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Matthew R. Dudgeon Date

Birth after Death: Men and Reproduction in Two K'iche' Maya Communities

By

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M.A., Emory University, 2001
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An abstract of
A dissertation submitted to the Faculty of the
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Abstract

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By Matthew R. Dudgeon

In the late 20th century, ethnic and economic inequalities in Guatemala led to a *guerilla* insurgency that was met by state military counterinsurgent forces. The genocidal violence of the civil war disrupted the reproductive trajectories of many western highland indigenous Maya communities. In this dissertation, I explore patterns of reproduction and reproductive loss in Maya communities after the Guatemalan civil war. I focus on an aspect of reproduction often left unaddressed in demographic as well as anthropological approaches: men. Working with predominantly K'iche' Maya communities, I investigate ways men influence decisions about family size and reproductive complications. I interrogate men's own experiences of reproduction as an integral part of their masculinity and an area of risk that lies outside the domains defined as masculine. To accomplish an ethnography of reproduction and masculinity in the context of genocide, I worked in two K'iche' Maya communities: one peri-urban community relatively less affected by the civil war, and another rural community the war had forced into hiding as a Community of Populations in Resistance.

I examine men's attitudes toward marriage, pregnancy, childbirth, and contraception. I trace four important elements of K'iche' Maya masculinity: productivity, growth, control, and respect. I argue that these elements inform men's reproductive experiences and decisions and aid in explaining the profound ambivalence many men feel about their roles in reproduction. I tie this ambivalence to broader narratives of risk associated with reproduction that implicate men and women as well as care providers such as local traditional birth attendants. I examine patterns of contraceptive use, demonstrating that men may actively collaborate with partners in contraceptive decision making even as they confront conflicts that arise from the consequences of those decisions. Using quantitative data, I explore the impact of variables accounting for men's influences on epidemiologic models of reproductive health outcomes such as initiation of prenatal care, complications during pregnancy, contraceptive knowledge and use, and neonatal and infant mortality. I conclude with a discussion of K'iche' Maya reproductive resilience and men's changing reproductive roles in the context of that resilience.

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Bill Eley and Dr. Ira Schwartz, who together inspire not only me but also hundreds of physicians to be great doctors.

Anthropological fieldwork is a daunting piece of work, perhaps doubly so when working in two communities. I owe a debt of gratitude to the men and women of Jun and Keb', who let me into their homes, onto their soccer fields, and into their lives for almost three years of mine. I only hope I have done some justice to the richness of their experiences that they shared. In particular, I thank my field assistants who so tirelessly helped me to interview so many. *Maltiox cha we.*

My fieldwork would not have been possible without the cooperation of many men and women in the Guatemalan Ministry of Health, who helped me to frame the questions about reproductive health that would undergird my project. I am particularly thankful to the friendship and guidance of Dr. Gustavo Barrios and his family, who really were a second family to me during my time in Guatemala. I am ecstatic to return as a physician to Guatemala and join him in his relentless struggle against illness in that country.

I hardly know where to begin in thanking fellow graduate students, having met and worked with so many along the way. I am so grateful to have shared a few steps on a long intellectual journey. Special thanks to Ben Junge, Sarah Lyons, Sarah Willen, Julie Solomon, Joanna Davidson, Brandon Kohrt, Ryan Brown, Dan Hrushka, and Lara Deeb for their support, intellectual and moral. Dan Smith and Holly Wardlow have been older intellectual siblings in the field of gender studies, and I have benefited immensely following the blazes on their trail.

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List of tables and figures

List of male participants

To protect the anonymity of participants, all names are pseudonyms and I have provided only limited background information where possible.

Married men with children in Jun

Pedro is 28 years old and has one son. He drives a truck for a transport company and a bus. His wife works as a nurse.

Alfonzo is 38 years old and has a son and a daughter and is expecting a third child. He owns a bus that is part of a local bus company. His wife does not work outside their home.

Marcos is 37 years old and has a daughter and also had a son who died at age 8. He is a bus driver.

Lorenzo is 58 years old and has five children. He owns a local bus company. His wife is a midwife.

Carlos is 31 years old man and works as a weaver. He has two children and plays soccer.

Pablo is 38 years old man and has three children. He works as a weaver. He plays soccer.

Regino is 34 years old. He has three children and works as a weaver. He plays soccer.

Daniel is 41 years old man. He has two children and works as a teacher. He also owns a bus and has started a cable television business. His wife is a midwife.

Hugo is 37 years old. He has two children. He works for a local power company and plays soccer. He is separated from his wife.

Guillermo is 55 years old and works in local government. He has five children. His wife is a midwife.

Geronimo is 47 years old. He has three children. His wife is a midwife.

Cornelio is 71 years old man who works as a healer and as a farmer. His wife is a midwife.

Renaldo is 41 years old man with two children who works as a school teacher.

Ricardo is 54 years old and has two children. He works as a healer and Maya priest as well as textile merchant and owner of looms.

Esteban is 52 years old with three children. He works as a secondary schoolteacher. He owns several looms on which other men work.

Men without children in Jun

Gustavo is 35 years old and works as a schoolteacher.

Ignacio is 22 years old and works collecting money on buses and occasionally driving buses.

Luis is 34 years old and works as for the local forestry service.

Alfonso is 21 years old and works as a weaver. He is a basketball player.

Lucas is 20 years old and works as a weaver. He is also a basketball player.

Raymundo is 22 years old and works as a minister in a local evangelical church

Married men with children in Keb'

Domingo is 38 years old, in a union, and has four boys and two girls. He came to Keb' after a massacre in his home community in the department of Huehuetenango in 1986. He was a member of the guerilla for eight years in the Ixcan when he married and had children afterward. He completed sixth grade.

Simon is 47 years old and has been married since he was 18. He has three sons and four daughters. He did not attend school.

Diego is 25 years old and married. He arrived in 1980 and married at age 22. In addition to farming he has a small store in his house. Both of his two children died in infancy. He finished sixth grade

Leonardo is 30 years old and is married. He completed third grade. He joined the guerilla when he was 15 and fought for 3 years and married afterward. He has three sons and one stepson and his wife is currently pregnant. His primary language is Ixil.

Maximiliano is 42 years old and married when he was 18. He is one of 12 children, four of whom have died (one before and three during the civil war). He has five

sons and two daughters, all of who are living. He is one of the primary community organizers and travels often to the capital. He did not go to school as a child, but he did learn to read in classes during the war.

Valentin is 30 years old and in a union. His father was killed in the civil war when he was eight years old and he came to Keb' when he was 10. He finished secondary school after fighting with the guerilla and studied agronomy in vocational school.

Umberto is 22 years old and married at age 18. He was born in Keb' and he finished sixth grade. His wife has been pregnant once, but the infant was premature and died shortly after birth.

Rene is 42 years old and is in a union. He completed first grade. He works as a farmer as well as a healer in the community. One of his seven children died at the age of 5 of a respiratory illness. He believes that, after an illness, his wife can no longer have children.

Jacobo is 32 years old and married at age 26. He has three children. He completed fifth grade. He moved to Keb' after a massacre when he was four. He fought in the guerilla for three years and was away from Keb' for 12 years, purposely delaying his marriage.

Bonifaz is a 23 year old and is in a union. He was born in Keb'. He has one girl and one boy. He finished sixth grade.

Fidel is 37 years old and is in a union. He spent eight years in the guerilla and found his partner afterward. He has three living daughters; a son died at age 5 with what he believes was asthma. His primary language is Q'anjob'al.

Victor is 34 years old and is in a union. He was born in Keb'. He has not gone to school. He was a part of the guerilla and spent 10 years in Mexico, returning in 1995. He has had three female partners, but only had children with one. He has three living children; one died at 15 days with a cough and fever.

Don Felix is 66 years old and is married. He was among the first settlers in Keb'. His wife is a *comadrona.* He has five living children and had two children, nine months and seven months die during the civil war.

Don Zacarias is 68 years old and grew up in another part of the Ixil Triangle. He works as a healer. His primary language is Ixil. He was in the guerilla for 3 years. He was married and separated during the civil war and is now in a union. He never attended school.

Lucas is 26 years old and he is in a union. He married at 18. He was born in Keb' and did not attend school, but can read. He has two sons and one daughter and wants another child. He had a daughter die immediately after a normal delivery.

Javier is 37 years old and is in a union. He was born in Keb'. He was in the guerilla for 14 years, in combat for three of those years. He has been with his partner for 7 years and they have three children; he would like to have one more. He finished 3 years of secondary school.

Don Anastasio is 38 years old and is in a union since he was 25. His wife was an orphan of the war. He works as a healer in the community. He has three sons and three daughters who are alive, with one son who died in a bus crash. He did not attend school.

Nataniel is 37 years old and married at age 18. He has two sons and four daughters. He was born in Keb'. He studied outside the community for one year but his studies were interrupted by the civil war, so he finished high school by radio.

Gerardo is 29 years old and got married after the Peace Accords. He has two daughters and one son who are alive, with one son who died a month after birth with pneumonia. He finished high school via correspondence courses.

Don Ernesto is 51 years old and in a union. This is his third union; he separated from his first two partners during the civil war. He had one son in his first union who died of measles and has since been unable to conceive children and believes he is infertile. He worked with the guerilla for seven years. He is a healer.

Married men without children in Keb'

Gabriel is 26 years old and is married. He was born in Keb'. He went to high school outside the community, where he took courses to be a health promoter. He does not have any children.

Unmarried men without children Keb'

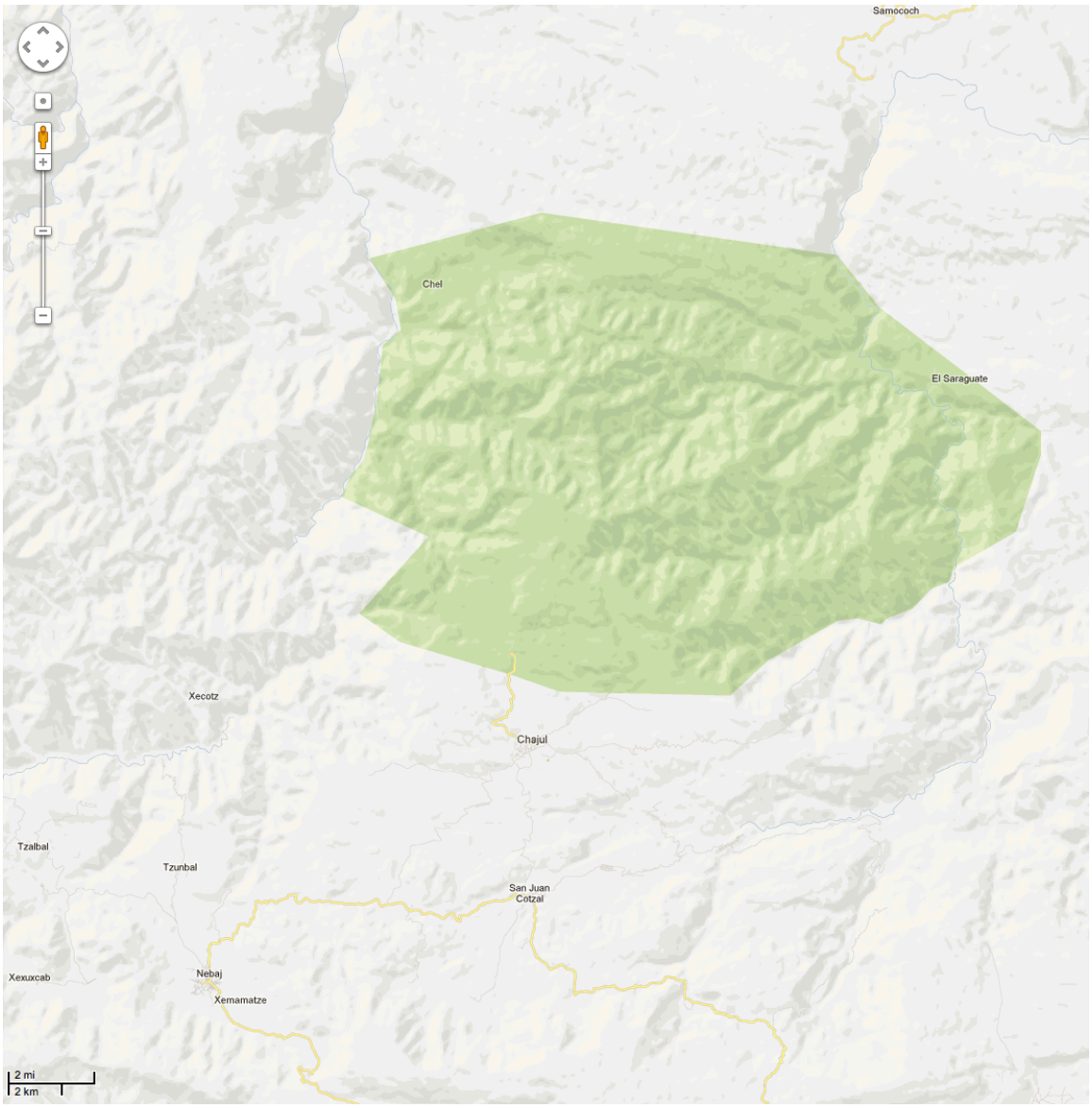
Anacleto is 20 and is a high school student outside of Keb'.

Benjamin is 22 and is a high school student outside of Keb'.

Map of Guatemala, retrieved May 4, 2013 from www.maps.google.com with data and images provided by Google / INEGI

Map of the departments of Quetzaltenango and Quiché, Guatemala, retrieved May 4, 2013 from www.maps.google.com with data and images provided by Google / INEGI

Map of the municipality of Cantel, Quetzaltenango, Guatemala, retrieved May 4, 2013 from www.maps.google.com with data and images provided by Google / INEGI



Map of the municipality of Chajul, Quiché, Guatemala, retrieved May 4, 2013 from www.maps.google.com with data and images provided by Google / INEGI

Chapter 1: Introduction

This dissertation examines the ways men influence the reproductive health of others, most notably women and children, in two K'iche' Maya communities in Guatemala. Framing that discussion is a parallel examination of men's own experiences of reproduction as an integral part of their masculinity as well as a risky arena that lies outside the domains typically defined as pertaining to K'iche' men.

Reproduction in Guatemala, in particular among Maya groups, has been an object of demographic investigation. Demographic studies have focused on the relatively high fertility, low rates of contraception and high maternal and infant mortality rates in Maya communities. A number of factors have been investigated from this epidemiological perspective, including access and distance to health resources, economic inequality, and language barriers (Bartlett, de Bocaletti, & Bocaletti, 1991; Dudgeon, 1998; Finley, 1999; J. Foster, Anderson, Houston, & Doe-Simkins, 2004; Goldman & Glei, 2003; E. Kestler & Ramirez, 2000; E. E. Kestler, 1995; Replogle, 2007; Schieber, O'Rourke, Rodriguez, & Bartlett, 1994). Belonging to a Maya community repeatedly emerges as an independent risk factor for these demographic outcomes (Jane T. Bertrand, Pineda, & Santiso G., 1979; J. T. Bertrand, Seiber, & Escudero, 2001). These studies have not been able to capture what about being Maya explains these demographic findings (cf. Ishida, 2010; Ishida, 2011), and have left unaddressed Maya men's and women's subjective experiences of reproductive decisions, plans, challenges, and losses (cf. M. Carter, 2002). This dissertation begins to bridge this gap by focusing on the roles of K'iche' men in

reproduction and reproductive health.

A focus on men in the Guatemalan context is of particular importance, not least of which being the overall absence of men from discussions of reproduction and reproductive health. This absence of men has been noted both by anthropologists (Inhorn & Wentzell, 2011) and other social scientists (Greene & Biddlecom, 2000). The significance of this absence is both manifold and complex in the anthropological literature on reproduction as well as in the context of reproduction in Guatemala. As I will argue in this dissertation, understanding men's perspectives on reproduction and their experiences making decisions about reproduction have critical implications for women's reproductive health in Maya communities, where men's traditional roles in households, while changing, privilege men as authorities and decision-makers. Men's roles have broader implications for how it is possible to think about men as participants in the production of, rather than merely obstacles to, reproductive and household health. At the same time, men's reproductive experiences are important subjects of anthropological inquiry in their own right. Rather than being reducible to more or less necessary elements in a process that leads to pregnancies and births, K'iche' men have varying, often complicated and even contradictory ideas about and experiences of the meanings and outcomes of reproduction. A corollary, although of critical importance, is that men's experiences must be understood for any adequate picture of reproduction in K'iche' communities, and they must be addressed by any project to improve reproductive health in those communities.

This final argument is made, however, with particular attention to the facts that 1) women's experiences and narratives, rather than men's, have been left out of anthropological studies of different cultural groups, and 2) reproduction and reproductive health have emerged as dynamic areas of anthropological theory and investigation in which women have been more central subjects. It is important, I stress, that bringing men into the discussion of reproduction should not decenter women or other participants in the construction of gender, but rather should augment and expand that discussion (cf. Ginsburg & Rapp, 1995b; Rapp, 2001).

A final element in this dissertation that has undergirded these broad questions about men's reproduction has been the trajectory of Maya reproduction and how that trajectory has been influenced by the genocide of the Guatemalan civil war. Rather than investigate men's reproduction in isolation or in the detached ethnographic present, I have foregrounded the importance of history, with a particular emphasis on the violence that reigned in Guatemala spanning three decades. My research seeks to address the question of how violence targeted at an ethnic group would change how members of that group thought about and decided to have children. In order to do that, I conducted field research in two different K'iche' communities – one of which was able to defend itself from some of the most direct incursions of violence, while the other was a community in hiding at one of the fronts of the civil war. While the bulk of my research was spent in the first community, my time in the second provided me with data to complete an ethnography of reproduction in the context of genocide.

This dissertation seeks to fill in some of these descriptive and theoretical lacunae in understandings of K'iche' men's reproduction in Guatemala. I address men's ideas about and experiences in several important areas of reproduction, including decisions about marriage and when to children, using and not using contraceptives, and their involvement in pregnancy, childbirth, and childcare. I explore how men's understandings may overlap with and differ from one another's, from women's, and from health care providers both within and outside their communities. In order to understand the roles reproduction plays in men's ideas about themselves as well as men's reproductive influences, I investigate broader themes of masculinity that include work and play, civic and religious responsibility.

I argue that reproduction in K'iche' Maya communities has been and continues to be a risk that men must negotiate, both for themselves and for their partners and families, and as such men hold varied and sometimes contradictory attitudes toward reproductive decision making and reproductive outcomes. The men with whom I worked draw on available models of masculinity from multiple sources, both from within their families and communities and those that come, in varying degrees, from without, and at the blurred boundaries of the two. Those men also actively negotiate these models, sometimes combining, sometimes creating, sometimes contradicting in efforts to navigate risk and cultivate opportunities, reproductive and otherwise.

Theoretical perspectives

In this dissertation I engage a larger anthropological literature on masculinity, but with a focus on regional ethnographic work on men and masculinity in Latin America. I argue that the community is the locus of Maya masculine identity, and that reproduction within the community an important aspect of ideal, or *hegemonic, masculinity*, a concept I explore in detail below. I also use the concept of *stratified reproduction* as a tool to pry apart the unequal reproductive outcomes not only for Maya as a group but also within Maya communities.

Masculinities, hegemonic and otherwise

Connell (1987) introduces the concepts of hegemonic masculinity and subordinate masculinities as a way to go beyond sex-role research, which under-theorized the complexity of masculine gender structures and the role of power in the production and of masculine identities. Hegemonic masculinity refers to the structures and practices which support and enact male dominance generally of women as well as the dominance of a minority of men relative to less idealized, or subordinate masculinities. Hegemonic masculinity "embodied the currently most honored way of being a man, it required all other men to position themselves in relation to it (Connell & Messerschmidt, 2005, p. 832: 832). The concept advanced sex role theory because it emphasized the plural, dynamic, and historical nature of gender identities and relations and the active negotiation and struggles inherent in those identities and relations. However, the concept of hegemonic masculinity

reinforces the interplay between idealized versions of being a man and men's power over women and other men (Holter 2003).

Along with this problem of reification, Connel and Messerschmidt note that hegemonic masculinity has been criticized for it ambiguity in practice and emphasis on structure over the subject position (Wetherell and Edley 1999), its implicit functionalism (Demetriou 2001), and reliance on a concept of masculinity that is overly essential (Hearn 2004). In addressing these criticisms, they argue that the "fundamental feature of the concept remains the combination of the plurality of masculinities and the hierarchy of masculinities (846)," but offer four areas for reformulation of the concept of hegemonic masculinity: gender hierarchy, the geography of masculine configurations, the process of social embodiment, and the dynamics of masculinities.

In discussing gender hierarchies, Connel and Messerschmidt emphasize relationships between hegemonic and non-hegemonic masculinities. They recognize "nonhegemonic patterns of masculinity, which may represent well-crafted responses to race/ethnic marginalization, physical disability, class inequality, or stigmatized sexuality" (848) while at the same time noting that hegemonic masculinity may draw from and incorporate elements from the nonhegemonic patterns – what Demetriou (2001) calls "dialectical pragmatism". They also note under-theorization of the relationship between women's identities and practices as a part of the landscape of gender hierarchies. They point to a need to addressing geographic levels at which models of masculinity operate and circulate, arguing that

these models can be analyzed at three distinct levels: the local, the regional, and the global. They use as an example local professional sporting events as local level practices that provides the material for regional masculine models of the "star athlete" and use Wittgenstein's concept of "family resemblance to argue that locally plural models may "hang together" to support a regionally recognizable and hegemonically meaningful regional model. They seek to highlight a focus on male bodies as a locus for understanding the patterns of practice involved in hegemonic masculinity – as both objects of and agents in social practices. Finally, they remark on the need for attention to dynamism in mapping masculinity, insofar as the conflicts and contradictions that men may maintain in their own practices as well as the changing nature of masculinity both in time and over the life course.

Inhorn and Wentzell (2011) directly engage the four areas Connell and Messerschmidt offer for reformulation, in particular the emphasis on dynamism and change. They propose the concept of emergent masculinities, drawing on Williams concept of the emergent, or the "new meanings and values, new practices, new relationships and kinds of relationships" (Williams 1977: 125) which are continually created even in the face of dominant social orders and cultural systems. Emergent masculinities as a concept is intended to "evoke novelty and transformation" (Inhorn and Wentzell 2011: 803) and to highlight change over men's lives, embodiment, and engagement with new (medical) technologies that affect men's bodies. They bring the concept of emergent masculinities to bear on masculinity in the Middle East as it relates to *in vitro* fertilization and Mexico as it

relates to Viagra use, emphasizing how these new reproductive and sexual health technologies play important roles as "key sites for shifts in individual enactments of masculinity" (806). One element which Inhorn and Wentzell emphasize is the pragmatic nature of emergent masculinities; specifically, that different aspects of these masculinities emerge under different local contexts, and that men strategically shift between personal versions of masculinity. However, shifting emphasis to change and fluidity sidesteps any extended analysis of more entrenched local and regional characterizations of masculinity in favor of more novel, less mundane sites of investigation, such as infertility clinics. Inhorn and Wentzell discuss in broad brush strokes the stereotypes of men that exist in the two regions they discuss, saying "both the Middle East and Latin America are known for aggressive, patriarchal styles of manliness marked by violence and domineering gender relations" (805). The very concept of emergent masculinity as they employ it relies heavily on stereotypes, both in terms of the referent from which emergent masculinities emerge, as well as men's own characterizations of their own differences from such stereotypical masculinities. For example, in discussing ethnography conducted in Mexico, Inhorn and Wentzell mention men's references to *machismo*, both as a point of reference for their personal versions of masculinity as well as their disapproval of *machismo* as a viable masculine ideal in modern Mexican society. "They [Mexican interviewees] felt that Mexican society was marked by *machismo*, a social pressure that led some men to behave badly, especially in terms of drinking, being unfaithful, and being emotionally closed when they were

young" (806). It is exactly this operation of *machismo* as a hegemonic masculinity – plural, dynamic, and contested – that requires further examination and explanation beyond simply a "social pressure," given the grave implications for men's behaviors, behaviors that themselves define and redefine the content of *machismo.*

This dissertation relies heavily on the concepts of hegemonic and subordinate masculinities, but at the same time notes the critiques above to refine the concept. I focus predominantly on local contexts for the production of masculinity and the relationships of power that different masculinity occupy and engage. However, I do not dwell on somewhat static relationships between hegemonic and subordinate. Maya men, as a part of an ethnic group that has historically experienced inequality and discrimination, necessarily occupy shifting positions of hegemony and subordination that depend on context as well as their own deployment of masculinity. I am more interested in exploring how different styles of masculinity allow men to negotiate power relationships with each other and with women in ways that may reinforce as well as contradict one another that are important in the Latin American context.

