It falls into the category of medical-adjacent practices, like fetal education.

Infant swimming happens in the large private bathroom of an inpatient room. A team of two nurses fill the tub, attach the neck float, and manage the baby. Unlike nearly every other ritual of pregnancy, birth, or infant care, fathers are more active in both watching and assisting in infant swimming than mothers. The day after a C-section, mothers are still in bed. They are only able to see pictures, and listen from the next room. After vaginal birth, mothers are sore and sleep deprived. They tend to watch the swimming from the doorway without getting physically involved.

Everyone talks to each other, and baby-talked to the swimming baby, during the swim session. The conversations with the baby are interspersed with parents' questions for the nurses, and commentary from the customer service staff, on how cute the baby is, how strong, what a good swimmer, and so much hair.

When I saw infant swimming for the first time I was struck with awe that a newborn could look so capable. Watching a blinking, squirming newborn acquire a float, and begin swimming through water with the speed and dexterity I would expect only from a much older child, was a profoundly strange and unsettling experience. So much of the care of babies, especially newborns, is built around helplessness, dependency, and immobility. A baby in the water has none of those qualities. When the newborns swim, their lower halves move independently below the water. Their faces over the neck float look like a parody of the fat cheeked babies of formula ads, as the float squishes the baby's face into even rounder and even chubbier cheeks. When a baby is first lowered into the water, her facial expression usually looks startled and confused, and then becomes more relaxed as the swimming session progresses. The way the head over the float, and the body under the water, were not usually visible at the same time, gave an eerie effect of disembodiment. Once the baby got going she moved purposefully and, after a minute, even gracefully.

Parents' and medical staff's understanding of the meaning of infant swimming was very similar. Both parents and staff said the swimming tub was like a womb. The temperature of the water is at body temperature, and the sensation of floating is meant to resemble the feeling of being inside the womb. Returning the baby to the womb, on the first or second day after birth, was understood by both parents and staff as a soothing way to ease the transition from the womb to the world. The spectacular nature of the experience animated the event. Infant swimming is also perhaps the

most nakedly apparent moment of enjoyment of the healthy, smart qualities of the baby. By swimming well and staying calm (which most babies do), the baby demonstrated the qualities of health and intelligence that fetal education is meant to instill. It was both a device and a demonstration of enrichment.

Much like an ultrasound, infant swimming assists in visualizing the qualities of health, activity and intelligence. Like an ultrasound, the session is documented and an image is created. The photos go into circulation for pregnant women, their families, and anyone visiting the hospital to see. The photos taken at the swimming sessions end up on the wall of the main hallway, between the lobby and the outpatient clinic. One photo that stayed up on the wall a particularly long time showed a one-day-old baby girl photographed at an angle from the far side of the tub, so that her whole body was visible below the water. It was clear in the photo that she was swimming actively, and looked at home in the water. Rebecca, one of the customer service supervisors who chose the pictures for the board, said parents like looking at active babies, which was why so many of the swimming photos ended up on the wall. When choosing the pictures, they select photos that demonstrate the ability of infant swimming to visualize qualities that parents want babies to have.

Infant swimming is a practice wherein the fragility of the category of medicine becomes visible as well. Swimming has medical efficacy and was practiced in a hospital, yet is an experience joyfully consumed with, and by the family. The parents, the nurses and the photographers swoon over the tub not about the return to

the womb, or the health, intelligence, and accelerated growth that the fetal education literature says is the result of infant swimming. Instead they remarked on the cuteness, mobility and remarkable speed that babies took on when they swam. Like fetal education, infant swimming regulates the internal life, mood, and emotions of the baby through manipulation of environment. Like fetal education it is practiced with non-spectacular tools, such as a rubber tub and an inflatable ring, rather than specialized medical equipment or the technologically complex tools of spectacular reproduction.

Infant swimming, as a tool and a form of assistance, has characteristics of the tools of spectacular reproduction such as making the invisible visible. It also has characteristics of non-spectacular tools since it is done with everyday objects. Its hybrid nature demonstrates how closely all the tools of reproduction, spectacular and non-spectacular, spectacular and every day, are linked.

Birth, Knowledge and Technology

After all the preparation, anticipation and rehearsals, comes birth. Day or night, the curtains are closed and the lights are dim in the fourth floor delivery rooms.

Every birthing room has a camera pointed at the foot of the bed, right between the stirrups. The images are not recorded, but are transmitted straight to the monitor underneath the camera. The hospital installed the cameras so that women could see what doctors were doing during exams, and what was happening as labor progressed. The cameras were also intended to be a bit of a power equalizer. Usually in labor, a

woman could feel, but not see, what was going on the other side of her knees. At least in theory, the camera increased the visual field of the mother to give her more information and more power.

Despite the popularity of visual tools at the hospital, and despite women's expressed interest in having more information about what was happening during birth, the cameras were extremely unpopular. At some point during the first year of operation, the delivery room staff stopped even asking women if they wanted the camera to be hooked up. By the time I came along in the hospital's third year of operation, no one who worked in the delivery rooms could remember the last time the cameras had been used. This meant that during every delivery there was a blind camera and blank television monitor on the wall, directly across from the foot of the bed. Since the monitor took up so much space on the wall, in such a prominent position, its blankness was unsettling. Sometimes women asked if the camera was hooked up, and whether they were being recorded. The tool, which had been designed and installed to be empowering, had become a source of perplexity and anxiety.

The blank screen is next to a large window with drawn, heavy curtains. From the foot of the bed, where the obstetrician and midwives stood, monitors blinked and flickered and beeped, and printouts of vital signs spat noisily out of machines. The blank visual field of the mother, and the full visual field of the medical workers, offers a stark contrast. The contrast is suggestive of the types of labor mothers and

medical workers are called to perform in the delivery room. Knowledge of the procedures of birth, and rehearsal of some of its embodied aspects, are considered necessary for mothers. Otherwise, why would the hospital offer classes, rehearsals, and tours through the birthing rooms? But the absence of visual information in the mother's visual field, in a space so rich with it, suggests that the knowledge and labor required of the mother is not visual. Prenatal care classes, and the tools employed in teaching them, install foreknowledge of what will happen during labor. This knowledge and experience helps mothers manage their responses and emotions to labor. This implies that the application of what was learned in the prenatal classroom was an embodied process relying on bodily skills already learned, rather than a knowledge-directed process relying on the visual. In a hospital environment saturated with visual information, where women see ultrasound after ultrasound, and where the aesthetics of the hospital are designed to have material effects on pregnancy and birth, the lack of importance of visual information during labor is significant.

A second theme that emerged in the relationship between prenatal education classes, the technology they employed, and birth is the difference between the ideals the patient education staff had about the process of labor and birth, and the realities of how birth happens at Maternacare. Both Nurse Zhan and Nurse Li believe strongly in the safety of vaginal birth, and advocate for it in their classes. They believe it is better for mothers' long-term health, and that it has slightly beneficial effects on the newborn's health as well. They believe in an active labor, where the mother is able to

walk and move, receive massages, and sit on a birthing ball. These activities are shown in an illustration that hangs on the wall in both the prenatal education classroom and the delivery room. In practice, movement during labor rarely happens after the administration of an epidural, since the delivery of the anesthetic to the spine requires an IV to remain in place for the duration of labor. By teaching Lamaze and pain-relieving postures during prenatal education classes, Nurse Zhan and Nurse Li prepare students for a wider field of responses than those that will be provided them during delivery.

Returning to the skit in which the father went into labor and gave birth, it is possible to see some omissions in the skit's representation of labor as it happens at Maternacare. Pregnant women's mothers and mothers-in-law, and to a lesser extent fathers and fathers in law, were participants in birth. They are not directly involved, as they are not usually present in the delivery room, but are indirectly very much involved as decision makers. Nurse Li and Nurse Zhan cite families' lack of education about the process of labor, and their anxiety about the unknowns of vaginal birth, as reasons that so many patients who want vaginal births end up with C-sections. When labor goes on for more than a few hours, they explained, the older generation of the family waiting downstairs becomes anxious, and begin pushing for a C-section.

The play was also a political act in the realm of hospital politics. The patient education staff believes strongly in vaginal birth, and emphasized it in their classes,

even though the C-section rate was so high that it would have been more realistic for the majority of patients to provide extra psychological preparation for the operating room. During the classes, Nurse Zhan and Nurse Li explain the difficulties of nursing after a C-section, and the feeling of helplessness many women experience while lying still for twenty-four hours, while others care for the baby. Rather than teaching women how to withstand the pain of labor through shifting their breath and attention, it might have been more practical to prepare them for the fear and discomfort of lying flat on their backs on the operating room table. The teachers might have spent more time describing how patients would be conscious while abdominal surgery happened on the other side of a drape, and how they would not feel pain, but would most likely feel a sensation that some patients described as having someone reaching around inside them. Instead, in the classes, and especially in the rehearsals, the teachers emphasized a vaginal birth without complication.

A second form of activist politics accompanied the tools and rehearsals of the prenatal education classes. Several of the proxies were meant to teach empathy and pain to fathers, such as the exercise where mothers squeezed the father's leg as hard as they could for two minutes, while he practiced Lamaze techniques for reducing pain.

The issue of proxies, rehearsals, and knowledge imparted, accessed and hidden reveals several small ironies. Pregnant women are trained for a birth that is not the birth they will likely have, but the birth the educators would like them to have,

a birth that has more in common with *What to Expect When You're Expecting* (very popular in its Chinese translation), than the institution they were birthing in. Some of the biggest decisions were made by the people with the least information, such as mothers' parents and in laws, waiting downstairs. The information that might do the most to inform women about birth, for example, the fact that someone will likely be pressing your thigh and belly down hard enough to bruise when the baby isn't crowning as fast as the midwives think it should, or that even though anesthesia prevents pain it doesn't prevent sensation, isn't always given to patients. During pregnancy mothers receive detailed and reassuring information from spectacular, high-tech sources at regular intervals, such as ultrasounds, Non-Stress Tests, and fetal Doppler's. During labor, those same types of information are collected, but are glossed over in doctors' reports to patients.

The way a woman consumes information during pregnancy is very different from how a woman is meant to consume it during labor and delivery. During pregnancy she operates as an engineer of her baby, in concert with her partner and family. She collaborates with testing and doctors to bring into being a baby that is the best possible baby. During labor, she is meant to be informed and armed with knowledge, but only knowledge that will help her go with the flow of the delivery room, withstand pain, and tolerate what is happening. There is not an element of independence to the knowledge during labor, as there is during prenatal education. She is told how far she is dilated, and how the heartbeat is doing in relationship to her

contractions, the two main metrics of the healthiness of a birth and its progress. However she cannot see the monitors, and is not told the specifics.

The technologies for achieving a healthy, smart baby, notably fetal testing and fetal education, have implications for the personhood of the fetus. Each technology engages with and creates a different form of fetal personhood, resulting in a reproductive landscape where any individual fetus has multiple forms of partial personhood. I will explore this point more fully in Chapter 3.

Conclusion

The non-spectacular tools used in the patient education classes at Maternacare assisted in pregnancy in two ways. First, and most literally, they taught women what they should expect to experience during birth, or parents-to-be what they should expect during specific acts of caring for infants, such as bathing and feeding. Second, they created a group experience of laughing and working together. Most of the tools and experiences created by them had an element of absurdity. Even the serious looking plastic pelvis had a teddy bear for a fetus and a striped ribbon for an umbilical cord. The laughing and feeling of community is just what is prescribed by fetal education, which holds that the mother's emotions affect the baby's development, and the baby's future character.

Each tool, especially models like the Ping-Pong ball and balloon, has a metaphor or allegory in it. Tools turn complex situations, and complicated bodily states and events, into manageable pieces by stripping them down to a single gesture

or single idea. The reduction of the pushing phase of labor into a ping pong ball inside a balloon strips away layer upon layer of physicality, pain and fear into a physics demonstration of the relationship between two single surfaces of rubber and plastic. The backpack full of beans offered for fathers to wear during class as a way to instill empathy and understanding of the difficulty of pregnancy distills a physiologically complex state into a simple weight hung over the shoulders and onto the belly. It mimics the way pregnancy makes walking with a straight back and tying shoes difficult.

At the same time that tools turn events or skills into a manageable teaching moment, they also have the effect of fragmenting the body. The backpack full of beans breaks off the pregnant belly and uses it as a symbol, much in the way that the phrase "da duzi" meaning "big stomach" or "da duzi de" meaning "having a big stomach" are used both as a noun for a pregnant woman and an adjective. The breasts hand sewn by Nurse Zhan and Nurse Li consolidate breast-feeding to a single, sensationless organ, so that parents can practice technique without distraction.

Feminist ethnographers of spectacular forms of assisted reproduction, such as the fetal ultrasound, have noted that the use of such technologies has the effect of fragmenting women's bodies (Taylor 2008). Sharp (1996: 299) observes that reproduction itself, not just spectacular reproduction, has the effect of making women's bodies vulnerable to fragmentation and commodification:

Reproduction and associated technologies currently define intensified sites of anthropological interest, where the commodified female body, its reproductive

organs and processes, and, in turn, the fetus have generated an impressive array of works. As outlined above, female reproduction renders women's bodies particularly vulnerable to regulation and commodification. Set against the context of current biotechnologies, (post)feminist critiques offer an obvious analytical framework, driven by the understanding that women's bodies are consistently manipulated, fragmented, employed, and raided in ways altogether different from men's bodies.

It is not necessary to focus on the spectacular to examine the relationship between reproduction and commodification or fragmentation; as Sharp points out, reproduction itself engenders fragmentation.

Non-spectacular reproductive tools suggest that fragmentation is not always a path to commodification, or a form of violence. It appears that any fragmentation achieved through using educational tools is temporary. As the use of the Ping-Pong balls and balloons shows, reproductive tools can be part of an informational loop between tool and body. The tool fragments the body by isolating a part or function. The experience taught through using the tool, however, brings new awareness or capability to the body as a whole.

CHAPTER 3

Making the Healthy, Smart Baby: Fetal Education, Fetal Personhood and Fetal Testing

"Kids now are smarter than previous generations. It is because of nutrition, conditions, and taijiao." Dr. Chen, senior obstetrician in the education department at Maternacare

"Before people thought that the fetus couldn't hear anything. Technology allows knowledge of the fetus. It can hear at 16 weeks." Dr. Cong, senior radiologist, Maternacare

"Every night I patted my belly and said, 'Baby, Mama loves you.' I bet you've heard that one before." Li Guiying, the marketing director at Maternacare and the mother of a three year old, was talking about the *taijiao*, or fetal education, she did when she was pregnant. The patting, the love, and conversation with the fetus were common threads in mothers' descriptions of fetal education, which is a program for enhancing the quality of the fetus through stimulation and providing a rich, safe emotional and experiential environment. In practicing fetal education, mothers relate to the fetus as if it is a child who can hear and understand speech, and also feel the feelings of the mother. Fetal education creates a kind of personhood for the fetus that is nearly indistinguishable from the personhood of a newborn. Yet that personhood, and fetal education, are more complex than they first appear, since the instability of

the existence of the fetus makes it different socially and legally from a child. Fetuses have a social life in the womb, yet their existence is contingent, tied to their development into a healthy, smart baby. They both are, and are not, people. Their personhood is partial.

Fetal education is a puzzle. It is a shifting map of the connections between eugenics, kinship, and the work of mothering. It is part of a long-running cultural conversation about what makes a good person, how a good person is made, and how, specifically, to make a good Chinese person. It is a point of connection between biomedicine and *yangsheng*¹⁶ health practices and cosmopolitan desires and classical philosophical texts. It is taken for granted as a common practice, yet its origins are very different depending on who is telling the story. It is ascribed, varyingly, to two different periods of Chinese history and to 20th-century America. The category of fetal education is malleable and accommodating. Nearly every form of nonprofessional prenatal practice can be categorized as fetal education, from taking a prenatal vitamin, to going for a walk in the park after dinner, to strapping on a speaker with an attached microphone and reading the fetus stories. It is a messy, flexible category with multiple, contested histories. Its flexibility tells a story about the emergence of fetal parenting, and changes in parenting in general, in late 20th-and early 21st century Beijing.

_

¹⁶ Yangsheng, literally "nourishing life," includes everyday, self-directed healthgiving activities such as exercise, good nutrition, and maintenance of a healthy social and physical environment. See Farquhar and Zhang 2005.

This chapter is about the complicated status of fetal personhood. Fetal personhood is complex because there is not just one type of fetal personhood, but several. Fetal education and the conversational-emotional relationship it establishes between fetus and mother indicates one kind of personhood, one that appears very much like the type of personhood a baby or even an older child with preferences and interests of his own might have. Fetal testing, and the process of verifying the quality of the fetus, indicates a more tenuous personhood contingent on healthy test results. Both types of personhood exist at the same time, during the same pregnancy. Therefore I believe it is accurate to characterize all fetal personhood as partial.

This chapter is an exploration of the multiple, contingent, partial personhoods of the fetus and a discussion of the historical and cultural origins of those personhoods. Fetal personhoods are the outcome of some very specific histories. First is the history of eugenics in China. Second is the history of the One Child Policy and the ensuing concern with ensuring that single children are as healthy and intelligent as possible. Third is *suzhi* discourse, a concern with the personal physical, intellectual and social quality of individuals. The pressures inherent in having the healthiest, smartest only child possible make the existence of any individual, corporeal fetus a small part of the process of having a child; the continuation of the pregnancy is contingent on test results that show it is developing into a healthy, smart baby.

In this chapter I will discuss three separate but related techniques for

evaluating, nurturing, and creating the fetus. First, *taijiao* is a process used to nurture and enrich the fetus and to bring it into relationship with the parents and the outside world, but particularly the mother, through stimulation and response. Second is fetal testing, which verifies that the right kind of baby is made. Ultrasound creates images that engender fetal personhood by representing the fetus as a person with a face and an object of portraiture. The fetal Non-Stress Test, like *taijiao*, creates a situation where stimulation and response creates and affirms personhood. Finally, images of the fetus used in the hospital's patient information sheets that explain pregnancy month by month represent the fetus as a person living an independent life in the womb with likes and dislikes and hobbies, unfettered by an umbilical cord.

The responsive, stimulus-receiving fetus of fetal education and testing, the independent life of the images of the fetus in hospital and other prescriptive literature, and the absolute ubiquity of eugenic abortion create a complex constellation of personhoods with complex relationships between them. *Taijiao* requires, and creates, personhood. Testing creates personhood. Illustrations of the fetus represent personhood. The ubiquity of abortion in response to even slightly abnormal test results suggests that any individual fetus is most important as a future healthy, smart baby than as a specific entity. The personhood of the fetus is contingent.

To unravel the relationship between the healthy smart baby and the fetus, I will discuss fetal education, a tool with roots in TCM and traditional Chinese philosophy, its revival in the late 1990s, and how it is used in concert with the testing

regime used at the hospital. Much of the advice given for practicing *taijiao* is similar to popular medical advice for all kinds of health: eat healthy food, don't get too hot, too cold, too angry, or too depressed. Listen to soothing or uplifting music, practice gentle physical activity, read books and practice calligraphy to cultivate the mind. These everyday health practices just listed are called *yangsheng*. *Yangsheng* and fetal education include many of the same activities and most of the same ideas about what kinds of influences on the body are harmful, such as cold water. Since fetal education, like *yangsheng*, has its roots in TCM, this is no coincidence; in many ways practicing fetal education is practicing self-cultivation aimed at a fetus. *Taijiao* is a form of self-cultivation that ends, ideally, in the cultivation of a healthy, smart baby.

At the same time that fetal education cultivates, testing evaluates.

Maternacare patients undergo a regime of testing including an ultrasound about every month, every possible blood test for genetic and hormonal anomalies and for viruses that can affect the fetus such as toxoplasmosis, amniocentesis or CVS¹⁷ when called for (many patients choose to terminate the pregnancy rather than do follow- up testing on abnormal results), non-stress tests, basic blood tests for anemia and organ function and blood sugar. Some of these tests evaluate the mother's health, while others specifically monitor the growth and health of the fetus. Here I will discuss ultrasounds and fetal non-stress tests as they are used to evaluate the fetus and make

¹⁷ Chorionic villus sampling, which is a genetic testing technique similar to amniocentesis. It can be performed at 10 weeks, several weeks earlier than amniocentesis, which cannot be done until 15 weeks.

decisions about its care and continued existence. As Taylor (2005, 2008) has pointed out, ultrasounds blur the boundaries between medical test and image, taking on the weight of forging kinship and bonding as well as evaluating the size and morphology of the fetus. Non-stress tests are an example of a test that does not produce an image, but that produces a dual evaluative and bonding experience in the same way as ultrasounds do, but uses sound. Additionally, I will discuss images of the fetus that create and confirm its personhood. Fetal education makes personhood, and testing confirms or refutes it. These practices are ongoing throughout pregnancy, and result in partial personhood that is made, confirmed and negotiated continually.

History and Context

The cultural and historical context of the concern with using extraordinary testing and enrichment to create healthy, smart babies of the highest possible quality includes both the history of eugenics in 20th century China and the One Child Policy. Population quality, rather than quantity, was the main issue in the beginning of the 20th century, when the global eugenics movement and Chinese modernization reformers joined in a call for a better population free of disability and weakness and able to restore the health of the nation. Population quantity became the main issue mid-century, culminating in the One Child Policy of 1979. Although there was always a thread of concern with eugenic quality in the One Child Policy (Greenhalgh 2010: 20), early on the policies and programs were far more concerned with managing birth numbers than with reproductive health or eugenics.

Youshengyouyu (good birth and parenting), which had its origins in the high water mark of the eugenics movement in the 1920s (Chung 2002), became part of the One Child Policy in the mid-1980s. It was related to both state concerns about population quality and individual parents' concerns about maximizing the health and intelligence of their only child.

When the global eugenics movement hit China in the 1920s there was already a long history of concern with the malleability of the fetus and a set of Traditional Chinese Medicine (TCM) knowledge and practice for optimizing quality, setting gender, and avoiding deformity. Pan Guangdan, who adapted the term "yousheng" (eugenics) into Chinese from Japanese and founded the Chinese Eugenics Association, defined the field by what it was not:

It is not free love; it is not sexual education; it is not public hygiene; it is not experimental marriage; It is not a movement of anti-prostitution; it is not taijiao; it is not research on physical education; it is not compulsory marriage under the State's mandate; it does not emphasize a massacre of the weak, the unruly and inferior; it does not aim to reproduce superman; it does not aim to reproduce genius to supply for the society's need; it does not aim to reduce romanticism in love; it does not advocate animal breeding as a model for human rearing; it does not turn against any sensible concepts from sexual morality, marriage, love, family, reproduction, and childrearing (in Chung 2002: 15).

Pan also argued against the creation of a superior race as a goal of eugenics. What he *did* see as the goal was the use of science to investigate the hereditary traits that correspond with character and to use the information to improve reproduction (2002: 15). The traits he singled out as most desirable for reproduction were those possessed by the upper class at the time, the same traits parents try for in contemporary urban

China: intelligence, physical robustness, morality, creativity, resilience, and social intelligence (Chung 2002: 15).

In this early era of eugenics, environment was considered as important as genes in determining individuals' fitness. In the fight between Mendelians, who emphasized strict heredity, and Galtonians, who used statistical population analysis to paint a more complex picture of traits as they were spread throughout a population, the Galtonians eventually won (Chung 2002: 17). Galtonian genetics emphasized environment as well as genes in determining traits. This corresponded with the era's concern with hygiene as a path towards modernity and health (Rogaski 2004).

In the mid-twentieth century, socialist cultural critique, while also dedicated to strengthening the nation, deemphasized kinship and genetics (both in laboratory form and in the context of eugenics) by making kinship only one of several affinities, secondary to class, and subjugating biology to social authority in describing social and biological personhood. The elevation of class as the primary social affinity brought with it the belief that individuals could change some of their most significant characteristics through social conditioning and social struggle.

The Soviet-influenced adoption of Lysenkoist genetics brought with it the belief that individuals could change their genetic makeup through their daily lives, making natural processes subject to, and less authoritative than, social influence.

Early communist-era genetics and ideas about evolution were dominated by

Lamarkianism, the belief that all organic matter is malleable, that it is predominantly

influenced by environment, not genes, and that humans have the ability to transform any organism, including themselves (Schneider 1989, 2003: 118). Here there is a continuity, all the way from early eugenicists though the socialist era and into the 21st century, of environmental factors being just as important as genetics in the project for better children and a better national population.

While it was the widest reaching population management project, the One Child Policy is in many ways a continuation of earlier ideas about population quality and quantity. The One Child Policy, which was instituted in 1979, not only limited population quantity but also brought a renewed concern with population quality right from the beginning (Greenhalgh 2010). The concern with the quality of births, or *youshengyouyu* (eugenics and good child rearing), intensified over time. By the time economic reform intensified in the 1990s, the focus had shifted from merely avoiding genetic disorders and deformities to increasing intelligence and *suzhi* (personal quality) through enrichment.

In 1995, the party passed the Eugenics Law, which was re-named the Maternal and Infant Health Improvement Act after international criticism at the use of "eugenics." The law mandated premarital health exams and prohibited the marriage of people with hereditary illnesses. Alternately, if those with hereditary illnesses were to marry, they were required to be sterilized (Bakken 2000: 68; Sleeboom-Faulkner 2010: 126, Greenhalgh 2010: 59, 85; Evans 1997: 151). As of 2003, premarital health exams have been optional and testing rates have declined

dramatically (Sleeboom-Faulkner 2010).

Since the mid-1990s state eugenics campaigns persist. Self-directed eugenic activities such as *taijiao*, fetal testing, and prenatal preparation has become part of every day urban life. While Pan's manifesto may be a representation of eugenics in the 1920s, the desirable traits have remained the same. *Suzhi* discourse carries much of the language of eugenics, but emphasizes the malleability of traits rather than focusing on genetic heredity.

Anthropologists have noted the emergence and ubiquity of suzhi discourse since the late 1990s, as well as a corresponding emphasis on enriching the value of children to the point of extraordinary intelligence and health (Anagnost 1995, 1997b, 2004b; Kipnis 2006; Sigley 2009; Sleeboom-Faulkner 2010). In the late twentieth and early twenty-first centuries, eugenic concerns and interest in increasing suzhi engendered two new types of people: 18 the good mother and the quality child (Greenhalgh 2005: 236), or as I heard at my field sites, the "healthy, smart baby (*jiankang tongming haizi*). The technique for their creation is *taijiao*, or fetal education, a flexible category of practices organized around the principle that the fetus *in utero* is subject to a radical degree of influence from its physical environment, the emotional and linguistic content of its mother's life, and from communication, music and reading directed at it.

The following chart lays out the two main categories of fetal education, and

¹⁸ The good mother and good child are not new categories but their contemporary iteration as seen through the lens of *suzhi* are.

the main activities of contemporary fetal education. Passive *taijiao* comprises prepregnancy and prenatal care practices that are more related to the physical health of the fetus than the development of character or intelligence. Passive *taijiao* is prenatal care based on TCM, biomedicine, and common sense. Active fetal education practices are designed to cultivate certain kinds of personhood and character traits: intelligence, high *suzhi*, sociability, artistic and musical capabilities, and good temper. Passive taijiao, however, also influences these traits. Most parents who practice active *taijiao* practice passive, but not vice versa. The two categories are synergistic.

Figure 3: Fetal Education

Passive Fetal Education	Active Fetal Education
Begins before conception	May be practiced during whole pregnancy but begins in earnest at four months, when the fetus is able to hear sounds outside the womb
Passive fetal education comprises pre-pregnancy and prenatal care practices that are more related to the physical health of the fetus than the development of character or intelligence. All passive taijiao practices are common sense pregnancy care which have become part of the fetal education paradigm.	Active fetal education practices are designed to cultivate certain kinds of personhood and character traits: intelligence, high <i>suzhi</i> , sociability, artistic and musical capabilities, good temper.
Pre-pregnancy medical exam	Cultivating a calm environment
Avoiding toxins	Seeking out beautiful places and art
Good nutrition	Reading edifying material like classical essays and poetry
Exercise	Reading aloud to fetus
Following some TCM derived food restrictions like avoiding seafood. Pregnancy books, and many pregnant women, regard many TCM pregnancy practices like avoiding touching cold water and resting a full month after birth without washing their hair old fashioned and unreasonably restrictive.	Playing classical music
	Talking to the fetus
	Mood management. Anger is considered particularly toxic but sadness and depression are also damaging.

The origins of fetal education are related to *youshengyouyu* in that the beliefs about the malleability of the fetus and cultural permeability of the intrauterine environment that animate *taijiao* are the same ones that made eugenics in China emphasize environmental influence. The fetus' most intimate and immediate environment is the mother's body. Furth (1987: 14) notes that an 1827 obstetrics and gynecology text says the most important job of a pregnant woman is to regulate her emotions, especially avoiding anger and sexual excitement. These emotions created heat that acted as a "fetal poison." This belief is an important part of contemporary *taijiao* in its passive form; *taijiao* is passive when it is provision of an environment or avoidance of negative influences rather than active stimulation.

Early medical texts such as the *Mawangdui* manuscripts, which date from 168 BCE, describe the process of the fetus becoming a set form as taking place slowly over several months, in particular the first four months of the pregnancy, and give suggestions for influencing the sex and character of the child by wearing or viewing special objects (Harper 1998). Chao's *Etymology and Symptomatology of Diseases*, published in 610 CE, notes, "At this time the blood is not yet circulating and the fetus begins to grow although lacking fixed form. It will change as it is influenced by external forces. If the child is to be dignified, the mother should arrange to meet noble people rather than ugly and evil ones. If the parents prefer a boy, the mother should use a bow and arrow and ride mares. If a girl is wanted, the mother should wear plenty of jewelry. If the child is to be beautiful, the mother should handle

objects made of white jade and observe peacocks. If the child is to be virtuous and capable, the mother should be reading poems and books." (Chao, in Nie 2005: 84). The belief in extreme, physical fetal malleability is not part of contemporary fetal education. However, the belief that exposure to the mother's emotions will make permanent, lifelong changes to the child's emotional makeup, stress tolerance, and sociability is a core piece of *taijiao*.

Contemporary Fetal Education

The origin story it is commonplace to read in popular advice manuals for fetal education, or any prescriptive pregnancy literature, is about the mother of Mencius, a Confucian philosopher who lived during the Warring States period (403-221 BCE). There are several stories about Mencius' mother that are brought up to illustrate points about child rearing, but one in particular is relevant to fetal education. Several nurses at Maternacare referred to Mencius' mother as the first practitioner of fetal education, because she made sure she sat straight on the mat so her fetus would have a good environment. The full story of the straight mat reproduced in pregnancy books is that Mencius' mother catches herself in a small lie, saying, when Mencius asked why pigs were being slaughtered at the butcher's, that they were being slaughtered so that he could eat. She realized that since they were not going to be eating pork that night, not having much money, she was lying to him. She thought, "When I was pregnant I wouldn't sit on a mat if it wasn't straight, why am I lying now?" So she went to the market and bought some pork, aligning her word with her

actions to set an example for her child.¹⁹

The idea that the elements of the world the mother encounters during pregnancy influence development is present in contemporary fetal education. The transition from conceiving the fetus as having no "fixed form" to an entity with a fixed form mentioned in the Mawangdui manuscripts is much subtler in contemporary fetal education. Rather than the fetus being literally incorporeal inside the womb, contemporary fetal malleability is conceived in terms of personality, emotional makeup, taste, talent, and other attributes of character that are understood to be both environmentally influenced and innate but more strongly environmental.

While there is a conceptual lineage in both beliefs about the fetus and in women's attribution of the origin of fetal education to Mencius and to traditional practices, there are discontinuities as well. Fetal education has a geographical dimension to it that points to its complex lineage. According to doctors and pregnant women I interviewed, Taiwan is a center for the production of fetal education equipment like microphones. There is a robust fetal education literature in Taiwan. The centrality of Taiwan is important in mapping the discontinuity in the history of *taijiao*. The practice was dismissed and discouraged as superstition during the collectivist era, particularly the Cultural Revolution. More than one woman who had a child during the 1970s said of *taijiao*, "We were too busy for that!" Women see

¹⁹ Wang Renwen, Renshen, fenmian, Yuer Quan Fangan

practiced continuously. Shandong, in northeastern China, is the geographical center of fetal education as a philosophy, since it is the home of Mencius. Fetal education manuals almost always trace *taijiao* to Shandong and either Mencius or Confucius. The United States is the origin of Baby Mozart and toys for newborns' intellectual enrichment. The United States, Europe, Canada and Australia are the source of imported formula, vitamins, supplements, and fish oil, all important for the provision of a toxin-free, nutrient-rich environment that is a part of passive fetal education. *Taijiao*, then, is both Chinese and foreign, and both part of a continuous historical legacy and a broken one.

Both historical fetal education and contemporary fetal education rely upon passive exposure to elements of life outside the womb and on the mother undertaking a program of enrichment practices. Historical fetal education de-emphasizes the senses of the fetus, though, whereas contemporary fetal education uses them as a channel for transmitting language and sound. The core of contemporary fetal education in its directed, focused sense is that the fetus is engaged through the senses. The sense of hearing is the most often cited and the most commonly used. At sixteen weeks, when the fetus has developed the ability to hear, parents start reading stories, talking, and playing music. It is not just sound in its raw form that is used and recommended as a way to stimulate and comfort the fetus but processed, meaningful sound. After birth, on the other hand, it is soothing background sounds that refer to

_

²⁰ The claim that *taijiao* has an unbroken lineage of practice in Taiwan is a question for further research.

or recreate the womb that are considered useful, almost like anti-stimulation. Useful, processed, stimulating sounds include language—regular speech, poetry, essays, stories—and music, often the same kind of music played prenatally. The proof of taijiao is in the response, whether it is immediate or if it is visible after birth. Fetuses kick, knock and move in response to stimulation. Parents think that fetal education provides stimulation that leads to early development, good character, and increased intelligence. Stimulation is the goal during *taijiao*, and relaxation is the goal during early infancy. It is almost as if there is a dual correction happening—making the relaxing womb more stimulating and making the over stimulating outside world more relaxing. The fetus might move differently, or more or less intensely, depending on whether it is their mother's or father's voice they hear. The other core of fetal education is the idea that what happens in utero is enduring. Tastes and character are formed. Sounds and sensations a fetus is exposed to have a special and comforting place in the baby's life. Parents read stories and music during fetal education with the intent of playing them later for the baby as a calming experience. Character is formed through exposure to the mother's moods. Babies like the foods their mothers liked while pregnant.

I argue that the common ground of fetal education consists of stimulation and the expectation of a response, and the concept of management. Mothers manage their moods, their environment, and their nutrition. Even women I talked to who did not believe in systematized fetal education said that the most important thing you could

do during pregnancy is to avoid anger and sadness.

The relationship between *taijiao* and population control looks at first to be paradoxical. The practice of fetal personhood relates to the fetus as a person with preferences and the ability to learn. The efficacy of *taijiao* depends on fetal personhood; *taijiao* is derived from cosmologies like Daoism that endow the fetus with a soul (Nie 2005: 83). *Youshengyouyu*, or excellent childbearing and education, is a national birthing management policy with the aim of increasing the quality of the population as a whole. As such it is concerned with groups, not individuals. *Youshengyouyu*, very much a part of the day-to-day practice of obstetrics at Beijing hospitals, requires abortion to be carried out for some conditions such as birth defects, and strongly suggests it be carried out for abnormal results on any of the prenatal genetic tests recommended in *youshengyouyu* protocol.

In Nie's (2005) fieldwork on abortion, she describes a range of beliefs about fetal personhood from the belief that a fetus is a person from conception, to the more common belief that the fetus becomes a person around four months, which is also the time the fetus starts to hear well enough for fetal education to be effective. She argues that the real meaning of the fetus under the current family planning regime is external, meaning external to the fetus. The interests of women, family, society, and the state outweigh the interests of the fetus. Abortion is not morally neutral but it is worth it; moral absolutes are impossible.

I suggest that the partiality of personhood of the fetus comes from the fact that

fetal personhood is to some extent separated from individual, biological existence. Parents, in practicing *taijiao*, participating in a pregnancy culture filled with sentimental images like 3D ultrasound portraits, and giving the fetus a name or a nickname, create and affirm the personhood of the fetus. At the same time they create and affirm the personhood of the healthy, smart baby they desire. Partial personhood is located in the physical fetus. Partial personhood is located in the process of creation of the child that the fetus will become, which is dissociated from the existence of any particular fetus that may be part of the process. There is no contradiction between *taijiao* and *youshengyouyu*; in fact, they reinforce each other.

Teaching Taijiao

In many ways *taijiao* is so ordinary and so dispersed into the routines of daily life that its practice is publicly invisible except in the pregnancy section of the bookstore, and the ideas about virtuous motherhood and child development it propagates. Most of it is internal, a project of management that pregnant women do on their own, to their own bodies and fetuses. Nonetheless, these personal projects create the partial personhood of fetuses. *Taijiao* treats the fetus as a person with a social life, likes and dislikes, and emotions, and as a precursor to a fully realized person. The personhood of the fetus as created by *taijiao* is partial in its contingency upon demonstrating its ability to become a healthy, smart baby.

The Ai Baobao center, in a building overlooking the second ring road in central Beijing, holds a class two or three afternoons a week, called "Doing Fetal

Education Together." Ai Baobao is a company that sells supplements and formula. In their showroom they have experts on pregnancy and early childhood development available to answer questions and provide a full schedule of prenatal classes. For the fetal education class, "together" means with other pregnant women and a teacher, rather than mother and child as "together" often means in prenatal literature. I was at Ai Baobao to talk to women on the sales floor rather than to attend a class that day. When traffic in the showroom slowed, I ducked into the classroom to see what was happening.

The whole room was full of women reading poetry projected onto a large screen with the text on top of a picture of a sunset. They were sitting up straight with their hands on their bellies. I was so struck by the scene that it did not occur to me to notice the poetry itself, though from later reading of fetal education materials there is a very good chance it was classical poetry of the four-character line variety. The poem was on a PowerPoint slide with the computer desktop visible around it. The students read it in unison at a pitch that was not quite singsong but not far off. When they were finished with the poem the class was over. They clapped, and laughed, and talked to each other as they put on their coats. The room was warm, overheated, and everyone looked a little pink; the class seemed to have cultivated a joyous feeling in the room.

An exercise class at Ai Baobao was also presented as *taijiao*. Nine pregnant women, most of them in large maternity dresses with overall tops, sat on mats waiting

for the class to start. The instructor explained that exercise is a form of fetal education because it is good for you and it is something you can continue after birth. The exercises look like a gentle form of broadcast calisthenics—shoulder rolls and arm lifts in time to Ode to Joy.

The students look awkward. Those in skirts don't lift their legs all the way for the leg lifts or lift up their backs when lying down. Their husbands, mothers, and mothers-in-law sit in a circle around the mat as an audience. The teacher walks around the room correcting their posture or alignment. One exercise is grasping a ball and rotating the torso. One student asks, "Is this going to put pressure on the fetus?" The teacher replies, "The fetus isn't that delicate. You have all that amniotic fluid in there protecting it." The class ends with a relaxation exercise in which students are told to "close your eyes and think about something." Then Xu Juan, the teacher, says, "The fetus, with Mama, can receive the excitement of exercise." She wraps up the class with a lecture on how to do *taijiao* at home:

The way to do fetal education is to watch, hear and experience beautiful scenery, music. A smooth pregnancy will give your child a good character. This is general fetal education. It includes nutrition, experiencing beauty, and mood. You don't need special equipment for taijiao. The microphone can hurt the fetus' ears or make them nervous. Beauty is happiness. Beauty is medicinal. Say, "what a beautiful ——blank——." Visualize it while listening to music.

The Ai Baobao version of a prenatal care class described fetal growth in minute detail focused on the brain. Taught by Dr. Liu, a middle-aged retired OB/GYN in a tailored gray suit, it was a very different environment than the warmth of the *Taijiao Together* class. The classroom was a very serious environment full of pregnant women taking notes. She started with a detailed description of fetal development. Before 6 weeks the zygote looks like "a little fish, not a person. At six weeks it starts to look like a person. At 6 weeks the brain starts working. Most organs are present." She said, "If you're pregnant you have to notice where you are in the pregnancy and what develops when," emphasizing knowledge of fetal development as an important part of making sure the development happened correctly.

Moving into the practical part of her presentation, she started by saying that "inner environment and outer environment are both important," and that "Conception is too late to begin preparations for pregnancy." Before conceiving, a full body health exam is advised "to see if you have the strength to become two people" and to avoid "having that kind of kid," meaning a child with a birth defect, especially an intellectual disability. "Maintaining the body is like building a large building." She also emphasized the importance of making sure your husband has "clean sperm," meaning that it is free of toxins from smoking, drinking, plastic off gassing, or workplace chemicals, and that he is in good health.

She then moved on to the brain. She said that if you don't get enough

nutrients, the brain isn't able to develop. DHA supplements "increase the DHA in your body 69% and will make the baby smart." DHA supplements were Ai Baobao's number one selling product. She cautioned against many types of pollution: electrical, including TV, house remodeling, clothing dye, face products, hair dye, makeup, staying up late, having taken birth control within three months of conception, smoking, coffee, strong tea, and bad moods. As far as fetal education goes, she said that the more and earlier you do it, the smarter the baby. The brain is a sponge. More stimulation means more development. Intelligence is ½ genes, ½ development.

The *taijiao* practiced in this class presented a form of personhood that was not just partial in relationship to the contingency of pregnancy, but also partial in that it emphasized individual components of the fetus, particularly the brain. Not surprisingly for a class given inside a formula and supplement showroom, it emphasized the responsiveness of the fetus to consumption of supplements, especially DHA. Development in this context was not presented with cartoons of what the fetus was doing and thinking, as it was in some other *taijiao* contexts. The poetry on the projector showed that the kind of personhood that makes a fetus responsible to poetry, mood, beauty, and intellectual stimulation was alive in this classroom, but the focus on supplements for the development of specific body parts and processes showed a personhood that was both partial and fragmented.

Across town, at a prenatal class at Maternacare Hospital, taijiao was built into

the environment of the class with music, rather than overtly practiced as a group. The majority of the *taijiao* content was presented educationally for women to do at home. When Dr. Chen, a semi-retired obstetrician, taught the class, she emphasized exercise, telling the students how she rode a bike to work at eight months pregnant. She shamed the class by saying Chinese women are "lazy mamas" who don't like to exercise during pregnancy, unlike American women.

She emphasized the effect emotions have on pregnancy, saying, "The choice between a vaginal birth and a C-section does not only depend on the size of the baby's head and the pelvis. It also depends on emotional conditions. If the emotional conditions aren't good labor might not be successful. There is no way of knowing until it happens." Her most specific advice was to say, "right now, choose a *taijiao* name. Say it every day. When the baby is born use the name when it is upset and it will calm down . . . We don't think you need equipment for *taijiao*. You can start any time." She recommended music as a good starting place. Her approach was a big contrast with that of Ai Baobao, which recommended a more regimented style.