Masculinities in Latin America[1]

Several anthropologists have historicized and pluralized the concept of masculinity and *machismo* in Latin America (Gutmann, 2001), including Mexico and Central America (Gutmann, 1996; Lancaster, 1992), the Caribbean (Padilla, 2007), and South America (Parker, 1999; Pribilsky, 2007). Lancaster (1992) investigates the *machismo* in Sandinista Nicaragua, arguing that aggressive, competitive masculinity has as much to do with power and sexual relationships between men as it does with relationships between men and women. Gutmann (1996) shows how social and political forces have shaped men's and women's gender identities in working class neighborhoods in Mexico City such that no simple definition of *machismo* exists, but is instead a shorthand stereotype for a range of negative characteristics.

Gutmann challenges the stereotype of the unfaithful, domineering, aggressive macho with men's lived realities of fatherhood, sex, and marriage. More recently, Gutmann (2007)focuses on men and women's active negotiation of sexual and reproductive decisions and behavior in the state of Oaxaca in diverse contexts, including work with patients in HIV and vasectomy clinics, alongside laborers in an ethnobotanical garden, and with traditional medicine practitioners. He details five overlapping processes: (1) how men and women operate as gendered actors, (2) how men and women negotiate masculinity within the context of couples, (3) how traditional reproductive and sexual health knowledge has become increasingly

[1] A portion of this section is a section of a previously published book review: (Dudgeon, 2010)

medicalized, (4) how forces of globalization have affected men's and women's heath, and (5) how cultural assumptions about men have been used to explain and maintain patterns of men's sexual and reproductive health. Gutmann then challenges a series of explicit and implicit assumptions made about men – both by his informants and by scholars – namely, that reproductive health only concerns women or only pertains to men vis-à-vis HIV, that men are "naturally" promiscuous and avoid responsibility for birth control, that "sexuality" equates with reproduction, and that for men sex and reproduction have little to do with love or with women's preferences. He inspects these assumptions against the backdrop of two areas of health care that intersect men's sexual and reproductive experiences in Mexico: HIV and vasectomy.

Gutmann describes two interrelated dimensions of HIV in Oaxaca: first, the political economy of men's transnational migration to the United States; and, second, the experiences of health care for those living with HIV/AIDS. Gutmann goes beyond local conditions of poverty to focus on the global capital forces of migrant labor demand and multinational pharmaceutical production of expensive antiretroviral therapy. Through illness narratives with men infected with HIV, Gutmann interrogates the simplistic caricature of men as culpable *machista* vectors of the virus. He describes "medical profiling" in the labeling by health care workers of rural and indigenous groups as "unsanitary" relative to "clean" urban citizens of the Mexican nation. Gutmann's discussion of contraception revolves around a central tension: while Mexico's government, with support from the Catholic church,

has long promoted a pronatalist vision, popular grassroots demand for and use of birth control has effected a demographic shift in Mexico. Internationally directed family planning efforts have been aimed almost exclusively at women, creating what Gutmann calls a "female contraceptive culture" (41) applied in Mexico because of perceptions of Mexican men as irresponsible and uninterested in contracepting. Working in a vasectomy clinic, Gutmann explores the complexities in the decisions of those few men who have had "the little cut." Gutmann capitalizes on these contraceptive outliers to diagram the mechanics of Mexican masculinity in operation. Most men choose not to tell friends or family (apart from their wives) of their vasectomies, reflecting their ambivalence about the effects of a vasectomy on their virility as well as the importance of others' perceptions of their virility. Men's vasectomies also embed them in a small network of comrades who have had the operation such that Gutmann describes each as existing as "two men"— one who has privately had a vasectomy and another who publicly hides it.

Although the concept is only briefly addressed, the entire work is a sustained attack on what Gutmann calls the "totemization of male sexuality" (164). Gutmann systematically dissects monolithic masculinity in Oaxaca to show how overly simplistic biomedical and public health approaches to reproductive and sexual health, even those that do account for men, will encounter difficulty. Ultimately, Gutmann argues, simple glosses like *machismo* cannot explain men's sexual and reproductive behaviors, because those stereotypes have consequences, affecting rates of unintended pregnancies and HIV infection.

Following in the footsteps of these anthropological investigations, I adopt in this work a community-based approach to understanding local masculinities, while at the same time using sites such as health clinics to provider additional data on reproductive health outcomes and as locations in which masculinity is shaped and enacted. This dissertation also seeks to add additional dimensions to the already plural concepts of *machismo* elaborated by authors like Gutmann and Lancaster by investigating the limitations of *machismo* in making sense of Maya masculinity. As I will argue throughout this dissertation, Maya masculinity is not reducible to or captured by this more general concept of Latin American or even Central American masculinity. Maya men articulate and engage *machismo* in their own experiences and concepts of being men, both as an extension or excess of more ideal ways of being a man, as well as the absences of those traits. Tracing four dimensions of Maya masculinity as described by Maya men – control, growth, productivity, and respect – as well as the contours of Maya *machismo* are major contributions of this dissertation.

Stratified reproductions in Guatemala

Reproduction has, in the past decades, moved increasingly to the center of anthropological theory. Going beyond kinship as a static anthropological concept analytic concept, Schneider (1968) criticized assumptions that the biology and genetics of reproduction, including intercourse, pregnancy, and childbirth. Rather than kinship as universally determined by the natural facts of human reproduction – male and female pairings producing offspring that lead to patterns of consanguine

and affinal relationships – Schneider suggested that this concept of relatedness was actually based on a Western folk model. This criticism was extended by Yanagisako and Collier (S. J. Yanagisako & Collier, 1987) to advocate for a relativistic position on sex and gender as well as kinship, arguing that biological sex was itself socially constructed. In their wake, anthropologists have studied how technologies like artificial insemination, IVF, and prenatal testing have changed the ways in which reproduction occurs. (Franklin, 1997; L. Handwerker, 1999; Inhorn, 1994; Ragoné, 1997; Rapp, 1987, 1999), as well as emerging family arrangements such as gay and lesbian kinship and family (Lewin, 1993, 1995; Weston, 1993, 1995). Scheper-Hughes' work in Brazil (Scheper-Hughes, 1993b) questions the natural facts of maternal instinct, or what she calls "mother-love."

These cultural beliefs and behaviors regarding kinship, sex, and reproduction are not disconnected from relations of power within social groups. Ginsburg and Rapp's (1995b) use of the concept of stratified reproduction (cf. Colen, 1995), by which the reproduction of members of some groups is encouraged and facilitated, while that of others is limited and hindered. Numerous anthropological studies of reproduction (Ginsburg & Rapp, 1995a) have used the concept of stratified reproduction to explore how the regulation of reproduction intertwines with relations of power across multiple domains, in particular social hierarchies. Here I want to explore the utility of the concept for an improved understanding of hegemonic masculinity.

Reproductive resistance and reproductive resilience

Running throughout this investigation is the theme of reproductive resilience. Both men and women in K'iche' Maya communities see reproduction of paramount importance to their definitions and experiences as individuals, as families, and as communities. Reproductive resilience among K'iche' Maya is in part explained by this centrality of reproduction in K'iche' Maya communities, which in turn I argue is related to the material obstacles to Maya reproduction, such as poverty and lack of access to health resources. That is to say, even as the overall trajectory of Maya communities has been a demand for extractable labor, this has been in the face of material conditions that maintain Maya poverty (and therefore limit positive reproductive health outcomes) in order to simultaneously maintain the conditions for labor extraction. Demands have been placed on Maya communities for reproduction with limited resources, and the details of the organization of that reproductive effort have until recently been left largely to the communities themselves, and those details have been folded deeply into highland K'iche' Maya culture. I acknowledge the difficulty of tracing the origins of the importance of reproduction to K'iche' Maya men, but regardless of historical particulars the interviews and experiences I had with men show just how much of their time and efforts, how much of their work and their religious beliefs, directly engages reproduction and reproductive health. This centrality has meant that K'iche' Maya have maintained continuity of their families and their communities

both in the face of changing global forces as well as more direct challenges, such as the genocidal violence of the Guatemalan civil war.

Mullings and her colleagues (Mullings, 2005; Mullings & Wali, 2001) apply the concepts of resistance and resilience to investigations of reproduction in Central Harlem in New York City. She introduces the model of the Sojourner Syndrome, based on the historical figure of Sojourner Truth as emblematic of disenfranchised African-American women in the United States as a strong, hard-working, long-suffering ideal of womanhood. That model is an explicitly gendered version of John Henryism, inspired by James' and colleagues' (Haritatos, Mahalingam, & James, 2007; James, 1994; James, Hartnett, & Kalsbeek, 1983; James, Keenan, Strogatz, Browning, & Garrett, 1992; James, LaCroix, Kleinbaum, & Strogatz, 1984; James, Strogatz, Wing, & Ramsey, 1987) model of high-effort coping in the face of differential access to resources for African American males. The Sojourner Syndrome model is meant to capture metaphorically a behavioral strategy of high effort coping Mullings argues is adopted by many African American women that has direct consequences for their health, including premature delivery as it relates to their increased exposure to and more limited resources to cope with social stressors in comparison with women who are not African-American or poor. She takes an intersectional approach, looking at the interaction of race, gender, and class. As one example of this intersectional approach, she notes that African American women in middle class social strata were more likely to depend on friends for social support, while women with lower incomes relied more on kin networks (Mullings, 2005).

Mullings' work closely parallels that of Geronimus and colleagues' "weathering hypothesis," which argues that the interaction of race, gender, and class create synergistic stressors that help to explain disproportionate mortality and morbidity (such as hypertension) for African Americans (Geronimus, 1992, 1996; Geronimus, Hicken, Keene, & Bound, 2006).

The Sojourner Syndrome, although immediately resonant in its association with a recognizable historical figure, is a complex model that weaves together several concepts, including resilience and resistance. My reading of this model is that Mullings heavily weights structural constraints, such as access to resources like income, health care, education and housing as limitations on choice and modifiers of risk. These constraints are concretized in hierarchies of race and gender that shape African American women's experiences and choices even when they challenge conventions and expectations of poverty. The Sojourner Syndrome, an ideal model of poor African American womanhood, provides these women with a set of behavioral strategies, a blueprint as well as an expectation for high effort coping that exposes them to increased risks and therefore poorer health outcomes over time. Mullings' argues that the utility of the model lies in avoiding focus on individual risk or separate risk factors such as race, class, or gender in isolation. Rather, the model draws attention to social hierarchies and structural inequalities and calls for public health interventions that address these systemic forces rather than poor individual choices.

Mullings's model makes use of the concepts of resistance and resilience as they relate to reproduction. The behavioral strategy embodied in the Sojourner Syndrome allows African American women to resist the gendered and racial hierarchies imposed on them as an alternative, positive narrative. Moreover, the high coping effort outlaid in the Sojourner Syndrome provides the requisite material and emotional resources to bear and raise children under difficult circumstances, even if it is at the expense of women's own health. Underlying this model of resistance and resilience are some of the more basic mechanisms detailing how women come to take on these reproductive roles. Anthropologists like Scehper-Hughes (1993b)and Gregg (2003), both working in Brazil, have dispelled any easy assumptions about the "natural" roles of women as mothers and have detailed the complex strategies women employ in their sexual and reproductive choices. Nevertheless, the concepts of resistance and resilience provide important conceptual anchors for understanding men's and women's behavioral strategies when faced with structural constraints in the form of stratified reproduction.

Research sites

In this dissertation I try to capture some of the stark differences as well as diffuse commonalities between the two indigenous K'iche' (pronounced kee-CHAY) communities in which I conducted my field research. I worked in the community of Jun (pronounced HOON) in the municipality of Cantel, Quetzaltenango department, and the community of Keb' (pronounced KEP) in the municipality of Chajul, Quiché (also pronounced kee-CHAY). I chose these sites because of their very different

historical trajectories and different experiences during the Guatemalan civil war. Jun I conceived of as my primary research site, while Keb' provided both contrast and, because of its unique connection with the civil war, an important caution against any ahistorical claims or over-generalizations about the roles men play in their communities or the ways those roles have changed over time.

Jun

Cantel is of course distinctive in its history, but demographically not unlike many peri-urban communities in the western highlands. Cantel is home to the oldest *maquila* (factory) in Guatemala – specifically, in this instance, a textile factory - and divided by a stream and highway that drops from Guatemala's second-largest city and cultural capital in the mountains to the Pacific coast. Cantel is connected economically to Quetzaltenango while at the same time remaining at a remove, closely tied to other predominantly indigenous communities through trade in *corte* (women's woven dresses), but with real mountainous geographic barriers that socially insulate the hamlets of the eastern portion of the municipality. Most families in the community have some land they use for subsistence, cultivating of corn and beans that often supplement rather than totally supply ground corn for tortillas. Families in Jun participate in many other cash earning activities, the most prevalent being the weaving of cloth on foot-pedal looms. Although weaving is often a family business, with women participating in the dying of thread, only men weave, and Cantel holds a key position an emerging local and regional center of *corte* production. It is this weaving production that in part explains the relatively low

level of male migration from the community to the United States at the time of my fieldwork – an important reason to work in this community, as other nearby communities have seen one-third or more men absent from the community at any given time. Another impetus to work in Cantel was its unique history during Guatemala's civil war in the 1970s and 1980s, at which time Cantel was the first community to reject military occupation and imposed *rondas*, or rounds that men were required to make surveillance rounds on their own and other communities during the civil war.

Keb'

The community in Chajul, by contrast, is a much smaller group of approximately 500 souls located in the northern Chuchumatanes Mountains. Home to a multi-lingual group of predominantly K'iche' and Ixil Maya, the community was originally created by a group of K'iche' settlers from nearby departments. The community increased greatly in size at the beginning of the Guatemalan civil war, at which time refugees from other areas in the Ixil triangle entered the area. During the following months and years Keb' became a Community of Populations in Resistance, perpetually mobile to evade military intrusions and living as internally displaced persons in the area of their own community, caught between the Guatemalan military and the *guerilla* armies of the western highlands. The community "came back to light" in 1993, at the time of relative return to relative normality in the area, but before the formal signing of the Peace Accords in December 1996. Households in the community are producers of corn, coffee, and

cardamom in the three distinct ecological zones the community occupies on the mountainous slopes near the Mexican border and the Yucatan peninsula, and both men and women participate in this combination of subsistence and cash crop production. Increasingly, however, men have begun to leave the community to look for work in the United States, making the dangerous journey to *el Norte* with borrowed money and linguistic skills that marked them as neither American nor Mexican. The community had a thriving structure of (male) democratic participatory self-government that had arisen during the community's autonomy during the civil war. Much of the political activity of the community during my fieldwork focused on the division of land among male heads of household and debates about the collective versus the individual as the social center of the community.

Outline of the dissertation

This dissertation addresses K'iche' men's relationship to reproduction broadly conceived, both their own experiences as well as their influences on others. In Chapter 2 of this dissertation I describe the ethnographic settings of the two communities introduced above. I also address the anthropological and epidemiological methods used for data collection and analysis.

Chapter 3 returns to a discussion of anthropological perspectives on men's roles in reproductive health and their experiences of reproduction begun in the introduction. Through this review of anthropological evidence, I address how global health programs have addressed men's roles to argue against overly simplistic

characterization of these roles that have been used in the past. I also argue that any discussion or project addressing men's roles in reproduction must address the difficult issues of *reproductive equality* and *reproductive equity*. Reproductive equality asserts the reproductive rights and responsibilities of men and women are seen as on par, with the goal of intervention to balance those rights and responsibilities. Reproductive equity, on the other hand, asserts that women's reproductive rights, which have historically been neglected, must be addressed instead of, and in some cases at the expense of, those of men. Over the rest of the dissertation, I will amass evidence to argue that, 1) context must dictate the answer to resolving such issues, and 2) even if women are the focus of reproductive health interventions, in the Maya context, men's roles must be addressed and men included for such interventions to succeed.

In Chapter 4, I discuss the historical background of ethnicity and gender in Guatemala, addressing the particular histories of the two departments in which I worked. I argue that Maya demography has been shaped by ethnic and gender inequalities, with the violence of the civil war a genocidal manifestation of those inequalities. Moreover, I argue that constructions of ethnicity and gender influence K'iche' men and women make decision about reproduction, even as reproduction plays an important role in those very constructions. I then directly address men's views on aspects of reproduction and reproductive health in Jun. Men with partners as well as men without partners discuss their experiences with pregnancy, childbirth, contraception, and reproductive emergencies and loss. These data

suggest that men in Jun endorse the importance of having families and children, but also feel profound ambivalence about their roles in reproductive decision-making. They often feel that they should and must be the ultimate arbiters of reproductive decisions, even when they acknowledge that reproduction is an area in which they may have very little if any direct experience and which is in important ways the domain of women. I address the concept of gender complementarity in Maya households, investigating Maynard's (1974) concept of responsible patriarchy as it applies to Maya men and women today.

In Chapter 5, I focus on reproduction in Keb'. I explore Keb's distinctive history as a Community of Populations in Resistance during the civil war in a region of Guatemala known at the Ixil Triangle. The Ixil Triangle was one of the fronts for confrontation between the Guatemalan army and the *guerilla.* While hundreds of thousands of Guatemalans in the area were displaced, some communities like Keb' moved about in more inaccessible areas as Communities of Populations in Resistance. This chapter details that period, drawing connections between the violence and displacement during the civil war and its long-lasting implications for reproduction and reproductive health in Keb' now. As I did for men in Jun, I discuss the attitudes men in Keb' express toward marriage, birth, fathering, and contraception, as well as their ideas about masculinity and Maya identity. Drawing on data from both Jun and Keb', I present an outline of important elements of K'iche' Maya masculinity.

In Chapter 6, I address the concept of reproductive risk in the context of reproduction in rural Maya communities, focusing on Jun. I contrast different perspectives on reproductive risks, including physicians and public health officials working outside the community as well as *comadronas* working within the community. Specifically, I argue that supernatural pacts by which *comadronas* are bound allow them to negotiate the risks surrounding pregnancy, childbirth, and the postpartum, including their decisions as they may conflict with those of men or other family members.

Chapter 7 looks at another risky area of reproduction for K'iche' men and women: contraceptive use. I discuss patterns of marriage and reproductive timing, discussing some changing ideas about when to get married and have children. I discuss control and respect as two critical concepts for understanding K'iche' masculinity. I then examine patterns of contraceptive use in Jun, showing that these patterns reflect changing attitudes toward completed family size that also incorporate more traditional ideas about having children soon after marriage. Finally, I look at several specific examples of men's ambivalence toward contraception – as both a tool to cooperate with their wives or create economic opportunities as well as a risk to their conceptions of themselves as men. That ambivalence, I show, can have devastating emotional outcomes for families even as those same families are behaving as rational reproducers from the perspective of demographic theory.

Chapter 8 presents analysis of survey data from both communities in which I worked, examining demographic trends in terms of household wealth and health. I interpret these data in the context of the preceding chapters, using insights about Maya reproduction and Maya masculinity to make sense of surprising demographic data, including similar rates of contraception between the two communities. Finally, in Chapter 9, I conclude with a summary of the findings of my research. I return to a discussion of reproductive resilience, noting the important roles K'iche' Maya men continue to play in that resilience as well as the need for a balance of reproductive equity and equality in the K'iche' Maya context.

Chapter 2: Ethnographic Context and Methods

My dissertation research began in Cantel, Quetzaltenango[2] in December 2001 and continued until May 2002. I worked in the *aldea,* or hamlet, which I will call Jun.[3] I resumed fieldwork in December 2002, moving to the northwestern department of El Quiché, where I would work in a second community in municipality of Chajul until December 2003, a community I will refer to as Keb'. This dissertation is based on the approximately 32 months of fieldwork conducted over that time. My methods included participant observation, as well as representative sample surveys and census surveys of household demographic and health data, nutrition and anthropometric data, and recent live births, semi-structured interviews, and case studies. My time as a participant observer and as an observing participant took many different forms, much of which was directed at spending time with and interacting with men in the communities in which I worked. I spent time observing work done in the health outposts in both communities, interacting with both patients and providers. I also spent time at a number of training activities and workshops within the community – for midwives as well as other local officials – as well as outside the community, for physicians and other health care providers. I was present at many local social events, including weddings,

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[2] My introduction to Guatemala as an anthropologist began in June 1998 during summer pilot work with the John Snow, Inc. project MotherCare and in the southwestern highland department[2] of Quetzaltenango. I would return to Quetzaltenango in April 1999 for an additional four months of research in hospitals in the region as well in the municipality in which I would conduct the bulk of my fieldwork, Cantel.

[3] The names of the *aldeas* in which I worked, as well as all proper names of individuals, are pseudonyms.

burials, church gatherings, community as well as family parties and local fairs, and multiple community meetings to discuss events and decisions of local importance.

In Jun, I also tried to participate in the life of the community as an observing participant. I taught English once a week for a semester to two classes of 6th graders at two different schools, and also gave classes in the local high school. I participated in the work of the men of the *auxiliatura,* or town hall, which is a local institution in which a group of young men in the community spent most nights of each week sleeping in the local community hall for one year as community service. I also attended meetings of the local chapter of Alcoholics Anonymous, where I discussed my own experiences with an alcoholic father with the group. Along with these other sites and situations, I also played as goalie on two soccer teams and center on a basketball team in the community. Together, these which provided me with the *confianza*, the complex mixture of confidence, connection, and trust, of many of the men in the community that made more formal interviews possible. In Keb', I cooperated with local leaders to create petitions to the government for increased services for the community, and I participated in ongoing community debates about land allocation, serving both as scribe.

In both communities I had closer ties with a few families that accepted me as part of their families over the course of my fieldwork. I lived in a compound in Cantel with the Saq' family, next to their parents, a family I will call the Kek, in the community where several of the children of the Kek lived. While in Chajul I lived in

the local health post, but I ate most meals with the Q'an family. These families – the Saq', the extended family of the Kek, and the Q'an – provided me with some of my richest experiences and most extensive data on the day-to-day lives of the members of the community, including their conversations, celebrations, arguments, and losses. Through these experiences I was privy to a side of life that I would never have seen merely conducting interviews or collecting statistical data in the community, another important aspect to my work in the two communities.

I used several survey instruments to collect statistical information in the two communities. I used a modified Guatemalan Survey of Family Health developed by the RAND Corporation to collect demographic and health information on random, representative sample of women of (extended) reproductive age, 18-45 years old. The complex instrument includes sections on basic demographic, household composition, and socio-economic information, along with information on birth history, prenatal, delivery, and post-partum care, recent child illness, social support, health beliefs, partner data, household consumption, and family planning. Along with four research assistants I interviewed 152 women in Jun using a random weighted sample over-selecting women 18-49, which was weighted to 672 cases. I conducted follow-up data collection with these same women, collecting anthropometric data. I again used the EGSF instrument in Keb' where I conducted a census of women rather than a sample, interviewing all women in the community 18 years old or greater, 63 women total. In Jun I also collected data using a semi-structured interview with women who had experienced a reproductive loss, defined

as either a stillbirth (pregnancy loss after the first seven months of pregnancy) or an infant death (in the first year of life) in the prior five years, as well as semi-structured interviews with women who had had a live birth in the prior year.

Descriptive statistics: women who have ever been pregnant

Although not representative of the entirety of either community, the reproductive heath survey I conducted provides important descriptive statistics for women who have ever been pregnant in Jun and in Keb' that quantify some of the differences between the two communities. (Table 2.1). Notably, a much larger percentage of women in Keb' cook and sleep in the same room (25.4 percent) than do in Jun (7.3 percent). Approximately two-thirds (65.5 percent) of households in Jun report having a television, but only 10.7 percent have a refrigerator and only 8.7 percent have a car and 12.0 percent have a telephone. Over half of households in Jun (61.3 percent) report having access to emergency transportation.

Table 2.1: Descriptive statistics, Jun and Keb'

Variable		N (%)*	
		Jun (N=600)	Keb' (N=59)
Cook and sleep in the same room	Yes No	44 (7.3) 556 (92.7)	15 (25.4) 38 (64.4)
Electricity	Yes No	552 (92.0) 36 (6.0)	50 (84.7) 3 (5.1)
Television	Yes No	384 (64.0) 216 (36.0)	1 (1.7) 53 (91.5)
Refrigerator	Yes No	64 (10.7) 532 (88.7)	0 (0) 54 (91.5)
Car	Yes No	52 (8.7) 548 (91.3)	0 (0) 54 (91.4)
Emergency Transportation	Yes No	368 (61.3) 156 (26.0)	1 (1.7) 52 (88.1)
Fuel for cooking	Firewood Gas/charcoal	532 (88.7) 60 (10.0)	51 (86.4) 0 (0)
Telephone	Yes No	72 (12.0) 528 (88.0)	2 (3.4) 52 (88.1)

Jun – a village on the edge

While the municipality of Cantel may seem representative of the department as reflected by basic demographic similarities and geographic proximity to the department capital, the dusty hamlets of Cantel can seem worlds away from the crowded cobblestone streets of the colonial center of Quetzaltenango. It was in fact this duality, close but at a distance from Guatemala's second largest urban center, that drew me to work in Cantel. The municipality represents a best-case scenario of material and health care access for an indigenous community, 96 percent of the population identifying as K'iche' Maya and nearly all speaking some K'iche'.