One of the main differences between the two sites is Maternacare's emphasis on whole fetuses and children, rather than components like brains. There are brains everywhere in Ai Baobao's marketing materials, which makes sense, as one of their biggest products is a DHA supplement, used to enhance the fetus's brain. The classes are free with purchase of supplements and formula and the classes emphasize aspects of fetal development that can be addressed through supplements. Throughout the

class, the instructors at Maternacare drew the students' attention to the interior life of the fetus as it was happening during class, and as it changed throughout the pregnancy. The partiality of the personhood of the fetus in this setting was less fragmented, and less complex; everything in the class addressed towards the fetus was to the whole fetus, who had emotions and experiences throughout pregnancy, with a personhood that developed as its ability to hear, experience and understand developed. The partiality of fetal personhood in this context was due only to the contingency of pregnancy.

Taijiao Stories

Yueyan and Lijun are both in unusual families for Beijing, certainly for China, but not at all for the upper middle class women who populate the maternity wards at Beijing's private hospitals. I have included their stories for several reasons, first that there is not a large body of English language anthropological or historical work on *taijiao*, especially in its contemporary form. Sleeboom-Faulkner (2009) and Dikotter (1998) both present an overview of prescriptive literature on *taijiao*. My ethnographic research adds to this literature by demonstrating that the assumption that the practice of *taijiao* follows the regimented style of the books is inaccurate. In practice many aspects of *taijiao* are looser, more intuitive, and more pleasurable than the prescriptive literature suggests.

I have chosen Lijun's story to emphasize one of the points I heard over and over again: that *taijiao* is hard work. She had a rough pregnancy with ambivalence

about carrying it to term, depression, and family problems. Engaging in serious mood management for an entire pregnancy is real labor, especially under those circumstances. I also tell their stories because both women seek, in one way or another, to transcend Chinese culture and the local. This suggests that despite the self-conscious Chineseness of *taijiao* as suggested by the manuals that it is more complex and a more fundamentally embedded way of thinking than a conscious embrace of Confucianism.

Lijun

Lijun, who had recently delivered a second baby on Xie He's VIP ward,²¹ lived in a large, glossy box of an apartment overlooking the San Yuan Qiao cloverleaf where the Third Ring Road meets the Airport Expressway. Her husband was high up in an international finance firm and it showed in their apartment furnishings, which were simple and expensive looking. We sat on a nubby white sectional sofa in the middle of a living room with deep brown hardwood floors and a collection of bronze vessels that could have come straight out of an archaeological site. Through the long picture window we could see cranes lifting parts up to what would be the middle of a high-rise apartment building. Her husband and older son were away and her parents and the *ayi* (nanny/housekeeper) were in the house with the baby, walking in and out of the baby's room and the kitchen.

She had been worried during her first pregnancy three years earlier because

²¹ Xie He, or Peking Union, is the teaching hospital associated with Beijing University. Their VIP wards are used by the very rich, and by celebrities.

her husband is ten years older than she is, making birth defects more likely. She was particularly worried during prenatal testing. Her husband was worried, too, but deferred to her judgment whether the results of any particular tests meant they should continue the pregnancy. He was working in Shanghai at the time, and was only home twice a month. As an employee in a multinational finance company, her husband made enough money so that they could afford the fines for a second child, which are approximately a year's salary, determined by individual income. A second child was commonplace among people in her world. Her older son's kindergarten class mostly comprised children from two-child families. Her second pregnancy was harder. She hadn't been entirely sure she wanted a second child. She was still deliberating whether or not to conceive again when she discovered she was pregnant. By her own account, she did not have a "well prepared heart" and was full of inner conflict. The first two weeks after she discovered her pregnancy, she couldn't sleep at all. She decided after a month of deliberation that she couldn't continue the pregnancy because she hadn't conceived under good circumstances, had been drinking coffee, and was unhappy. Then her depression broke, and she changed her mind. She moved to her parents' house while her neighbor's house was being renovated because the smell made her sick, and then got about the business of being pregnant: nutritious food, rest, vitamins sent in the mail from her brother in law in the US, taijiao.

Lijun's *taijiao* program was comprehensive. It was the most ambitious program I encountered, yet its imperfections, according to manuals, highlights the

fact that the taijiao programs outlined in pregnancy manuals are regimented beyond practical implementation. She listened to classical music, like most pregnant women, and also listened to Yanni, an instrumental musician and composer whose jazz/classical/New Age fusion music is popular internationally. She patted her stomach in rhythm with the music. She said she did not think this had any effect because she couldn't feel the fetus move. She went to the US when she was two months pregnant and saw a lot of art in museums, video art, and art magazines. She read literature, including short stories, essays, and novels. Mood management was difficult because she was easily moved during pregnancy, making it hard to avoid feeling sad, and also because there was conflict in her family that upset her deeply. She let go of small problems during pregnancy to avoid having feelings. Mood management, she said, was a completely baseline responsibility of being pregnant. She also had the worry of the semi-planned, early pregnancy to deal with. She had a cold, and a low fever, and did not know if she might have had a virus that could affect the fetus. She flew in an airplane, which she thought was probably not dangerous, but still something to worry about. She also was worried because at 35 she was one of the older mothers she knew.

One of the tenets of *taijiao* is that the character, mood and emotional resilience of your future child is dependent on your mood during pregnancy, particularly on your success at managing negative moods, suggesting that the fetus has emotions and sensitivity to the moods of others, a trait suggesting personhood. It

was common for women to trace some of their children's traits to experiences or emotions they had while pregnant:

"My mother said 'all you kids' characters exactly followed what my character (xingge, which can mean alternately character, disposition, or temperament) was when I was pregnant with you.' When I was pregnant the interests (aihao), tastes, and character all followed what I did and felt when I was pregnant." (Nurse Wu, Maternacare)

"Even if you don't know a person, if you live with them you will be affected by them, especially if they're in your belly . . . When I was pregnant I was unhappy and to this day my [five year old] child's temperament is irritable. A child [fetus] reacts to mood. When it is happy the baby moves a lot. When my husband came home it reacted. It was very obvious and the feeling was very deep." (Dr. Ou, Maternacare)

Lijun said that her first child had a very happy and open temperament, which might be a result of relatively little worry during her first pregnancy as compared to her second. Her first son was also very cautious, which she thought must come from an environmental influence during pregnancy, but she wasn't sure which one. Her second child was too young for her to tell if *taijiao* had had any effect, but she expected that he would be influenced by the emotional upheaval and ambivalence she experienced during his pregnancy. Despite her ambitious and unusually structured taijiao program, she did not think she was particularly diligent with either pregnancy.

What is interesting about Lijun's pregnancy story is that while she is one of the most ambitious practitioners of fetal education I talked to, she didn't seem more convinced of its effects than women who practiced it more casually. While she was glad she took the trouble of doing it for both pregnancies, when I asked her if you could do a comparison of a child who had received taijiao and one who hadn't, she said she wasn't sure what the results would be. Her belief that mood management was the absolute responsibility of every pregnant woman suggests that taijiao practices are considered, at least by some, a responsibility rather than an enhancement. Her story also makes clear a point that is obscured by the prevalence of one-child families. While the links between the rise of taijiao in its current incarnation, the competitive market economy, and the One Child Policy are indisputable, taijiao ideas about the emotional and social responsibilities a mother has to her unborn child are not confined to single children. Even with the ability to have two children and financial security, Lijun practiced a thorough version of taijiao, and considered mood management an indispensable part of having a responsible pregnancy and a healthy child.

Yueyan

I met up with Yueyan, a management headhunter working for a small firm, at an Italian restaurant near Chaoyang Park. She had a six-month-old daughter. Her husband was an American photographer who worked part time teaching university courses in photography and spent most of his time parenting. Either of those facts—

the foreign dad or the full time parent dad—would make her family unusual, even in the world of cosmopolitan, middle class women who give birth at private hospitals.

Yueyan, unlike most of the mothers I talked to, was explicitly critical of prevailing ideas about parenting. "I hate Chinese parenting," she said. She defined Chinese parenting as the authoritarian, cold, non-individualistic upbringing she experienced as a child: "It is too regimented, too much by rote, too violent." She struggled against it when she was young, she said, and didn't want to inflict it on her daughter. Taijiao, to her, was a practice that fit with the kind of parenting she wanted to perform instead. She saw it as an expression of the kind of love she wished to give her daughter. Accordingly, she identified the origins of *taijiao* as the United States and deemphasized its Chinese origins. Although identifying *taijiao* as entirely foreign in origin was unusual, it was not unusual for women to identify parts of it, such as playing music for the fetus, as foreign. She drew on US culture, and the access she had to it through her marriage to an American, as an alternative to the Chinese parenting style she wanted to avoid. The emotional closeness taijiao encourages between mother and fetus through gentle conversation and mood management fit into her paradigm of gentle, humanistic parenting.

She started fetal education close to the beginning of her pregnancy. Her first pregnancy, although wanted, had not been planned. She had been sick in the first trimester and had taken cold medicine. Fearing the effects both the illness and the medication would have on her child, she had an abortion, waited a few months, and

became pregnant again. During the second pregnancy she was happy, relieved to be healthy, and relieved that she knew about the pregnancy early enough to manage it well from the beginning. During a business trip to Hong Kong early in her pregnancy, she picked up some pregnancy and child rearing books from the US, chiefly *Baby Mozart*, a guide for using classical music to enhance your child's intelligence, which she listened to during pregnancy and planned to play for the baby.

Many women identified sound, particularly playing music and speaking, as the key feature of fetal education. Managing emotions and sound were the two key parts to fetal education. The receptiveness of the fetus to sound, its ability to hear and understand, and the ability of sounds heard *in utero* to affect the fetus in its life outside the womb, were understood to be why fetal education works:

"After five months you can talk, play music, and read stories to your baby. I did it myself with a radio on my belly. I talked to her, called her Zha Zha, which was her special name during pregnancy . . . I had a patient whose first child was sick while she was pregnant. Her baby stopped growing and she had to stay in the hospital for a week. After a week of taking the pressure off, the baby started growing again." (Dr. Zhou, Maternacare)

"Four and five year olds don't like vegetables. If you want your kid to like them you should tell the baby while you are pregnant how delicious vegetables are." (He Lili, birth certificate clerk, Maternacare)

"I did not do taijiao. Putting things on my belly is dangerous and I cannot

control it. But when I listened to music I played it for the baby. Every night I patted my belly and said 'Baby, Mama loves you.' I bet you've heard that one before." (Wang Yan, Human Resources, Maternacare)

"The baby becomes a person/life (shengming) at four months. After that you can communicate with it, pat the belly, and try to get an answer. The baby knocks. [When I do taijiao] I describe the weather, introduce the family and say 'this is grandpa and grandma.' From the beginning of pregnancy you can do health taijiao." (Nurse Wu, pregnant at the time of the interview, Maternacare)

"Some people say it is like standing in a room listening to something outside."

(Dr. Li, radiologist, Maternacare)

"A Finnish dad [a patient at the hospital] who was a scientist decided to do an experiment. Every night he told the same story to the fetus. [After the baby was born] when the baby cried he told the story and the baby stopped crying." (Nurse Wang, Maternacare)

"I had a patient who sat next to a printer at work. After birth the baby responded to printer noises." (Li Na, Marketing, Maternacare)

Yueyan's main form of fetal education was sound. When she was pregnant she talked to her daughter, told her stories, told her she loved her, and gave her a special name. When her daughter cried after she was born, Yueyan would say her

special name and it would calm her down. When I asked her what the name was she just smiled, not wanting to share the secret. Mood management, for her, came more easily than it did for a lot of women. She said that while she was sensitive during pregnancy, she cared less about work problems that would usually upset her. When she had a difficult client it didn't upset her as much. The physical stress of pregnancy slowed her down. Her husband had always done more of the household work since his job was less demanding, and while she was pregnant he took good care of her, cooking for her and encouraging her to relax.

At the time of our interview her daughter was six months old, but she was already nostalgic for pregnancy. Pregnancy was just the two of them, Yueyan and her daughter. She had a reason to sit and relax. She said that when her daughter was born, she had already met her because she had been getting to know her for nine months. Pregnancy, and her relationship with her daughter in utero, sounded almost romantic. Mothers definitely saw their relationship with their kids in utero as relationships between two separate entities. The communication was uneven, since fetuses can communicate through "knocks" and "kicks" and "turns" but only parents can speak or play music. Mothers, though, can communicate indirectly through moods and through the creation of the intrauterine environment through food and exercise and choice of environment.

Yueyan's experience of pregnancy as a time of intimacy with her daughter, who now, after being born, is a fully realized and adored baby, is quite common.

Yueyan's experience is all the more intense owing to having had a previous pregnancy, equally wanted and planned for, that ended in abortion due to fears that the pregnancy had been compromised and would not end in a healthy, smart baby. Her daughter's personhood while in the womb was a daily part of her life, and her favorite part of the day, even as the continuation of the pregnancy was contingent upon verification that it was healthy. Partial personhood, then, is not experienced as partially real. Mothers' commitment to emotional intimacy with the fetus ranges from ambivalent, like Lijun, to absolute, like Yueyan. The partiality is a matter of contingency of pregnancy, not the intensity with which the fetus is able to have relationships and experiences.

Imaging Personhood: Fetal Images

Prescriptive literature for pregnant women uses a remarkably consistent set of images for illustration. There are photographic images of pregnant mothers, both Chinese and white, wearing white; pregnant mothers holding their bare bellies; pregnant women laughing. Then there are pictures of babies, both Chinese and white, in every possible position, dressed in hats, crying, laughing, and playing. Then, there are images of the fetus: illustrations, rather than photos, showing the fetus as an independent social being with likes and dislikes, sensitivities, hobbies, physical characteristics, and achievements. This family of images, like *taijiao*, emphasizes communicating and responding. The fetus does not passively possess a trait, or skill, or achievement, but demonstrates it.

Two images from a Maternacare patient handout have features common to this kind of image. The patient handouts are given out by doctors during the visit for the corresponding week of pregnancy. They are also freely available in clear plastic file shelves on the wall of the outpatient clinic. They are a single sheet front and back and are a compressed source of information about what is happening in the pregnancy, what happens at the appointment for that week, possible symptoms, advice on nutrition, exercise, and self-care, and detailed measurements for fetal growth and development.

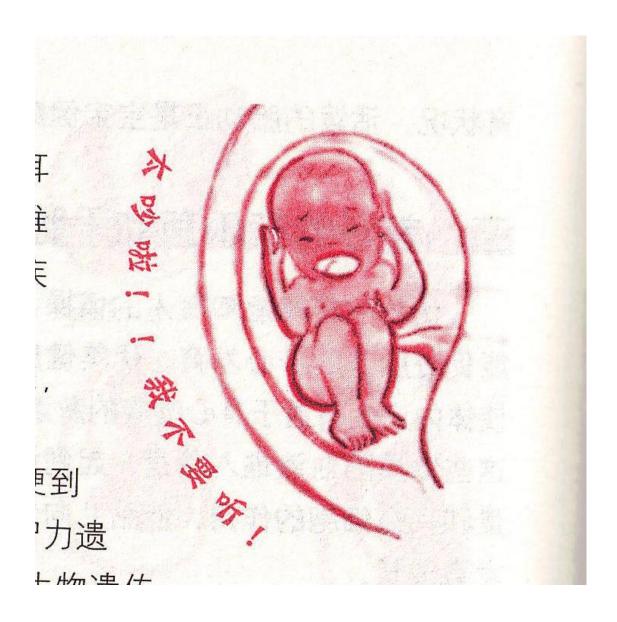
Figure 4: Twenty Weeks of Pregnancy



Figure 5: Thirty-two Weeks of Pregnancy



Figure 6: "Too Loud! I don't want to listen!"



Every sheet includes a small box at the bottom right corner showing what's happening with the fetus. Earlier sheets have a small fetus that isn't doing anything in particular. Later sheets show the fetus leading an active intrauterine life. At twenty weeks the fetus is shown in three boxes. The first is captioned "Body becoming well proportioned." It shows the fetus, which looks more like a three-year-old than a baby, standing against a ruler that is only slightly taller than he is. He is looking at the ruler with satisfaction. Not only is he being evaluated but he is also participating by standing against the ruler and checking it. The next image is captioned, "Can hear sounds/voices outside the uterus." It shows a fetus standing, knees slightly bent, head inclined against the uterine wall, hand up to ear. Sound waves stream in next to his head and marks of excitement (or excited movement?) are against the back of his head. The third image is captioned, "Can distinguish Mommy's voice" and shows a fetus on his knees listening with open mouth and outstretched hand to sound waves coming in through the uterine wall. A small smiling mother is drawn in a thought bubble. All three images show response, communication, and relationship. At the same time in each image the fetus is shown without an umbilical cord, making it appear to be a baby in a bubble and a separate entity. The spaciousness of the uterus adds to this effect.

The themes of achievement, activity, and independence continue in the 32week handout. In these images the fetus has developed even more of an independent life and has become more accomplished. The fetus has also acquired a few accouterments. The first image is very much like the 20-week image of the measuring stick. It is captioned "Body completely resembles an infant's." The fetus is standing arms and legs outstretched, mouth open, action lines coming out from both sides of his belly. The second fetus, captioned "Brain function is already strongly developed" shows a fetus with a visible brain wearing a graduation cap (but no gown) with a book under his arm and a big smile. The third image is even more active and precocious. The caption reads, "Already has likes and dislikes in music." It shows the fetus standing on a platform directing an orchestra. What is significant about this last image is that the fetus is not listening to music, or even playing it, but directing it. The themes of communication, response, independence, and activity are strong in each of the images but strongest in the last.

The image for the 36-week handout shows a two-headed fetus with a smile on one head and a frown on the other. The caption says "Sometimes smiling, sometimes frowning" and goes on to say that facial expressions are visible on the ultrasound. The emotional intensity in the image is high; the cloud of anger and the kicking arm and leg from the frowning fetal head distort the contours of the uterus.

Another image from *Forty Weeks of Pregnancy*, a pregnancy information manual written by the head of obstetrics at Ai Baobao, is an interesting contrast. It shows the themes of activity and likes/dislikes but also shows the fetus in a more realistic proportion to the uterus and gives it an umbilical cord. Captioned "Too loud!

I don't want to listen!" the drawing shows a fetus drawn in red pencil, hands over ears, an expression of pain on his face. The intensity in this image comes not from precocious abilities but from emotional intensity. There is response and communication; there is representation as an independent entity with likes and dislikes. It is clear in this image that the mother's environment is responsible for the fetus' happiness and unhappiness

Next to these blocks of images of the fetus there is a static, headless lump of a woman's body growing the fetus. It is a cutaway in profile and shows the woman's body as a pale shell around the uterus. Inside the uterus is a simple but medically realistic image of a growing fetus. These images are the only images of pregnant women on the handouts. It is clear who the agent is in these images, almost as if the fetus were growing itself. Life in the womb is much more interesting than the womb itself or even the woman surrounding the womb.

These images portray a fetal personhood that is robust, but they also suggest its contingencies, and the achievements and failures that make its personhood partial. They focus on development of size, and of capacity to feel and understand. These are traits identified with personhood, and they are also traits that have analogs on tests such as developmental ultrasound. Fetal size, the structures of the brain and other organs, and activity level of the fetus are all tested regularly from the beginning of pregnancy. The cartoon fetuses are both a map of personhood and map of tests that validate the worthiness of a pregnancy for continuation.

Testing the Fetus, Making the Fetus

In many ways the ultrasound room is the center of the Maternacare outpatient clinic. Even the extremely accurate HCG blood test for detecting pregnancy is not considered truly definitive until confirmed visually by ultrasound either for women who wish to terminate the pregnancy or who wish to continue it. I heard two rationales for this from doctors: one, that early, routine use of ultrasound diagnosis for pregnancy screens for ectopic pregnancy, thereby saving lives; two, that women with abnormal hCG levels are more likely to have abnormal fetuses and early miscarriage, and early ultrasound can identify problematic pregnancies as early as possible. Ultrasounds are given at 8, 12, 15, 20, 24, 30, 34, and 36 weeks, and often at the beginning of labor as the patient checks into the hospital for delivery. Seven to eight ultrasounds in a pregnancy are a lot when compared to both public hospitals in China and international practice. In urban Chinese public hospitals, for instance, it is standard to have 2-3 ultrasounds. Rural Chinese women may have one or none. Canadian hospitals typically do 2-3. Dr. Zhou, a senior obstetrician who left Maternacare during my time there for a job as an administrator at another private hospital and whom I could rely on for a very experienced and slightly cynical insideroutsider perspective on obstetrics practice in private hospitals, explained the redundancy of ultrasounds as a money-making tool for the hospital that also made patients feel reassured and "cared for." The word "care," often said in English in the midst of an otherwise Chinese sentence, is used frequently by doctors and

administrators and quite important in hospital marketing and the literature it gives to patients.

The hallway outside the ultrasound room is lively and more chaotic than any place in the hospital besides the lobby. For ultrasound appointments patients were often accompanied by husbands and mothers-in-law. While office appointments with the obstetricians moved quickly and waits were short, patients were often in line for the ultrasound for an hour. The ultrasound room is small but sleek, serene, and photo ready. The advertising pamphlets for the hospital featured the European-manufactured ultrasound equipment and comfortable lounge-like ultrasound table prominently, not including the illegal 50-inch flat screen display positioned for the patient to view the ultrasound images as they happened. (Because of the one child policy, a historical preference for male children, and the state's fear of social imbalance as a result of sex-selective abortion, hospitals are forbidden to show patients sex-identifying ultrasound images) The pamphlets do, however, include images of the 3-D facial portraits of the fetus, which are not illegal but slightly controversial.