Cantel is a municipality of the department of Quetzaltenango, a department in the west of Guatemala. Quetzaltenango's long, slender shape cuts across the landscape from southwest to northeast, stretching from coast to the Pacific slope and rising up through the contours of the Sierra Madres mountain range to reach the highland plateau. Cantel itself is located at the extreme eastern border of Quetzaltenango, touching the neighboring departments of Sololá and Totonicapán. The department capital, Quetzaltenango, is Guatemala's second largest city and has long been an important economic and cultural center in the western highlands.[4] According to the 2002 National Statistical Institute (INE) census, the department of Quetzaltenango had a population of 624,716, of whom 300,325 (48.1 percent) were men and 344,858 (55.2 percent) lived in urban areas (Estadísticas, 2005). The population of Cantel in 2002 was 30,888, of whom 15,477 (50.1 percent) of were

[4] For a detailed examination of the role of Quetzaltenango in racial and political history of the western highlands, see Grandin (2000).

male and 17,121 (55.4 percent) lived in urban areas. The 1994 INE census had counted the population of Cantel at 23,180, of which only 3,647 lived in areas defined as urban, with the remaining 19,467 classified as urban (Estadísticas, 1997). While there has been growth in population over that time period, it is likely that the 1994 census experienced higher rates of underreporting at the end of the Guatemalan civil war. Moreover, the highway that cuts through Cantel divides the municipality into its more urban seat to the west and a much more rural collection of hamlets to the west, where I worked.

The municipality of Cantel is comprised of 13 different administrative districts, each with a classification that corresponds to the population of the areas. There is the *pueblo,* or town, which is the administrative and population center, along with three *aldeas,* four *cantones,* two *barrios,* one *paraje,* and two *caseríos.* All of these Spanish terms translate approximately to hamlet, small village, or neighborhood, and for the purposes of this study, in which anonymity is sought, all the divisions of Cantel will be referred to as *aldeas* or hamlets. The highway that divides the municipality just grazes the more heavily populated areas on either side of the valley, and Jun is at an even further remove from the paved roads that connect several of the *aldeas* to the highway. Buses traveling to and from the coast stop at the side of the road, but do not enter the *pueblo.* Tourists are most likely to be attracted to the glass factory at the far southern end of the municipality, where they may stop on their way to or from the therapeutic hot springs farther down the slope of the mountain, in the municipality of Zunil.

The day-to-day life of Jun is quiet relative to the hustle and bustle of the nearby department capital or even the *pueblo* across the highway. Activity is most brisk in the early morning, when crowds await the first buses that leave for the highway and for Quetzaltenango. These early morning commuters and market goers thin as the day continues, with light traffic through the community until the late afternoon, when those same commuters return home. The community is immediately recognizable as indigenous. The vast majority of its residents speak some K'iche' both inside and outside their homes, and a mix of Spanish and K'iche' will be heard in the street when neighbors cross paths. Just as distinctive is the brightly colored *traje,* or indigenous clothing, worn by the women in the community, including *huipiles,* or shirts, embroidered with intricate floral patterns, and *corte,* or skirts, which are woven in the community. Men dress in button-down work shirts, print t-shirts, khaki pants or jeans, work shoes or sneakers. This is in contrast to men who speak Tzutuhil from Sololá, who cross the mountains behind the community and walk through the town center on their way to Quetzaltenango or the coast. They might be barefoot or wear high rubber boots, and they are dressed in white shirts and breeches that a few men in Jun might own as costumes for special occasions or ceremonies.

Busier days in the community include those when a local market is held in the adjacent *aldea,* very close to the border with Jun, two days each week. A small variety of local produce as well as fruits and vegetables from the slope of the mountain are available, along with a handful of additional products such as plastic

containers and cleaning supplies. Evening falls early in the hamlet, with few residents lingering outside their homes past dark. Jun is "periurban" because of its relative proximity to Quetzaltenango, but that does not adequately capture its quiet insulation, similar to many other rural K'iche'-speaking highland Guatemalan communities much further from their department capitals.

Many of the homes in Jun had electricity that was continuous 24 hours each day, apart from sporadic blackouts that lasted a few minutes or hours. The homes that did not have electricity were those that chose not to or that could not afford it, rather than those for which there was no access possible. A much smaller number of households had access to running water. My survey of women of reproductive age, though not a true household sample, nevertheless gives an idea of the household utilities in the community. In that survey, 45 percent of households had electricity, while only 36 percent had running water in the home. Even those households with taps experienced frequent shortages of water, sometimes lasting weeks at a time in which no water flowed, and water availability and the search for additional springs higher on the nearby mountain slopes was a constant theme of discussion. Houses without running water depended on local communal pumps and washbasins, known as *pilas*. Although Jun has several natural springs from the westward-facing side of the mountain on which the community lies, none of the water available from the plumbing in Jun is technically potable. Nonetheless, most residents drank the water from the tap without additional preparation. Other

households purchased bottled water in large five-gallon containers for consumption for a Q40[5] deposit and Q8 per refill.

Although increasing numbers of Guatemalans were migrating to the United States, I was surprised to find that there was a relatively low rate of immigration from Cantel as a municipality as well as from Jun. Of the households in my survey, only 9 percent reported some member of the household living temporarily outside of the community, and only 5 percent reported a member of the household in the United States. This is in sharp contrast to some of the *aldeas* and municipalities close to Jun, which experienced much higher rates of migration, some with more than half of men outside the community at any time.

In discussing the low rates of migration in Cantel with residents of the community, there were generally two theories put forward. First, many residents suggested that Cantel was somewhat behind other municipalities. They gave as evidence of this their perception that, in the past, when Jun was mainly a community that farmed corn, other communities had begun to farm other non-traditional crops such as snow peas, radishes, carrots, and cabbages in the rich volcanic soil further down the slope of the mountain.[6] In other *aldeas,* they said, residents had adopted earlier the large-scale production of fabric for *corte,* the traditional skirts worn by indigenous Maya women, which they say developed later in Cantel. Residents proposed that this geographic advantage, along with the perceived greater

[5] At the time of my fieldwork, $1 (US dollar) was approximately equivalent to Q8 (Quetzales).
[6] See Arbona (2006) for a discussion of the history of agricultural production in Almolonga, dubbed the "vegetable garden of the Americas."

industriousness in other communities, meant that those communities began to send young men to the United States earlier, where they would found small networks that would allow for larger numbers of emigrants to follow them. Others in the community feel that fewer men in Jun have left for the United States because there is currently a large, flourishing business in the production of *corte.* This, they feel, is in part because the residents of Jun, who were later to adopt weaving on a large scale, have been more competitive as late comers because they are more industrious, accustomed to the lower wages and more difficult labor of the fields.

While there are no paved roads in Jun proper, there are two main dirt and gravel roads to the center of the community which provide access to the buses, vans, and trucks that move in and out of town *via* the paved roads at the communities' edges. The road traveled by most vehicles runs north to the adjacent *aldea,* across whose borders a paved road quickly begins which winds its way to the highway. A second road, heading west from the center of town, takes a much more direct route to the highway, but eventually meets a steep drop to the valley below which is traversed by an old cobblestone road with precarious switchbacks that is perilous for even the most experienced of drivers. Only 8.7 percent of households in my survey reported owning a car. The preferred mode of transportation out of the community, apart from walking, is public transportation via converted Blue Bird school buses that leave the town on a regular schedule multiple times each day. These buses and the roads they run on have greatly changed the way residents of Jun are able to interact with the larger communities outside their own.

Several categorically distinct levels of the ministry of health serve Cantel. The municipal center has what is known as a *Centro de Salud* (C/S), or Health Center, while the *aldea* of Jun, on the other side of the highway, has a *Puesto de Salud* (P/S), or Health Post. In Cantel, each of these health services is nominally open eight hours each day from Monday to Friday, although both experience frequent closures and half-days, more frequent at the P/S. A doctor and two to three nurses staff the C/S, while a single nurse staffs the P/S. The P/S provides only the most basic services, such as vaccines, contraceptives, a limited formulary of analgesics, antiemetics, and antibiotics, and basic supplies such as dressing and antiseptic for wounds. The services of the C/S are more robust, and include a larger pharmaceutical formulary with some antihypertensives, diuretics, and additional antibiotics, a very limited laboratory with a microscope and tests such as urine dipsticks, as well as some procedures, such as pap smears. More complicated medical problems or diagnostic tests such as radiographs are referred to the regional hospital in Quetzaltenango.

Near the center of Jun is one of its largest structures, the two-story public primary school. The building is constructed of concrete block and corrugated roofing, the combination of which produces deafening echoes that drown out even the most persistent of instructors during the rainy season. This particular primary school is administered by the ministry of education, and its teachers come from both within and from outside the community. Cantel as a whole had 14 primary schools, with four concentrated in the town center. Although there are no secondary schools

in Jun, the hamlet adjacent to Jun is home to a secondary school, or *basico,* which is also a *telesecondaria,* or distance learning center, at which some of the student instruction is conducted through video cassettes and accompanying materials. The mission of these schools has been to expand access to secondary education to areas with few qualified teachers; however both teachers and students I spoke with were candid about the limitations of high school education from TVs and videotapes.

Agricultural production continues to be important in Jun. The principal crops produced in Jun include corn and beans, along with some wheat and vegetables, the latter two produced in greater quantities in other parts of Cantel. Production of corn and beans is through *milpa* agriculture, with the two crops growing together on small plots of land. The production of corn and beans, along with other agricultural production, is in the main for household consumption rather than for commercial sale. Those whose work is dedicated to agricultural production tend to earn much less in comparison to other sectors of the local economy, and work is seasonal and on the land of other owners. A second important environmental product is wood, used predominantly for firewood, which is taken from the surrounding forests of pine, cypress, and alder. The consumption and sale of wood, along with the clear cutting and burning of forests for agricultural expansion, has led to problems with deforestation, including a lack of wood as resource as well as erosion on the steep slopes of the mountain. Increasingly, residents of Jun have had to rely on large trucks filled with wood from further down

the mountain as well as from the Pacific coast to meet their fuel needs, an irony not lost on residents who once collected wood from the hills behind their homes.

By far the largest single economic industry in Cantel is that of textiles, which includes both the production of fabrics as well as sewing and embroidery. Cantel is perhaps best known in the anthropological literature as the setting of Manning Nash's pioneering monograph, *Machine Age Maya.* Written as a thesis at the University of Chicago in 1955 and published in 1958, the work examines the effects of what was at the time the largest textile factory in the Americas on the predominantly K'iche' Maya community of Cantel. Using a controlled comparison methodology, Nash contrasts both agrarian and factory workers within Cantel as well as the inhabitants of Cantel with surrounding communities. The monograph was groundbreaking, concluding that "factories may be introduced into peasant societies without the drastic chain of social, cultural, and psychological consequences implied in the concept of 'revolution'" (144). Nash argues that, rather than uniformly destroying or disrupting existing social structures and kinship ties, components of industrialization like a factory may allow for conditions such that historical/traditional elements of social life my thrive – a process Nash carefully and not unselfconsciously referred to as "easy" industrialization. At present, however, many of the residents of Jun worked not in the factory, but instead in local cottage industries at treadle, or foot pedal, looms, in the production of the material used for *corte*. While Cantel had been noted as a center of treadle loom production as early as the 1930s (cf. O'Neale, 1945), many residents in Jun

agreed that there had been an rapid expansion of production in the *aldea* during the past decades. This was attributed, at least in part, to fewer men working in the Cantel factory, a fact in part due to increased unionization of workers and ensuing labor disputes.

While in Jun, I lived in one of the communities' older established residences, an adobe compound with tile roof build as a large square of connected and unconnected rooms that opened to an enclosed central patio. I lived with the Saq' family, a young couple about my age who had one child. I ate meals with them in their kitchen, where in the evenings I had a chance to ask questions about concepts or ideas that had come up during the course of the day, as well as to hear about their days as well.

Near the beginning of my stay in Jun, I spent time with groups of *comadronas* who I had worked with previously, both through the C/S as well as through local *comadrona* organizations. I was able to gain the support of these *comadronas,* to whom I was able to explain my interest in investigating reproduction in the community. They in turn were valuable assets in helping me explain my investigation to other members of the community, both political leaders as well as women who were their clients. As a part of my role as a participating observer, I tried to engage in a variety of roles. These included teaching English lessons to 6th graders and high school students, giving lectures to *comadronas* as a part of some of their training with the C/S, and playing soccer and basketball on local teams. These last experiences made for a bit of a spectacle, but engendered enough amusement

and good will in the *aldea* that I was accepted into many more homes for structured interviews, as well as provided a non-random sample of male informants for my interviews with men.

My own early visits to Cantel were seen in part through the lens of Nash's description of the *municipio,* both in terms of the population as well as the geography. Entering the town center from Quetzaltenango one swings around the distinctive, jagged silhouette of Cerro Quemado, an extinct volcano that lies between Cantel and the department capital, just to the north of the higher volcano Santa Maria. Judging from Nash's description and his map of the town center, the *pueblo* has changed little in its basic layout of tightly packed buildings lining narrow streets organized on a vague grid that slope up and down from the central park, which itself lies at a not so subtle grade. But unlike Nash I conducted the majority of my research in the rural hamlets, on the eastern side of the Rio Samalá. The river flows along the highway, and the two together wind their way from Quetzaltenango down the Pacific slope to the coast, dividing Cantel in two. Nash's description did not prepare me for what lay on that other side of the river, at least topographically. On a clear day the hamlet in which I worked most, Jun, as well as the surrounding hamlets, are visible, while on others they may be shrouded by the fog that hangs gently on the side of the rapidly rising slope to the east. These three community centers occupy a kind of ledge against the Chuatroj Mountains that separate Qutzaltenango's Cantel from Sololá's Nahualá. The roads that lead from the highway in the river valley to

these communities wind back and forth up the steep slope, switchbacking relentlessly. In many ways, Jun is perched on the edge.

In my survey of women of reproductive age in Jun, 95 percent reported having a male head of household or employed male over the age of 16. Of those 95 percent, 28 percent reported that male heads engaged primarily in agricultural production, either on their own land or on land owned by others. Another 42 percent of these households said that the main occupation of the male was weaving, while only four percent reported that he worked in the factory. Twenty of the households reported that men worked in carpentry or construction. A smaller, but not insubstantial, percentage of the households reported that women were engaged in economic activities, which included sewing and embroidery as well as thread preparation.

The political structure of Cantel, although ostensibly democratic, is overtly hierarchical with power concentrated at the top of that hierarchy and geographically in the hamlet's town center. This concentration of power had very real implications for municipal projects, including water, road, and health projects in Jun. Projects would go forward with political and economic support from the municipal center and wither without it. The municipality of Cantel is governed by a group of elected officials, including an *alcalde,* or mayor, along with a group of four *concejales,* or councilpersons, who are appointed by the *alcalde,* as well as two financial administrators, or *sindicos,* who together form the *concejo municipal,* or municipal council. Additional positions include a secretary, a treasurer, and an

internal auditor. Given that the associates of any given candidate for *alcalde* were generally known prior to any election, choosing an *alcalde* was also a referendum on the political block that would guide the political will and hold the economic purse strings of the municipality. The municipal council subsequently organizes commissions that are responsible for various projects and municipal demands, including commissions for urbanism, education, culture and sport, environment, finance, women, agriculture, livestock, and nutrition, and health and safety. The *alcalde* position is decided through a municipality-wide election and the position is held for four years. During my fieldwork period the *alcalde* position was to be held from 2000 to 2004. These government positions in Cantel were political only, with no additional religious authority or responsibilities. Within each hamlet an *alcalde auxiliar,* or auxiliary mayor is selected annually. These positions were held for a year at a time, beginning at the first of each year, and are held by men of middle age who are ideally seen as responsible and respectable within the community. The *alcalde auxiliar* of each community was selected each year by the outgoing holder of the position.

Rather than wielding political authority, the auxiliary mayor is responsible for communicating between the different hamlets and the town center in the event of some emergency, as well as communicating to the hamlet various missives from the municipal or departmental government. The former was achieved through a series of CB radios in each *auxiliatura,* or auxiliary building, in each hamlet, while the latter was achieved through the use of the *pregón,* or town crier, in which

members of the *auxiliatura* walked the streets of Cantel beating drum and making said announcement public. As suggested above, the *auxiliatura* also refers to a local group as well as to the building in which they are housed. Each year a group of between 12 and 15 young men are required to donate a year of service to the community. Typically those young men had recently been married and had several young children, but each cohort depended on the young men available that year. They spend approximately three out of every four nights in the *auxiliatura* building, remaining "on call" overnight in the event of some town emergency or disturbance during they night. They were also responsible for recording events and complaints of community members as *actas* (acts) or *conocimientos* (proceedings) that served as records of public statements that could later be referred to in the event of disputes or further legal action. The position of the *alcalde auxiliar,* as well as those of the members of the *auxiliatura,* were unpaid. While there were no religious responsibilities for the *auxiliatura,* the majority of those who participated identified as Catholic and were chosen through a selection process through the Catholic church.[7]

[7] The civil-religious hierarchy in Mesoamerica was at one point a widespread form of political organization in which positions in the religious *fiesta,* or *cofradia,* system of each community corresponded with positions of political authority, and was considered by many anthropologists to have pre-Colombian antecedents (Monaghan, 1995). In Guatemala, the existence of civil-religious hierarchies has waned over the course of the 20th century in many highland Maya communities with the "opening" of indigenous to increased external political, religious, and economic forces (Brintnall, 1979; Warren, 1989). Nash (1999) specifically describes the decline of the civil-religious hierarchy in Cantel as related to the rise of labor unionization in the factory following the 1944 revolution. See Early (2005) for an detailed account of the ethnohistory of the civil-religious hierarchy in Guatemala.

Keb' – a population in resistance

While still in the western highlands, the department of Quiché (pronounced kee-CHAY, like the Maya language K'iche' for which it is named) is further inland than Quetzaltenango. Its borders are draped across the heart of the Cuchumatanes Mountains, just touching Mexico to the north. While its southern portion lies squarely in the K'iche' language extension, the northern portion of the department of El Quiché also lies at the linguistic border of K'iche' with several other Mayan languages, including Ixil, Uspantek, Sacapultek, Q'anjob'al and Q'eqchi'. The 2002 population of Quiché was 655,510, with 317,096 (48.4 percent) male and 161,591 (24.6 percent) urban. I chose my second field site in the municipality of Chajul, which had a population of 31,780, of which 15,737 (49.5 percent) were male and 10,095 (31.8 percent) urban.

The predominantly K'iche' community of Keb' lies in the north of the Ixil Triangle, of which Chajul forms the eastern point. The community is 80 kilometers from the municipal capital and not connected to any road – the nearest passable road within the department is a 12-mile hike through the northern Cuchumatanes Mountains. The community, like several surrounding it, was identified as a Community of Populations in Resistance (CPR) – communities that had gone into hiding during the Guatemalan civil war in the early 1980s and had not come out of hiding until 1993, not long before the official end of the civil war with the signing of the peace accords in 1996.

Communities of Populations in Resistance - Sierra

To say that the demographic composition of the CPR has been in flux over the past 40 years, only recently stabilizing with the communities' re-entry into civil society in the early 1990s, would be a gross understatement. Although the name would not be officially adopted until 1990, the story of the CPR begins in the 1960s,[8] at which time the Guatemalan government prioritized the colonization of areas of underpopulation in the lowland areas in the northern part of the country near the Mexican border (Dennis, Elbow, & Heller, 1984, 1988; Egan, 1999; EPICA & CHRLA, 1993; J. R. Jones, 1990; Manz, 1988). Colonization of these areas was sought to reduce population concentrations in the predominantly indigenous highlands, to bring underproductive regions into agricultural cultivation, as well as to reduce political demands for land reform. One part of this area was the Ixcán, a region that is now the northernmost municipality of Quiché department, which borders Mexico to its north.[9] This area would become the westernmost extension of a development area named the Franja Transversal del Norte (FTN), or Northern Transverse Strip, stretching east-west across Quiché, Alta Verapaz, and Izabal departments, and through which runs the FTN highway, began in the late 1970s. Initially settled in the late 1960s and early as part of efforts to colonize the area by Maryknoll priests of the Catholic Church and the as well as the governmental Institute of Agrarian Transformation, or INTA. Two distinct areas were colonized, beginning with Ixcán

[8] For a detailed timeline of the events of the armed confrontation beginning in 1958, see Annex 1 of the Report of the Commission for Historical Clarification (Ishida, 2010).
[9] The municipality of Ixcán was created in August 1985, carved from Chajul as well as part of Huehuetenango department and the Quiché department of Uspantán. (Manz, 1988)

Grande, the western part of the Ixcán between the Ixcán and Xalbal Rivers, in the late 1960s, and later Playa Grande or Zona Reyna, east of the Xalbal River, in the early 1970s. The majority of those recruited for the colonization projects were landless indigenous Maya from northern highland departments such as Huehuetenango and Quiché. Although the projects were meant to colonize lowland areas, some of the flood of colonists remained in the northern escarpment of the Cuchumatanes Mountains, a sparsely populated area in northern Chajul. One group, initially comprised of just a few K'iche' families from Aguacatán, would form the nucleus of the community of Keb' in which I worked.

The Ixil-speaking area defined by the municipalities of Nebaj, Cotzal, and Chajul, also knows as the Ixil triangle, saw increased indigenous political activity in the late 1960s and early 1970s. In part this activity was associated with a growing Catholic Action movement in the region (Stoll, 1993), along with a growing population and increasing awareness of the degree of economic exploitation (Manz, 1988). While the Ixil area had remained largely politically and economically isolated until the end of the 19th century, coffee production opened the area, such that the local economy was more extensively monetized and wage labor became more and more important. Increasing numbers of men, as many as 30-40 percent at any time, would leave Ixil communities to work on export crop plantations in the region as well as on the southern coast (Colby & Van den Berghe, 1969). This decrease in the prevalence of self-sufficient subsistence was paralleled by a steady decrease in the Ixil percentage of the population – not through differences in fertility

rates between indigenous groups and *ladinos,* but through the process of acculturation which in Guatemala has been called ladinoization (Warren, 1989), in which indigenous individuals or their children cease to identify with their natal indigenous or linguistic group.[10] Nevertheless, the Ixil region saw an increase in the collective organization such as primary schools, literacy programs, agricultural diversity programs, and perhaps most importantly credit organizations that provided loans to small farmers through the 1970s (Cabanas Díaz, 1999).

Around the same time colonists were coming in from the highlands to the south, another important group would move into the area from the north. In January 1972, 15 men crossed into the Ixcán from Mexico, an armed contingent comprised of former leaders of the Rebel Armed Forces that had been exiled in the 1960s. Originally calling themselves the New Organization of Combatants (NORC), they recruited disaffected rural populations in northern Quiché and Huehuetenango as well as on costal plantations in southern departments as the Guerilla Army of the Poor, or the EGP (Gunson, Chamberlain, & Thompson, 1991). An early public act of the EGP, in 1975, was the killing of Luis Arenas, owner of the plantations at Sotzil, Ilom, and La Perla and erstwhile "Tiger of Ixcán," known for his abusive and exploitative control of his plantation workers, many of whom were indigenous and with hereditary debt (CIIDH, 1996). By 1980, some 6,000 had joined the EGP, and in 1982 the EGP would fight on seven different fronts, including those in the Ixil

[10] Colby and Van den Berghe (Colby & Van den Berghe, 1969) report that in 1921 the indigenous population in the Ixil region was 64.8 percent, in 1950 it was 53.5 percent, and by 1964 it was 43.4 percent.

triangle and the Ixcán, becoming a national organization allied with the civil groups such as the Peasant Unified Committee (CUC). That year the EGP would merge with the Guatemalan Labor Party (PGT), the Revolutionary Organization of Armed People (ORPA) and the Rebel Armed Forces (FAR) to form a single insurgency, the Guatemalan National Revolution Unity (URNG) (START, 2007).

A combination of factors – the increased insurgency activity of the EGP in the late 1970s, the increasing political and cooperative organization of indigenous Maya groups, and the land claims of various foreign oil companies in the FTN – led to a swift and devastating counter-insurgency campaign by the Guatemalan army in the Ixil and Ixcán areas. In 1976 the Mobile Military Police established a permanent presence in the Ixil region, with successive army occupations and bombardments of numerous locations in Ixil and Ixcán, including the communities of La Perla, Juil, Chel, Amacchel, Pulay, and Salquil Grande. Until 1980, the predominant strategy pursued by the army was the clandestine disappearance, interrogation and murder of individual communities leaders, including some 40 from Chajul, 28 from Cotzal, and 32 from Nebaj (Cabanas Díaz, 1999). Beginning in 1980 the army forces began a second, deadlier phase of counter-insurgency, in which violence became more generalized and collective, including ground offensives supported by aerial bombing and strafing that lead to group captures and community massacres. Of the 26 villages and 145 hamlets in the Ixil region in 1980, all were nearly completely destroyed, and hundreds of thousands were internally displaced or fled to Mexico as refugees (CIIDH, 1996).

The scorched earth campaign had touched even the remote community of Keb', where homes and crops were destroyed repeatedly in 1981 and 1982. It was in the context of these scorched earth tactics that nearly 2000 refugees from the Ixil community of Xix made their way to Keb' and two other nearby communities in 1982, where they were allowed to join the relatively isolated community. The community continued to avoid the army even as their neighbors and thousands of displaced persons in the region were reorganized into model communities and development poles in the areas around them (CIIDH, 1996). Again, in 1984, yet another group of refugees, this time a multiethnic band from other areas near Aguacatán as well as Quiché department slowly found their way to Keb', some of whose original settlers had come from the same area of Hueheutenango (Ball, Kobrak, & Spirer, 1999).

The community of Keb', like the other CPR-S communities, adopted strategies to survive. Due to the repeated incursions through the rest for the rest of the decade by army forces from the nearby La Perla base, Keb' become permanently nomadic, moving every week to every few days. The population relied on plants and roots, some of them wild, others that could be cultivated with light camouflage, like squash leaves and *malanga* root. Working in tight coordination, families would minimize their smoke and movement during the day, while avoiding the use of fire at night. The members of Keb' also engaged in several coordinated strategies of *auto-defensa,* or self-defense, including the use of small pit traps with stakes, boxes with killer bees, and food left that had been injected with snake venom (Cabanas Díaz, 1999).

Men in the community also participated in patrols, working in pairs stationed some thirty minutes from the group and carrying instruments like flutes to provide early warning of army approaches(Ball et al., 1999). Army incursions and captures continued until late 1990, long after many regions of the country had returned to normality. In September 1990 the CPR issued a public statement announcing their existence and asking for recognition as well as an end to the army counterinsurgency campaign, which had taken a heavy toll (Cabanas Díaz, 1999). This "coming to light" of the CPR allowed for the community of Keb' to begin to rebuild, replant, and reintegrate into local social and economic networks by 1992 (Ball et al., 1999). During the period of near-continuous army incursions into the CPR, the population peaked at around 30,000 individuals, but was only 17,000 in 1993 – today, the population of the area is around 18,000, and the population of Keb' around 500.

While I had months of pilot work prior to my dissertation research in Jun, I went to Quiché department with the specific agenda to find a predominantly K'iche' community in northern Quiché that had been significantly impacted by the Guatemalan civil war. I distinctly remember my conversations with then director of the Ministry of Health in his office in Nebaj. He pointed out a couple of the nearby communities in the predominantly Ixil region, none of which seemed appropriate for my research. The Styrofoam map we were looking at depicted, in addition to the location of communities, the number of maternal deaths in the past year, several of which were concentrated in a group of communities in the north. He mentioned

that one of the communities was a bit of an outlier – a predominantly K'iche' community in the very north of the Ixil Triangle. While I had planned to work in a larger community, I felt like it might be an incredible opportunity to work in one of the CPRs. Conditions would be difficult – no running water and no wells, with rain water trapped in large plastic cisterns beside each residence, and electricity introduced just a few months before, with solar cells powering a light bulb in each house.

The path from La Perla to Keb' is grueling, the terrain a constant up and down, up and down, like hiking over the teeth of an enormous saw. On my first hike in, I had discounted one key piece of advice that I had been given both in Quetzaltenango and before starting off on the hike from Nebaj – wear rubber boots. I had made a half-hearted attempt to find a pair of rubber boots, but could only find pairs that stopped a full two shoe sizes below my own. I should have looked harder. The mud, created over the course of days if not weeks of torrential rain on the tenuous terraces of trails along heavily wooded mountains, trod daily by humans, horses, mules, dogs, and the occasional wild hog or jaguar, would appear to be no more than a few inches deep and then swallowed my leg to the hip.

The physical layout of Keb' consists of a number of trails that weave between a series of rocky outcroppings separated by deep ravines with sparse vegetation. The top of one of the central hillocks affords uninterrupted vistas in all directions, but the edges of the horizon eventually fold into green forest. Interspersed in this bare, jagged landscape are wood plank buildings with sheet metal roofs, often

solitary, occasionally in small collections. One might not, at a distance, recognize the black dots that sit beside each building, only noting that they are too small to be cars, but only just; their positions under the corner of roofs a clue to their function. On closer inspection they prove to be enormous plastic containers for the collection of rainwater. The small glass glints reflecting in the sunlight resolve into, of all things, solar panels, incongruous (or not so incongruous) with the bucolic scene. The ground is littered with limestone, with some collections erupting like elaborate sandcastles. Even within the cleared area of the community, if it has rained recently, in spite of all the rocks, the paths are ankle deep mud. The largest structure in town looks like a modest barn, and its warped, mud-spattered sides look as if they had been exposed to the elements for decades, which I might have assumed had I not seen the town hall being built myself.

The political structure of Keb' was nominally similar to that of Jun, with an elected *alcalde* and a group of chosen councilmembers. The political operations of the community is much different, however, as all decisions that affect the community are taken after extensive discussion and vote by members of all households in the community. During my time in Keb' I participated in numerous town meetings during which various topics were discussed, including the creation of a new cemetery, the exhumation of victims of violence during the civil war, and the division of the community's group land title among individual households. Although I had seen community meetings in Jun, those meetings in Jun were community gatherings in which issues were debated. They were ultimately sites of

public discussion but no group decision-making. In Keb', however, votes were held and decisions were made.

A parallel organizational structure had also developed in Keb' because of its unusual history in the form of *Empresa Campesina Asociativa* (Rural Business Association), or ECA. Because Keb' had, during the civil war, settled in the area of the bioreserve, the community did not, until just prior to the beginning of my fieldwork, have title to their land. The ECA had been formed as an entity for the administration of that title, and "associates" had paid fees that went toward the processing of the land title granting process, such that not all members of the community were associates of ECA. The ECA, moreover, was an entity that was actually made up of Keb' and three additional distinct communities in the vicinity that had cooperatively organized in order to gain their land title. Associates of ECA were, during my fieldwork, in the process of securing a land title separate from the other three communities and were dividing that community land among the associates.

Keb's economic differences from Jun were distinctly related to its remote location and its geography. Every man in Keb' identified as an agriculturalist, and all were involved in each of Keb's three predominant crops: corn, coffee, and cardamom. Each of these crops requires different growing conditions, most importantly different temperatures at which the crop best grows. In Keb', cardamom is grown in the hot jungle plain that lies at the steep northern foot of the mountains toward Mexico and the Ixcán. Coffee is grown on the warm slope of

those mountains, while corn can be grown in the cooler, higher altitudes among the mountain peaks. This division of arable land into hot, warm, and cold complicated the distribution of land among associates, in that each member wanted to have prime land in all three of the climate zones. Moreover, the three climate zones were not in equal availability, nor were they of equal value relative to the crops they would produce, with land for coffee and cardamom much more valuable than that used for corn. The distribution of land by ECA, especially of three distinct zones of land, required that some associates own land that was farther away from the center of the community, sometimes as far as several hours' walk.

In 2001, as a part of the nationwide decentralization of health services through SIAS as well as the expansion and improvement of services in the Ixil triangle, the Direction of the Area of Health of Ixil (DASI) was formed, responsible for the health services of the municipalities of Nebaj, Cotzal, and Chajul. Chajul is divided into three health jurisdictions, each comprised of approximately 10,000 inhabitants. Keb' lies within the second of these jurisdictions, which comprises the bulk of the territory of the municipality and is the most sparsely populated. Jurisdiction 2 has a single health center, three of the nine health posts, and two community centers. The closest hospital is in the bordering municipality of Nebaj. In 2002, Chajul had 12 doctors, 11 of whom were Cuban doctors working in the municipality for short-term contracted periods and not necessarily residing in the municipality. The Guatemalan doctor working in Chajul occupied the director's position at the health center. At the same time, 14 nurses and five institutional

facilitators worked in the area, along with 24 community facilitators, 224 health promoters, and approximately 123 traditional birth attendants.

While there had been a steady growth in the number of recorded births between 1997 and 2000 from 613 to 1471, 2001 saw a reduction in the number of recorded births to 1238, 1217 (98.3 percent) of which were delivered at home and only 17 (1.4 percent) of which were delivered by physicians. In 2002, nearly 88 percent of reported community morbidity could be attributed to the combination of respiratory infections (47.3 percent) and intestinal illnesses (40.6 percent). Since 1996, however, malnutrition has also played a significant role in morbidity, accounting for as much as 22.7 percent of morbidity in 1997 and 24.0 percent in 2001.

These figures are taken from posters lining the walls of the small health post in which I lived while in Keb', built by the Canadian NGO. It served as both as the medical office as well as housing for medical workers who came to the area, including Cuban doctors who had time-limited tours of duty in the region and who would pass a night or two every few weeks in the post. Their graffiti covered the walls of the small bedroom, attesting to previous occupants, and on nights when the Cuban doctors came through I slept on the floor in the small office room with the post's limited medical supplies. The post had a small gas stove and a solar-powered bulb. One or two days each week one of the community health workers would have office hours, and if anyone were ill they might call on the health worker, who would stop at the post for supplies.

My time in Keb' was shorter than in Jun, but I did try to work with the community in the same ways I had in Jun. I provided some limited services, such as taking notes at community meetings for their records and helping the community draft a typed, electronic document petitioning for a road. I played soccer at community games, which were much less formal than those in Jun but no less fun, especially since the soccer fields were on steep, irregular inclines. I ate my meals with the Q'an family, a middle-aged couple and their daughter-in-law and several children. He organized the health posts for several communities, while she worked as a *comadrona* and provider of contraception in the community. Both of them were invaluable in my introduction and stay in Keb' and they patiently explained the history of the community as well as some of the more intricate politics between households and families. Meals were simple, and many days dish was only boiled squash leaves gathered that morning. Around the glowing stove on cold rainy days, though, I learned how leaves, or squash, or egg, or fava beans were really only a garnish, and that the true meal was the handmade tortillas, thick and steaming from the stovetop, passed between the family as fast as they could be eaten.

Chapter 3: Gender, Masculinity, and Reproductive Health[11]

Throughout this dissertation I explore the contours and limits of a reproductive health approach that emphasizes reproductive health, broadly defined, *as a basic human right*, rather than as a means to achieve population control through increasing contraceptive prevalence rates; a spectrum of health concerns involving individual sexual and reproductive well-being and resting directly on a foundation of reproductive rights, including the right to have all sexual experiences as wanted ones, the right to control the timing and conditions of pregnancy, and the right to achieve healthy pregnancy, birth, and child health outcomes (cf. Petchesky, 2000).

Several antecedents influenced this shift to a reproductive health paradigm. First, classic demographic transition theory has failed to explain why population growth continues, often in the face of other indicators of economic development and despite falling fertility rates in many countries (Greenhalgh, 1995; W. P. Handwerker, 1986). Second, work by feminist groups has shown how population and development interventions that focus on demographic goals as a means to economic and social development often disregard or negatively affect the health of women (Dixon-Mueller, 1993a). In particular, feminists in developing countries have pointed to major imbalances in reproductive health outcomes in First and Third World countries, suggesting the need to address population control within the context of holistic, comprehensive reproductive health care services (Corrêa & Reichmann, 1994). Finally, the global HIV/AIDS pandemic has caused a fundamental

[11] This chapter is an edited version of two previously published articles; (Dudgeon & Inhorn, 2003, 2004)

rethinking of reproductive health programs, shifting attention from population control to sexual behaviors and practices that affect the transmission of sexually transmitted infections (STIs) among and between men and women (Dixon-Mueller, 1993b; Parker, Barbosa, & Aggleton, 2000; Vance, 1991).

A reproductive health model has had important consequences for the ways men are conceived as participants in reproductive and sexual health that will be explored below. On the one hand, men are seen as important influences on the reproductive health of others. These influences are numerous and may involve direct effects, such as sexual violence or STIs, as well as more indirect effects, such as the mediation of resources available during pregnancy and childbirth. Because most human societies privilege men in both the private and public domains, men also structurally affect the reproductive health of others in ways women do not, namely through the positions of authority they occupy, the resources they control, and the sexual and reproductive norms they support or subvert. On the other hand, men traditionally have not been included in interventions targeting maternal-child health, contraceptive use, or other reproductive health problems, while women's access to birth control and prenatal and delivery care are often seen as key avenues for the empowerment of women (Collumbien & Hawkes; Ndong, Becker, Haws, & Wegner, 1999 and Wegner 1999). Moreover, assumptions about men's lack of involvement and interest in reproductive health have militated against men's inclusion in reproductive health programs (Gutmann, 1997).

Several areas have been identified as important to consider in comprehensive approaches to men's reproductive health needs, including male contraceptive technology, reproductive tract infections and STIs, male infertility and sexual dysfunction, male adolescent reproductive health, male reproductive aging, and occupational and environmental effects on male reproductive health (Mundigo, 1998; Wang, 2000). However, given the broad definition of reproductive health stressed in these conference platforms, this list of concerns is largely biomedical in nature, potentially of more concern to health care providers than to individual men. Furthermore, this biomedical focus may prove inadequate to capture the range of issues men themselves may include in reproductive health definitions (Collumbien & Hawkes, 2000). This dissertation explores cultural determinants of reproductive health, including barriers to biomedical intervention (Drennan, 1998; Mbizvo, 1996; Mbizvo & Bassett, 1996; Presser & Sen, 2000).

Human Reproduction as a Biosocial Process

In addition to its social nature, reproduction is fundamentally biological, with necessary physiological requirements for its accomplishment and relatively well-defined biomedical parameters marking reproductive health and illness. A central argument is that human reproduction is a biosocial process (Harris & Ross, 1987; Panter-Brick, 1998). It is dynamic and changes over time, and it occurs at the intersection of human biology, ecology, and social and cultural context. Social collectives—households, lineages, and states—derive power and resources from the control and administration of reproduction. Furthermore, different levels and

mechanisms of collective social control have had different effects on reproductive health. For example, the focus of states on the vaccination of infants is a way of ensuring labor forces and lowering national health costs, although this focus often diverts limited resources from other health programs. States may or may not invest in fertility-limiting technology in an attempt to control women's labor, including preventing them from occupying certain positions because of their reproductive status or potential (Bandarage, 1997).

Apart from the more direct aspects of power related to control of labor and resources, biological reproduction occupies a key position in the reproduction of ethnic and other social groups. Anthropologists have emphasized the centrality of kinship as an ideological concept organizing social relations within groups, as well as the regulation of ethnic boundaries through the control of miscegenation (Bledsoe, Guyer, & Lerner, 2000; Delaney, 1991; D. M. Schneider, 1968; S. Yanagisako & Delaney, 1995).

Reproductive ecologists' research on male reproductive physiology has begun to examine variation between groups of men (Campbell & Leslie, 1995). For example, declining levels of testosterone in men as they age have been seen as a reproductive health problem in the West, and thus are a common topic of discussion in popular men's health literature, where testosterone decline is linked to age-related changes in frequency of sex, sex drive, muscle mass, and general function. Available data from non-Western groups suggest that the trajectories of decline in testosterone levels with age vary considerably across populations, with non-

Western populations showing lower peak lifetime levels and more gradual declines (Bribiescas, 2001; Ellison et al., 1998). For example, Worthman (1999) found that men in Nepal attain much lower peak lifetime levels of testosterone in comparison with American men but do not exhibit significant declines in testosterone with age. The implications of such variation in lifetime exposures to testosterone for health risks such as prostate cancer are presently unclear and warrant further investigation, which is beyond the scope of this research (Bribiescas, 2001).

Examining the ecological influence on human reproductive choices has been the work of human behavioral ecologists, whose research is devoted to the ecological context in which human reproductive decisions and behaviors occur. In investigating reproduction within human systems of marriage, behavioral ecologists stress differences in male and female reproductive behavior produced by natural selection. They argue that: men and women will tend to pursue different reproductive strategies (e.g., beginning and length of reproductive career, timing and frequency of mating, number of partners, and investment in offspring) (Borgerhoff Mulder, 1992, 2000); individual men will pursue variations on this generalized pattern of male reproductive strategy, differing from one another at different points over the course of their lives (Hill & Hurtado, 1996; Worthman, 1995); and differences in mating strategy, fertility, and mortality between groups will be associated with ecological constraints, such as resource availability and

distribution (Hill & Hurtado, 1996; Hill & Kaplan, 1999), which ultimately affect group subsistence patterns (Marlowe, 2000; Sellen & Mace, 1997, 1999).

Although debates exist over the relevance of evolutionary pressures to explanations of contemporary human reproductive patterns, all the aforementioned approaches highlight the fact that meaningful differences exist in the reproduction of men and women, of different men, and of men over the course of their lives. Even small differences in reproductive patterns can have profound effects on reproductive health outcomes; for example, different mean numbers of sexual partners per year can affect the incidence rates of an STI (Finer, Darroch, & Singh, 1999), and STI rates are also affected by the differences in patterns of sexual behavior between older and younger men (Olayinka, Alexander, Mbizvo, & Gibney, 2000). In summary, insights from biological anthropology regarding men's reproductive physiology and behavior have been used to demonstrate physiological variation between and within populations and to describe local conditions under which men are more likely to invest in their partners and children. Rather than rigidly determining reproductive behavior or health, human biology exhibits flexibility in ecological context. Furthermore, biological anthropological research suggests the importance of gender; particularly gender relations between men and women, as having a profound impact on reproductive health outcomes, including the well-being of women and children.

Gender and masculinity

As will be explored in more depth below, only recently have men as men—that is, as gendered agents, with beliefs, behaviors, and characteristics associated with but not dependent on biological sex—become subjects of theory and empirical investigation within the social sciences (Connell, 1987, 1995; Seidler, 1994), including in anthropology (Bourgois, 1995; Gutmann, 1997; Lancaster, 1992). Although no single framework for the study of men holds, attempts have been made to explain general patterns in male identity and behavior. For example, the notion of masculinity has been used to refer to a differentiated set of roles and behaviors undertaken by men and involving ideas about self as they relate to these roles. Recently, theorists have stressed that individual men do not simply fill static roles and identities; rather, they must perform masculinity as an ongoing process drawing on existing sets of behaviors and ideas while allowing for innovation and change over time. Gilmore (1990), for example, argues that masculine identity and roles are more tenuous than feminine identities and roles, and thus must be performed more vigorously. According to Gilmore, this need for greater performance of masculinity is the result of two circumstances. First, women can demonstrate their femaleness through reproduction, while men cannot. Second, throughout the world, women in family structures raise boys. But as boys become men, they must differentiate themselves from that feminine world, a separation young women need not make. However, such an argument is more descriptive than explanatory. Furthermore, it homogenizes men, thereby tending toward a unitary definition of masculinity defined in opposition to femininity.

Social scientists have pointed to the plurality of definitions of masculinity, even within a single social group. Masculinity is characterized as a plural set of gender identities or masculinities (Connell, 1995), which are related to but not uniquely determined by biological sex. Approaches to men's involvement in reproductive health must account for broader social patterns that structure men's attitudes and behaviors regarding sex and reproduction. Men's effects on the reproductive health of others are diverse and often complex, ranging from direct effects, such as STI transmission and sexual violence, to mediation of resources available for women and children's health needs, to structural asymmetries that privilege men and maleness in arenas such as contraceptive technology development and infertility treatment. As suggested by this research, men themselves experience the negative reproductive health effects of what Rubin (1984) calls the "sex/gender system," which roots gender not only in individual behavior, but also in social institutions and cultural norms.

Masculinity and Reproductive Health

Research in fields such as medical anthropology and medical sociology has begun to draw connections between gender and men's health (Browner & Sargent, 1996; Doyal, 2000; Krieger & Fee, 1994; Lorber, 1997; Moynihan, 1998; Sabo & Gordon, 1995; Sargent & Brettell, 1996; Zeidenstein & Moore, 1996). In general, such approaches argue that numerous aspects of health, ranging from accidental death to cardiovascular disease, are conditioned not only by differences between male and female physiologies, but also by the culturally specific, socially constructed

gender roles and identities that men and women perform. Courtenay (2000) argues there is a reciprocal relationship between masculinity and health, stressing that men's health problems are often produced by men's enactment of masculinity, and that cultural norms and expectations reinforce these enactments. In addition, some researchers have observed that certain aspects of health and illness help define hegemonic masculinity (Sabo & Gordon, 1995). For example, certain markers of health are emphasized over others (e.g., men's muscle mass), markers that may not fit biomedical models for good health (Klein, 1995). Moreover, illness in general may be characterized as unmasculine, and some disorders, such as infertility and erectile dysfunction, are seen as particularly emasculating (Inhorn, 2002, 2003; Webb & Daniluk, 1999). In some cases, men's health disorders, such as benign prostatic hypertrophy, can be characterized as "culture-bound syndromes," given differential (and often profitable) emphasis in diagnosis and treatment by doctors and pharmaceutical manufacturers (McDade, 1996).

Not surprising, many of the aspects of health most closely tied to masculinity involve reproduction and sexuality. Masculinity affects reproductive and sexual health insofar as sexual behaviors play key roles in defining gender roles and identities (Dixon-Mueller, 1993b). Gender approaches stress the culturally constructed meanings of sexual practices (Vance, 1991), in the main demonstrating that other- or same-sex sexual behaviors are not isomorphic with universal definitions of hetero- or homosexual, straight or gay identities (Herdt, 1997; Lancaster, 1992). In addition, attention has been drawn to the importance of

particular sexual behaviors—-many of them unhealthful for both men and women—for the performance of masculinity. Often listed among such practices are sexual promiscuity (Farmer, Connors, & Simmons, 1996) and avoidance of contraceptives (Ward, Bertrand, & Puac, 1992; Wingood & DiClemente, 1998). These behaviors are theorized as being in a dialectical relationship with masculinity, with the behaviors both conditioned by and as part of the basis for masculine identities and roles.

In addition, cultural constructions of sexual behavior and sexual disorders shape the ways individual men experience their own masculinity. Anthropologists have demonstrated that culture-bound syndromes such as semen depletion (Bottéro, 1991; Herdt, 1997) or erectile dysfunction (Inhorn & van Balen, 2002; A. Potts, 2000) depend not only on culturally specific understandings of human reproductive physiology, but also on a phallocentric perspective on human sexuality that deemphasizes other forms of male sexual expression and pleasure.

Given the connection of masculinity to reproduction, interventions targeting men's involvement in reproductive health, such as the promotion of condoms and sexual responsibility, must cope with sexual behaviors as they are embedded in masculine identity roles. Men and women often exhibit different patterns of sexual behavior, and similar patterns of sexual behavior affect men and women differently. In many societies, men's sexuality is sanctioned and encouraged, while women's sexuality may be closely monitored, constrained, and condemned (Nencel, 1996; Pyne, 1994). For example, in researching relationships in rural Haiti, de Zalduondo

and Bernard (de Zalduondo & Bernard, 1995) argue that nonconjugal sexual relationships between men and women are not the product of men and women's individual or dyadic choices, but rather reflect their positions in a political and moral economy. Men are expected to have "flings," and women are expected to resist and ask for economic recompense. Although women do not depend completely on men economically and actually outproduce men in the fragile local economy, the returns on women's labor over time are small relative to men's returns, the latter being important in economic emergencies. Thus, non- and extraconjugal sexual relationships make possible women's economic survival while putting them at greater risk for sexual harm (e.g., STIs) and for the birth of children outside of stable unions. The authors conclude that "far from being idiosyncratic results of male and/or female non-compliance to sexual and conjugal norms, non-conjugal sexual relations are predictable consequences of the interlocked sexual, economic, and moral premises that underlay male and female gender roles and men's and women's expectations regarding conjugality" (de Zalduondo & Bernard, 1995).

Such research suggests that the connection between sexuality and reproductive health cannot be limited to an examination of sexual orientation or behavior alone, but must also account for shifting notions of masculinity, femininity, and gender relations within larger political, economic, and moral contexts. Gender organizes a system of health. For example, gender provides the structure, which is different across cultures, for what counts as a healthy male body, what physical

ideals men should pursue, and what illnesses men should fear, ignore, accept, or endure. Moreover, notions of hegemonic masculinity do not refer simply to differences in ethnicity or socioeconomic status, but also to health and fitness—ideals that may or may not coincide with men's overall well-being. Men's reproductive health offers a particularly penetrating lens to explore this mutually reinforcing, but not necessarily health-promoting, relationship between gender and health.

Pronatalism and Fatherhood

The relationship between men's intentions and desires for conception, pregnancy, childbirth, and fatherhood have been understudied and remain understood, especially in international contexts. A male partner's intentions and desires have been shown to affect the timing of first pregnancy, women's desires in and prospects for becoming pregnant, partners' feelings upon learning of a pregnancy, and subsequent changes in women's evaluation of pregnancy wantedness both during pregnancy and the postpartum period (Joyce, Kaestner, & Korenman, 2000a, 2000b; Zabin, Huggins, Emerson, & Cullins, 2000 and Cullins 2000).