Ultrasounds are the most magical and compelling of the medical tests and the most productive of a fetal image, enabling not only the identification of structural abnormalities in the fetus but also a point of affective connection with the fetus for the parents. They are a machine-facilitated translation of the maternal and fetal body into sound waves which are then translated into two and three-dimensional digital

images and then into measurements, which are themselves translated by doctors through numbers into a position on a prenatal growth chart and through visual judgment into a "normal" fetus. Ultrasounds pull the fetus into relationships with medical norms, the "healthy smart baby" and its family.

The first time I saw an ultrasound at Maternacare was on film. I had not yet been to the hospital. I was at my friend Wang Xia 's house in an enormous new highrise apartment complex called Paris (named after the European city, like many new developments in Beijing, and Sinified to BaLi) on the fringe of urban Beijing. Like the neighborhood surrounding Maternacare, the area around Paris is a frenzy of upscale new development and construction sites speckled with red brick farming villages decaying into tarp-roofed suburban slums. Sitting on her couch, she handed me her digital camera and played the video, the tinny sound barely audible. Shot by her husband, the short film showed Wang Xia with her glasses on (she usually wore contacts and only wore glasses in public if she had to) lying on her back on a medical platform resembling a beige vinyl lounge chair with her pink t-shirt hiked up to her rib cage. The film cut to Dr. Cong, the senior ultrasonographer, sitting at the ultrasound controls, one hand pressing buttons, one hand rolling the ultrasound wand over Wang Xia's belly, which was covered in a thick layer of clear ultrasound jelly. Dr. Cong chanted body parts like an incantation, partially to explain to the patient, partially for dictation to the nurse sitting at the room's other desk transcribing her notes and entering measurements into her electronic medical chart: "I am measuring

the child's head. These are the child's kidneys. This is the heart."²²

The camera flicks between Wang Xia, Dr. Cong, and the large screen directly in the patient's line of sight where the 20-week fetus is visible not wholly, like a naked eye view of a person, but in squished flashes produced by sonic contact with the ultrasound wand. Despite the fragmented quality of the flashes the pieces are clearly recognizable as grainy, off-scale baby parts floating in a flowing and swirling background of gray, black, and white static, surrounded by a frame of numbers and percentages in white figures. Looking at the close-up of the moving fetal heart on the screen, less an image of a heart than a pulsing white circle with four sections, Wang Xia starts to sob. The camera flashes between her face and the screen with the moving images on it. Dr. Cong moves the wand away to measure the cord blood flow and the room fills with the sound of blood rushing both directions in a pulseless cacophony. The view on the screen changes from the white circle to a red and green sound wave. This was Wang Xia 's first ultrasound at Maternacare, as she had discovered her unplanned pregnancy and chosen the hospital for her prenatal care relatively late. She loved watching the ultrasounds and loved the sound of the fast, almost rodent-speed fetal heartbeat that fills the room during the non-stress test. She

_

Xiao hai'er ("small child" in Beijing dialect) or xiao haizi ("small child" in standard Mandarin) is used by most of the medical staff to refer to the fetus. It is the same word that would be used to describe a child of any age from infancy to adolescence. Some of them—mostly the patient education staff, who generally spoke to patients in a more intimate tone rather than the formal, respectful tone used by the lower-status nurses and junior doctors—used baobao (baby), which has both a more intimate feel and is also used more commonly in marketing literature such as formula advertisements

looked forward to her prenatal visits. During her NST if I, or nurses, or other patients tried to chat with her she said "Shh! It's my time with her."²³

Months later, in the prenatal patient education classes taught at the hospital by Nurse Zhao and Nurse Song, I asked class participants how they felt during their first ultrasound. Their responses were extremely varied. One said she was extremely happy the first time. Another said she was scared. Another said she was struck by the way the fetus had "already developed an appearance" (vijing zhang yangzi le) and the way the doctor's careful narration of body parts helped her understand what she was looking at. Another patient who usually had her appointments on Wednesdays, the only weekday Dr. Cong doesn't work and a less experienced, younger doctor from another hospital covers for her, said that she didn't like the way she couldn't decipher the images herself and sometimes the doctors don't explain them well or say much. Several said they were happy they were delivering at Maternacare, where they could see the ultrasound images and their husbands were allowed in the room, rather than a public hospital where doctors follow the law against showing patients ultrasound images that could identify sex. One mother said, "I see it myself and I don't understand (kanbudong). When the doctor explains I understand." The first few times I saw ultrasounds I saw them like a patient—blurry, incomplete,

_

Wang Xia found out during her 24-week ultrasound that she was carrying a girl. It is possible to tell sex as early as 16 weeks but her fetus had her legs crossed during every ultrasound, making it impossible to see the "hamburger," as the sonographers and nurses called the appearance of the fetal vulva out of patients' hearing. She and her husband joked that the baby was playing a game with them.

confusing—and then, a few months later, could identify the fetal body part before the doctor said it. The consensus among patients was that ultrasounds are difficult to interpret, requiring training, a special gaze, knowledge, and concentration, and my experience in the ultrasound room backs this up.

Fetal body parts are hard to identify with an inexperienced eye for many reasons. First is that they often are internally focused cross-sections rather than surface views. Most often they are cross-sections taken from the top. There are standard views that the sonographer tries to get during each ultrasound. The heart, for instance, is seen from above and looks like a pulsating bell pepper cut in half horizontally. The standard view of the head is also cross-section and looks like a circle with a number eight inside it, a brain inside a skull. Fetal movement further complicates the process of identifying parts by sight. Dr. Jiang, one of two of the part- time sonographers, has a theory that the fetus feels the ultrasound waves and moves to evade them. She bases her theory on the way it tries to move away and puts its hands in front of its face when she checks the lower face for cleft palate.

The ultrasound exam is a mix of pleasure and fear for many patients, but the visual element and ritualistic order of it (the doctor always calls out two head measurements, upper lip, stomach, heart, femur, lower leg, feet, cord blood flow, in the same order during every exam) as well as the obsessive timing—every month or so for most of the pregnancy—gives it a concreteness that a few patients said they find reassuring. One patient told me she's more afraid of the problems that can't be

seen, and that she's heard that many problems won't come out until the baby is a year old. Many people believe the ultrasound will and should catch every abnormality. Li Jia, the marketing director of the hospital, has a nine-year-old daughter who was born at another hospital and is partially deaf. She now has normal hearing with the use of hearing aids. She told me that she received all the tests and prenatal care she was supposed to get, and that she thinks her doctor could have identified the problem by ultrasound and blood tests but didn't. She was very angry at the hospital when the problem was discovered a few months after her daughter was born. During our conversation her anger and disappointment were visible in her face and audible in her voice.

The photography element of the ultrasound is yet another way of bringing the fetus into relationship with the parents and extended family. The still photos taken during the 3-D portion of the ultrasound are available for 200 *yuan* (about \$25) burned onto a DVD. Dr. Cong chooses which photos are worth burning, and then shows them to the patient. She offers to put them on disk. It is technologically possible but forbidden by the hospital administration to print a hard copy of the portrait-like photos of the fetus that end up on the disk. Most of the hospital's obstetricians I asked about the 3-D ultrasound said that the 3-D ultrasound images have no diagnostic use that they know of and that the hospital has the equipment only so that patients and their families can see pictures of the fetus. Most patients buy at least one disc full of images during their pregnancy, usually those taken during the

20-week morphology ultrasound.

The twenty-week ultrasound is a key moment when the instability of the fetus and the simultaneous realness of the "healthy smart baby" and fetal personhood under this regime of testing are particularly visible. The morphology ultrasound does the most extensive test for abnormalities of all the ultrasounds. Furthermore, twenty to twenty-four weeks is considered a threshold of fetal realness in popular culture and pregnancy literature. It is when the fetus begins to have the ability to hear sounds, including those from outside the womb, marking the beginning of directed taijiao such as poetry reading and music playing. It is the point at which medical literature on youshengyouyu suggests that abortion becomes more medically difficult, has more potential to affect the mother's health, and is less desirable except in the case of birth defects (although abortion is not illegal under any circumstances in any phase of pregnancy). It is also the beginning of the time that the 3-D fetal portraits start to look good. Before 20 weeks the 3-D portraits of the fetus show a big head with a small face and limbs. The fetus looks thin and oddly proportioned. After this threshold the fetus appears to be a baby. The arms fatten and the facial proportions shift to look more baby-like, making a portrait-like image of the fetal face possible. However, after 30 weeks the portrait image is less possible to produce, as the growth of the fetus outstrips the expansion of the uterus, squishing the face and arms and making them less photogenic.

From the disk purchased from the hospital, the ultrasound images take on

another life and circulation. They are emailed to distant relatives, posted to mothers' personal blogs, shown to friends, viewed in private, and printed out on office computers. I read these fetal portraits as ambiguous, neither strictly fetus nor strictly baby, and emblematic of the partiality of fetal personhoods; the word "mysterious" (shenmi) is often used by pregnant women and occasionally by doctors to talk about the ability to view the fetus, but I read the mystery as the ability to time travel, to see the fetus photographed like a baby, rather than the ability to see inside the womb. The ambiguity is further compounded by the use of the word "child" in vernacular and medical Chinese to describe fetus and infant. Ultrasound images, interestingly, are not deployed in advertising for baby formula, prenatal supplements, or fetal education materials; instead, advertisers use images of fat, active, bright-eyed infants, sometimes Chinese but more frequently blonde and blue-eyed. It is in fact extremely rare to see ultrasound images circulating outside of personal use by pregnant women and their families, medical textbooks, and hospital advertising for ultrasound machines.

Wang Xia—the woman in the film—later cried over her ultrasounds for a reason other than joy and connection with her fetus/baby. Starting at about twenty weeks her ultrasounds started to show that her fetus, while it did not show any structural abnormalities and had a normal heartbeat and movement, was consistently about two weeks behind in size. This is an ambiguous sign that can mean anything, from no significance at all (especially if the date of conception is off) to a serious

abnormality that will result in death or significant disability. Wang Xia took the test results personally and took nutritional supplements, rested more, ate more meat and milk, and worried that her body was harming the baby. Then in the last month the ultrasounds showed that the umbilical cord was wrapped around the fetus' neck (according to the patient handout Maternacare's obstetricians distribute, up to 70% of fetuses have the cord wrapped around their bodies at some point during the pregnancy). After one ultrasound she sat in the outpatient waiting room and sobbed inconsolably; two of the nurses came over to comfort her, telling her not to worry. Her baby was born completely healthy after an uneventful labor and hit all the developmental milestones of infancy on time. A few months later Wang Xia said she felt a little silly for the amount of pain and anxiety she felt about the behind-schedule growth and wrapped cord but that the doctors made her feel that way by saying her fetus was behind. She blamed them for her anxiety, remarking that she knew exactly when she had gotten pregnant and that they had always insisted the date of conception was at a different time, throwing off the growth timeline. The crisp and matter-offact way that Dr. Cong said, "nuchal cord wrapped twice" (the medical terminology for a wrapped cord) in the ultrasound report dictation particularly spooked her.

The Fetal Non-stress Test

The fetal non-stress test (NST) is a moment when the existence of the fetus as multiple entities, and the relationships and practices surrounding it, are particularly visible. The NST takes place in a quiet back room of the outpatient clinic. Like the

ultrasound, it is a recently invented test that was not possible until the advent of fetal monitors, which are also used to monitor the fetus during labor and delivery. At public hospitals the test is done once or not at all during a healthy pregnancy. Public hospital obstetricians use the NST only for women who experience little fetal movement during late pregnancy, which can be a sign of heart problems or fetal death, and for patients with gestational diabetes, preeclampsia, and other abnormalities. At Maternacare it is routine and redundantly frequent, like ultrasounds.

The NST consists of the patient sitting in a chair for twenty minutes with fetal monitors strapped to her belly. The monitors track the fetal heartbeat. The mother has a button in her hand that she presses every time the fetus moves. The monitors are connected to a machine that spits out a piece of graph paper with lines that look like a seismograph. One of the jagged lines is the heart rate and the other, discontinuous, line is a record of when the fetus moves according to the button the mother presses. It is important during the test for the patient to move very little, as it is intended to capture the movement of the fetus while the mother is in a state of stasis and calm.

A "normal" NST shows increased heart rate when the fetus moves, and a fetus moving at least every few minutes. "Abnormal" NST results occur when the fetus doesn't move, or when the relationship between the two lines on the chart show a lack of heart rate increase in response to moving. Unlike most prenatal tests that doctors

perceive as an empirical measure of a pre-existing state of being, like blood tests and ultrasounds, "normal" results for a NST are actively produced by the mother, the nurse who administers the test, and the fetus. In fact, some kinds of "abnormal" results are actually both normal and changeable. The most common reason for an "abnormal" result is that the fetus is sleeping and therefore moving very little. The nurse administering the test looks at the chart as it prints out. If, during the first part of the test, the fetus doesn't move often enough, the nurse goes through a series of progressively aggressive interventions. First she wobbles the mother's belly with both hands to wake the fetus. If the chart doesn't show a response, she wobbles the belly a few more times. Often while she wobbles she talks to the fetus, saying, "Wake up!" If there is still no response then the next step is to invert a metal catheter tray (about the size and thickness of a small, round cake pan) over the belly and bang on it with a ballpoint pen until the fetus hears or feels it and wakes up. If this doesn't work, or in the case of mothers whose fetuses are always sleepy during the NST, this might be done first. The nurse asks the mother to drink a sugary drink with the hope that the blood sugar surge will not only wake the fetus, but also increase its activity level. In the hundreds of NST sessions I observed, I did not once see or hear of an abnormal result that couldn't be made normal enough to satisfy the obstetrician (I did hear of this happening in high risk pregnancies, but it was still extremely rare). Like all the tests at Maternacare, the NST is repeated frequently, so patients go through the process about every two weeks throughout the final trimester. During the test the room is filled with the sound of the fetal heartbeat amplified by the charting machine. The sound is thick with static. It modulates in pitch as the speed changes—lower when it is slower, higher as it speeds up. The heartbeat is quick and rodent-paced. It does not sound like a human heart because of the speed and the intensity of the change in speed. Every time the fetus moves and the patient presses the button the machine emits a shrill, short beep. When two women are testing simultaneously, usually but not always separated by curtains, facing opposite walls, the room is full of two fetal heartbeats.

The NST is a way of speaking between the fetus, the nurse or doctor, and the mother. By performing well in the NST the fetus testifies through movement and heart rate, with the aid of machine translation and nurse intervention, that it is a "healthy, smart baby" despite being a still-invisible fetus. By manipulating and producing the results, the mother and nurse or doctor are working with the fetus, engaged in a form of conversation and collaboration that brings the fetus into being.

Conclusion

Taijiao, testing and images of the fetus create distinct types of personhood. *Taijiao's* personhood is predicated on the ability to receive stimulation and provide a response. Testing asks for a response too in the form of medical markers, but also creates personhood through portrait images. Educational images of the fetus create personhood through imagining an independent fetus with wants, needs, and interests.

All these ways of seeing and interacting with the fetus are constructing partial

personhoods that continue at least through the *zuo yuezi* period, the traditional month long recovery period after birth, when mothers avoid most activities and eat nourishing food. The fetus and to a lesser extent the newborn exist outside any binary conception of personhood and non-personhood. The absolute ubiquity of abortion as the outcome of unsatisfactory tests is not the only demonstration of partial personhood. The fetal response in fetal education is always partial because it is a physical response in the form of kicking, or becoming more active, to language or music or identification of the mother or father. The fetus never responds in the language of the stimulus. None of these glimpses of the fetus present them as whole persons. The response is never what it would be from a whole person because of the extraordinary means and technological intervention required to receive and read the response. Testing creates and confirms partial personhood by isolating aspects of personhood: physical quality and health, social engagement, and visual representation of the face.

Most of the responses don't involve more than one sense at a time, usually touch, sound or sight. The fetus is rarely touched and seen at the same time. The fetus responds to sound with touch. Touch, in fact, is the only way the fetus responds. Otherwise the fetus is imaged by others and there is a degree of imagination in interpreting the images and the meaning of the images.

The concept of partiality is not an argument that the fetus is not real, just that its personhoods are partial. The fetus is a person who cannot exist as a complete

person *yet*. Reading pregnancy as the mother's investment in transforming partial personhood into full personhood takes the contradictions and ambivalences of the fetus sometimes being a baby during fetal education, and sometimes being and a fetus during testing into account. One quality of its partiality is that a large part of its personhood is contingent upon its potential to become the healthy, smart baby of parents' desires.

CHAPTER 4 Making Reproductive Cosmopolitanism

Introduction

Medical and consumer cosmopolitanism are both integral to the baby-making process at Maternacare. The hospital was conceived as a venue for American-style maternity care, transformed into a hybrid of American and Chinese practices. The hybridization process was the work of a few staff chosen for their cultural hybridity, the upper management, who had lived and worked in Europe, Canada, and more rarely the United States. In fact, pregnancy at this site is hybrid. It is both a commodified experience to consume, and a productive endeavor, with the end goal of a high quality, healthy, smart baby.

In this chapter I am working with Rofel's (2007: 111-12) characterization of cosmopolitanism in China to frame the circumstances in which the construction of reproductive cosmopolitanism takes place. Rofel characterizes cosmopolitanism as a site where the meaning of being human is reconstructed again and again:

[T]he cosmopolitanism that young heterosexual women embody . . . consists of two aspects in tension with one another: a self-conscious transcendence of locality, posited as a universal transcendence, accomplished through the formation of a consumer identity, and a domestication of cosmopolitanism by way of renegotiating China's place in the world . . . Cosmopolitanism, then, is a site for the production of knowledge about what it means to be human in this reconfigured world, knowledge that is being embraced, digested, reworked, contested and resisted in China. These struggles over knowledge of the world and the ability to embody this knowledge are what I refer to, playfully, as cosmopolitanism with Chinese characteristics.

Here Rofel identifies two aspects in tension with each other. First is transcendence of

locality and achievement of universalism. Second is domestication of cosmopolitanism, and its deployment as a tool for renegotiating China's place in the world. At Maternacare there is a tension between the national and very often patriotic project of youshengyouyu, which is a set of practices, both government and vernacular, that seek to create smart, healthy children, and in turn a smart, healthy, globally competitive China, and the critique of the state and nation implicit in some of the practices used in carrying it out. The practice of youshengyouyu was discussed in Chapter 3. Here, I discuss it as policy and public debate. In the context of its public, political life I am, after Rofel's description of cosmopolitanism, working with the term "eugenics with Chinese characteristics." The tension in the practice of eugenics is the fact that youshengyouyu is a state policy, and is carried out in the name of a stronger nation, but contains a critique of the nation in the fact that it relies on foreign, imported formula, foreign material for infant toys, foreign medical vaccines, and foreign-educated medical staff, especially for affluent families. The tension shows that the domestication of cosmopolitanism at Maternacare is complex and at times paradoxical. Rejection of guochan (Made in China products) happens in the service of building the nation, one baby at a time.

Zhu (2010) observed in her ethnography of prenatal care in China that the women at her field site center their anxiety on the concern that their bodies don't measure up to modern, scientific standards of nutrition. Like mothers at my field sites, they took vitamins and supplements to increase the amount of specific

substances in their bodies, such as DHA and folic acid. However, at my cosmopolitan field site nutritional deficiencies were framed in direct contrast with mothers abroad. The categories of modern, scientific, and foreign were conflated. Discussions of nutrition and the dangers of lacking specific elements routinely mentioned the inferior physical quality of women in China as compared to women in North America and Europe. While pregnant women, their families, doctors, nurses and patient educators debated the nutritious qualities of Chinese diet vs. Western diet, caesarean section vs. vaginal birth, the suitability of women of different ethnicities for giving birth vaginally, the efficacy of Traditional Chinese Medicine vs. biomedicine, and a host of other OB/GYN issues, the inferior physical quality of Chinese women, blamed on diet, a lineage of historical turmoil, and the prevalence of illness, was never called into question. In the cosmopolitan OB/GYN context of my field sites foreign, modern, scientific and robust were routinely and unquestioningly contrasted with Chinese, provincial, and weak.²⁴

In this chapter I will discuss the central tension of critique of the nation in service of the nation that is demonstrated by parents seeking out reproductive cosmopolitanism, and medical workers engaged in the process of making medical

_

²⁴ Critics of China in everyday conversation in Beijing often critique it as a "backwards" country, but this was not true of conversation at my field sites. This is likely due to the fact that my informants were most often comparing cosmopolitan OB/GYN to medical practices at good state hospitals in Beijing, and "scientifically" supplemented nutrition to a healthy urban middle-class diet. "Backwards" was reserved for rural women showing up in the emergency room to give birth without having received prenatal care, or for women in the countryside giving birth assisted by unlicensed midwives.

cosmopolitanism and negotiating their engagements with capitalist processes. I will also reflect on the range of maternity hospitals available to families seeking cosmopolitan reproductive services and the desires informing these institutions. Reproductive cosmopolitanism involves a struggle about which kinds of people build the nation, who counts as high quality, a concern with global norms, and a rejection of potentially dangerous China-made goods, such as baby formula. Translation of the cosmopolitan into the local is a struggle over knowledge of the world and the ability to embody this knowledge. Translation of the cosmopolitan into the local is the main feature distinguishing Maternacare and other private maternity hospitals from public hospitals.