Men's desires for large families in pronatalist community settings marked by high fertility rates may be powerful factors in women's fertility decision making, effectively militating against fertility limitation campaigns. Furthermore, men's pronatalist desires are clearly connected to hegemonic concepts of masculinity, including the Latin American context. The concept of *machismo* operates in variable

ways throughout Latin America, affecting men's behavior regarding paternity and ultimately women's childbearing. According to Browner, "In Colombia it meant that a man who impregnated a woman had the right to deny paternity, abandon the woman, or insist on abortion. In contrast in the Oaxacan village, it generally meant that men imposed their desire for large families on their wives" (Browner, 2000). In urban areas of Mexico, poor men may be guided by national stereotypes of masculinity and *machismo*, but must also reconcile themselves to the realities of life in poor barrios, which has required them to cooperate, both politically and economically, with women for survival, including through limiting family size. Indeed, Gutmann's (1996) work on changing concepts of masculinity in Mexico City provides several extended examples of men's attempts to make meaning of their experiences of fatherhood under difficult local economic and social conditions. Gutmann argues that some activities, such as work outside the home and childcare, have become less gendered, that is, less associated with either men or women over time. Cross-cultural studies have shown that, generally speaking, men tend to spend between 25 and 35 percent of the time that mothers do interacting with young children (Lamb, 1987; Lamb, Charnov, Levine, & Pleck, 1987). However, in societies where men are involved in childcare, men are less inclined to display hypermasculine roles and aggressive competition (Coltrane, 1994).

Men's fathering behaviors do not necessarily center on an investment in childcare during infancy and early childhood. Rather, men's investments as fathers are often tied to the concretization of access to sexual or economic resources from

their female partners, their realization of broader social obligations to produce children for their families or communities, and their interest in the child's potential as an adult member of a social group (Browner, 1986a, 1986b; Greene & Biddlecom, 2000; Guyer, 2000). Social relations, such as division of labor, social status, and household arrangements, shape the nature of family life and child well-being. And popular models may represent normative, hegemonic, idealized, and potentially minority experiences of fatherhood.

For the most part, the emphasis in research on fatherhood has been on the effects that fathers have on others, rather than on the effects of fathering on fathers (Tripp-Reimer & Wilson, 1991). More recent research on fathers emphasizes how local contexts, along with broader ideological underpinnings, combine with men's individual attempts to define fatherhood experiences and expectations for themselves (Reed 2005; Townsend 2002). One study of expectant fathers in the United States reported that though men wanted to be involved in pregnancy, childbirth, and parenting, they found few models of men as parents to guide them, and they struggled on their own for relevance as fathers (P. L. Jordan, 1990). Townsend (2002) examines a highly uniform cultural norm of American fatherhood—part of what he calls the "package deal"—which is composed of emotional closeness, provision, protection, and endowment. This cultural norm, he argues, provides a lens of meaning and anticipation for men's often contradictory experiences of parenting. In interviews with men who graduated from a Silicon Valley high school in 1972, he examines "the composition of, and internal

contradiction within, a cultural model of successful male adulthood and fatherhood" (20) "to understand how [men] construct themselves as men and fathers in order to better understand their actions" (28).

Such studies have, for the most part, been confined to North American and European fathers, but more studies have begun to investigate father-child relationships in non-Western settings. Hewlett's (1991, 1992) work among the Aka Pygmies, who exhibit more paternal care than any other human group, suggests that male caregiving for infants may be part of a generalized reciprocity between husband and wife. Hewlett develops an ecological family systems theory of paternal caregiving, arguing that shared communicative activity between partners leads to greater partner intimacy as well as increased infant care by fathers.

In reviewing literature on father involvement in developing countries, Engle and Breaux (1998) point out that more is known about father's absence than presence. They suggest that, in addition to a caring relationship and economic support, one of men's most important influences cross-culturally is not having children outside a partnership. They consider evolutionary, economic, ecological, and cultural explanations for why some fathers, such as those described by Hewlett, invest more in children, while other fathers do not.

Men's Experiences of Reproductive Impairment and Loss

Just as men's experiences of fathering are poorly understood, men's experiences of and attitudes toward reproductive impairment and loss are just beginning to be investigated. For example, in the burgeoning anthropological

literature on infertility and the uses of assisted reproductive technologies (ARTs), men's experiences of their own or their wives' infertility have been underprivileged, despite the fact that male infertility factors contribute to more than half of all cases of infertility worldwide (van Balen & Inhorn, 2002). Globally, many men do not accept the idea of social fatherhood through adoption, making a resort to ARTs the only viable option (Inhorn and Bharadwaj 2003), and men's infertility remains much more stigmatized than women's (G. Becker, 2002). In the West, both infertility and its treatment have been reported as resulting for some men in impaired sexual functioning and dissatisfaction, marital communication and adjustment problems, interpersonal relationship difficulties, and emotional and psychological distress (Abbey, Andrews, & Halman, 1991; Daniluk, 1988; Greil, 1997; Greil, Porter, & Leitko, 1990; Nachtigall, Becker, & Wozny, 1992; van Balen & Trimbos-Kemper, 1994).

Men's Influences on Women's Reproductive Health

In the first half of this chapter, I noted the absence of men from previous reproductive health models (M. Carter, 2002; Collumbien & Hawkes, 2000; Hawkes, 1998). Men are important actors who influence the reproductive health outcomes of women and children within, by and large, systems that engender reproductive inequality that range from asymmetries in pay and work opportunities, to legal systems that allow for domestic violence and rape (Boonstra et al., 2000; Pollard, 1994) yet criminalize abortion (Margrethe Silberschmidt & Rasch, 2001), to the

comparative lack of research on and development of male contraceptive technologies (Mundigo, 1998).

Although the importance of these macrostructural relationships between men's and women's reproductive health is clear, perspectives for understanding these relationships are not. For example, the concept of patriarchy, men's systematic domination of key structural and ideological resources and positions, which is often institutionalized on multiple levels (e.g., legal, medical, political), does not fully explain differences in reproductive health outcomes, even as patriarchal relations do affect women's reproductive health on a "macro" level. For example, women's reproductive health is affected by male policymakers, male health care administrators, and male service providers, who may perpetuate a dominant "male definition" of what is important and what is not without taking heed of women's perceptions and felt needs. However, as shown in the first part of this chapter, the reverse also may be true, when men's reproductive health needs are underemphasized in rights-oriented reproductive health policy discussions that explicitly privilege the rights of women.

On the "micro" level, men also affect women's reproductive health as partners of women and fathers of their children. As will be shown in the second part of this chapter, male partners' influences on women's reproductive health are complex, involving effects both direct and indirect, and both biological and social. This chapter presents medical anthropological perspectives and ethnographic research findings that contribute to the understanding of men's influence on

women's reproductive health. In addition, the chapter points to major lacunae, where medical anthropological research is still developing. The chapter opens with a summary of current frameworks regarding men's and women's reproductive rights, critiquing the notion of "rights" from an explicitly anthropological perspective. As part of this discussion, the question of equality versus equity is critically addressed, with suggestions for approaches to incorporate men into reproductive health programs.

Reproductive Rights: Equity, Equality, and Intervention

As elaborated above, reproductive health is argued to be a basic human right and, as such, is protected by existing international agreements on human rights, including documents on the rights of women, children, and indigenous peoples (Cook & Dickens, 1999, 2000; Cook, Dickens, Wilson, & Scarrow, 2001; Cottingham & Myntti, 2002; Petchesky & Judd, 1998; Sen, George, & Östlin, 2002). Presently, the framework of reproductive rights depends heavily on the compliance of nation-states with the programmatic statements of the international conventions they have signed. However, it is often in the traditional and marginalized communities in which anthropologists typically work where state laws have the least influence and the state is least accountable. These communities, or some of their members, may explicitly reject the concept of reproductive rights as conflicting with local law or community norms. For example, in a cross-cultural study, Petchesky and Judd (1998) found that many women understood their rights *ad hoc* in terms of their desire to avoid conditions of suffering they had experienced in the past.

Furthermore, although the notion of reproductive rights is usually conceived of in terms of individual persons, reproduction never involves single individuals and rarely involves only two people. Instead, as many anthropologists cited in this chapter have shown, reproduction often lies at the intersection of group interests, including families, households, kinship, ethnic, and religious groups, states, and international organizations.

Beyond the rights debate, a second important distinction—and one that is key to best providing reproductive health services for both men and women—is that between reproductive health equality and reproductive health equity (Basu, 1996; Ann K. Blanc, 2001; Petchesky, 1998; PopulationCouncil, 2001). "Equality" emphasizes egalitarian reproductive health outcomes for all men and women, achieved ideally through equal or complementary services. Conversely, "equity" refers to an approach that emphasizes justice in reproductive health outcomes, achieved through services provided within the context of existing and recognized differences in reproductive physiology as well as inequalities in economic and social resources.

Implicit in discussions of equity is the realization that the reproductive and sexual needs of women often are culturally subordinate to those of men and that men locally have rights over women's reproduction and sexuality; thus, the achievement of equity could in many contexts require privileging the reproductive rights of women over those of men. In these discussions of equality versus equity, particular notions of men's involvement in reproduction have been used to inform

frameworks for incorporating men. Men have traditionally been portrayed, either explicitly or implicitly, as relatively unconcerned and unknowledgeable about reproductive health. They have been seen primarily as impregnators of women or as the cause of women's poor reproductive health outcomes, through STI exposure, sexual violence, or physical abuse. In addition, they have been regarded (often correctly) as formidable barriers to women's decision making about fertility, contraceptive use, and health care utilization (Greene & Biddlecom, 2000). Indeed, some of these generalizations about men have been empirically demonstrated across cultures. Relative to women, men tend to have more sexual partners over their lives, are more likely to have multiple partners simultaneously, are more likely to pursue commercial sex, are more likely to have extra-partner sexual relations, and are more likely to commit an act of violence against women, adolescents, and other men. Men have the option to be absent at childbirth, tend to commit smaller percentages of their income to children and childcare, and contribute less time to direct childcare (Greene & Biddlecom, 2000).

In examining some of these stereotypes in demographic research, Greene and Biddlecom (2000) show consistent exceptions to many of these generalizations. They find that

- men may be more, less, or equally informed about contraceptives than women;
- many men participate in birth control through male and coital-dependent methods;
- men's pronatalism varies, with average fertility preferences often differing little from women's and with wide variation between men from different regions;
- men's dominance in reproductive decision making varies and may vary over the reproductive life course of the couple;
- men may not prevent women from covertly using contraceptives; and

- men as well as women may have financial motives for sex, as children may legitimate partners' claims to one another's resources.

An important advance in characterizing men's involvement has been the more explicit theorization of the role of power in sexual and reproductive relationships. Blanc (2001) distinguishes between the power of individuals within a social group and their relative power within dyadic sexual and reproductive relationships. She argues that the difference between power to (i.e., power as positive possibility for oneself) and power over (i.e., power as negative and limiting of others) is of particular importance in these relationships.

Recent attempts to conceptualize reproductive health interventions based on these observations about power have led to two major frameworks for the incorporation of men into programs and services. Basu (1996) has described the first framework—one he finds in the programmatic statements of both the Cairo and Beijing conferences—as "Women's Rights and Men's Responsibilities." Namely, although both women and men have rights and responsibilities in the area of reproductive health, this framework differently addresses rights and responsibilities for men and women because of existing power differentials and the unequal distribution of resources between men and women. Extrapolating to the realm of reproductive health, women's and men's contributions to reproductive health are seen as unequal and their experiences of reproductive health as fundamentally different. Interventions following from this framework tend to focus on the reproductive health problems caused by men, along with approaches to empowering women. This framework focuses on the need for reproductive health

equity rather than equality. Yet, as Basu points out, by focusing on equity versus equality, this framework may not achieve its goal; interventions excluding men may do less to achieve reproductive health equity than those including them.

Basu discusses explicitly the need for equality in addressing men's individual reproductive rights; even so, he does not address men's rights as they involve other individuals. Because reproduction always involves more than one individual with rights, the discussion of reproductive rights must address the coexisting reproductive rights of men and women in relationship to each other. This is particularly important for integrating men into this perspective, given that men often have culturally explicit and implicit rights to women's sexuality and reproduction.

Rather than only discussing men's responsibilities as partners, or their rights as individual reproductive actors, an anthropological perspective emphasizes men's rights regarding other reproductive participants, and how these rights—as derived from international treaties and conventions—may differ from locally defined notions of rights. To redirect the reproductive rights discussion in this way leads to numerous complex ethical questions. For example, do men have the right to withhold care or support from a pregnant mother? Is responsibility for care to be derived solely from genetic paternity, from consanguine or marital relations, or from some combination? Do men have the right to have multiple partners or children with multiple partners? Do they have the right to withhold information about their STI status? Do they have the right to play a part in the termination of

pregnancy? These questions will have to be addressed in future reproductive rights discussions.

A second framework for including men in reproductive health, "Men as Partners" (S. Becker & Robinson, 1998; Wegner, Landry, Wilkinson, & Tzanis, 1998), emphasizes a client-based approach that seeks to provide sustainable reproductive health care for men without compromising (but hopefully improving) services for women. Such a perspective recognizes men's important contributions to reproductive health, as well as men's needs and attempts to reconcile conflicting reproductive goals within the context of reproductive partnerships, primarily married couples. The approach adheres to the three avenues for involvement issued at the ICPD, with services provided through screening, education, counseling, diagnosis, and treatment (Ndong et al., 1999 and Wegner 1999). Such an approach focuses on men as partners—that is, as members of a family, usually as husbands, with a significant locus of responsibility for reproduction. The framework therefore envisions male involvement in reproduction and addresses men's own bioreproductive and psychosexual needs.

However, given the explicit focus of this framework on the cooperation of men and women in reproductive decision making, this framework downplays the different reproductive and sexual strategies and goals that men and women may pursue separately, including outside of the marital union. Greene and Biddlecom (2000) have observed that, in this approach, the ideological assumption of heterosexual monogamy with fidelity associated with reproductive health actually

becomes a programmatic goal. This perspective has been difficult to implement, as it requires a positive and more general definition of "partner." Moreover, it does not clearly answer whether or not a partner approach implies that services for men should be integrated or separate from those for women; this is a contentious issue that depends heavily on existing services as well as the kinds of services provided. The partner perspective also makes several implicit assumptions about men and reproductive health—namely, that educating men about men's and women's reproductive health needs will make men more sensitive and responsive to these needs, and that incorporating men into reproductive health programs will improve both men's and women's reproductive health outcomes. Such assumptions may not hold in all contexts.

Men's Influences on Women's Reproductive Health

Difficulties in defining reproductive health, rights, and equity have become as apparent as men's involvement in reproductive health has increasingly been addressed on an international level. From an anthropological perspective, these difficulties arise in large part because of the significant variation—biological and cultural—in how different groups of men and women encounter, define, and experience reproductive health problems, as well as the significant variation in family and legal structures that, in part, produce these problems. A medical anthropological perspective emphasizes the diversity in local health needs and the importance of understanding this diversity in order to develop appropriate interventions. As noted earlier, medical anthropology has tended to describe

cultural variations in health belief systems, emphasizing actors' own descriptions and experiences of reproductive health and illness within local cultural systems. Furthermore, a critical branch of medical anthropology examines how structures of inequality within and between social groups cause, perpetuate, and augment reproductive health problems (Farmer, 1999). In the wake of the AIDS epidemic, numerous researchers have called for ongoing qualitative studies to understand not only the ways reproductive health problems are experienced by men and women on a local level, but also to understand the structural factors leading to poor reproductive health outcomes (Farmer et al., 1996).

The remainder of this chapter examines medical anthropological research on men's influences on women's reproductive health, at the same time taking note of some of the specific areas where medical anthropology has failed to produce sufficient ethnographic findings. In each section, medical anthropological research is highlighted against a backdrop of groundbreaking empirical findings from public health and demography, the first disciplines to acknowledge the importance of male involvement in reproduction. As this review demonstrates, much of the medical anthropological research examines dyadic, heterosexual relationships between women and their male partners, explicitly focusing on men's involvement *from their own perspective*. However, at least some of this research remains cognizant of larger structural relationships, involving gender asymmetries and imbalances in economic and political power, affecting the interactions within the male-female reproductive dyad.

Men's Influence on Contraception

Contraceptive use and effectiveness depend directly on men's involvement. Of all the contraceptive options currently available to men, only one—vasectomy—is completely under male control. With the use of condoms and withdrawal, some degree of negotiation is involved, and cooperation is necessary for the method to be used effectively. The use of female-centered methods—such as oral contraceptives, injections, implants, intrauterine devices, spermicides, and barrier methods—such as the diaphragm or female condom, may be significantly influenced by male partners in that men may mediate the economic resources required to access these methods, or may indirectly sanction or directly prohibit women's use of these methods. Furthermore, the absence of a stable male partner may be one of the most important determinants of women's desire to avoid a pregnancy, especially young women and women with few resources.

Several anthropological studies examine how social organization and culture may influence contraceptive patterns and men's influences on them. For example, research from Africa, including Ghana (Ezeh, 1993) and Nigeria (Bankole, 1995), suggests that men may have significant influence over women's contraceptive decisions, while the converse may not be as true. Bankole (1995) reports that for the Nigerian Yoruba, an apparent "equality" in spousal desire for more children breaks down when the number of children is taken into consideration. Men's wishes for more children are more likely to be met when couples have few children, while women's wishes prevail with more surviving children in the family. Men's desires,

however, affect most directly the first decade of a marriage and the first four children.

Anthropological perspectives also provide context for the results of contraceptive research. For example, in Kenya, where more than 90 percent of men approve of contraception, more than half of them believe women should be responsible for it. Furthermore, 37 percent of men approve of female rather than male sterilization (Were & Karanja, 1994). Another study from Kenya (Dodoo, 1993) notes the importance of lineage and descent, such that partners are tied more directly to their lineage groups than to each other. In this situation, bride wealth compensates a bride's family for her lost fertility, securing the rights to her children to her groom's lineage rather than to her own. In this context, men may be much more invested than women in the use and timing of contraception.

Bankole (1995) and Dodoo (1993) have suggested that estimates of unmet contraceptive need in sub-Saharan Africa may be invalid when derived from data collected only from women. In Zimbabwe, for example, men report making final decisions in contraceptive use, even while women are held responsible for obtaining contraceptives (Mbizvo & Adamchack, 1991). These and a number of other studies demonstrate discordance within couples regarding contraceptive use (S. Becker, 1999; Bongaarts & Bruce, 1995; Casterline, Perez, & Biddlecom, 1997; Casterline & Sinding, 2000; Klijzing, 2000; Ngom, 1997; Wolff, Blanc, & Ssekamatte-Ssebuliba, 2000; Yebei, 2000).

Within such a context, how is "unmet need"—a concept problematized in the U.S. context (Santelli et al., 2003)—to be elaborated and usefully employed? Men's intentions, as well as women's, play a part in achieved fertility and contraceptive use, especially in early childbearing. Bankole (1995) documents how Yoruba women of Nigeria are better able to negotiate future pregnancies and family size after they have successfully borne several children for their husbands and husbands' lineages. In effect, a woman's value depends on, and is confirmed by, her reproductive success. Bankole goes on to assert that "[w]hen a woman does not want a child, but her husband does, the birth of such a child cannot be regarded as unwanted" (318). From an anthropological perspective, such a view begins to address the potential for conflict between men's and women's reproductive goals.

Economic context and its relationship to other demographic factors undoubtedly contribute to a partner's influence. Throughout the world, women in poorer countries with lower levels of female education show the highest rates of unmet need (M. Potts, 2000), while financial independence has been linked to women's consistent use of condoms (Soler et al., 2000). Recent reviews of qualitative and quantitative research suggest that, rather than a purely economic explanation, unmet need is conditioned by social opposition, lack of knowledge of contraceptives, and method-related problems and side effects (Casterline & Sinding, 2000; Westoff, 2001).

Rather than taking evidence of male influence on fertility and contraceptive behavior as prima facie evidence of (or against) unmet contraceptive need, some

anthropologists have attempted to make sense of male preferences and reproductive behaviors within local cultural systems of sex and reproduction. For example, among Maya of Mexico and Guatemala, many indigenous men profess that women who are sexually aggressive or responsive cause anxiety that may interfere with their sexual enjoyment (Mendez-Dominguez, 1998; Paul, 1974; Ward et al., 1992). Such cases are not rare; in many parts of the world, male sexual pleasure appears to be dependent on passive female sexuality. Conversely, in some parts of the world, men's concerns about the ability of their wives to achieve sexual pleasure may preclude condom use. For example, Ali (2002) shows that one of the reasons Egyptian men do not use condoms is because of the belief they could not receive and were incapable of giving sexual pleasure. The rural and urban Egyptian men he interviewed insisted that women received heightened sexual pleasure when they felt the ejaculate passing into their bodies. This pleasure "was mixed with the gradual cooling down of female bodies from a hot state" (130). In the case of contraception, anthropological research demonstrates how difficult it is to assume the conditions under which men will or will not use contraception, their reasons for wanting or not wanting to use contraception, and their actual patterns of use relative to their ideas about use.

Men and Sexually Transmitted Infections

Male beliefs about women's sexual passivity and sexual pleasure may preclude the possibility for the negotiation of condom use or other contraceptives, which is extremely problematic in areas of the world where condoms are believed

to be the best protection from HIV and other STIs. In such cases, the problem of "unmet need" for barrier contraceptives (and STI prevention) involves a direct conflict between the sexual needs and desires of men, the health and safety of women, and the goals of contraceptive service providers. More important, contraceptives are never "needed" when couples are attempting to conceive. For example, among infertile couples in some parts of the world, particularly sub-Saharan Africa, contraceptives, including condoms, are rarely used, leading to an increased risk for STIs, including HIV/AIDS (Boerma & Mgalla, 2001).

Thus, men's sexual behaviors (including their use of barrier contraceptives) have major implications for the transmission of STIs, including bacterial, viral, and parasitic agents that can lead to acute and chronic conditions in men and women, as well as pregnancy-associated diseases affecting the well-being of offspring. Wasserheit (1989, 1992, 1994) has discussed how the physiological micro-environment, the behavioral interpersonal environment, and the sociocultural macro-environment all affect the epidemiology of STIs and other reproductive-tract infections. For example, a macro-environment of poverty will affect men's and women's decisions to participate in sex with multiple partners or to undertake commercial sex work, affecting their access to information, barrier contraceptives, and adequate health care.

From an anthropological perspective, the interaction of these environments must be investigated in local contexts, *where no mechanically deterministic relationship exists*, even though structural inequalities constrain choices and risks

(Farmer, 1992, 1999). A prime example is the high prevalence of HIV in both West and East Africa, which has influenced men to seek sex with virgins in an attempt to avoid exposure (M. Silberschmidt, 2001; Margrethe Silberschmidt & Rasch, 2001; D. J. Smith, 1999). Through unprotected sex, men (including HIV-positive men unaware of their sero status) may expose adolescent and even prepubescent girls to STIs, and may damage their immature vaginas.

Condoms (including the female condom) are the only effective contraceptives protecting against the transmission of most STIs for both women and men during penile-vaginal intercourse (K. R. Davis & Weller, 1999). As men must cooperate in order for condoms to be used effectively during sex, much emphasis has been placed on condom use as men's contraception. Some feminist writers have seen the refusal to wear condoms as a sign of hegemonic, heterosexist masculinity (Patton, 1994). Although asymmetries in the negotiation of condom use between men and women may depend heavily on hegemonic male prerogatives, great variation exists in men's acceptance of condoms and the meanings of that acceptance.

Anthropological research with young Australian men suggests that men can incorporate condom use as a healthy expression of heterosexual male identity and that condom use can be eroticized (Vitellone, 2000). Men in Zimbabwe showed significant generational differences in number of partners and condom use, suggesting that male sexual behaviors may change over the course of a lifetime (Olayinka et al., 2000 and Gibney 2000). Being unmarried and duration of relationship were significant predictors for increased odds of condom use among

U.S. women between 1988 and 1995, suggesting the need for a more complex understanding of male partner effects (Bankole, Darroch, & Singh, 1999).

Taken together, such research suggests that no direct correspondence exists between condom use and gender equality. Men's condom use can be incorporated into very patriarchal socioeconomic systems, even without changes to those systems, depending on men's perceptions of their reproductive health needs and sexual pleasure. Moreover, condom use may be more or less associated with family planning in the context of high STI prevalence. Through anthropological research, the potential exists to elucidate the beliefs and structures shaping men's behaviors around the use of contraception for both STI and pregnancy prevention.

Men's Influence on Abortion

Even under the best conditions, abortion is a physically and emotionally difficult event. Its continued practice despite legal prohibitions in many parts of the world makes abortion dangerous and life threatening. Thus, abortion has social, psychological, and health consequences for both men and women, even though relatively little research has examined men's roles in women's abortion decisions and experiences (Adler, 1992).

Abortion is perhaps the best example of the direct connection between laws and policies and poor reproductive health outcomes, and in most countries, men write, ratify, and enforce abortion law (Cottingham & Myntti, 2002). In Turkey, for

example, abortion among married women is restricted to those with their husbands' permission, reflecting conservative interpretations of Islamic law (Gürsoy, 1996). Furthermore, men may directly affect women's decisions about abortion. They may provide or withhold economic and emotional support for an abortion or parenting, or they may actively or passively impose their own desires for or against an abortion. Men's influences also may be less direct and involve other areas of reproductive health; for example, in the United States, women with abuse histories are less likely to involve their partners in abortion decisions and have different reasons for seeking abortion than non-abused women (Glander, Moore, Michielutte, & Parsons, 1998 and Parsons 1998).

Given that the social acceptability and desirability of pregnancy and abortion may change with the age of parents, pregnancy at different stages in life may show variable patterns of partner influence. Among American teenagers presenting for antenatal care rather than abortion, women tend to report that their partners' support is important in their decision not to terminate the pregnancy (Henderson, 1999).

Several anthropologists have taken abortion as a central theme in their study of reproduction (A. T. Carter, 1995; Ginsburg, 1989; McClain, 1982; Scheper-Hughes, 1993b). Although many of these studies have focused on women's abortion decisions, access, and experiences, men's influences on abortion choices and outcomes also have been examined. For example, in her investigation of amniocentesis and abortion in New York City, Rapp found that partners' beliefs

greatly influenced women's use or refusal of prenatal tests like amniocentesis (Rapp, 1999). She examines the use of prenatal diagnostic procedures that identified potential risks of undesirable pregnancy outcomes, or those for which no therapy is available and abortion is often recommended by medical practitioners. In addition to describing the distinct experiences of women and men in genetic counseling (often mediated by ethnicity and economic resources), Rapp shows how important men are in the decisions women make about bringing disabled children to term. Women who felt that their male partners would love and help raise a disabled child were less likely to undergo such tests, relying heavily on their partners' beliefs about the desirability of a disabled child.

Browner's work on reproduction (1979, 1986, 2000; also see Browner and Perdue 1988) has consistently explored how men influence their partners' reproductive decisions and options. Browner's path-breaking study (1979) of clandestine abortion in Cali, Colombia, reveals not only the high percentage of intentional abortions (an estimated one-third to one-half of pregnancies in Latin America), but also the important role men play in abortion-related decisions. Browner argues that men in Colombia strongly influence their partners' abortion decisions, as women abort children to avoid becoming single mothers. In instances in which women were told directly or perceived that their partners would abandon them, they sought abortions more frequently and with more resolve.

Similar to Rapp, Browner (2000) has examined the use of fetal testing, conducting interviews in the United States among Mexican-origin parents with high-

risk pregnancies. She found that 50 percent of the women made fetal testing decisions independently of their partners, while 23.5 percent made decisions jointly with their partners, and that men made the decisions in the remaining cases. Structural factors, such as economic independence and the local health care system, affected women's decisions. However, Browner argues that these factors only become meaningful when interpreted through cultural processes. "Women incorporated the man if they were uncertain about his feelings about the pregnancy, and they wanted him involved in any decisions that could have long-term consequences for them both" (2000:81). Even when women are seen as solely responsible for decisions about testing and abortion, men are expected to play a supportive role. At the same time, Browner suggests that women are expected to shoulder the entire responsibility if something goes wrong with the pregnancy.

Men's Influence on Pregnancy and Childbirth

Unfortunately, the influence of men's intentions and practices on conception, pregnancy, and childbirth outcome have been little studied and are poorly understood within medical anthropology, even though pregnancy and childbirth have been studied by medical anthropologists in a variety of international contexts. In U.S.-based public health studies, male partners' intentions and desires have been shown as affecting the timing of a first pregnancy (Chalmers & Meyer, 1996), women's prospective desire for becoming pregnant (Lazarus, 1997), feelings upon learning of pregnancy (Major, Cozzarelli, Testa, & Mueller, 1992 and Mueller 1992), and subsequent changes in women's evaluation of pregnancy "wantedness", both

during pregnancy and postpartum (Montgomery, 1996). Understanding partner effects on "intendedness" of pregnancy is important in explaining such issues as desired family size, timing of first pregnancy, and women's completed fertility (Santelli et al., 2003). Also in the U.S. context, Joyce, Kaestner, and Korenman (2000b) show an association between the stability of women's pregnancy intendedness over time and partners' disagreement on the issue. Zabin, Huggins, Emerson, and Cullins (2000) found that women's desire to conceive is more closely related to their evaluation of their particular relationship rather than to abstract notions of completed family size. Such research suggests that women often define pregnancy intention as influenced by their relationship to their partners and their partners' desires.

One of the most important areas of reproductive health affected by men is pregnancy care and outcome. Yet, men's participation in and influence on prenatal care is poorly understood from an anthropological perspective. Extrapolating from the early anthropological ethnographies of human birth, Kay (1982a) lists some "extrinsic" factors of pregnancy, such as food, sleep, and the visible body, that may affect birth outcome. In her path-breaking but now somewhat dated review, men are listed as one of the extrinsic factors in pregnancy, with influences potentially leading to maternal and infant mortality.

Globally, there are as many as 600,000 maternal deaths each year, as well as a staggering burden of maternal morbidity (Khattab, Younis, & Zurayk, 1999; Koblinsky, 1995). Adequate prenatal care is consistently associated with the

detection of pregnancy conditions such as hypertension and anemia and its lack with poor pregnancy outcomes such as low birth weight and preterm births (Fiscella, 1995; Mustard & Roos, 1994; Quick, Greenlick, & Roghmann, 1981). Unfortunately, ethnographic information on prenatal care—its use and adequacy by women, as affected by their partners—is lacking in both developing and industrialized countries.

In the United States, one of the most consistent predictors of adequate prenatal care utilization is the mother's relationship with the father (Casper & Hogan, 1990; Gaudino, Jenkins, & Rochat, 1999; Lia-Hoagberg et al., 1990; McCaw-Binns, La Grenade, & Ashley, 1995; Oropesa, Landale, Inkley, & Gorman, 2000; Petersen, Alexander, D'Ascoli, & Oswald, 1994 and Kogan 1997; Schaffer & Lia-Hoagberg, 1997). However, research and interventions in the area of prenatal care, as well as other aspects of pregnancy outcome, consistently target women rather than men (Bloom, Tsui, Plotkin, & Bassett, 2000; M. Carter, 2002; Johansson, Nga, Huy, Du Dat, & Holmgren, 1998; Wall, 1998). This is due not only to the perceived need to channel resources to women during and after pregnancy, but also to the slowly changing perception that men are only tangentially involved in the mother-fetus health package (Gerein, Mayhew, & Lubben, 2003). Thus, most epidemiological investigations rely on indicators such as marital status rather than on more qualitative analyses of the relationship of women with their partners. Furthermore, very little research, if any, has been conducted on the kinds of care men provide

during pregnancy or the effects of such care on maternal reproductive health outcomes.

To date, anthropologists primarily have addressed men's influences on prenatal care in developing countries in only the broadest sense, examining how male-dominated biomedical services interact with existing pregnancy practices. For example, in discussing traditional midwifery in southern Oaxaca, Mexico, Sesia (1996) uses Jordan's concept of authoritative knowledge (B. Jordan, 1997) to argue that traditional midwives have maintained their position as primary sources of prenatal care because both male and female individuals in the community share midwives' medical knowledge. Conversely, physicians and other biomedical practitioners possess an authoritative knowledge base that is not evenly distributed or accessible by the community. Similarly, Sargent (1989) has argued that the encouragement of hospital-based birth by public health programs serving the Bariba of Benin has paradoxically limited women's reproductive choices by enhancing the power of male heads of households to make decisions about obstetric care. Among the Bariba, men's educational and occupational status affect women's prenatal and obstetric care choices because of the importance of emerging status distinctions within the community.

As the vast majority of maternal deaths occur during or within the first forty-eight hours after delivery, the management of obstetric emergencies has been one of the key points of intervention strategies in reducing maternal mortality. Frameworks for addressing obstetric emergencies refer to the "three delays":

recognition of an emergency, decision to seek care, and transportation to care. Men potentially affect the outcome of an obstetric emergency at all of these levels as partners, relatives, neighbors, and service providers (Network, 1992). Yet, few studies of any type directly investigate the actual roles men play during, or men's experiences of, obstetric emergencies. Information on men's involvement in obstetric emergencies usually comes from accounts provided by women after the event has occurred. Moreover, relatively few interventions have targeted men in obstetric decision making (Howard-Grabman, Seoane, & Davenport, 1994). An exception may be western highland Guatemala, where training programs for midwives and other community health care providers have emphasized men as involved in the negotiation of decisions during obstetric emergencies (MotherCare, 1996).

Unlike obstetric emergencies, preterm birth has proven resistant to intervention, with no predictive clinical markers, causing many clinicians to despair of lowering rates of preterm births below certain thresholds (Johnston Jr., Williams, Hogue, & Mattison, 2001 and Mattison 2001). Rates of preterm birth continue to show marked stratification between developed and developing countries as well as between different socioeconomic and ethnic groups within developed countries, such as the United States (Rowley & Tosteson, 1993). Although mechanisms of preterm birth are poorly understood, preterm delivery seems to be governed by two maternal physiological factors: a neuroendocrinological response sensitive to acute and chronic stressors and an immuno-inflammatory response sensitive to microbial

infections (in the form of bacterial vaginosis) (Wadhwa et al., 2001). These physiological pathways suggest several plausible mechanisms for men's influences on preterm delivery. For one, men may prove to be a source of chronic stress for women, or, alternately, they may alleviate other sources of chronic stress. Such chronic stress, often experienced years before pregnancy, has been hypothesized to "set" maternal reproductive physiology for early delivery (Hogue, Hoffman, & Hatch, 2001). Stress during pregnancy caused by men may also lead to premature delivery. Moreover, men may introduce infection into the vagina of a partner during pregnancy. Low birth weight is often an outcome of preterm birth, but is also caused directly by insufficient caloric and micro-nutrient intake during pregnancy. Because men mediate women's access to economic resources in many parts of the world, women's nutritional status, especially during pregnancy, may depend heavily on male partners and relatives. Yet, direct epidemiological evidence for an effect of paternal factors on preterm or low birth weight deliveries has been inconclusive (Basso, Olsen, & Christensen, 1999a, 1999b; Shea, Farrow, & Little, 1997). Nonetheless, after birth, the father's involvement in caregiving has been associated with improved outcomes for preterm and low birth weight babies' cognitive development (Yogman, Kindlon, & Earls, 1995).

Aside from the plausibility of men's influences, few anthropological studies have addressed men's relationships to their partners either prior to or after a preterm delivery, although some anthropologists have focused on the relationship between men's couvade symptoms (sympathetic pregnancy, which includes weight

gain, indigestion, and nausea), men's involvement in pregnancy, and pregnancy outcomes (Conner & Denson, 1990). Anthropological investigations of pregnancy and birth traditionally have focused on obstetric practices (Davis-Floyd, 1992; R. Davis-Floyd & C. Sargent, 1997; Kay, 1982b), as well as women's birth experiences and care decisions (Sargent, 1989). Although a recent emphasis on power differentials negotiated in obstetric care points to the role of men (R. Davis-Floyd & C. F. Sargent, 1997), more qualitative research from an anthropological perspective is needed to include men as a major part of women's social environment in both pre- and postnatal health.

Men Causing Fetal Harm

The impact of occupational risk factors on reproductive health has been one area of research on men that predates the ICPD paradigm shift (Sever, 1981; Sinclair, 2000; Steeno & Pangkahila, 1984). However, the majority of studies have focused on the effects of different occupational exposures on men's, rather than women's, fertility and reproductive well-being. Much less research has been done on the effects of men's occupational, environmental, and lifestyle toxicant exposures on women's reproductive health and birth outcomes (D. L. Davis, Friedler, Mattison, & Morris, 1992). Yet, birth defects are more often associated with paternal rather than maternal DNA damage (Pollard, 2000). With the increase in industrialization and the proliferation of new chemical compounds that are potential endocrine disrupters, the magnitude and effects are likely to increase. Theoretically, exposures that could transmit harm to a fetus might damage the paternal germ line, the cells

from which sperm cells are produced. Paternal exposure to mutagens, in particular industrial aromatic solvents, is highly associated with impaired semen quality (De Celis, Pedron-Nuevo, & Feria-Velasco, 1996; Tielemans et al., 1999), and may lead to adverse pregnancy outcomes such as spontaneous abortion, congenital malformation, and low birth-weight/preterm birth (Brinkworth, 2000). Lifestyle choices such as smoking, drinking, and drug use also may affect semen quality, but results are equivocal, with little research directly connecting men's use of substances to fetal harm.

In considering fetal harm in the United States, Daniels (1997, 1999) describes a complex web of relationships, including institutional and social ones, affecting reproductive health while still emphasizing the importance of the individual as a locus of responsibility. Even given the limited conclusive evidence for transmission of fetal harm through occupational and environmental damage to paternal germ cells, Daniels argues that paternal exposures profoundly influence fetal health. Moreover, Daniels examines perspectives on men and fetal harm as emblematic of broader attitudes toward men's responsibility for social reproduction. "Crack babies" are the children of "pregnant addicts" and "absent fathers"; these are the terms framing discussion over fetal harm, such that men are protected from responsibility while women (predominantly African American women) are criminally prosecuted for fetal neglect and abuse. "Debates over fetal risk are not so much about the prevention of fetal harm as they are about the social production of truth about the nature of men's and women's relation to

reproduction" (1997:579). Daniels suggests that notions of masculinity that deny male health problems project vulnerabilities onto the bodies of women. Sperm is thus either classified as damaged and incapable of fertilization, or as unaffected and potent, while women's bodies are characterized as highly vulnerable to occupational reproductive risks (Martin, 1987). This all-or-nothing approach suggests that abnormal or damaged sperm are incapable of causing fetal harm such as birth defects.

Daniels argues that male vulnerability must be recognized and suggests that targeting select groups of women (and men), such as those who use crack cocaine, obscures the institutional and structural causes of fetal harm. Just as Daniels argues it is impossible to separate responsibility for fetal harm along the lines of men/women or institutions/social structures, so too is it impossible to isolate who suffers from fetal harm. Men may "cause" fetal harm involuntarily through occupational exposures that affect their semen, and at the same time suffer the feelings of compromised reproductive health if a pregnancy results in spontaneous abortion. Recent anthropological studies of pregnancy loss cross-culturally (Cecil, 1996; Layne, 2003) suggest that men are caught in a double bind: they feel the need to avoid showing emotion so they can support their partners through the physically difficult experience of pregnancy loss, at the same time experiencing similar emotions of the grief and loss experienced by their female partners. This is perhaps especially true as prenatal ultrasound imaging technologies have changed men's

expectations of paternal bonding to unborn fetuses (Layne, 1992, 2003, 1999; Morgan & Michaels, 1999).

As Daniels argues, this area of reproductive health requires different definitions of rights and responsibilities for men and women based on their varying contributions to fetal harm. Anthropological research has the potential to describe different perceptions of rights and responsibilities depending on the actors involved in reproductive health—mother, father, and fetus. Rather than straightforward and constant agents, "mother," "father," and "fetus" are ideological concepts with reproductive health states dependent on their definition (Morgan & Michaels, 1999). Because reproductive health depends on more than one individual, the idea that the individuals involved can be multiply defined—not just in terms of their rights and responsibilities but in terms of their identities and the boundaries between them—deeply affects how reproductive health may be achieved in any given setting.

Chapter 4: Masculinities and Reproduction in Jun

In this chapter and the next I look at the way men in the communities of Jun and Keb' think about some of the issues involved in reproduction, including pregnancy, childbirth, and fathering. I place this discussion in the context of men's ideas about what it means to be a man, including their insights into being K'iche' Maya men. I will then discuss some of the gendered relations that structure and stratify reproduction in Jun and Keb'. As I asserted in the introduction, these data suggest that men derive important aspects of their masculine identities from their communities, even while models from outside the community may influence local masculinities. Reproduction, both in terms of having had children and having healthy families, is an important aspect of ideal masculinity in both communities. I start with a review of anthropological perspectives on reproduction in Guatemala. Then, using interview data with married men with children and unmarried men without children from both communities, I elaborate on relationships between masculinity and reproduction in Jun and Keb'.

Maya identity and Maya reproduction in Guatemala

Smith (1995) historicizes household reproductive relationships in Guatemala against a backdrop of ethnic, gender, and class relations. She examines why Maya women rather than men are often accorded the job of maintaining symbols of ethnic identity through dress, language, and behavior, especially among subordinated/oppressed/colonialized groups. In her analysis, she suggests that race, class, and gender are structurally related as "cojoined systems of belief about

identity and inequality" (C. A. Smith, 1995, p. 724). She argues that, in Guatemala, "ideologies of descent and rules of marriage" support these relationships, focusing on women as the bearers of ethnic identity.

In colonial Guatemala, this meant that Creoles (those of only Spanish descent) maintained blood and class purity through a system of segregated marriage. Men married women of their own class and race, who would bear legitimate offspring. Sexual relations with non-European indigenous women were sanctioned and might lead to children, but those children would remain unrecognized. This process of *mestizaje* produced a class of individuals outside the wealthy Creole and subordinate indigenous groups, called *ladino* in Guatemala, which formed a poor working class that adopted Iberian norms of sexual and reproductive relations. In present-day Guatemala, *ladino* refers broadly to the vast majority of Guatemalans who do not identify as indigenous and includes individuals from all economic strata, including the very wealthy, the middle class, and the poor (cf. R. N. Adams, 2008; Arenas Bianchi, Hale, & Palma Murga, 1999; Grandin, 2000).

Many Maya communities have remained culturally distinct, continuing to speak Maya languages and retain patterns of dress recognized as indigenous, and Smith recognizes an important role for women in maintaining these elements of Maya culture. Smith argues that the "maintenance of Maya women's parochialism (through dress and language) helped to maintain Maya women as marital partners for Maya men … Maya women were seen to be (and were) the reproducers of the Maya community, both culturally and biologically … ethnic identity and Maya

community solidarity was based on the reproductive control of traditional Maya women" (C. A. Smith, 1995, p. 738). However, Maya communities' resistance to *mestizaje* has been incomplete and inconsistent over geography and time (Esteva Fabregat, 1995; J. Hawkins, 1988; Nelson, 1999). Some of the ethnographic studies of Maya groups documented growing economic and social pressures of industrialization portending assimilation (Redfield, 1950; Redfield & Villa Rojas, 1934), and Nash's work in Cantel focused on industrialization as a modernizing force threatening Maya culture (Nash, 1973). Nash's work recognized a particular influence of industrialization and assimilation on Maya men in Cantel, as they were participating in factory work with *ladino* foremen and co-workers, and indeed the greater pull of *mestizaje* on Maya men has been examined, and is a foil to Smith's argument. Moreover, increasingly scholars have noted that partial and often strategic adoption of some *ladino* elements has likely over time strengthened Maya communities and allowed for their ongoing existence (R. N. Adams, 2008; Grandin, 2000; Little, 2008). But I accept Smith's broader argument that Maya women's language and dress have operated to help maintain Maya communities in part by marking women as the reproducers of those communities. I will extend that argument to suggest that this maintenance of Maya women as cultural and biological reproductive partners for men has allowed men to interact more flexibly with *ladino* culture and economies while simultaneously maintaining their communities and ethnic identities without risk of complete assimilation.

Bossen (1983, 1984) outlines differences in the sexual and reproductive practices between ethnic groups in late 20th century Guatemala. In working with four different populations in Guatemala in the late 1970s, she describes variation between plantation workers, urban squatters, urban upper class, and an indigenous community. She finds that gender relations are more equal in the indigenous village in which she worked because women make essential contributions to the household in communities less integrated into the world capitalist system, even as responsibilities for reproduction and child care prevent indigenous women from greater participation in the formal economy. "Because child rearing remains a cottage industry, it is costly for the formal sector to accommodate to its very different rhythms and requirements" (Bossen, 1984, p. 319).

Grandin's historical work (1997, 1998, 2000) traces patterns in the shifts of race-gender-class over time for K'iche' Maya. His archival work is serendipitously situated in Quetzaltenango, the large regional center near Jun, although his arguments have important implications for K'iche' and other Maya groups more generally. Grandin argues that, rather than leading inexorably to the erosion of ethnic identity, "Guatemala's capitalist development allowed for an intensification of ethnic identity, even as class divisions were forming" (Grandin, 2000: 130). Prior to coffee, Guatemala's sluggish economy had had little need to integrate a largely indigenous agrarian sector.[12] He argues that, beginning in the mid 19th century,

[12] A situation different from, for example, Mexico, where greater economic activity meant indigenous groups were included in nationalist discourses of *meztizaje* (Bonfil Batalla & Dennis, 1996).

K'iche' elites responded to liberal reforms by attempting to create an ethnic identity that did not equate ethnicity with class, or being Indian with being poor.

Changing economic relations strained the meaning of K'iche' ethnicity and kinship, with changes that were felt directly in the household.

> "…the household was the basic unit of Quetzalteco society: it afforded male patriarchs a competitive advantage in their dealings with Ladinos and provided women with a form through which they conducted their economic activities and made claims on patriarchal obligations…Reflecting the change from a primarily peasant subsistence economy to a commodified artisanal-commercial economy, families were shrinking…" (Grandin, 2000: 183-84).

Grandin notes that, over the course of the 19th century, K'iche' fertility fell from an average of five to four children per woman, going on to observe the following:

> "Further, despite the naturalized assumptions of blood determinism prevalent among Quetzalteco K'iche's, reproduction of the collective took place more through cultural affiliation than endogamous biological reproduction. While there were strong cultural pressures promoting endogamy, intermarriage both with residents of other indigenous towns and with Ladinos continued apace. … As Quetzaltenango was transformed into a more integrated urban economy, the immediate family – represented by a father, a mother, and a reduced number of children – gained in prominence" (Grandin, 2000: 187).

Grandin argues that, at the turn of the 20th century, symbols of ethnic identity became prominent even as, and moreover *because,* urban K'iche' were becoming more urban and better educated, when they were switching from agricultural to artisanal production, and most importantly, as they were taking on more trappings of Ladino culture, including intermarriage.

Men and Reproduction in Jun

Marriage and reproduction in Jun operate to reproduce class distinctions between communities in that 1) endogamy maintains community status and prevents members of other communities from easy in-marrying, and 2) economic relationship between households, such as the contracting of apprentice laborers in weaving communities, occurs through ties of kinship. Like many Maya communities, most households in Jun have male heads of households that occupy positions of authority, ownership, and control of resources – broadly speaking, patriarchal.[13] Jun's families follow social conventions such as early marriage, patrilocal residence, and land inheritance patterns[14] present in many K'iche' communities (cf. J. P. Hawkins & Adams, 2005).

Table 4.1 presents descriptive data from Jun from the reproductive health survey conducted with women of reproductive age; data presented are from women who had ever been pregnant. The average age of women interviewed who had ever

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[13] In discussing patriarchy in Egypt, Inhorn (1996) defines patriarchy as "characterized by relations of power and authority of males over females, which are (1) learned through gender socialization within the family, where males wield power through the socially defined institution of fatherhood; (2) manifested in both inter- and intragender interactions within the family and in other interpersonal milieu; (3) legitimized through deeply ingrained, pervasive ideologies of inherent male superiority; and (4) institutionalized on any societal levels (legal, political, economic, educational, religious, and so on)" (pp. 3-4). Therborn (2004) notes that patriarchy "has two intrinsic dimensions. The rule of the father and the rule of the husband, in that order. In other words, patriarchy refers to generational and to conjugal family relations or, more clearly, to generational and to gender relations" (p. 13).

[14] In Jun, while daughters might inherit land, most did not, and their inheritance was often limited to a small plot of land large enough for an existing house or house construction and a small adjacent *milpa.* Sons often inherited land when they married, while daughters might not inherit until the deaths of their fathers. I was told the rationale for this by one father, Don Lorenzo, was that women would not need to inherit land because their own husbands would have land when they married. This pattern in Jun is similar to that described by Green (1999) in the department of Chimaltenango, where she (like Don Lorenzo) notes that patrilocal residence patterns limited female inheritance. Notably, Don Lorenzo's own daughters lived close to or with him, their husbands had moved to live with them, and his daughters inherited land from him, although it was less than their brothers.

been pregnant was 31.1 years in Jun. Women in Jun reported receiving 3.5 years of education, and 83.3 percent of these women reported ever attending school in Jun. In Jun, 88.0 percent of women were literate. Over half of women in Jun were Evangelical Protestant (53.3 percent) and 42.0 percent were Catholic; importantly, there were no significant associations between religion and other variables such as income level and education in cross-tabulation (data not shown). The majority of women who had ever been pregnant were currently married or in a union, with 95.3 percent in Jun. The women in Jun were fairly evenly divided in terms of numbers of years of husband's education, income level, and if husbands accounted for 100 percent of the household income. About 58 percent of women reported that they made decisions about food purchases without any input from their husbands. About 24 percent of women said they were solely in control of household funds, while another 29 percent said that they did not control household money at all; the remaining 47 percent of women reported shared responsibility for household money with their husbands.