Recent formula scandals demonstrate that food safety critique, especially that of infant formula, is a direct engagement with ideas about the nation and the state that cut to fundamental questions of the relationship between children and the nation/state. I will discuss the 2004 and 2008 infant formula scandals and how they illuminate the tension between building the nation and transcending, or even demonizing, the nation via reproductive cosmopolitanism. In contrast to Maternacare, which cares for the elite, and Ai Baobao, which sells to and educates the urban middle class and elite, the formula scandals cut across class and region.

I will then discuss four women, all experts on reproduction and parenting, who use cosmopolitan knowledge as legitimization for their projects of education and activism around women's health care and reproduction. All four women are

originally from Beijing. Xiao Wu is a Beijing parenting author and activist who is involved in La Leche League, a global organization, but who is best known for parenting books advocating against Chinese style parenting. The father of her two children is from New Zealand. Emily Song is the head of the Maternacare patient education department, and the mother of two children. Her husband is from Hong Kong. Dr. Chen is a semi-retired OB/GYN who, during my time in Beijing, worked both at Maternacare and a new private women's hospital inside a larger hospital. Her husband and the father of her daughter, from whom she had divorced, is Chinese, also from Beijing. Before working at Maternacare she worked in Ghana and Cambodia, and had spent a significant amount of time in Australia, where her daughter lives. Yueyan, whose *taijiao* experiences are discussed in Chapter 3, is a headhunter with a one-year-old child. Each woman's cosmopolitanism is different, offering a glimpse of the complex relationship of local and global.

Dr. Chen's sense of service to people in places with a lower level of care than much of China, as well as the separation of her cosmopolitan engagements from consumption, place her in the category of socialist cosmopolitanism.²⁵ Emily Song's translation of medical information from the United States and Canada into knowledges and practices usable at Maternacare makes her an agent of consumer cosmopolitanism, implicated in the production of knowledge about what it means to be a Chinese person in a cosmopolitan world (Rofel 2007). Xiao Wu's and Yueyan's

-

²⁵ See Rofel 2012 for a detailed description of cosmopolitanisms through several eras of twentieth-century China.

overt critique of China as a harmful environment for raising children is another, more contrarian, flavor of cosmopolitanism.

Finally, I will discuss the private maternity hospitals of Beijing as further examples of divergent cosmopolitanisms. Among private hospitals, maternity hospitals are the most numerous; there are at least seven in Beijing. One hospital, Beijing Healthcare International, emphasizes strict adherence to American medical practice, focusing in their marketing on the authenticity of their foreign medical experience and the foreign citizenship of much of their staff. St. Grace emphasizes the luxury of their hospital, visually striking foreign images such as European religious sculpture, and cosmopolitan ideas about sexuality. Maternacare invites potential patients into an environment where globalized medicine has been made comfortably Chinese. Each marketing strategy claims an authentic experience, yet each experience is different. Divergent claims by hospitals on what constitutes a medically cosmopolitan experience illustrate the flexibility of the category and the existence of multiple forms of cosmopolitanism.

Formula Contamination Scandals

The baby formula scandals of 2004 and 2008 are a principal site at which the tension between consumer cosmopolitanism and debates about the quality of the nation are visible. It is difficult to overstate the widespread outrage resulting from the scandals. In 2007, when I began my fieldwork at Maternacare, the 2004 scandal, in which formula producers in Anhui sold diluted formula lacking in protein (see

illustration on following page) was still a big topic of discussion at the hospital, especially among pregnant women deciding whether to breastfeed. In 2008, when the melamine contamination scandal, in which milk producers deliberately added melamine to milk that was then made into infant formula, broke, there was again widespread public fear and outrage. The vulnerability of babies and the preciousness of only children to their parents fed public fury. There were protests in several cities, including Beijing, Internet outrage, and widespread media coverage. The 2008 scandal, in particular, cut across class, region and the urban/rural divide.

Consumption is a crucial component of the lived experience of cosmopolitanism. During pregnancy at Maternacare, and at other sites of middle class pregnancy in Beijing, cosmopolitanism is enacted through many kinds of consumption, milk being one of the most important. Mother's milk, cow's milk, and formula, and the differences between them, are tied up in ideas about scientific and medical cosmopolitanism, and health. According to some doctors, nurses, and pregnant women, cow's milk is the source of foreigners' superior *tizhi* (physical quality). For that reason cow's milk is recommended in the literature the hospital passes out on nutrition for different stages of pregnancy, and in much of the prescriptive literature available at bookstores. Cow's milk is part of the post-fasting blood test breakfast served in the sunroom at Maternacare. Gottschang (2007) notes that part of the struggles women often have with breastfeeding is both internal and external concerns about the nutritional quality and quantity of their breast milk.

Formula, it is thought, is more scientific, more consistent, and therefore safer.

Because it is seen as modern and scientific, concerns about baby formula in the wake of the formula scandals are an excellent example of the tension between nationalism and cosmopolitanism. The untrustworthiness of domestically produced formula is used as an example in the discourse on China doing poorly at modernity through greed and corruption. The state is supposed to regulate the industry and inspect the dairies where formula producers buy their milk powder. When people talk about food safety, including formula, there is an implicit and sometimes explicit critique of both the national character, for being greedy and corrupt, and the state, for failing to regulate greed and corruption. The state is involved in every food scandal, whether through regulation, testing, suppression of news about contaminated food, or by actually having a party cell inside the food company (McGregor 2012). The nation is not off the hook, however; food scandal Internet discourse often focuses on the question of what is wrong with national character that food scandals keep happening. Formula from abroad, particularly Australia and New Zealand, which are the most widely available in supermarkets and specialty baby product stores, are considered safe.

The Sanlu scandal of 2008, in which the milk powder used to make formula was knowingly adulterated with melamine powder in an effort to make milk pass government protein content tests, was the most widespread infant formula scandal. Six children died and at least 30,000 were sickened. Many were left with permanent

kidney damage. Sanlu, which has since been dissolved, was a joint enterprise operated by a Chinese dairy producer in Shijiazhuang and Fonterra, a New Zealand food company. As Sanlu expanded they instituted a supply chain in which they rented cows to farmers and bought milk back from the farmers, making the farmers essentially independent contractors. The milk was aggregated and processed at centers run by other independent contractors. Everyone involved in the supply chain, farmers and producers alike, was under pressure to meet government milk protein-content standards which were unreasonably high for many producers (the standards have since been lowered slightly to discourage adulteration done in order to increase protein test readings) (McGregor 2012.)

Parents began to complain that their babies were becoming sick after consuming Sanlu formula. In response, Sanlu ran tests on its products and discovered melamine contamination at levels high enough to cause toxicity. In late 2007, when the tests were conducted, there was an order from the national government that there should be no food safety scandals in the months leading up to the Olympics, which were to take place in August 2008. Sanlu management decided to cover up the contamination. As the head of the company's party committee, CEO Tien Wenhua was also an agent of the state. The contamination, and the accompanying recall, was not announced until September 2008, after the closing of the Olympics. In the

^

²⁶ Chinese parents who buy foreign made formula consider New Zealand made formula safe despite Fonterra's involvement with Sanlu, since food safety enforcement is tougher.

meantime hundreds of thousands of babies had been poisoned with melamine.

The scandal finally came to light when Fonterra, the New Zealand partner company to Sanlu, discovered the contamination and the cover-up; Fonterra broke the news when it became apparent to their management that Sanlu intended to maintain silence. Sanlu management and the milk processors directly responsible for contaminating the milk powder were charged with crimes, as were some farmers deemed to be complicit with the contamination. Tien Wenhua, head of Sanlu, received a life sentence. Other Sanlu executives received substantial prison sentences. One milk processor and one farmer were executed, while another processor received a commuted death sentence. Some parents protested outside the courthouse during the trials. Many parents who attempted to attend the trials and sentencing hearings were prevented by police from traveling to Beijing.

Food scandals involving children form part of the background for the establishment of Maternacare, Ai Baobao, and other cosmopolitan hospitals and formula import businesses. All of these businesses explicitly market by drawing upon parents' distrust of domestic products, especially consumable products such as formula and vaccines. Maternacare markets the availability of foreign-made vaccines, mostly of European origin, though the pharmacy stocks both domestic and foreign vaccines. The small shop inside the hospital atrium stocks European made breast pumps. These hospitals buy German-made ultrasound machines, while public hospitals use domestically made equipment. They decorate with Ikea. The Ikea

décor and the H&M maternity clothes are domestically produced, but as European brands they are deployed by the hospital marketing and design team as foreign. The marketing of Maternacare as American maternity care in an environment enriched with foreign products and people, and the protective and pleasurable cosmopolitanism of proximity to those products and people.

In some ways, the state is like a co-parent. The state restricts family size and promotes reproductive quality standards through reproductive law, the *hukou* system, institutions such as the national OB/GYN governing board and public hospitals, and public health campaigns. Yet as an agent who strongly values economic growth, the state puts children in harm's way by enabling their exposure to toxic food and environmental pollution. Even as the state is complicit in these harms, the state attempts to mitigate them through regulation and the legal process, such as the prosecution of those involved in the Sanlu scandal. The eugenics laws of the 1990s and 2000s instituted rules on marriage and sterilization for people with genetically transmitted conditions, and mandated physical exams before marriage. These laws set up structures of testing and education designed to eradicate developmental problem (Sigley 1998; Sleeboom Faukner 2010). At every step, the state is involved in pregnancy, whether regulating it, contributing to reproductive health, or causing harm to reproductive health.

Although the concern with toxicity at Maternacare was centered on harm to pregnant women and fetuses, it did not end with them. Concern about pregnant

women's exposure to toxic and contaminated food was an intensified version of a more generalized concern rather than a concern specific to pregnancy. Employees complained about the plastic used to hold hot food in the cafeteria, and how it leached carcinogens into the food. The two hospital accountants, close friends who share a strong interest in politics and current events, printed out and passed around a twenty page list of "poison foods" (*du shipin*). The most frightening aspect of the list is that many are unavoidable daily staples like noodles, eggs, cooking oil, and salt. Noodles are adulterated with toxic binders, table salt contains industrial chemicals, soy sauce is produced with human hair, whole fake eggs are created out of gels and plaster, oil is skimmed out of the sewer, and baby formula with almost no protein is put on the market, causing malnutrition and death (see image on following page). The vividly illustrated list ends with, "What's left to eat?" Nurses commonly discuss food toxicity over lunch in the cafeteria. They share strategies for avoiding low quality or adulterated food, such as shopping only in supermarkets.

²⁷ http://wenku.baidu.com/view/9540165777232f60ddcca135.html. Accessed August 5, 2013.

Figure 7: Poison Formula



The above image from the "Common Poison Foods" document circulating on Baidu refers to the 2004 formula scandal. Translation follows:

Poison baby formula

Do you see the suffering of these bigheaded babies? They are doomed to a life of disability or adversity, and an early death. Is that because of lethal baby formula, or a congenital condition? Poison food products from adults have poisoned these children. As a result these newborns have already suffered a life of pain. Why is it that they have just arrived in this world and their fate is so terrible?

The protein content of the formula was so low that it completely lacked nutrition. Plain water would be better than this inferior formula. In just a short time the ability of the baby's body to manufacture blood was impaired, organ function was impaired, their immunity compromised. The fact that this lethal formula surprisingly has existed now for many years is incomprehensible!

The scale of concern with toxicity and food scandals makes visible the relationship between food safety and cosmopolitanism. The food scandals between 2004 and 2008, and those since, involved both small-scale producers of the kind of food sold in small markets and street stalls, as well as processed food like baby formula produced on a larger scale and consumed across China. Cosmopolitanism is, in part, a transcendence of the local through formation of a consumer identity. In the case of food scandals, one of the solutions sought by parents is to consume products made outside China, especially formula from Australia and New Zealand. By

providing transcendence of the local, businesses like Maternacare sell transcendence of the danger of the nation in service of building the nation through nurturing healthy, smart children. The relationship between building the nation through reproduction and protecting reproduction from the nation makes visible the complexity of the relationship between consumption, reproduction, and the nation. Transcendence of the nation through consumption is a tool for a national project, *youshengyouyu*, and the emphasis the One Child Policy places on health as well as quantity of births.

Parents' desires for a healthy baby, their interest in China as a nation, economic development, and the *youshengyouyu* goals of the state are aligned, but in the process of working toward those goals, parents take a swerve into critique of the nation and the state as production of hazardous food, insufficient government regulation, and government corruption affects their children's health.

Cosmopolitan Engagements, Translations, and Critiques: Dr. Chen, Emily Song, and Xiao Wu

Engagement with the complexities of cosmopolitan reproduction takes multiple forms: intellectual and professional encounters with and translation of foreign ideas into local practice, activism, and personal exploration of alternatives to local practices. In this section I will discuss three women engaged in the process of bringing cosmopolitan ideas about pregnancy and parenting home to Beijing, as well as a fourth, Yueyan, who shares many of their cosmopolitan engagements but is not a medical or parenting professional. Dr. Chen, an OB/GYN at private hospitals and an

pregnancies the same way she uses her own stories about being pregnant in the 1970s to encourage pregnant women not to be excessively careful or sedentary. Emily Song, her co-worker in the Patient Education Department at Maternacare, is the primary source of information about foreign prenatal care practices at Maternacare, and splits her time between patient education and adapting foreign prenatal care practices for women at the hospital. Xiao Wu is a parenting activist, author and teacher fighting against mainstream parenting ideas.

Although there are important differences in their approaches to the cosmopolitan and their relationships to it, each engages to some degree in translating concepts and practices from abroad, and teaching them to others. Each of them draws on her experiences abroad, and her use of cosmopolitan knowledge to define herself professionally. Their stories illustrate that the paths cosmopolitan practices take to get into hospitals, and into other institutions that market cosmopolitanism, is not a straightforward path from market to market, but rather is tightly interwoven with the life histories and cultural critiques of its translators and practitioners.

Dr. Chen

"In teaching, every story has a purpose. I have to tell stories to get to the truth, rather than giving medical lectures."

In her role as a patient educator, hospital administrator, medical volunteer and semi-retired OB/GYN, Dr. Chen's work as a cultural translator and importer of

cosmopolitan ideas about pregnancy and childbirth is informed by a type of cosmopolitanism that is buried in much of the contemporary discourse on China: cosmopolitanism within the socialist world. Dr. Chen was an enthusiastic practitioner of socialist society building during the Cultural Revolution; cultural exchange within the socialist world, particularly medical knowledge, was her introduction to cosmopolitanism. Her present commitment to social justice, and to medical service in rural China and developing countries, in addition to transcendence of the local through consumption, in this case of medical and cultural knowledge, is a hybrid form of cosmopolitanism. Dr. Chen, who loves sushi, Western buffets, and American pop music, in accordance with Rofel's definition of cosmopolitanism, constructs a consumer identity through transcendence of the local. Her consumption, however, is hybrid. In accordance with socialist cosmopolitanism, much of the capital she accumulates from her various cosmopolitan engagements is given away.

Dr. Chen's socialist mores about service and class are integral to her work, but are not her only engagement with cosmopolitanism. Like any of the women in this chapter who work as "foreign experts" carrying home cosmopolitan knowledge from abroad, she capitalizes on her experience abroad, mainly working in medical service in the developing and post-socialist world, in building her career. She moved from OB/GYN surgeon at a public hospital, to the director of Maternacare patient education, to CEO of a new private maternity hospital, with gaps between jobs in Beijing spent in Cambodia and rural Sichuan Province providing women with free

medical care.

Dr. Chen's story is part of the story of her generation. Many urban women born in the 1950s were "sent down" to the countryside to work on farms and learn about rural life, a policy that was supposed to level some of the inequalities between cities and the countryside. Dr. Chen looks back on that period as formative. She loved the intensity of her work life in the countryside, where her extraordinarily high energy served her well. It was where she learned how to work hard, discovered the inequalities between urban and rural life that would inform her career, and learned how to be a leader. Women sent down to the countryside during this time have a variety of stories and experiences, some positive, some negative, but mostly somewhere in between.²⁸ Dr. Chen's story of the Cultural Revolution was one of adventure, learning, hard work, and service. She had nothing negative to say about that period in her life, or about the policy that sent her to a small town in Shanxi province for several years, except that it was hard for many sent-down youth to get an education when their time in the countryside was finished.

Dr. Chen sees continuity between her experiences during the Cultural Revolution and her present-day commitment to service, including her service abroad in Ghana and Cambodia. Her story is an alternative to the mainstream narrative of cosmopolitanism that sees it as opposed to socialism, and as constituted mainly

_

²⁸ See Xueping Zhong, Wang Zhong, and Bai Di's *Some of Us: Chinese Women Growing Up in the Mao Era* for a discussion of the complexity of women's experiences in that era, including those of sent-down youth.

through consumption.

I met Dr. Chen on my first day of fieldwork at Maternacare. I was immediately overwhelmed by her energy, enthusiasm, and charisma. She bounced into the administrative office, where the Patient Education department has their desks, wearing a hot pink satin sweat suit with gold metallic piping and "Ferrari" printed across the back, an unusually youthful and loud outfit for an OBGYN in her sixties to wear. She sat down hard in her chair and bounced it a few times. She announced to the office that she had just been to the teashop for some pu'er tea, which her doctor had recommended to control her high blood sugar. As she loaded up her small glass teapot, she gave the office the details of the shop where she had bought the tea, the price, her plans to drink only pu'er from now on, and its medicinal effects. Like anything she was enthusiastic about, she made sure to share it with everyone.

Assuming correctly that I had never had pu'er tea, she poured me a cup and interviewed me about the flavor as I drank it.

Her presence energized the room. Before she walked in, the other two patient educators had both been napping with their heads on the desk, sleeping off the greasy, starchy cafeteria lunch that was usually as beige as the tray it came in. As soon as she walked in, the other staff came back to life. It wasn't because she was their supervisor. Employees with a desk to nap on routinely slept for half an hour after lunch. Rather, her presence is big, and she has a way of making herself the center of any conversation, or any room. Her approach to karaoke is representative of her

whole way of being. It doesn't matter that she is a terrible singer with no pitch and erratic rhythm; her confidence overrides her lack of skill. When she sings she fills the room with her presence, and looks everyone in the eye. She picks English language songs that show off her facility with English, learned in Ghana. She gets everyone engaged in her performance. When she does something she is good at, like teaching, talking to patients, managing her department, or public presentations, she shines for both her skill and her exuberance.

When she left the hospital, it was with dramatic flair. Dr. Chen had become increasingly dissatisfied with her salary. Out of earshot of the two nurses in the education department, she told me that the hospital was paying her like "a little nurse." The administration wouldn't give her a physician's salary without requiring her to perform surgeries, work night shifts, and do back-to-back patient consults. She didn't want to go back to the pressure and exhaustion she had left behind when she retired from full time OB/GYN practice. One day, she announced she was leaving, and would be back in a month. She left behind rumors of a blowup between her and Marla, the hospital CEO. The office was full of whispers for days as Emily, the new department head, doled out information as she received it from Dr. Chen over text and email. Dr. Chen had gone to rural Sichuan and Yunnan provinces to work pro bono on a project bringing gynecological services, especially cancer screening and treatment, to poor women in remote areas. HR officially called it a vacation, but everyone knew she wasn't coming back. A month and a half came and went, until

her desk was given to Emily's new assistant.

Dr. Chen taught on an epic scale as well. She peppered the prenatal classes she taught with gory, grim stories of fetal death and retardation. Every group of students heard at least once about the woman who had lost two babies at 40 weeks of pregnancy. The woman's first pregnancy ended in intrauterine fetal death. Late in her second pregnancy, she listened to her mother-in-law's insistence that diminished fetal movement in the last weeks was not a cause for alarm, and lost the second baby the same way. The third pregnancy finally resulted in a healthy live birth because she listened to her doctors, tracked fetal movement in the last trimester, and went to the hospital for an emergency C-section when she noticed the same signs of fetal distress she had felt in the first two pregnancies. Another story in Dr. Chen's repertoire ended in brain damage, feared by many parents more than fetal death. At 34 weeks, a patient's water suddenly broke. Rather than lying down immediately and calling an ambulance to take her to the hospital, she waited several hours. In those hours, her umbilical cord prolapsed, which deprived the fetus of oxygen, and caused permanent brain damage.

Although she deliberately set out to scare students with the consequences of careless medical treatment during pregnancy, when it came to daily life she encouraged women to ignore the sometimes over-cautious advice of their parents. She told students not to be afraid of exercise, because not only would it not harm the fetus, it would make the baby healthier, and make for an easier labor and delivery.

She drove this point home by pointing out that women abroad (meaning the United States, Canada, Europe and Australia/New Zealand) aren't afraid of silly things like exercise and cold water during pregnancy, and the physical quality (*tizhi*) of their babies is quite high. At the same time, she pointed out that when she was pregnant in the 1970s, she rode a bike until her eighth month, when her awkward center of gravity made it impossible for her to balance.

She was passionate to the point of social awkwardness, both about medicine and about teaching class. Most doctors were circumspect and euphemistic about difficult topics like tumors and fetal deformity, except for the occasional bit of gallows humor in the delivery room office at 3 am. Dr. Chen, on the other hand, often mentioned missing the pathology lab where she spent her twenties and thirties. She liked difficult surgeries, and she liked to reminisce about the difficult surgeries she had performed and unusual illnesses she had treated.

However her personality may have stood out at Maternacare, however, Dr. Chen's story was fairly typical for her generation of doctors. Two other doctors on the staff, Dr. Zhang and Dr. Li, have nearly identical stories of coming of age and receiving medical training during the Cultural Revolution. These doctors' life histories illustrate that socialist ideas about service, class, and cosmopolitanism are an active part of cosmopolitan pregnancy and birth care.