Table 4.1: Descriptive statistics, Jun (N=600)[15]

		N (%)*
Women's age, mean (SD)		31.1 (8.0)
Years of education, mean (SD)		3.5 (2.4)
Woman's age	18-24 25-29 30-34 35-39 40-44 45-49	160 (26.7) 108 (18.0) 124 (20.7) 96 (16.0) 64 (10.7) 48 (8.0
Ever attended school	Yes	500 (83.3)

[15] For all tables, cells that do not add to 100 percent represent missing data for that cell, with percentages of the total sample reported.

	No	84 (14.0)
Less than 6 years of education	Less than 6 6 or more	388 (71.8) 152 (28.2)
Languages spoken at home	Spanish K'iche', Ixil, or both Spanish and Mayan	136 (22.7) 288 (48.0) 40 (6.7)
Religion	Catholic Protestant Maya/other Non-practicing	252 (42.0) 332 (55.3) 4 (0.7) 12 (2.0)
Maternal literacy	Yes No	528 (88.0) 72 (12.0)
In a union	Yes No	572 (95.3) 20(3.3)
Husband's education < 6 years	Yes No	254 (47.1) 286 (52.9)
Total bi-weekly income less than Q600	Yes No	322 (61.8) 199 (38.2)
Husband contributes < 100% of income	Yes No	219 (45.5) 262 (54.5)
She alone decides food purchases	Yes No	338 (57.8) 223 (38.1)
She alone controls money	Yes No	131 (23.9) 418 (76.1)
She does not control money	Yes No	159 (29.0) 390 (71.0)

* where noted, mean and standard deviation (SD) are reported.

To investigate men's ideas about marriage, family, pregnancy, childbirth, and contraception I conducted open-ended interviews with more than two dozen men, most of them married and a few of them single. Some of these interviews were more formal and semi-structured, while others were more opportunistic, taking advantage of conversations and sometimes occurring in group settings, such as on the twenty minute ride to a soccer game in the bed of a truck, or at night at the *auxiliatura*. Some of these men I had the opportunity to know very well, living in or near their homes, sharing meals, or spending time in their company, while others were more casual acquaintances that played on the same soccer or basketball team, or that other men or women introduced me to solely for the purposes of the

conversation I hoped to have. Several of their life history and reproductive loss narratives will be presented and considered in more depth in later chapters. These data give important insights on local ways of being a man with respect to reproduction.

Marriage

Local norms and expectations for newly married couples in Jun exemplify community-level practices that reinforce male authority. Esteban, a married schoolteacher, described for me in detail local *pedimientos,* (literally, "asking") a ceremony in which a young man, accompanied by his family or a local matchmaker, or both, call upon the father of a woman in order to ask permission to marry. The mechanics of the ceremony are somewhat ritualized, with prospective husbands sometimes turned away multiple times before an offer of marriage is accepted. Esteban recounted his own *pedimiento* as a gut-wrenching event in which a sweaty-palmed younger version of himself and his stone-faced future father-in-law played prominent roles, along with what sounded like copious volumes of smoke and alcohol that are brought along as gifts. Once an offer is accepted, family members from both sides give advice to the new couple. Men are counseled to give up their roaming in the streets, to work hard, and to make enough money to provide an allowance for his new wife. Young women, on the other hand, are advised to maintain themselves and their households – to wash their dishes and clothes, to comb their hair, to sweep and clean daily, to prepare meals, and to respect her new parents-in-law. Men are expected to earn money, while women are expected to

maintain their households and raise their children. These themes were also in the Catholic and Evangelical wedding ceremonies I attended in Jun, but not quite at such specific level of detail. While many women may work in jobs such as embroidery, selling produce or other goods, or helping with household industry, such as dyeing thread for male weavers. The roles enumerated in the *pedimiento* suggest that economic contributions are ideally supplementary and men's earnings are primary and necessary to ensure marital harmony. This is true even as women's contributions to household maintenance and childrearing are highly valued; in fact, women enable men's economic activity as explicitly stated in some *pedimientos.* Esteban said that at his ceremony he was reminded that men (in particular young men) are at base "wild animals running in the streets" and required the influence of women for a successful, productive household.

Moreover, women were at risk of being overwhelmed by household responsibilities, which Esteban pointed out in further discussing the importance of washing clothes and combing hair.[16] Keeping both hair and clothes clean and well-kept signified that the household was well-managed. Unwashed and unkempt hair and clothes let the community know that a woman was unable to maintain herself

[16] Maya women's clothing has been briefly discussed already in this dissertation and has been the subject of over a century of academic research. Maya women's hair might be just as important a signifier and source of analysis, as it certainly is for many women themselves. Risking generalization, most Maya women have thick, straight, long, shiny jet black hair, and by these women's standards the straighter, thicker, shinier, longer and darker, the better. Women generally wear their hair drawn back, in braids, or in braids drawn back; a woman with her hair down has usually just been combing it, is combing it, or is about to comb it. Combing one's hair can be for many women a moment to relax or reflect. Women may touch, stroke, or braid another's hair as a sign of true appreciation of the hair's beauty; women may even say that they are irresistibly drawn to touch another's hair. Some women have somewhat wavy, curly, or even kinky hair; such, it would seem, are the exigencies of an unknowable God, who hopefully provides them with other gifts. Many Maya women keep their black hair their entire lives, even into old age, but grey hair is tolerated.

or her household; a grave insult indeed was to accuse a woman of being unable to keep even her hair clean, as the broader social implications are clear.

Money and marriage

Although several different systems for managing household funds exist, including pooling of funds and individual management of funds, in most families men provide a weekly or biweekly allowance to their wives for buying food and other supplies. Most men speak of weekly expenses in terms of these allowances,[17] while most women know exactly what they spend each week by item. For expenses beyond these allowances, women must confer with their husbands. Women tend to know their husbands' weekly pay and may directly manage their husbands' entire income. Finally, for major expenses that affect women's allowances, many men confer with their wives.

Children and marriage

Reproduction plays a major role in justifying marital arrangements for both men and women. Couples are expected to begin their reproductive careers as soon as possible after marriage – even if they intend to have few children and later want to space their births, most couples are not averse to having a child soon after marriage. Moreover, social pressures to have children exist both within the extended family and within the community. Women who do not have children within the first year after marriage may be accused of their mothers-in-law and

[17] Drawing strict distinctions between allowances and pooled resources may be somewhat misleading. Many men may give their wives a weekly "allowance" that is in fact all or the majority of their weekly income, which is immediately spent on that week's food and household needs.

others of using contraception, of infertility, or of having sex with other men. Marriages that do not produce children in their first years may result in verbal and physical violence against women and/or eventual dissolution.

I learned about the consequences of infertility in detail in conversations with Hugo. He described his own marriage and his personal difficulties with alcohol abuse. When I spoke with him, he and his wife were separated, although they were working on living together again, contingent on his maintaining his sobriety. Hugo felt that problems in his own marriage were due to his drinking, but he said that he felt like his drinking had worsened early in the marriage because they did not have children in more than a year. He said he was at loose ends, frustrated that his wife had not conceived, and found himself going out to the street to drink. He was ashamed of this, and ashamed to admit that he had hit his wife. By the time they had their first child (and a second soon after) he was already abusing alcohol. Hugo discussed a friend of his, who had left his wife after two years when they did not have children together. He took a second wife, and they also did not have children. Hugo had conflicting opinions about this. He said that it seemed obvious that it was very likely that it was his friend who was unable to have children, and that men should seek treatment for infertility and not be afraid to do so. At the same time, however, he expressed clearly that, if in this case the wife had been infertile, his friend would be justified in dissolving their marriage. "Why," he said, "should he not have children if the fault is the woman?"

Early marriage in Mayan communities is structured to produce early reproduction. Young women – often in their husbands' natal home and under the watchful eye of their mothers-in-law – are expected to help support the household through cooking and cleaning and maintaining a fairly constant presence within their homes. Men and women alike fear women's working too much outside the home because, should women not have children early, their work outside might been seen as a *discuido* (or carelessness) that was the potential cause of their problem. Work is a hot activity, and too much heat from work could prevent pregnancy. Work outside the home comes with innumerable encounters with dangers, ranging from bad air, cold air, colds and headaches, coughs, and *susto* and *mal de ojo*. It is women's responsibility to become pregnant and to bear and rear healthy children, while it is men's responsibility to provide the material conditions that make pregnancy and family life possible.

I was given a very explicit picture of this model of family and household in the context of an Evangelical religious discussion given by Luis.

> Life is very difficult – it is like a tremendous rain. It is the work of the mother to protect her children. She wraps her arms around them and pulls them to her, and they stay warm and dry. But then she gets wet, because her back is to the rain. What is the problem? It is the work of the father to put his arms around the mother and the children, to protect them all at the same time, even as the mother is protecting the children. But then he is wet! The father needs something to hold over his head, and that is the Bible, which protects him from the rain. And God knows that this family can take the rain, but God is also the sun.

While the logic of what determines who covers whom and who holds the Bible may be unclear, the imagery (and hierarchy) is striking, and I will return to this position for men as protectors, but at a remove, in discussing decision-making.

Pregnancy

Men who were already fathers had a variety of attitudes toward men's roles in pregnancy and reproductive health, which they related with their personal experiences. Men described pregnancy as a time in which their roles in their households changed vis-à-vis their wives, and mentioned seeking to help their wives in several areas. This included providing their wives with more food, especially meat, fruits, and vegetables, along with specially requested foods women might occasionally ask for during pregnancy. These foods were seen not only as providing happiness to their wives in the moment, although men did comment that they felt happiness when they were able to procure a particularly tasty or ripe fruit that their wife had asked for. Geronimo and Pablo mentioned that extra care and affection were necessary during pregnancy because both the woman and the fetus could appreciate the care they were given and the fetus would grow more completely. At the same time, however, much of pregnancy is seen for men through the focal lens of childbirth. Men like Renaldo mentioned that the foods that they provided would ease women's pain in the moment of childbirth because the demands of the infant had been placated during pregnancy. Heavy lifting and difficult labor such as working outside in fields were mentioned as things for women to avoid and for men to take care of, both to reduce the chance of miscarriage as well as to make the moment of childbirth less problematic, both in terms of pain and duration as well as other complications such as exhaustion and hemorrhage. A woman who had exerted herself during pregnancy might not have the strength for childbirth. Men

associated heavy lifting in particular with vulnerability during pregnancy and risk of miscarriage. Esteban mentioned having had an aunt in another community who lost a pregnancy after lifting a heavy basket of corn and "opening" her back. Many women of course did continue to do work through much of their pregnancies, but from my observations the prohibition against heavy lifting was widely endorsed and adopted. As an example, I did see women who were pregnant carrying very heavy loads balanced on their heads, but always asked for help placing or removing them.

Men said that providing more money for their wives during pregnancy was also important, so that she could increase her discretionary spending on food and medicines, in particular fruits and vegetables and prenatal vitamins. Prenatal visits, be they to a *comadrona,* a health post, or to some other health provider were mentioned by many men as important during pregnancy. While many men said that they did not go with their wives to prenatal visits, most expressed that it was important that women should go to these appointments and that one of the men's roles was to make sure that women went to these visits. For Hugo, who had been on his best behavior during his wife's second pregnancy, this meant making some extra time for his wife, contributing occasionally with afternoon childcare and feeding for their younger child when his wife had had appointments. Men who did not go to prenatal appointments gave several reasons for not going. Lorenzo and Marcos mentioned that prenatal appointments, like other health care visits, lay in the realm of "women things" or were "of women," areas of which men were largely ignorant

and which men should not intrude upon, both because men themselves might have some *verguenza,* or shame and embarrassment, as well as causing *verguenza* for their wives. Regino noted that "I cannot imaging sitting in that waiting room with all of the other women. They would laugh and talk." Other men, like Daniel and Alfonzo, went with their wives to as many prenatal visits as they could. They expressed that they felt it was the responsibility of men to accompany pregnant women both to help her with transportation or walking and to avoid problems "in the street" as well as to be present to hear information that was given during the visit.

Married men described some of the stresses that they experienced during pregnancy. They described one of the foremost concerns as the expense of pregnancy and of delivery. According to Pablo, "If you can, you already start saving, little by little, because you know that you want to have another baby sometime. Maybe she has started talking about how it would be nice to have another baby, and so you know it will happen. If you save like that, then maybe you don't even feel it. But sometimes she is all of a sudden pregnant, and you have to think about money, and that can be hard." Men agreed that this saving during pregnancy was of key importance and was a man's responsibility. Along with some savings, men work during pregnancy to have baby clothes and cloths that can be used as diapers ready for the birth. Some of the men also mentioned knowing a neighbor who might provide transportation in an emergency was important, even if they did not personally own a vehicle.

Men might not save money for a variety of reasons. They might be very poor, with no margin for savings, even if they work harder while their wives are pregnant. They might already owe money. They might have no foresight, and not realize that they might have major expenses associated with the pregnancy. They might be fiscally irresponsible, attempting at times to save but spending their money all at once on some large expense, like alcohol or new clothes. Whatever the case may be, the married men with whom I spoke occasionally expressed contempt for men who did not save during pregnancy, but they universally had pity for the situation in which a man who had not saved might find himself. Cornelio said, "If you do not save, then at the last moment, you may have to go around and borrow. You may have no plan and then what can you do? You have to go to your neighbors and ask, and it is very hard." Two men recounted their savings plan in detail. Carlos gave a weekly allowance to his wife for household expenses, and once he had found out that she was pregnant he had given her an additional money each week to cover the cost of her *comadrona* visits, any additional medicines, vitamins, or groceries she needed to buy, and to save for the delivery. She was in charge of the extra money, which she kept track of, and by the end of the pregnancy they had some savings. He also said that he ordinarily "kept money stored" on hand that he sometimes used for personal for family expenses, but that during the pregnancy he thought of this money as for the delivery, too, and so would be available in case of an emergency. Hugo, on the other hand, gave his wife a lump sum early in the pregnancy, which he would add to as the pregnancy went on now and then when he had extra money.

This fund was in addition to money he would give his wife for each of her *comadrona* visits. Some men like Alfonzo already had savings in the bank prior to pregnancy and they said that they would draw upon in case of emergency, but Alfonzo said that he would also put aside money during the pregnancy because it was good practice for when the baby was born and you would have new expenses, like it or not.

Prenatal care was sought from a variety of sources, but the vast majority of women received their prenatal care from *comadronas,* or traditional birth attendants. A few women sought prenatal care from physicians either in the community or in the nearby regional capital. An important distinction for traditional birth attendants from the perspective of the departmental Ministry of Health is that between empirical *comadronas,* or those lacking official training, and *comadronas* who had received official training in midwifery practice from the ministry of health or another approved organization.

The men that I spoke with did recognize that there was a difference between midwives, but for them the distinction was between a *comadrona* who had been practicing for some time and who was known to have had many successful deliveries. At the same time, however, some men mentioned that some of the women who were practicing as *comadronas* were very old and they wondered if their skill were in decline or if they had the best training, even given their many years of experience. The most highly recommended *comadronas,* according to these men, were those who had many years of successful deliveries while at the same time

were not so old that they had not had some more formal training. Men mentioned geographic proximity as important – as Pablo said, "It is hard on the woman when she is pregnant to walk very far, so it is good that [the *comadrona*] is so close." And Hugo said "she went to the *comadrona* that is just over there (gesturing to a nearby household) because she [the *comadrona*] may have to come very quickly or in the early hours or in an emergency." Men also expressed preferences for going to *comadronas* to which they had some connection, either because their wife, sister, or other close female relative had gone to that *comadrona* in the past or because the *comadrona* was herself considered a family relation. That relationship was important because it would increase *confianza,* or confidence/trust, on several levels. It would increase the amount of trust that a pregnant woman and her male partner would put in a *comadrona* in terms of their perception of her investment in the outcome of the delivery as well as their trust that the delivery would result in a good outcome for both mother and infant, as they felt that they would have more information on the *comadrona* who was also part of their family. Working with a *comadrona* who was a part of the family also meant that there was likely less invasion of privacy of the home and its inner workings and daily dynamics. Because *comadronas* often visited women in the pregnant woman's own home, especially in the later weeks of pregnancy, it was preferable to have someone come into the home who was not a stranger or even infrequent visitor and who was less likely to engage in gossip about the family and the home. Indeed, some men characterized *comadronas* generally as busybodies who liked to walk

about in the street freely and go into whatever home to inspect and pass judgment on what they saw there and to spread rumors; for instance, about the cleanliness of the home and its upkeep, the neatness and dress of the children, the preparation of food and its quality, or the relationships between husband and wife, parents and children, or any other family members that might be living in the household.

Most of the married men did have some idea about the content of prenatal visits. They responded that generally the *comadrona* would talk with the woman, ask her about any complaints like back pain or swelling inquire about her diet. They said that the *comadrona* would also examine the size and position of the fetus, sometimes using corn oil on the woman's abdomen to give a massage or to help make checking the position of the infant easier. Of the men I spoke with, none had been present when a *comadrona* had conducted an external version, or rotation of a breech fetus (head up, feet down) to the cephalic (head down, feet up) position through external massage, but most said they knew that it could be done.

An important consideration, in terms of both prenatal care and delivery, was that infants be born within the community if possible. Several men confided that they would not want their child to be born in the regional hospital because the child's birth certificate would then say Quetzaltenango rather than Jun. This might lead to legal issues in the future (e.g. complicating landholding in the community) while at the same time complicating the identity of the child as truly from Jun.

Delivery

Most of these men said that they had been very lucky in that their wives had not experienced any medical complications during their pregnancies, and that overall their worries during had been related to delivery and having a new infant. Childbirth for these men was generally experienced as a stressful experience, even if labor was brief and the outcome positive. Men described different roles that they played during the birth of their children. Guillermo described sitting with several other adult relatives outside the bedroom at his home where his wife delivered. He believed the labor lasted about 8 hours, but he was not sure exactly how long it took because he was so preoccupied. "It was the first [delivery] and I did not know what to expect. Our parents do not tell us about these things. My brother was there and told me to wait, to be patient, and to pray. We pray a lot at that time because we want everything to come out well." Geronimo said that the *comadrona* told him to stay out of the delivery "because it would give the woman *verguenza* to be seen at that time." Esteban, on the other hand, said that the *comadrona* at his wife's deliveries "always came and got me and told me to watch the delivery. She said she wanted me to see the pain of the woman so that I would understand her pains." Men's greatest worries are that their wives will have a complication during their pregnancy. Men with whom I talked said that the complications that they worried about most included bleeding, a long delivery, or that the cord would be tangled around the baby. Most men said that they did not have very detailed concepts of the specifics of obstetric complications – that this was the domain of the *comadrona,* but

that ultimately they were worried that the baby would be born with some heal problem or birth defect, or that the baby would die, that the woman would die, or both would die.

Mediating these fears for most men was the anxiety surrounding what they would do in the event of an obstetric emergency. Men mentioned a number of preoccupations that they had, foremost being transportation. Most of the men said that it would be possible to call the hospital for an ambulance, but that they were skeptical about how long it would take the ambulance to come given the distance and road conditions and that they did not want to have to wait so long in the event of an emergency.

Some men like Cornelio did not own a vehicle, but had neighbors that they could ask if there was an emergency. "I talked to them [his neighbors] before the delivery and we had an understanding [about transportation]. Other men, like Hugo, said that they did not explicitly discuss emergency transportation before the delivery with any of their neighbors, but felt comfortable that they knew of neighbors to whom they could go for transportation. And a number of men did have access to transportation, such as personal cars or buses.

Men were clear that transportation was not a given, even in the case of a serious obstetric emergency. Several of the men recounted stories of other men in the community going between different houses in the dead of night and having difficulty finding transportation. The men with whom I talked felt that this, while pitiable, was also completely understandable. They said that the men who own cars

or trucks were under no obligation to make these late night trips to the hospital. By the same token, then, those who were willing to provide transportation in the case of an emergency were not expected to provide these services without due payment. Lorenzo noted, "Fuel costs money. Trips cost money. You do not have to give these things away." The few cases I heard about in which men described delays finding transportation in the case of an obstetric emergency were those in which they did not have payment for a ride at the time of the emergency. However, the men with whom I spoke were clear that, even if payment were available, drivers were not obligated to make these emergency trips. Pedro, who had access to a car, said "If you make a trip, then everyone will expect you to make trips all the time. We do what is possible, but sometimes it is not possible." Men said that the men who had difficulty finding transportation might be angry with those who would not provide a ride, but that the community in general was not.

An emergency trip to the hospital, however, could be a very problematic decision, even when transportation was available. Men enumerated a number of factors that they felt might influence decisions to go to the hospital in the event of an obstetric emergency. A large concern and potential obstacle was cost. While care in the regional hospital was ostensibly free to citizens, men's experiences with hospitals for other issues, such as the care of older relatives, suggested to them that there would be other out of pocket expenses that they would have to pay if they did go to the hospital, such as expenses for medicines or equipment used during the delivery and recovery. Men felt like this was particularly likely to be true if there

were a complication that might lead to surgery, such as a cesarean section, or if there were complications that would require longer-term care and possible hospitalization for the infant and/or mother, such as prematurity or congenital defects. These real and potential costs affect men's decisions about how to approach an emergency, or at what point to make a decision about going to the hospital. Pablo said "You are waiting to hear, and the *comadrona* will tell you if there is a problem, but you will make the decisions – that is what a man has to do."

From my conversation with *comadronas,* I know that many different women are often directly involved in emergency obstetric decisions. First and foremost is the *comadrona,* who is the respected authority about complications. However, in some cases, such as if the *comadrona* is younger, less experienced, or attends relatively few deliveries, in the event of a complication a more experienced *comadrona* might be called – sometimes as the first *comadrona's* explicit request, sometimes not. The woman who is delivering may have made her wishes about going to a hospital known prior to delivery or at the time of a complication, and I heard of more than one case in which a woman is said to have cried out "I would rather die than go to a hospital" through her labor pains. Female relatives of the couple may also play important role in decisions about how to manage delivery, including the male partner's mother, who is likely to be present and may attend the delivery herself, given patrilocal residence patterns in Jun.

Some men of course defer entirely to the decisions of the *comadrona* and other women, and the complication may not be entirely clear, even to the most

experienced *comadrona,* and decisions are discussed. But my data and observations suggest that it is within men's understood rights to make decisions, even when that decision is to defer to others. In some cases in which men refuse a *comadrona's* suggestions, other authorities, such as the father of the female partner or even the *alcalde auxiliar* are brought to the situation.

An additional preoccupation for men and women is how women will be treated in the hospital. Men know that, as a matter of routine, women will have their clothing removed and that they will be subjected to multiple vaginal exams, likely by both male and female hospital staff. The idea that women will be, for all practical purposes, naked in their hospital beds, exposed to staff members and possibly others if there are no private rooms available for delivery, is very difficult for men and women. Regino said "It gives us shame for the woman to have her clothing off, to have them touch the woman. That is what happens in the hospitals and it gives shame to the woman and shame to the man." Women that I spoke with confirmed this feeling, and noted that they are vulnerable to this shame for some time after the delivery in a hospital, with neighbors sometimes talking behind their backs that they were touched in the hospital by others.

Postpartum

Most of the men that I spoke with said that they had observed the traditional forty-day period after childbirth in which women have a "laying in" period in which they spend more of their time in bed with the newborn. During that period women are not expected to fulfill all of their usual domestic duties, such as food preparation,

cleaning, childcare for other children, and laundry. Depending on the household, other female relatives may help with these household jobs, bringing food to the house or taking the linens to the local public wash fountain. This may occur when women who have given birth share a household with these female relatives, either in the same house or compound, or if they live nearby. Female relatives also may come from other communities to live with the recently delivered woman during this time as well, although men said that this was less common. The children in the household were expected to pitch in as well. For families that did not have female relatives who could help, men might hire another women to help, sometimes called a *muchacha*. In this period men said generally that they would help in various ways, including participating in domestic chores, buying additional foods like meats, milk, or vegetables, making sure that the child had diapers or cloth for diapers, or providing vitamins. Men might also participate in massaging their wives abdomens or helping to prepare a *temescal* or *chuj* in K'iche', (steam bath), although some men left this to the *comadrona,* seeing their responsibility as making sure that women had the time free from domestic work to participate in the steam bath. A few men admitted that they felt like they were somewhat limited in how much they could help directly. Ricardo, for example, described at length how bad most men are at making tortillas, stressing that their large hands made it almost impossible to do.

Among the men that I spoke with, there was little stigma associate with changing diapers and all men said that they could do it without problem. Men mentioned that it was one of the ways that they could help women with infant care,

and would change diapers when they needed to in order to help. Women, both in my observation as well as in men's reports, changed the majority of diapers, but men did not necessarily shy from the task. Moreover, for many children a diaper was a cloth wrapped around them like a skirt rather than as a brief, and both male and female children wore such skirts when they were first walking so that waste could drop rather than be caught next to their skin. That being said, disposable diapers were becoming more popular while I was doing fieldwork. Although most households did not use them, more and more women were asking or deciding themselves to use them and more and more men were obliging.