Dr. Chen's story is recounted here from interviews conducted in the office where we both worked, and after she left Maternacare, over dinner and in the new

private OB/GYN hospital she founded. The beginning of her story centers on her passion for medicine, and her passion for socialism:

I wanted to be a doctor from the time I was a child. My father didn't care if he had a son or a daughter. My father, who was well educated and highly cultured, was a war hero and fought both the Guomindang and the Japanese, and was a government official. I was raised in government official housing, after the war. He told a story about a female soldier whose brother was a doctor. In a battle, the brother healed the sister from a war wound. My house, a Beijing siheyuan (courtyard house), was next to a small river.

People would drown in the river. I would see their bodies when they were pulled out. I wasn't afraid. I liked the idea of wearing a white coat. I gave injections to my doll. Then, a kid who lived in my building fell off the roof, and his brain came out of his head. I didn't want his mother to see him like that, so I pushed his brain back into his head. I'm not afraid of dead people. My first dead person as a doctor was a baby.

When I was 16 and sent down, I was sent to Shanxi for three years, to a small city. I was a very capable worker. My first job in the countryside was picking cotton. I didn't look back. I was happy. There were 38 sent-down youth in the city, and I did the best labor. I became a teacher of labor attitudes.

Because I was happy, the bosses gave me the best jobs, because they liked me. Then, I worked in a chemical laboratory for two years.

In 1977, the universities opened again. At Shanxi hospital there was a teacher named Huang. I was very clear and very sincere in conversations with this teacher, and told her I had wanted to be a doctor from the time I was a child. I was the only student let into the school with this professor. I felt very lucky, and felt that God had prepared everything (but Anna, I don't believe in religion). There weren't enough training teachers for doctors, so I trained to be a teacher at the university. I was twenty-one years old, and hadn't gone to high school. My character was good, but my education had fallen behind. This is when I started learning foreign languages, Russian and English. I started medical English at the same time. I didn't want to be a teacher. I wanted to come back to Beijing, but I didn't. I should have gone back to the city, but I went back to the suburbs. [I went to the] 38^{th} division hospital in Hebei, south of the city, where they needed doctors. In 1978, I started working as a doctor.

As she tells the story of how she learned to be an obstetrician, she emphasizes the struggles and hardships, but also the satisfaction and joy she experienced at the beginning of her career. The hardships and satisfaction seemed intertwined; as she speaks, it is clear she is nostalgic for both. She recounts being happy, just as she was picking cotton in Shanxi, when she was too busy to sleep or shower during the baby boom of the late 1970s, and during her residency in Beijing, when she was the only doctor in charge of a ward of women with preeclampsia, and slept at the hospital not

because she was required to, she says, but because she didn't want to leave her patients. She also expressed pride that she learned skills quickly, advanced quickly, and learned new subspecialties with ease. She also expresses some nostalgia for older practices of delivering babies, and concern that younger obstetricians don't know how to handle complex vaginal births:

Then I was transferred to Dongcheng hospital in Central Beijing. They asked me what specialty I wanted. I wanted to be a pediatrician because I love to play with babies, but they needed OB/GYN right away because there was a shortage. In my first two weeks I delivered ten babies when others were delivering one. My grandma was a midwife, [she] caught her own baby, and cut her own cord.

Medical training was very strict. There were uniforms and walking in line like a nun. I married like a nun at 22. Dongcheng, where I was working, was founded in 1921. It was a Grade II hospital, like Maternacare. There were no OB's at the time. There were only midwives, because there weren't the doctors or facilities for C-sections. Then, the government decided to make it into a comprehensive hospital, which could do surgeries like gynecological surgeries, abortions and C-sections.

Even though I was a doctor, I had to first work as a midwife to understand the process. First, I worked six years as a midwife. I learned from all the old midwives. 1978 was a very busy time because of the one child policy [which

began to be enforced in 1979]. There were eight women to a room, everyone trying to have a baby because of the law. Once, six women gave birth at once. One of them was on a cart because there were no more beds. Or, there were two on a bed. There were only five staff in the room. [Dr. Chen gets up and runs around the room demonstrating how to deliver six babies at once, and then once the babies were born sewing up six episiotomies at once. In English, she said "Six women at once hen lei! Exhausting!)"] Working in the countryside on terraced farms was not as exhausting as the baby boom of 1978. The only showers I had time for was when amniotic fluid hit me in the face. We did a lot of episiotomies. We checked on the mothers' episiotomy wound on day three after birth, and checked the stitches.

At the time if you had a breech birth you gave birth yourself, rather than having a C-section. There was a danger of the fetus lacking oxygen. You had to stick your whole arm in, and turn and pull to do a version.

Then I started doing surgery. Right now, OB's are good at C-sections, but my generation knew how to deliver a baby. Younger doctors haven't had midwife training and haven't been trained by "old midwives."

Before the Cultural Revolution, residents were only allowed to leave the hospital on Sunday afternoons, and were personally responsible for fourteen patients. When I was a resident, my patients were pregnant women with high blood pressure [preeclampsia]. I didn't want them to sleep alone, and I didn't

want them to be given sleeping pills, so I slept at the hospital even though I didn't have to. At first I brought my own cot, and then the hospital director gave a small room to the young doctors. There were three of us. One is the director of Qinghua hospital now and the other is the director of another hospital. I was the first doctor in the history of the hospital to advance to attending physician, or Grade II doctor, in less than a year. That year I slept from 1 am to 7 am. Surgeries started at 8. We did two or three surgeries in a morning. From 7-8 we wrote all the notes for the patients for the day.

From surgery, Dr. Chen moved into the pathology lab, where she specialized in analyzing the cervical tissue removed during colposcopies to check for cancerous cells. From there, she began to work in hospital administration. She was hired on at Maternacare as an educator because the CEO wanted the hospital to have the same educational standard for patients as hospitals in the United States. Besides her passion for talking about medicine and interacting with patients, Dr. Chen spoke basic English, and had practiced abroad, adding to the prestige of the hospital.

When she talks about patient education, her role at Maternacare, she distinguishes between the work she has done with rural women without good access to medical knowledge and care, who need women's health education to avoid dying from treatable gynecological cancers, and urban women who need knowledge to understand their medical condition and be good medical consumers:

Melissa [CEO of Maternacare] brought me in. It was her idea to meet a

foreign standard of service by teaching patients. Melissa wants the patients to have a clear picture of the treatment process, because the patient has a comprehensive picture of the experience of the illness [and the doctor does not]. Patients' education makes the patient pickier.

There was a patient who came into [Dongcheng] hospital to give birth to a baby. She was 24 and we discovered she had cervical cancer lesions in the late stage. She didn't know about it until it was advanced. Women from the countryside don't know that you can't just get local treatment for cancer because it's entered the bloodstream. It used to be that cervical cancer was an older women's disease, from damage to the cervix from too many births. Now it's younger women with HPV.

Here, she emphasizes that middle class women's education is in the hospital's best interest, because it makes them better consumers, while rural women's education has direct, life saving effects. Her teaching in the hospital, however, emphasized the dire consequences of making mistakes in pregnancy care, even as she taught middle class women.

For Dr. Chen, the middle class birth experience was never used as the default experience. In classes at Maternacare, she used pregnancy and birthing examples from many contexts, from Cultural Revolution era mothers like herself, to rural women, to women abroad. Her comparisons praised the relatively high level of knowledge and support the women in her classes enjoyed, but often compared their

circumstances of pregnancy and birth unfavorably to women of her generation.

Exercise, mobility, confidence in the body's strength and ability to give birth, were, in her analysis, lacking in the current generation of middle class pregnant women in Beijing:

Why did the C-section rate rise? It started in the eighties. Young women didn't want to give birth. They think they will get fat and their vaginas will be injured. They are also afraid of the pain. There were no epidurals then. Government hospitals still don't use them because there aren't enough anesthesiologists. Beijing Healthcare International was the first place to use them. OB/GYN in China is not "backwards," but most hospitals don't have the resources. The optimum C-section rate is 25%. Right now it's at 30%. Most women don't realize that it's better to give birth yourself.

Her description of both the desire of patients to give birth in private hospitals, and the high C-section rate, put both in a cosmopolitan context. Like food and formula contamination, in her analysis, problems with the public medical system are part of a wider critique of the nation. There aren't enough doctors trained, the universities, hospitals and licensing organizations don't do a good job of screening out incompetent or corrupt doctors, and hospitals aren't well-run. Her analysis is a critique that pathologizes aspects of the nation such as corrupt doctors, echoing other, more consumerist cosmopolitanism critiques of the nation, even as she is critical of some aspects of cosmopolitan modernity above:

Why do patients want to give birth in private hospitals? There are a lot of "cheater doctors" [said in English]. There aren't enough high quality doctors. Doctors are too busy. Ninety percent of the hospitals are terrible. Rural hospitals act as a money shed for tax cheats and corruption. The medical service can't keep up with the population. The government spends a bunch of money on hospitals right now. The government is putting much of that money into preventative medicine, community service and screening.

There are doctors who cheat people. They give anesthesia without having done the surgery, like treatment for infertility [which is possible because one of the surgeries, trans-vaginal salpingoscopy, which creates a channel in a fallopian tube blocked with scar tissue or endometriosis adhesions, has no visible incision]. One hospital was doing this, and the government figured it out and took their license because they noticed they were sending patients home on the same day. A patient reported it on the Internet . . .Sometimes to make money doctors give ridiculous treatments for simple illnesses, such as antibiotics for a yeast infection. The injection is a show to justify the money. This is able to happen. I'm speaking about the problem but it's not because I don't like my country. It's because people don't know enough about medicine.

In this interview she is passionate about addressing medical inequalities

between urban and rural women, and critiques contemporary pregnancy practices, yet her work in two private hospitals shows that her relationship to the consumer cosmopolitanism dimension of private medical care is complex. A few months after this interview, she went on to start her own private OB/GYN hospital.

Dr. Chen often spoke of Ghana as a formative experience, and used Ghana as a cultural comparison in classes, in marked contrast to the other members of the Patient Education Department, Emily and Nurse Zhou, who drew on experiences from Spain and Canada, and constantly made reference to American and European maternity care and parenting. Again and again she used her experience in Ghana as an ideal for the family, and a validation of Chinese family ideals, a marked difference from the cultural comparisons drawn between China and Euro American countries in the hospital's classes, where teachers emphasized modernity and women's independence from their families. In this aspect, her socialist cosmopolitanism was a source of pleasure in the way that consumer cosmopolitanism often is. Dr. Chen also emphasized that she practiced medicine abroad in countries where her service was needed, rather than where medical standards were already high. She wanted not only to provide medical services in Ghana and Cambodia, but also to establish institutions that would help with medical development in the countries as they developed economically:

I went to third world countries to work because I was needed. I was in Cambodia from 1999-2000. I had a translator who translated Chinese-

French. There were a lot of orphans whose parents had been killed in the war. A lot of huaren (overseas Chinese). I wanted to start an OB/GYN hospital in Cambodia because development is in their future, just like it is in Africa's. I was there as a general practitioner. In 2003 the Ghanaian embassy was looking for an older, experienced doctor to be a general practitioner.

When I went to Ghana I noticed the similarities between Ghanaian families and Chinese families. If a father had diabetes and had his legs amputated his five children would all be there to take care of him. I was all alone when I was in Ghana. I was very lonely, working in a school hospital. I wanted to find my daughter a job there.

Her reading of the Chinese characteristics of Ghanaian families is important. Other cosmopolitanisms used in prenatal education valorize Euroamerican prenatal care, nutrition, and pregnancy practices as modern, effective reproductive tools and sources of consumerist pleasure. Her experiences with Ghanaian families emphasize relationships and morality, and valorize both Chinese and Ghanaian culture as a result. Unlike medical infrastructure and contemporary OB/GYN practices, both areas where she believes China could use improvement, kinship is an area where, in her analysis, China excels.

Dr. Chen's socialist cosmopolitanism is strong, but so are her engagements with other forms of cosmopolitanism. She wants her daughter, who is studying at an Australian university, to find an Australian boyfriend, get married, have kids with him, and make the family international. She loves foreign culture, including the forms that are popular in China, like Starbuck's and American movies, and the less popular, like Ghanaian art and music. She works comparisons between China and *guowai* into most of her teaching, and many of her conversations. Drinking a cup of hot water is an occasion to talk about how abroad, women aren't afraid of water during pregnancy or the post-partum period (TCM considers cold water dangerous for both the mother and the fetus). When she describes American women sucking on ice chips during labor, she seems to relish the shock on her Chinese audience's face.

Office conversations during the African Chinese Summit were an occasion to talk about how Ghanaians are psychologically healthier than the Chinese, because they don't worry all the time.

After Dr. Chen left Maternacare, we met for dinner one night at an international buffet in a neighborhood near the East Third Ring Road filled with Korean and Japanese restaurants. The restaurant was a collision of cuisines and decors. The long buffet was covered in dishes from several countries: Beef Wellington from England, a French cheese plate, pizza, sushi, lamb chops, miniature pastries. There were many times more staff than customers. Young women in gray pants suits, and men of all ages in chef's hats, milled around behind the buffet and in

the corners of the room. This was Dr. Chen's favorite restaurant, and the staff all knew her by name.

Dr. Chen filled her plate with Korean barbecue, her favorite, and I did the same. We had met to catch up, and to finish up the interviews that had been interrupted when she abruptly left Maternacare. She had come back from Yunnan, then jumped straight into a new job as a top administrator at a new OB/GYN hospital she had helped start. Yunnan had been restful, and very beautiful, but was full of poor, ethnic minority women in need of medical care, and she had been very busy during her stay.

"The market is a war," she said, zooming straight from public service into naked capitalism. As we ate, she filled me in on months' worth of hospital gossip, giving me a better understanding of the staff poaching and espionage the private hospitals engaged in.²⁹ She had a hard time finding staff who met her standards. All of the private hospitals did. Maternacare is notorious among the private hospitals for poaching staff, but Dr. Chen had poached several customer service workers from them. Like Maternacare, her new hospital trained staff in minute details of physical comportment and body language. Nurses and customer service workers learn to lean down to talk to patients who are shorter than they are, and to nod their heads while listening. This kind of training is valuable, and the main reason hospitals like to

²⁹ The only place no one poached from was Grace Hospital, which, she said, is run by Fujianese and staffed by "peasants." Beijing natives can be prejudiced against Southerners, and many consider Fujianese the worst kind of Southerner.

poach from each other instead of training from scratch. Indeed, I noticed when I visited her hospital a few weeks later that although the lobby décor looked like a refurbished public hospital, which it was, the front desk staff was even more self-effacing and solicitous than the staff at Maternacare.

She had gossip on the Maternacare staff, too. Since she had left, Emily Song had become head of the Patient Education Department. She wasn't popular with the medical staff at the hospital to begin with; the head nurse thought she was pushy, and some of the other nurses disliked the way she talked about how much better everything was in Canada, where she had worked for several years. Now that she had been promoted to department head, even more of the medical staff thought she was stuck up. She was liked by the other members of her department and the students she taught, though, treated everyone I saw her interact with respectfully, and was kind and motherly to the younger staff in the office. Until talking to Dr. Chen, I had no idea she was unpopular with the medical staff.

In some ways, Emily is unpopular for the same reason Dr. Chen is popular: telling stories. Both of them rely on stories of their life abroad in their teaching, and both trade on their cosmopolitan experiences in their careers. I will now shift to Emily, who like Dr. Chen, uses her cosmopolitan experiences to inform her work. Unlike Dr. Chen, she is a generation younger, and practices a slightly different strain of cosmopolitanism, less informed by socialism.

Emily Song

Emily Song is literally the face of the nursing staff at Maternacare. She appears in the glossy, book-like marketing brochure as a nurse accompanying a patient through an ultrasound with Dr. Li, and holding the same patient's hand during labor. She is also the primary source of cosmopolitan knowledge about pregnancy, birth, and parenting in early childhood. Running the Patient Education Department takes up the majority of her time, but her other role, as a researcher of how pregnancy and birth happen in North America and Europe, and a translator of those practices into a form usable and acceptable to Chinese women, is an important part of her job.

Although she had a twenty-year career as a nurse before coming to Maternacare, she only works with patients as an educator. She and Melissa, the CEO, have the best English in the hospital. Like most of the department heads and management, she moves deliberately and speaks very politely, whether talking to a coworker, an employee she supervises, or a patient. While customer service staff's demeanor towards patients tends to be polished and solicitous, hers is soft and sweet.

Her job as patient educator, where she teaches patients, answers their questions, and visits them after birth to help with breastfeeding, allows her to express emotion in a way that doctors and nurses who did medical work with patients can't. In an environment where abortions, sometimes into the third trimester, are a routine part of having a healthy child and an element of state health guidelines, it takes an abortion that's truly out of the ordinary to provoke an emotional reaction from a whole hospital of OB/GYN nurses. A patient skipped her mid-pregnancy exams,

including the 20-week morphology ultrasound that checks for physical deformities. She had an ultrasound at 34 weeks that revealed that the fetus was missing two fingers. She decided to terminate the pregnancy. The fetus, essentially a full term infant, was alive and crying during the abortion. The nurses and midwives involved in the procedure were very angry, and blamed the mother for being irresponsible. The mother had been upset during the procedure when she saw the baby, and when the baby cried. "What did she expect?" one of the nurses said, as she sat down hard on a chair in the office and slapped her hand on a desk. The whole hospital buzzed with gossip about the procedure. I was with Emily when the nurses brought the news into the office, and saw Emily's eyes fill up with tears. "34 weeks is a baby. That poor child." Her response was the same sadness and anger that the delivery room nurses were feeling, but she cried openly. Her semi-medical job permitted emotional expression in a way that wasn't available to other nurses. When she talked about love and bonding in class she sometimes was visibly emotional.

Emily was born in 1960, in the suburbs of Beijing, in outer Haidian District. She trained as a nurse in her teens, during and immediately after the Cultural Revolution. She married her husband, who is from Hong Kong, and had her first child in her mid-twenties. Then, in her thirties, she was hired by a Canadian hospital, and moved there with her son. She stayed in Canada for five years, and used the opportunity of living abroad to have her second son, ten years younger than her first. She grew tired of being separated from her husband, who had stayed in China, and

returned to Beijing. As a Hong Kong citizen, her husband had been bilingual in English and Chinese from childhood. Emily's English had become not just fluent, but elegant. Both her children were growing up bilingual. Emily and both her children have Canadian passports. Her family had achieved a high degree of cosmopolitanism.

A straddler of OB/GYN practice and patient education in two languages on two continents, Emily was a natural choice to be a translator. The process of getting a foreign birthing technique, technology, or knowledge into practice at the hospital was a multi-layered process involving several people. It nearly always started with Emily, who surfed the Internet, moving from peer-reviewed medical articles to popular educational websites to blogs, looking for concepts, metaphors and tools to bring into the birthing room and the classroom. These concepts and techniques, separated from their cultural context, fell into some strange and revealing constellations.

For example, Emily instituted a Lamaze class. She brought the idea of offering Lamaze to the administration, who, after finding out that Lamaze was practiced widely abroad, was supportive of the idea and gave her all the resources she needed to get started. She took a certification workshop at Beijing Healthcare International, another private hospital in Beijing staffed almost entirely by foreign doctors. She explained to the administration that in Canada, some women believe anesthesia is harmful to the fetus, and use Lamaze to avoid having an epidural. Rather than teaching a separate class, Lamaze techniques were integrated into

Emily's general birth education class. Students spent fifteen minutes practicing breathing exercises and exploring the relationship between physical pain and emotional and mental awareness.

Lamaze, as an anesthetic practice, was doomed from the start. First, access to epidural anesthesia is one of the main reasons women choose Maternacare to give birth. Anesthetizing with breath, and laboring in motion like their mothers did, is what women come to Maternacare to avoid. Second, 60% of patients end up with C-sections, during which they are conscious, but numb from the chest down and immobilized, then sedated immediately following the surgery. Lamaze is not useful during a C-section, but might be useful before the surgery, since many women want to labor for an hour or two to experience it before anesthesia and surgery. Lamaze might be useful in one common scenario in which a woman labors for several hours, her family becomes nervous, and she is finally talked into a C-section. Lamaze is useful to patients in a form that is very specific to women giving birth at this hospital, in this time, under the conditions of the One Child Policy and other pressures to have a perfect baby.

Just because every practice that is used is chosen through the same process, starting with Emily, approved by the administration, and accepted, rejected or modified in medical practice, however, does not make them hang together seamlessly. Birth balls, like Lamaze, are another example of this. Every delivery room has giant inflated rubber balls for women to bounce on and lie across during contractions.

However, by the time a woman arrives in the delivery room she is sufficiently dilated for an epidural, which requires stillness and prolonged attachment to a drip of anesthesia through a needle in her spine. I never saw a birth ball used in the delivery room, nor any of the postures for easing contractions that were hung on the wall of every delivery room with a cartoon woman in a blue and white striped hospital gown just like the one every woman wears to give birth or have surgery. The balls spent most of the time on the sun porch outside the delivery room where they would be out of the way.

All of Emily's work moves between medical, cultural and other. She is everything the hospital wants for a front-of-house employee: flawless English, experience working in Canada, physical beauty and a soothing, professional demeanor. Her work as a cultural translator and educator brings her into the back of the house, though, where deliveries and surgery happen, and where the administration doesn't pay as much attention to the stylishness of uniforms or the physical attractiveness of the staff. She gives women the delivery room tour of the mysterious third floor, working in the back of the house but not being of the back of house. She is a liminal figure whose translation and teaching work takes her in and out of many departments and zones of the hospital.

In a reductive sense, much of her work was wasted medically. The vaginal birth she spent time talking about with patients in the classes often didn't happen.

Instead, women had the C-sections they and their families believed were the safest

way to give birth for both the baby and the mother. Instead of the Lamaze she taught they used epidurals. Instead of the massage and stretches supported by a giant inflatable ball she taught to relieve pain during labor, women were tied to the bed by monitors and by the epidural tubes. Never mind that it was sometimes called a walking epidural, no one walked after receiving it. Her translation work, however, was a large part of what made the hospital what it was: a cosmopolitan encounter with a *guowai*-informed environment and reproductive practices.

The medical cosmopolitanism at Maternacare, then, is anything but strictly "medical." Patients loved hearing what women did abroad during pregnancy, Emily's story of Canada and Dr. Chen's stories of Ghana, and learning the tricks of body awareness taught in the Lamaze sessions. The hospital's marketing traded on offering American care made culturally appropriate for Chinese women. Women were happy to be having epidurals, and happy to be learning about avoiding epidurals. In an environment informed heavily by the Traditional Chinese Medicine idea that emotions are medical, Emily's work, primarily years' worth of bringing foreign practices to the hospital, translating them to work in the hospital environment, and having them transformed in practice into a form bearing unpredictable relationships to the original, was not wasted. As the main facilitator of cosmopolitan consumption in the hospital, Emily's work was not wasted at all, but an essential part of the hospital, even if her training never made it from the classroom to the delivery

_

³⁰ Women weren't usually happy to have had C-sections; the post-operative pain and recovery time is brutal, compared to a vaginal birth.

Xiao Wu and Yueyan: Cosmopolitanism Critiques of Chinese Parenting

Xiao Wu and Yueyan, who I discussed in the previous chapter, are two
Beijing mothers who draw on their discomfort with the authoritarian families they
were raised in, and their experiences abroad, to critique Chinese parenting practices.
Xiao Wu is a parenting activist and educator, and Yueyan is a management
headhunter. Both are married to foreigners, and both are raising bicultural children in
Beijing. Their critiques, like the critique of Chinese culture raised in the context of
the formula contamination scandals, have an element of saving the nation from itself.
They believe that Chinese parenting is too rigid, too concerned with success and
achievement, and too authoritarian, and use their cosmopolitan knowledge and
experience to suggest alternatives, either in their own lives, like Yueyan, or in their
teaching and writing, like Xiao Wu.

Xiao Wu is a Beijing-based author, teacher and activist. Her mission is to point out the problems with Chinese parenting culture, and to advocate for alternatives. Her activism draws on international groups and movements like La Leche League and Montessori. She is a loud, fast talker with a striking appearance. At a Beijing TED Talk on childrearing, she dominated the room with no microphone. Many thirty-something mothers in Beijing have short, practical hair, but Xiao Wu's hair is buzzed short enough to see most of her scalp. She is the author of three books

on childrearing, all of which draw heavily from her experiences as a rebellious child who hated the regimented education system she grew up in, as a student in the United States, and eventually as a mother of two bicultural children.

Xiao Wu started writing parenting books when her first child was still young. She was asked to contribute by the creator of *FuMu* (*Parents*) magazine and then, after reading her articles, the editor suggested she write a book. She had already gotten involved with La Leche League before her first child was born, because she wanted to breastfeed and had been told that she couldn't breastfeed herself because her mother hadn't breastfed her. She chafed at the parenting advice and interference from the older generation, not just on breastfeeding, but also on all aspects of parenting, ³¹ and legitimated her critique with her experience abroad. In each of Xiao Wu's books, on the very first page, on the first line of the author bio, it says she was educated at Rutgers University in the United States. She includes pictures of herself with her husband in wilderness parks in New Zealand, where he is from, and their two kids. With her first baby, she resented being told what to do based on the way things had always been done:

My baby was tongue tied and had latch on problems. There is pressure from the older generation—it's your only chance. They think everything you do is wrong. Older women have seen it all and done it all . . .

Everything I did was at odds with what the Chinese do. If I had given birth in

³¹ This interview was conducted in English, and I have left ESL phrasing intact.

the States I wouldn't have had so many clashes. The way I protected him against Chinese culture worked for me. But if we had been in the US we probably would have been put on meds. Mainstream cultures regard normal behavior in a small child as abnormal. My child looks different so I can get away with it. Rebellion came from the way I grew up. I didn't like it. I didn't like childhood so much. I didn't want to have kids.

She disliked the hierarchical nature of parenting advice, as well as what she saw as its narrow-minded insistence on tradition. She disliked how it stripped agency from mothers, and individuality on children. From those experiences, and her own experiences of childhood, she developed a comprehensive critique of Chinese parenting:

Chinese child rearing has no respect for the child. They only want the child to obey. They give them no freedom or individuality. It's oppressive. It ends up with adults with low self-esteem who do anything to please their parents. You don't know what your life is about. Everything revolves around pleasing your parents. There is no room for imagination or creativity, you don't have initiative in any job situation, you can't take responsibility because no one has asked you to be responsible. In any multinational environment you can see the difference between local staff and foreign staff. University grads get a good white-collar job, and can't think, only follow instructions . . . They've

lived their whole life for other people, never became their own person.

She then shifted seamlessly from comparing Chinese parenting to parenting abroad, to using Confucius to legitimate her critique of the harms visited upon Chinese children by the nation. This is a sly rhetorical move, because Confucius is often used in popular discourse to validate authoritarian parenting and educational styles:

Confucius didn't actually say that parents and teachers should be really, really strict. Confucius actually said we teach children in accordance with their individual competence. And also the traditional idea is that it takes ten years to plant a tree, for a tree to mature. It takes one hundred years for a person to mature, which means that education is a slow and long, long-term process. It's not a short sprint; it's a long marathon.

In the above statement, uses Confucius to validate her child-centered, cosmopolitan beliefs about childhood education. In her words, Confucius sounds like a Montessori teacher. Her analysis of Chinese parenting culture, and sometimes, Chinese culture in general, is passionately critical, yet she draws on Confucius to bolster her argument. Her use of Confucius is reminiscent of some of the discourse around corruption during the formula scandals. She argues that Chinese culture is a danger to children. Like parents seeking toxin-free baby food, she looks abroad for solutions. She then makes Confucius cosmopolitan by recontextualizing his ideas about childhood and education.

She criticizes *taijiao* and other attempts to accelerate child development as a symptom of the pathology of Chinese childrearing culture, and of Chinese culture in general:

What are you going to do with a super baby? And when that baby isn't a baby anymore? Will you put on your resume that you were a prodigy? Early development leads to early aging. Mozart died when he was 33. He will grow up, don't worry. You can't stare at a child's gums and say, "Teeth come out! I fed you calcium!"

Taijiao is a marketing thing. Any good thing that comes into China³² will be distorted into a commercial thing. Like Montessori, they disregard the pedagogy and philosophy that come with the methodology, they train the teacher to operate a tool for two days and send the teacher to a class and pay a lot of money.

Here, she further critiques Chinese culture as doing cosmopolitanism incorrectly by perverting knowledge into commercialism, as well as for taking an instrumentalist view of children. The *taijiao* of her critique, however, was curiously not the type of communicative, relational *taijiao* practiced by other women I interviewed. The *taijiao* of her critique, interestingly, was from abroad. Women I interviewed about

³² See Chapter 3 for a discussion of the origins of *taijiao*. Some people attribute it to Mencius, Confucius, or early Traditional Chinese Medicine, while some classify it as a modern import from the United States, as Xiao Wu does here.[no need for the first sentence]

taijiao who talked about it in an intellectual, historical context often linked it to Mencius and sometimes to Confucius.

Xiao Wu's enactment of cosmopolitanism is certainly transcendence of the local through formation of identity through consumption, in this case of cosmopolitan standards of child rearing and personhood in general (Rofel 2012). She positions herself as a conduit through which accurate, non-commercialized information about early childhood can flow. Her U.S. education, New Zealand-born husband, and bicultural children validate her claims.

Yueyan, another mother with a foreign husband and a young child she is trying to insulate from Chinese parenting culture, was also on an unusual life path. She married her husband when she was thirty, and he was fifty, having never wanted kids. She started to want to have a child after they had been married several years. Her husband had never wanted to be a father, but changed his mind when she decided she wanted to have kids. She started trying to get pregnant in her mid-thirties. She terminated her first pregnancy when she discovered she was pregnant after she had been taking prescription cough syrup. She carried her second pregnancy to term.

Her pregnancy and birth, like those of Xiao Wu, reflected her ambivalence about Chinese practices and culture. She performed *taijiao* (fetal education), and like Xiao Wu, interpreted it as a wholly foreign practice coming from the United States.

It's illegal to know the baby's sex but I wanted a surprise anyway. I thought

the baby was going to be a boy because she kicked so much. Once I was watching 24 in the middle of the night, and she kept kicking. When I woke up to go to the bathroom she woke up with me and I thought, "It's a little human being." The book said the father should talk to the baby and read stories but Dan didn't. It was The Mozart Effect. I bought it in Hong Kong. In the second trimester I was still happy. I was comfortable and stopped having nausea. If you're not happy during pregnancy it affects mental development and personality.

She gave birth by C-section at Beijing Healthcare International, a private hospital staffed primarily by foreign doctors. After birth, she immediately came into conflict with standard child rearing and breastfeeding practices:

After the baby was born I had an ayi. I was nervous and listened to the ayi. It was like I was taking orders. I couldn't breastfeed at first. I got mad at the ayi because she said there was a gene for having no breast milk and I had it, because my mom didn't have a lot of breast milk either. I fired her because she was discouraging and hired one who was more encouraging.

Like Xiao Wu, she had been rebelling against Chinese culture since childhood; she wanted her child to have freedom and support she felt she had been denied. What these two women have in common is that both used cosmopolitan ideas about education and the self to transcend the parts of the local that felt stifling.

Each of the four women in this chapter pathologizes a different aspect of the local or of "Chinese culture," some more gently than others. Yueyan and Xiao Wu criticize the culture itself as pathological. Yueyan said she never felt like she was Chinese because the rigidity of the environment she was raised in chafed her. She wanted something different for her daughter. Xiao Wu, similarly, criticized competition, rigidity, and acceleration as the parts of Chinese culture most harmful to children. Emily critiques pregnancy practices and an inhospitable environment for breastfeeding. Dr. Chen criticized pregnant women for being pain-averse and not seeking out knowledge, and criticized the nation for its poverty and the inequality of medical knowledge and services. Dr. Chen, like parents and media after the formula scandals, cites corruption in the form of corrupt doctors, as a danger to the nation the must be transcended for the nation to build itself.

For Yueyan and Xiao Wu, nationalism, or renegotiating China's place in the world, is the least important part of cosmopolitan ideas, practices, or identities. All four of the women discussed in this chapter use their cosmopolitan engagements to critique Chinese childbirth and childrearing culture. Emily and Dr. Chen care in a direct and obvious way about China as a nation. Dr. Chen is overtly patriotic, and engages in medical service of a kind directly related to her socialist youth, while Emily often expresses sentimental nationalism, and cares deeply about Chinese women having access to medical knowledge from abroad. Xiao Wu and Yueyan were more interested in the micro-scale of the family and individual, and how the

nation can harm the individual child. Xiao Wu works to provide an alternative to authoritarian parenting and education by bringing home cosmopolitan ideas about childhood and personhood. Yueyan and her husband remain in Beijing because she likes her career, and because she and her husband have a longstanding network of friends and family, but they also like having a social network of foreigners. Emily has a Canadian passport, and plans to move to Canada with both her sons in the next few years. Dr. Chen wants her daughter to marry an Australian so that the family can be international. Both Xiao Wu and Yueyan characterized their relationship to the nation as one of individuals avoiding entanglement. Xiao Wu said, when I asked her why she lives in Beijing, "I'm rootless and floating. I don't want to put down roots anywhere."

Conclusion

Cosmopolitanism in Beijing pregnancy and parenting is not one thing, but many. I will conclude this chapter's discussion of the complexities of the relationship between cosmopolitan engagement and pregnancy/parenting by mapping the landscape of private maternity hospitals in Beijing, along with Ai Baobao, the formula and supplement supplier discussed in Chapter 1. I present these other institutions, and their alternative visions of cosmopolitan maternity care, as a point of comparison with Maternacare. Like the four women discussed in this chapter, each of these institutions' structure and marketing draws on different aspects of the concept of "abroad," mainly pleasure in consumption of the foreign, and safety in

authoritative and scientific knowledge. It is helpful here to think about Pun Ngai's (2003: 481) thoughts about desire:

Perhaps a rethinking of desire would be helpful here. Desire is not a fantasy that comes to be repressed in its encounter with "reality." Nor is desire derived from lack. Lack is only an alibi for the desire to consume. Desire is, on the contrary, the source of all reality and truth; it is what produces the real, the subject, and the social . . . "

I argued above that Emily's interventions into hospital practices were no less real, and no less marketable, because they were not always implemented. As shown in the prenatal care classes at Maternacare, desiring cosmopolitanism in pregnancy is its own reality.

This dissertation is concerned with both fantasies represented in marketing, especially that of hospitals, and with parents' desires for a smart, healthy baby.³³

Parents desire a child who is healthy, smart, able to do well in a globalized and competitive market economy, and socially adept. These desires build a social reality in which this can happen. The different marketing and reputations of the different private hospitals and other businesses concerned with pregnancy and birth in Beijing speak to the simultaneous unity and difference of parents' desire. Each hospital claims distinct, but overlapping, aspects of the desire to transcend the local through cosmopolitan parenting. The upscale tastefulness of Maternacare's marketing, and their representation of the space of the hospital as a place of relaxation and calm, is

The social reality of the desires of the architects of hospital administration is an interesting question for further investigation, but outside the scope of this chapter.

only one of many fantasies for sale on the hospital marketplace.

Ai Baobao, the formula and supplement importers who also offer prenatal education, emphasizes development and enrichment. Their marketing materials are full of images of entities moving from simple to complex, and from small to large. The development of zygotes into fetuses is represented in image after image. An image shows the neural tube of a fetus turning into the brain of a six-year-old. Two-thirds of the babies in their ads are white, usually blonde, a link to the foreign origin of their products, and a signifier of cosmopolitanism. Of all the pregnancy institutions, Ai Baobao's marketing draws on the critique of the danger of the nation to itself. Its emphasis on development makes sense, given that they sell products to enhance development, but their pervasive use of the trope of development raises the question of whether their marketing is a subtle reference to national development, as well.

Grace Hospital, another private maternity hospital, is marketed very differently from the other hospitals.³⁴ Their marketing focuses almost completely on pleasurable consumption. Their motto is "holiness, love, elegance, joy." The holiness in their marketing imagery is wholly European Christian. Like Maternacare's large, ceramic, maternal Guanyin in the lobby, Grace has a sculpture of a Madonna and child with the text "My heart has the host" in English. Gottschang (2007) argued that

_

³⁴ The hospital has a bad reputation in the Beijing OB/GYN world as having inexperienced doctors and an unscrupulous administration.

pregnancy and breastfeeding, and hospital education in breastfeeding, requires women to re-negotiate their relationships with their bodies and their sexual relationships, sometimes in ways that blur categories of sex and breastfeeding. This hospital seems to exist to address that process.

The pages of their catalog of services are filled with conflations of religious and sexual imagery. Their post-birth nutrition and exercise services are to regain "sexy mama's S-shape." There are other sexual images in the brochure including women in nothing but draped cloth. Much of the most sexually explicit language is in English, and often not present in the Chinese text. Their services are "based on a Canadian concept" (in contrast to Maternacare, a better-known, more established hospital, and their explicit marketing of American style maternity care?) Of the dozen children in the brochure not a single one was Chinese.

Their brochure is full of evocative, metaphorical images. Their description of their anesthesiology services is illustrated with a photo of a butterfly dropping a silver ball into a glass bowl of silver balls with the caption "indolent childbirth" in English, meaning that they provide epidural anesthesia. The aesthetic as a whole is a European art aesthetic of drama and classicism, with a woman in the toga on the "intimate recovery" page of their catalog, and a gold statue of Nike (the "Winged Victory") in the banner of their web page.

A second institution, Dr. Chen's new hospital, Americare, is inside a public hospital. The interior is not as luxurious as the other hospitals. Their marketing is

correspondingly simple and direct. Their interior is clean and comfortable, but has the aesthetic of a Chinese medical building with carpet, walls, and trim in gold, red and brown rather than pastels, wicker, and dramatic lighting. The hospital looks like a building, not a set. Their marketing mentions a one-to-one doctor-patient ratio like that of their "international counterparts." They provide translation, take international insurance, and offer a western-style delivery package including epidural, a birth plan, personalized choices about episiotomy and other medical choices that come up during birth, and a private room. The overall effect is one of practicality, and an emphasis on equipment and services offered. The affective labor of nurses and front desk staff is essential to their services. The staff is warm, and quick to offer service, but not as dressed up or as deferential as Maternacare.

Beijing Healthcare International's marketing is strikingly similar to hospital marketing in the US. The design of the brochure is practical, emphasizing services rather than experience. The prices are nearly as high as a US hospital. The interior is beige, and full of institutional furniture that would be at home in any hospital in the US. The doctors are all foreign, with website bios that have little flags by their names to signify their home country. There are a significant number of American flags. The hospital is run by a joint venture whose main business is supplying medical equipment to Chinese hospitals. It is a comprehensive hospital, not just for OB/GYN, with an emergency room, surgical specialties, psychiatry and psychology, and oncology. They do not have extensive marketing materials with healthy, smart

babies: the market for the hospital exists whether they market or not. Their marketing emphasizes high-quality international care, and assumes that their audience knows what that is.

These hospitals, like Dr. Chen, Emily, Xiao Wu and Yueyan, bring *guowai* home to Beijing. Each of these hospitals addresses global norms and cosmopolitan identities differently. Beijing Healthcare International markets medical services; other cosmopolitan desires are supplied strictly by the consumer. Maternacare and Grace market an experience of the United States and Europe, refracted and made Chinese. Americare markets a subtler, less fantasy-infused version of Maternacare's version of America. Each provides an invitation to build the nation through transcending the nation and the stress, crowding, and danger of the public through consuming medical care and environments from abroad.

The central tension in reproductive cosmopolitanism is building the nation through escaping the nation, pathologized as a corrupt place full of dangers to vulnerable fetuses, babies and children. The struggle is not just who builds the nation, but which vision of *guowai*—consumerist, socialist, radical, medical—informs the critique. Translation, including marketing, of the cosmopolitan into the local is a struggle over knowledge of the world and the ability to embody this knowledge.

CONCLUSION

This dissertation is about the process of making people in a particular historical moment, middle class Beijing at the turn of the 21st century. As I have shown throughout, personhood can be whole or partial, and is contingent upon both biological and social facts. Multiple actors—parents, the state, food producers, formula producers, doctors, hospital administrators, nurses, and the media—contribute to the construction of fetal and infant personhood. Mothers and families are also made through this process. Birthing babies, and making them people, is not just about infants and children.

In Chapter 1, the ethnographic account of pregnancy care at Maternacare demonstrates that care work or affective labor, often categorized as immaterial labor, is material because it creates very particular kinds of fetuses, mothers, workers and babies, and that the distinction between material and immaterial labor is not a useful one. This argument has implications beyond my field site, and beyond pregnancy; affective care, often the work of women, by creating affect and bodily states like health or by bringing a pregnancy to term, has very clear material effects.

In Chapter 2, I argue that spectacular, technologically assisted reproduction like ultrasounds and IVF is not exceptional, but rather is on a spectrum with more everyday tools and techniques for influencing pregnancy such as low-tech educational tools, stories and metaphors, and fetal education. The particularity of care work, and all kinds of pregnancy and labor "assistance" at Maternacare, contributes to the

construction of middle-class, high- value fetuses through emotional and physical enrichment.

In the context of the one child policy and a competitive market economy, parents are under tremendous pressure to have the healthiest, smartest baby possible. Chapter 3 argues that fetal testing and fetal education create a form of partial personhood where the fetus is simultaneously a future family member, a fully formed person enjoying an independent life inside the womb, and, in the case of an abnormal test result, an expendable stop along the way to the healthy, smart baby. Chapter 3 maps some of the relationships and experiences essential to building, and experiencing, the partial personhood of the fetus.

Chapter 4 shows how parents look outside China on one hand to construct alternate forms of personhood and alternative life paths, and on the other hand for the enrichment that is very much a standard part of middle-class urban reproduction. It is also an exploration of the multiple forms of cosmopolitanism operating in pregnancy and childhood care and enrichment. I discuss women who critique Chinese parenting and pregnancy cultures using ideas from abroad, as well as Dr. Chen, whose own alternative cosmopolitanism is connected both to the socialist world and to mainstream cosmopolitanism.

There are threads of inquiry I regret not being able to follow, and glimpses during fieldwork of alternate paths that I could not take. Some, like spectacular fertility treatments, infant swimming and baby photography, I encountered at my

field sites but did not study in the depth necessary to write about at length. The most important thread of inquiry, however, was completely outside the social world where my ethnography took place. Working class and rural pregnancy is an important counterpart to the research in this dissertation. *Taijiao* is predominantly a middle class practice. The *suzhi* that urban, middle class women build into their babies through pregnancy and infancy enrichment is meant, in part, to distinguish them from the working class, from migrants, and from peasants.

Women who live in rural areas are pregnant, and give birth, under completely different circumstances than those inside a private hospital in Beijing. Midwives, whose training and experience happens outside the medical establishment, and who are not licensed, pay house calls for home births. Many rural women, and in the cities migrant and poor women, receive medical care starting at their fifth month, or seventh month, or for the first time when they arrive at a county hospital in labor. Women die of treatable gynecological cancers. Along with problems of medical access, which are the best-known facts about rural and poor women's reproductive lives, there are questions about personhood that are unasked. What kind of personhoods do a mother, and a fetus, have during the process of reproduction that happens within a tense relationship with class and the nation?

The second are spectacular forms of reproduction, especially IVF. While I encountered fertility counseling and infertility surgery in the field, and encountered patients who had conceived by IVF, I did not have an opportunity to visit a fertility

clinic. I would be very interested to compare the management project of mothers' bodies in the IVF clinic, and the prenatal care clinic. The relationship between conception and state policy in the case of IVF is very different; infertility treatments, including infertility drugs, are tightly regulated to avoid multiple births. How do the politics of conception and access to services affect women's pregnancy management processes? Pregnancy is already a process of women's bodies becoming visible to, and manageable by, doctors and family members. How does fertility treatment fit into those relationships, and into the process of having a healthy, smart baby?

I also regret not spending more time during fieldwork observing infant swimming. Infant swimming studios have proliferated in Beijing. The mix of time shifting to bring the baby back to the womb, enrichment, embodiment, and the consumable pleasure for parents as their otherwise-immobile babies swim laps around a pool in a colorful neck ring, is a fascinating scene that I was not able to fully explore in the infant swimming section of this dissertation.

Along with infant swimming, there is another consumable pleasure related to pregnancy, birth and babies that deserves further exploration: baby and family photography. Baby photos are the postnatal equivalent to ultrasound portraiture. Babies are routinely photographed in elaborate sets and costumes in photography studios. The extreme cuteness of baby photos can have the effect of forestalling inquiry and analysis; generally, someone who has been handed a baby photo says, "Tai ke ai le! (How cute!)" and passes it back to the parent. What would a systematic

ethnography and interpretation of these photos look like? Their construction, their consumption, their circulation: what kinds of relationships and personhood are engendered by baby photography? Baby photos seem to be related to wedding portraiture, which creates fantasy images of women and couples. Are there similar kinds of fantasy operating in the creation of baby photos? How might it relate to other kinds of consumable pleasure parents take in children, like infant swimming?

The final avenue for further inquiry is something I often wondered about while I was doing fieldwork: what is it like to *be* an enriched, fetally educated, healthy, smart baby? The reinvention of *taijiao* began in the late 1990s, and the first wave of *taijiao* children are adolescents. What kinds of personhood, and experiences, does an infancy of enrichment engender? How do these children fit into families, and into the nation? These questions are often asked about single children since the One Child Policy; what does it mean to be not just a single child, but to have complex, partial personhood since pregnancy? And is there really a complete, unfragmented personhood to compare with the partial personhood of the fetus? Are there aspects of partiality to adult personhood? Whose personhood, and under what circumstances? These are questions that deserve more analysis, and thorough ethnographic exploration.

BIBLIOGRAPHY

Anagnost, Ann

- 2004a "Maternal Labor in Transnational Circuits." *In* Consuming Motherhood, Janelle S. Taylor, Danielle F. Wozniak, and Linda L. Layne, eds. Rutgers, NJ: Rutgers University Press, 139-167.
- 2004b "The Corporeal Politics of Quality (Suzhi)." Public Culture 16:2, pp. 189-208.
- 1997a National Past-Times: Narrative, Representation and Power in Modern China. Durham: Duke University Press.
- 1997b The Child and National Transcendence in China. *In* Ernest Young et al., ed., Constructing China: The Interaction of Culture and Economics. Ann Arbor: University of Michigan Center for Chinese Studies.
- 1995 A Surfeit of Bodies: Population and the Rationality of the State in post-Mao China. *In* Faye D. Ginsburg and Rayna Rapp (Eds.) Conceiving the New World Order: The Global Politics of Reproduction. Berkeley: University of California Press.

Bakken, Børge

2000 The Exemplary Society: Human Improvement, Social Control, and the Dangers of Modernity in China. Clarendon Press Studies on Contemporary China.

Barlow, Tani E.

- 2004 The Question of Women in Chinese Feminism. Durham: Duke University Press
- 1994 Theorizing Woman: Funu, Guojia, Jiating. *In* Angela Zito and Tani E. Barlow (Eds.) Body, Subject and Power in China. University of Chicago Press.

Butler, Judith

2006 Gender Trouble: Feminism and the Subversion of Identity. New York: Routledge.

Camfield, David

The Multitude and the Kangaroo: A Critique of Hardt and Negri's Theory of Immaterial Labour. Historical Materialism 15(2): 21–52.

Casper, Monica

1998 The Making of the Unborn Patient: A Social Anatomy of Fetal Surgery. Piscataway, NJ: Rutgers University Press.

Chu, Julie

2004 Cosmologies of Credit: Understanding Fuzhounese Migration Through Theories of Value and Exchange. Dissertation, Anthropology Department, New York University.

Chung, Yuehtsen Juliette

2002 Struggle for National Survival: Eugenics in Sino-Japanese Contexts, 1896-1945. New York: Routledge.

Clough, Patricia Ticineto and Jean Halley

2007 The Affective Turn: Theorizing the Social. Durham, NC: Duke University Press.

Cooper, M.

2011 Experimental Republic: Medical Accidents (Productive and Unproductive) in Postsocialist China. East Asian Science, Technology and Society 5(3): 313–327.

Croll, Elizabeth

2006 China's New Consumers: Social Development and Domestic Demand. London: Taylor & Francis.

Davis, Deborah

- 1993 Introduction. *In* Deborah Davis and Stevan Harrell (Eds.) Chinese Families in the Post-Mao Era. Berkeley: University of California Press.
- 2000 The Consumer Revolution in Urban China. Berkeley: University of California Press

Davis, Deborah and Julia R. Sensenbrenner

2000 Childhood: Parental Purchases for Shanghai's Only Child. *In* Deborah Davis (Ed). The Consumer Revolution in Urban China. Berkeley: University of California Press.

Dikotter, Frank

Imperfect Conceptions: Medical Knowledge, Birth Defects, and Eugenics in China. New York: Columbia University Press.

Duthie, Laurie

2005 White Collar China: Global Capitalism and the Formation of a New Social

Identity. Anthropology of Work Review 26(3): 1-12.

Dyer-Witheford, Nick

2001 Empire, Immaterial Labor, the New Combinations, and the Global Worker. Rethinking Marxism 13(3-4): 70–80.

Efird, Robert

2001 Rock in a Hard Place: Music and the Market in Nineties Beijing. *In* Nancy Chen, C.D. Clark, S.Z. Gottschang, and L. Jeffrey (Eds.) China Urban: Ethnographies of Contemporary Culture. Durham: Duke University Press.

Evans, Harriet

- 2007 The Subject of Gender: Daughters and Mothers in Urban China. New York: Rowman and Littlefield.
- 1997 Women and Sexuality in China: Female Sexuality and Gender Since 1949. New York: Continuum.
- 1995 Defining Difference: The "Scientific" Construction of Sexuality and Gender in the People's Republic of China. Signs 20(2): 357–394.

Farquhar, Judith

- 2002 Appetites: Food and Sex in Post-Socialist China. Durham: Duke University Press Books.
- For Your Reading Pleasure: Self-Health (Ziwo Baojian) Information in 1990s Beijing. Positions: East Asia Cultures Critique 9(1): 105–130.
- 1994 Knowing Practice: The Clinical Encounter in Chinese Medicine. Boulder: Westview Press.

Farquhar, Judith, and Qicheng Zhang

2005 Biopolitical Beijing: Pleasure, Sovereignty, and Self-Cultivation in China's Capital. Cultural Anthropology 20(3): 303–327.

Fleischer, Friederike

2007 To Choose a House Means to Choose a Lifestyle: The Consumption of Housing and Class-Structuration in Urban China. City & Society 19(2): 287–311.

Franklin, Sarah

- 2003 Ethical Biocapital: New Strategies of Cell Culture. *In* Sarah Franklin and Margaret Lock, Eds. Remaking Life and Death: Toward and Anthropology of the Biosciences.
- 1997 Embodied Progress: A Cultural Account of Assisted Conception. New York: Routledge.

1995 Postmodern Procreation: A Cultural Account of Assisted Reproduction.

In Faye Ginsburg and Rayna Rapp (Eds.) Conceiving the New World Order:
The Global Politics of Reproduction. Berkeley: University of California
Press.

Franklin, Sarah and Margaret Lock

Animation and Cessation. *In* Sarah Franklin and Margaret Lock, Eds. Remaking Life and Death: Toward and Anthropology of the Biosciences.

Franklin, Sarah and Susan McKinnon

2001 Relative Values: Reconfiguring Kinship Studies. Durham: Duke University Press.

Fraser, David

2000 Inventing Oasis: Luxury Housing Advertisements in Reconfiguring Domestic Space in Shanghai. *In* Deborah Davis (Ed.) The Consumer Revolution in Urban China. Berkeley: University of California Press

Fu, Diana

2009 A Cage of Voices: Producing and Doing Dagongmei in Contemporary China. Modern China 35(5): 527–561.

Furth, Charlotte

1999 A Flourishing Yin: Gender in China's Medical History: 960–1665. Berkeley: UC Press.

Ginsburg, Faye D.

- 1999 Fetal Reflections: Confessions of Two Feminist Anthropologists as Mutual Informants. *In* Lynn Morgan and Meredith Michaels (Eds.) The Fetal Subjects: Feminist Postions.
- 1989 Contested Lives: The Abortion Debate in An American Community. Berkeley: University of California Press.

Ginsburg, Faye D. and Rayna Rapp

- 2007 Enlarging Reproduction/ Screening Disability. *In* Reproductive Disruptions: Gender, Technology, and Biopolitics in the New Millennium. London: Berghahn Books
- 2002 Standing at the Crossroads of Genetic Testing: New Eugenics, Disability Consciousness, Women's Work. GeneWatch: A Bulletin of the Council for Responsible Genetics 15(1).
- 1995 Conceiving the New World Order: The Global Politics of Reproduction. Berkeley: University of California Press.

Gottschang, Suzanne Zhang

2007 Maternal Bodies, Breast-Feeding, and Consumer Desire in Urban China. Medical Anthropology Quarterly 21(1): 64–80.

Greenhalgh, Susan

- 2010 Cultivating Global Citizens: Population in the Rise of China. Cambridge, Mass: Harvard University Press.
- 2009 Governing China's Population. *In* Sabine Berking and Magdalena Zolkos (Eds.) Between Life and Death: Governing Population in an Era of Human Rights. Bern: Peter Lang, 2009.
- 2005 Missile Science, Population Science: The Origins of China's One-Child Policy, The China Quarterly 182: 253-276.
- 2003 Planned Births, Unplanned Persons: "Population" in the Making of Chinese Modernity. American Ethnologist 30(2: 196-215.
- 1994 Controlling Births and Bodies in Village China. American Ethnologist 21(1): 1-30.

Haraway, Donna

2003 The Companion Species Manifesto: Dogs, People, and Significant Otherness. Chicago: Prickly Paradigm Press

Hardt, Michael

1999 Affective Labor. Boundary 2 26(2): 89–100.

Hardt, Michael and Antonio Negri

2004 Multitude: War and Democracy in the Age of Empire. Cambridge: Harvard University Press.

2000 Empire. Cambridge: Harvard University Press.

Harper, Donald

1997 Early Chinese Medical Literature. London; New York: New York, NY: Routledge.

Hershatter, Gail

2004 State of The Field: Women in China's Long Twentieth Century, Journal of Asian Studies 63 (4).

Hochschild, Arlie Russell

2003 The Managed Heart. Berkeley: University of California Press.

Honig, Emily and Gail Hershatter

1988 Personal voices: Chinese women in the 1980's. Palo Alto: Stanford University Press.

Johnson, Kay Ann

1983 Women, the Family, and the Peasant Revolution in China. Chicago: University of Chicago Press.

Judd, Ellen R.

1994 Gender and Power in Rural North China. Palo Alto: Standard University Press.

Kaufman, Sharon R., and Lynn M. Morgan

The Anthropology of the Beginnings and Ends of Life. Annual Review of Anthropology 34: 317–341.

Kipnis, Andrew

2007 Neoliberalism Reified: Suzhi Discourse and Tropes of Neoliberalism in the People's Republic of China. Journal of the Royal Anthropological Institute 13(2): 383–400.

Ko, Dorothy

2007 Cinderella's Sisters: A Revisionist History of Footbinding. Berkeley: UC Press.

Kuan, Teresa

- 2011 The Heart Says One Thing but the Hand Does Another: A Story About Emotion-Work, Ambivalence, and Popular Advice for Parents. The China Journal (65): 77–100.
- Adjusting the Bonds of Love: Parenting, Expertise and Social Change in a Chinese City. Anthropology Dissertation, University of Southern California.

Lanoix, Monique

- 2013 Labor as Embodied Practice: The Lessons of Care Work. Hypatia 28(1): 85–100
- Where Angels Fear to Tread: Proxy Consent and Novel Technologies. Brain Injury 24(11): 1336–1342.
- 2005 No Room for Abuse. Cultural Studies 19(6): 719–736.

Martin, Emily

- 1992 The Woman in the Body. Boston: Beacon.
- 1991 The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-female Roles. Signs 16(3): 485–501.

Mauss, Marcel

2002 The Gift. London: Taylor & Francis.

McClintock, Anne

1995 Imperial Leather: Race, Gender, and Sexuality in the Colonial Contest. New York: Routledge.

McGregor, Richard

2012 The Party: The Secret World of China's Communist Rulers. New York: Harper Perennial.

McKinnon, Susan

2005 On Kinship and Marriage: A Critique of the Genetic and Gender Calculus of Evolutionary Psychology. *In* Susan McKinnon and Sydel Silverman (Eds.) Complexities: Beyond Nature and Nurture. University of Chicago Press.

Morgan, Lynn M.

2009 Icons of Life: A Cultural History of Human Embryos. Berkeley: University of California Press.

1996 Fetal Relationality in Feminist Philosophy: An Anthropological Critique. Hypatia 11(3): 47–70.

Nie, Jing-Bao

2005 Behind the Silence: Chinese Voices on Abortion. Lanham, MD: Rowman & Littlefield.

Ngai, Pun

2005 Made in China. Durham: Duke University Press.

Subsumption or Consumption? The Phantom of Consumer Revolution in "Globalizing" China. Cultural Anthropology 18(4): 469–492.

Ortner, Sherry B.

1974. Is Female To Male As Nature Is To Culture? *In* M. Z. Rosaldo and L. Lamphere (Eds.) Woman, Culture, and Society. Palo Alto: Stanford University Press.

Rapp, Rayna

2003 Cell Life and Death, Child Life and Death: Genomic Horizons, Genetic Diseases, Family Stories. *In* Sarah Franklin, Margaret Lock (Eds.) Remaking Life & Death: Toward an Anthropology of the Biosciences. Santa Fe: School of American Research Press

- 2001 Gender, Body, Biomedicine: How Some Feminist Concerns Dragged Reproduction to the Center of Social Theory. Medical Anthropology Quarterly 15(4): 466–477.
- 1999 Testing Women, Testing the Fetus: the Social Impact of Amniocentesis in America. London: Routledge.

Rocca, Jean-Louis and PT Brown

2000 The Rise of Unemployment in Urban China: The Contradictions of Employment Policies. *In* China Perspectives.

Rogaski, Ruth

2004 Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China. University of California Press.

Rofel, Lisa

- 2012 Between Tianxia and Postsocialism: Chinese Contemporary Cosmopolitanism" *In* Delanty (Ed.) Routledge Handbook of Cosmopolitan Studies.
- 2007 Desiring China. Durham: Duke University Press. 2001
- 2001 Discrepant Modernities and Their Discontents. Positions: East Asia Cultures Critique 9(3): 637–649.
- 1999 Other Modernities: Gendered Yearnings in China after Socialism. Berkeley: University of California Press.

Schein, Louisa and Tim Oakes

2006 Translocal China: Linkages, Identities and the Reimagining of Space. London: Routledge.

Schneider, Laurence A.

- 2003 Biology and Revolution in Twentieth-century China. Asia/Pacific/perspectives. Lanham, MD: Rowman & Littlefield.
- 1989 Learning from Russia: Lysenkoism and the Fate of Genetics in China 1950-1986. *In* Merle Goldman and Denis Simon (Eds.) Science and Technology in Post-Mao China.

Sharp, Lesley A.

2000 The Commodification of the Body and Its Parts. Annual Review of Anthropology: 287–328.

Sigley, Gary

2009 Suzhi, the Body, and the Fortunes of Technoscientific Reasoning in Contemporary China. Positions: East Asia Cultures Critique 17(3): 537–566.

Sleeboom-Faulkner, Margaret

2010 Eugenic Birth and Fetal Education: The Friction Between Lineage Enhancement and Premarital Testing Among Rural Households in Mainland China. The China Journal (64): 121–141.

Steinberg, Ronnie J., and Deborah M. Figart

1999 Emotional Labor Since the Managed Heart. The Annals of the American Academy of Political and Social Science 561(1): 8–26.

Stoler, Ann L.

2002 Carnal Knowledge and Imperial Power: Race and the Intimate in Colonial Rule. Berkeley: University of California Press.

Strathern, Marilyn

- 2002 On Space and Depth. *In* John Law and Annmarie Mol (Eds.) Complexities: Social Studies of Knowledge Practices.
- 1992a After Nature: English Kinship in the Late Twentieth Century. Cambridge: Cambridge University Press.
- 1992b Reproducing the Future: Anthropology, Kinship, and the New Reproductive Technologies. New York: Routledge.
- 1980 No Nature, No Culture: The Hagen Case. *In* Carol MacCormack and Marilyn Strathern (Eds.) Cambridge University Press.

Taylor, Janelle S.

- 2008 The Public Life of the Fetal Sonogram: Technology, Consumption, and the Politics of Reproduction. Studies in Medical Anthropology. New Brunswick, N.J: Rutgers University Press.
- 2005 Surfacing the Body Interior. Annual Review of Anthropology 34: 741–756.

Thompson, Charis

2005 Making Parents: The Ontological Choreography of Reproductive Technologies. Cambridge, MA: MIT Press.

Veeck, Ann

2000 The Revitalization of the Marketplace: Food Markets in Nanjing. *In* Deborah Davis (Ed.) The Consumer Revolution in Urban China. Berkeley: University of California Press.

Wang, Hui

2010 The End of Revolution: China and the Limits of Modernity. New York: Verso.

1998 Contemporary Chinese Thought and the Question of Modernity. Social Text 55: 9-44.

Wang, Qian

2010 Parenting and Child Socialization in Contemporary China. *In* Michael Harris Bond (Ed.) Oxford Handbook of Chinese Psychology.

Wang, Zheng

- 2005 "State Feminism?" Gender and Socialist State Formation in Maoist China. Feminist Studies 31(3): 515-51.
- 2001 Call Me "Qingnian" but not "Funu": A Maoist Youth in Retrospect. *In* Xueping Zhong, Wang Zheng, Bai Di (Eds.) Some of Us: Chinese Women Growing up in the Mao Era. New Brunswick: Rutgers University Press.

Wank, David L.

2001 Commodifying Communism. New York: Cambridge University Press.

Williams, Raymond

1977 Marxism and Literature. Oxford: Oxford University Press.

Wilms, Sabine

- 2005a "Ten Times More Difficult to Treat": Female Bodies in Medical Texts from Early Imperial China. Nan Nü 7(2): 182–215.
- 2005b The Transmission of Medical Knowledge on'Nurturing the Fetus' in Early China. Asian Medicine 1(2): 276–314.

Yan, Hairong

Neoliberal Governmentality and Neohumanism: Organizing Suzhi/Value Flow through Labor Recruitment Networks. Cultural Anthropology 18(4): 493-523.

Yan, Yunxiang

- 2003 Private Life under Socialism: Love, Intimacy, and Family Change in a Chinese Village, 1949-1999. Stanford: Stanford University Press.
- 2002 "Managed Globalization: State Power and Cultural Transition in China." *In* Peter Berger and Samuel Huntington, Eds. Many Globalizations: Cultural Diversity in the Contemporary World, pp. 19-47. Oxford: Oxford University Press.

Yanagisako, Sylvia S.J.

2012 Immaterial and Industrial Labor: On False Binaries in Hardt and Negri's Trilogy. Focaal 2012(64): 16–23.

Zhan, Mei

- 2011 Human Oriented? Angels and Monsters in China's Health-Care Reform. East Asian Science, Technology and Society 5(3): 291–311.
- 2001 Does It Take a Miracle? Negotiating Knowledges, Identities, and Communities of Traditional Chinese Medicine. Cultural Anthropology 16(4): 453–480.

Zhang, Zhan

2000 Mediating Time: The 'Rice Bowl of Youth' in Fin de Siècle Urban China. Public Culture 12(1): 93–113.

Zhong, Xueping, Wang Zheng, and Bai Di

2001 Some of Us: Chinese Women Growing up in the Mao Era. New Brunswick: Rutgers University Press.

Zhu, Jianfeng

2010 Mothering Expectant Mothers: Consumption, Production, and Two Motherhoods in Contemporary China. Ethos 38(4): 406–412.

Zito, Angela

1994 Silk and Skin: Significant Boundaries. *In* Angela Zito and Tani E. Barlow (Eds.) Body, Subject, and Power in China. University of Chicago Press.