Several of the men also recounted how they had begun to help their wives with the newborn in the forty day period and after – changing diapers, washing, and feeding. Men like Marcos mentioned that they felt nervous with his first child – "the baby is very small, and you are not used to washing a baby and you do not want to let the baby fall." Feeding was much less common, since the vast majority of men said that their wives breastfed, but Carlos mentioned that his wife had given one of their children infant formula as a supplement out of convenience rather than out of necessity since she also breastfed, and this had allowed him to participate in feeding. He found that feeding his child was gratifying, in part I surmised because it was novel and because he did so at his convenience, occasionally at night.

Unmarried men without children

As might be imagined, unmarried men and men who were married but who had not yet had children had different perspectives on the meanings of pregnancy

and childbirth. As a prelude to this discussion, I will point out that I was struck by the disclaimers single men made. Men that I talked with who were not married almost always pointed out that this was an area in which they did not have direct experience, and many of them were forthright in saying that they felt somewhat uncomfortable discussing an area with which they did not have firsthand knowledge. That being said, with some further explanation that their thoughts were important precisely because they would likely find themselves in situations in which their wives would be pregnant or they would have their own children, these men were more willing to share their perspectives, while others were more than happy to discuss hypothetical situations at length. The value placed on direct experience and empiric knowledge, however, was not limited to questions about reproduction and fathering; indeed, it was a pervasive way of knowing that emphasized real knowledge through trial and error, respect for those who had gained that direct experience themselves who were commonly older than oneself, reluctance to engage in discussion of matters one did not directly know about, and mistrust of those who did so regularly. Engaging in this kind of speculation opens men up to criticism and some degree of ridicule, as those around might point out that one is speaking of things he does not know or understand. Importantly, all of these men said that they wanted to have children at some point.

As Gustavo, a teacher, pointed out to me, this had direct bearing on issues of sexuality and reproduction – issues that he was facing when he tried to incorporate teaching on sexual health in his classroom. "Some of the parents are uncomfortable

that their children are learning about some of these things (e.g. sexual education, HIV education) because they say that you are not supposed to know about sex before you are married. But then many of the young people in the community experiment with sex, and have sex without protection – and then Plak! She is pregnant, and then what do you do? You get married!" Esteban (himself married) pointed out to me that "our parents do not teach us anything about sex before we are married – we do not know anything! We may hear a few things in the streets, but that is just other young men joking around, and you do not know what is true or not. And then you are married and you are under the covers with your new wife. You are scared, you are embarrassed! But little by little (laughing) you figure things out."

Disclaimers aside, these single and childless men did express opinions on the meanings of pregnancy and fatherhood. For example, many of the men I asked about pregnancy discussed their thoughts on unplanned pregnancy and pregnancy outside of wedlock. For example, Ignacio offered that if a woman were to find out she were pregnant, she should tell her boyfriend to marry her, so that he could fulfill his responsibility. Unmarried men did not automatically assume that marriage would necessarily follow an unplanned pregnancy out of wedlock. Luis also mentioned that, if the couple were not already married, then he would have to pay for the child's expenses. However, he did not feel that he would need to pay for the woman's expenses during her pregnancy if they did not live together. He said that, in that case, he would pay "something more" during the pregnancy for things like

vitamins, but that he would not pay for all of the woman's living expenses. "Maybe she is not really pregnant, or maybe the baby comes early." But once the infant was born, he said he would pay for all of the expenses for the infant, because that is his responsibility as a father.

The issue of trust came up for several of these men, who said that it would be hard to know when a woman got pregnant if the pregnancy was out of wedlock. Alfonso said, "You think things, that if she is with me she might be with another, and how do you know?" Lucas noted, "She might tell you she is pregnant, but you do not know, because you are not in the same house." Issues of sexual attraction also came up for these men in conjunction with pregnancy. Luis noted, "When she gets pregnant, then her stomach is going to swell. You do not know if you are going to want her or like the way she looks."

In general, unmarried men were ambivalent about sex and pregnancy outside of wedlock. Some unmarried men mentioned that they might not actually want to acknowledge a child if the pregnancy happened out of wedlock. Alfonso said, "She might get pregnant, and you do not want to accept your children." This contrasted with married men, for whom pregnancy was an expected part of marriage. While married men mentioned that pregnancies that happened close together might cause them worry, in particular because of the economic challenge it might present, these married men expressed happiness that their wives were pregnant. Ignacio mentioned, "It is better if you are already married, because then things are in order. But when you are dating, you have strong feelings, and you

want to be together [have sex] and then maybe she is pregnant. But if you are *novios* (engaged, going steady) then your parents will understand. Her parents will probably be angry, but it happens. Maybe it happened that way with her parents, too!"

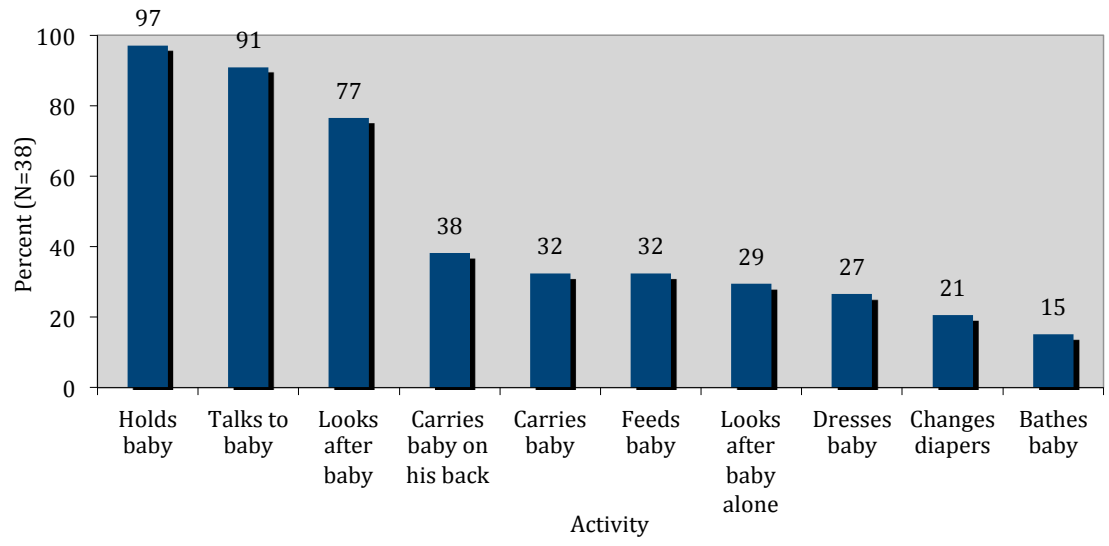
Newborns

The newborn survey gives perspective on how women perceive men's participation in prenatal and infant care. The average maternal age was 24.8 years, while the average paternal age was 28.3 years. Both averages were slightly, but not significantly, younger than the average age of women and men in the larger survey. The majority of women reported engaging primarily in domestic duties (70 percent), while the remaining 30 percent reported engaging in some wage earning activity, including dying thread (19 percent), sewing (8 percent), and in the case of one respondent, teaching (3 percent). The primary occupation of men (n=38) included weaving (58 percent), carpentry (14 percent), metalwork (11 percent), factory work (11 percent), and agriculture (6 percent). Fewer women in this group reported wage earning in this group than in my larger demographic survey, likely because these women had recently given birth. The overall distribution of paternal occupations is similar to that found in the larger survey (data not shown).

Figure 4.1 shows women's responses to questions about different infant care activities in which men engage. The majority of men in the survey were reported to help in some way with childcare, with 97 percent reported to hold the baby, 91 percent talking to the baby, and 77 percent looking after the baby, although this

would include looking after the baby while another care giver was present. There is a large step off between those activities and more involved caregiving activities. Thirty-eight percent of men were reported to carry the baby on his back,[18] 32 percent were reported to carry the baby in their arms, 32 percent fed the baby, 29 percent looked after the baby alone, 27 percent dressed the baby, 21 percent changed the baby's diapers, and 15 percent bathed the baby. Clearly, a minority of men engage in these more labor- and time-intensive infant care activities. However, it is also clear that a relatively consistent one-third to one-fourth of men with a recent newborn provide some significant elements of care for their infants.

Figure 4.1: Newborn Survey: Paternal activities with infant



[18] K'iche' women often carry swaddled infants in a cloth sling tied to their backs. Women place a square of durable cloth (often woven cloth or pieces of old *huipiles*) on their backs as they lean forward, artfully balancing the infant on their backs while they tuck the baby into the cloth and tie the remaining two corners around their chests. Men tend to carry infants in their arms and not on their backs, but will carry infants on their backs, as the survey indicates. I did see one young man in Jun carrying a child in a forward facing infant chest carrier.

In my conversations with women both during these interviews and informally in the community, I found that many women felt that their husband's participation in childcare represented a definite departure from what they considered the norm of marital relations and household division of labor. Numerous women would say, for example, that men in the community do not change babies diapers or dress babies, but that their husband did those activities – perhaps not most of the time or consistently, but he did, and that this made him different from other men in the community.

This marital exceptionalism was somewhat differently portrayed by my male informants. The vast majority of them said that they participated in most or all aspects of childcare, with the difference between men being the frequency in which they participated. While they might comment on how they were different from other men in the community in how much child care they performed, they were more likely to suggest that almost all men engage in some degree of infant and child care, and that it was the rare man who got away without helping at all. I also found that men were much more likely to distinguish between themselves and their fathers. On the one hand, men said that they lived in a different time than their fathers, in which more women were working outside the home, in which they were less likely to be working in far off fields during the day, and in which there were very different expectations for them as husbands and fathers than for their fathers. They said they wanted to have a different relationship with their sons than their fathers had had

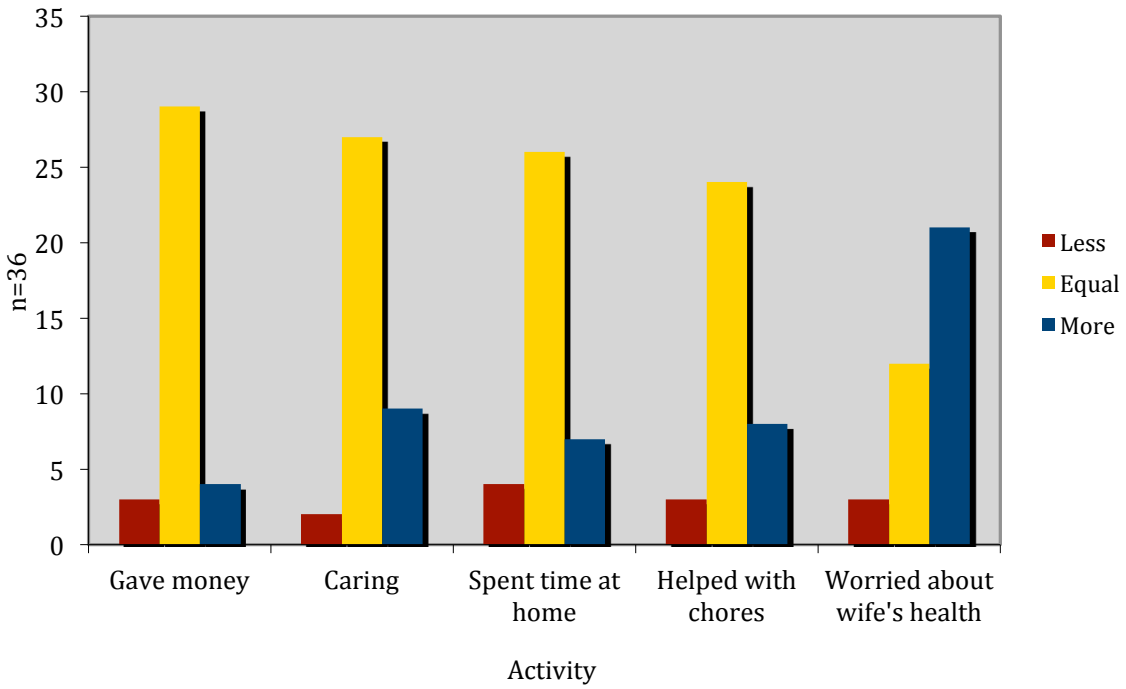
with them, specifically characterizing their fathers as aloof, distant, and less emotionally available than they wanted to be.

Women also repeatedly noted that men might engage in more infant care for their first infant than for later children. This (as women acknowledged when asked) might be due in part to the additional childcare older children are able to provide. Some women suggested that men might be sensitive to the fact that their wives as new mothers might need and appreciate more help with infant care than their more experienced maternal counterparts. But women also noted that men were perhaps more "excited" about their first infants, while with later children some of the novelty of watching infants alone or changing diapers might have worn off. In my interviews with men, they also noted that they might have different attitudes towards their first pregnancy and childbirth. However, they characterized this difference as one of greater preoccupation and worry with their first birth, in part because they did not know what to expect. Because of their experience with earlier births, they felt more prepared and less anxious during subsequent pregnancies.

Figure 4.2 shows women's response to questions about changes in men's activities before and after their pregnancy. For most of the items, including giving their wives more money, being more caring toward them, spending more time at home, and helping more with chores, women report that men did not change their activities before and after pregnancy. Women reported the least amount of change for receiving money from their husbands, with only four of 36 (11 percent) reporting receiving more money. When husbands did change their behaviors,

women reported that more often than not it was to engage in these activities more, with very few women reporting that their husbands gave them les money, were less caring, spent less time at home or helped less with chores – between three and 11 percent for these different activities, with a mode of eight percent. Although these percentages are low, this is again not an insubstantial number of women who perceived that their husbands were less positively engaged with them after their pregnancy than before. The one area in which the majority of women (58 percent) reported that men did increase their attention was in the area of health, saying that their husbands worried more about their health after they became pregnant.

Figure 4.2: Newborn Survey:
Men's activities during pregnancy relative to before pregnancy



I was particularly interested in the ways in which resources flowed between men and women, especially as they relate to pregnancy and childcare. I was somewhat surprised to find that more women did not report receiving more money after they had become pregnant, in light of men's responses about what they did for women during pregnancy. Like the women in this survey, the men with whom I conducted interviews did say that they were more concerned about their wives' health during a pregnancy. In these women's responses, however, there is a disconnect between the increase in men's concerns about their wives' health and the more limited increase in their material investment. Moreover, both men and women in one-on-one interviews would say that money was an important way that men could contribute to their wives during pregnancy. Notably, they did report that men are more likely to save money, specifically for the delivery, than to provide additional money to their wives during pregnancy.

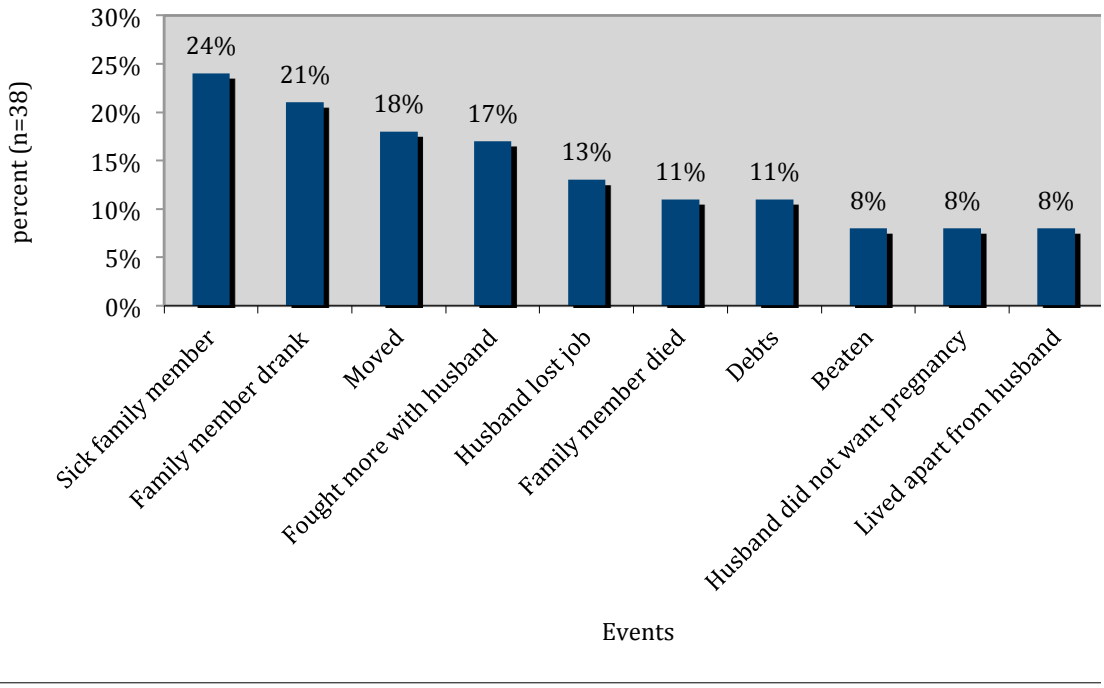
In interviews and conversations with both men and women about men's responsibilities during pregnancy, one of the elements that was repeatedly mentioned was clothing and diapers for the infant. Men should, over the course of the pregnancy, begin to get together pieces of cloth that can be used as swaddle for the newborn and skirt for the older infant, as well as baby clothing. The meaning of this act might have changed over time. In the past, infants were in the past usually wrapped in pieced of woven cloth, and infant clothing had in the past consisted of a small piece of *corte* tied at the waist, similar to their mothers and open at the bottom

so that infants' elimination fell to the ground. The pieces of cloth were locally obtained, usually from used *corte* or other adult pieces of clothing, or woven specifically for use in carrying and wrapping infants. Other pieces of cloth might be collected to use as diapers or for use in cleaning the infant. The same pieces of cloth were at a premium because, even though used, they were still of relatively high quality and durability and might also be appropriate for other uses, such as household cleaning or transporting goods on ones' back.

With the advent of *pacas,* the stores and stalls in which large packs of imported second-hand clothing are opened and pieces sold for prices as low as one quetzal, or $US 0.12, it was possible to buy very cheaply towels, scarves, and other pieces of cloth as well as infant clothing, such that now more mass produced infant clothing and cloths for infants are used, and there is less competition for the same pieces of cloth for use for other household tasks like cleaning. Many infants are still wrapped in a skirt, perhaps with a small infant shirt from the *pacas*, but other infants may be dressed head to toe in an outfit with labels of designer children's clothes from the United States. Infant clothing passes between siblings as well as between families as children infants outgrow clothing, which was less the case for the pieces of cloth whose uses were more generalizable. Men's responsibility for collecting infant clothing is much less difficult than in the past, although to take advantage of the clothing in the *pacas* men do have to have some cash. Men may also chose to weave some pieces of cloth for their own infants as a piece of finery for special occasions.

This change in the relative value of one of men's key contributions during pregnancy has meant a dynamic transition for men, somewhat emblematic of men's changing role in their families and relationship to their wives and children. As I have discussed, this was experienced with some ambivalence by some of the younger men with whom I spoke. They suggested that being a new father, especially during the first pregnancy, was difficult and produced anxiety for them because they did not really know exactly what to expect or how to be fathers. Most said that they had been given advice to put together clothing for their children during pregnancy. For some, this concrete task was a relief, giving them something specific to do during a process that, as I have argued, they found somewhat outside their control and a mysterious process belonging to women.

Figure 4.3: Newborn Survery: Events during pregnancy



Women were also asked about a number of events that might have occurred during their pregnancy. Such a question provides, on the one hand, a nine-month window on the kinds of events that occur in the lives of couples in Jun. The more episodic of these events, if assumed to occur at a constant rate and not to occur more or less frequently during pregnancy, could be generalized to frequency over a 12 month period, while all could be generalized to a minimum annual frequency. But the question also gets at the kinds of events that may stress the vulnerable, or at-risk, period of women's health during pregnancy. Figure 8.3 shows the results of a tabulation of their responses. The most frequently reported events, over 15 percent, were having a sick family member during the pregnancy (24 percent),

having a family member who drank (21 percent), having to move during pregnancy (18 percent), and fighting more with her husband. Thirteen percent of women said their husband lost his job, 11 percent had a family member die or had debts, and 8 percent said that they were beaten, 8 percent that their husband did not want the pregnancy, and 8 percent that they lived apart from their husband at some point during the pregnancy.

The results of the questionnaire suggest that, although any one of these adverse events might seem infrequent, affecting at most one quarter of pregnant woman, a majority of women experience some adverse event during their pregnancy. At the same time, these data help quantify the occurrence of adverse events during pregnancy that are notoriously difficult to measure, such as unwanted pregnancy. Using ENSMI 2002 data, Singh et al (2006) report that the rate of unwanted pregnancy among live births went from 9 percent in 1995 to 15 percent in 2002 in the southwestern region of Guatemala and from 11 percent in 1995 to 14 percent in 2002 nationally. The data presented here reflect women's perceptions of their husbands' desires, but are similar to those reported for the nation and the region. These community level data fly directly in the face of any simple generalizations about men's reproductive desires among indigenous groups in Guatemala, such that Maya men want to have as many children as possible or always want their wives to be pregnant.

Responsible Patriarchy

Men's responses to questions about reproduction and reproductive health demonstrate the range of attitudes that men have toward the complicated relationships in which they are involved as husbands, fathers, brothers and sons. As previously discussed, those relationships have broadly been cast in Maya communities as patriarchal in nature. In contrasting *ladino* and Maya groups in a community near Guatemala City in the mid-twentieth century, Maynard (1974) suggested that Maya culture is characterized by "responsible patriarchy" while *ladino* culture is characterized by "irresponsible patriarchy" (cf. Bastos, 2000). In irresponsible patriarchy, *ladino* women cannot rely on *ladino* men for economic or emotional support "because of the *machismo* concept, which glorifies the exploitation of women" (Maynard, 1974, p. 96). She goes on to say that:

> The patriarchy places the Indian as well as the Ladino woman in a lower societal position, limits her freedom, and subjects her to the frustrations of male infidelity. Since, however, the concept of Indian masculinity includes responsibility to the family of procreation, the Indian woman is much more secure both emotionally and economically. Marriage for the Indian woman means more of a partnership – a partnership marked not so much by a battle of the sexes as by mutual help (Maynard, 1974, p. 96).

She goes on to argue that, while *ladino* women have power in their families because men abdicate their familial responsibilities, for Maya women "the source of a woman's power in the family lies in the cultural definition of her role, a definition that recognizes her importance as wife, mother, and economic partner. All these roles are complementary to the man's role" (Maynard, 1974, p. 98). Indeed, ethnographies of gender relations in various Maya communities throughout Mesoamerica have documented aspects of gender complementarity between men

and women as it impacts economic support, alcohol use, and domestic violence (Eber, 1995; McClusky, 2001; Rosenbaum, 1993).

Men's accounts of pregnancy, childbirth, and contraceptive use in late 20th century Jun all lend support to Maynard's observation that a very different gendered power dynamic exists in Maya groups than exists in non-indigenous groups in Guatemala and in other parts of Latin America. Her concept of responsible patriarchy, as evocative as it is, is static in that it does not explain the dynamics that produce and reproduce the gender complementarity that she describes. It is difficult to reduce gender complementarity to economic roles in a community like Jun, where few men work as subsistence farmers and many men work as weavers, drivers, and teachers. As evidenced by men's discussions above, reproduction (as alluded to by Maynard) plays a pivotal role in the continuation and evolution of gendered relations in Jun as well as men's own ideas about masculinity. Their discussions also indicate some of the areas of contradiction and ambivalence they have about their gender roles and responsibilities.

I will return to the concept of responsible patriarchy and its relationship to Maya hypermasculinity and negative masculinity, or Maya *machismo,* later in this dissertation. In the next chapter, I will move to the department of Quiché to discuss men's attitudes towards reproduction and masculinity in Keb'. Using data from the two communities, I will trace some of the most important elements of K'iche' Maya masculinity, especially as they relate to reproduction.

Chapter 5: Masculinity and Reproduction in Keb': Dimensions of Genocide

One of the central arguments of this dissertation is that, in Guatemala, the genocidal violence of the civil war has been and continues to be intimately linked to reproduction[19] through its effects on the reproductive trajectories of individuals and its disruption of the social reproduction of communities. The violence is Guatemala during the civil war had a gendered component, in that the vast majority of deaths were of men. In my field work in Keb', I had the opportunity to complement data collected in Jun both to deepen understandings of the connections between masculinity and reproduction and to explore connections between genocide and men's reproduction.

In 1998, the Committee for Historical Clarification, the Guatemalan truth commission reporting on the Guatemalan civil war of 1960-1996, charged the Guatemalan state and some of its highest officials with genocide (CEH, 1998). Guatemala's war, the report finds, targeted Maya, the poor, and those who challenged political structures of inequality. The report contextualizes state-authored violence historically as the continuation and outgrowth of centuries of marginalization and exploitation. That violence served the interests of a privileged minority manipulating an "exclusivist" militarized state whose base rested on racist, coercive and ultimately genocidal control of land and labor. Moreover, that violence

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[19] Article 2 of the UN Convention on Genocide: "In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such: (a) Killing members of the group; (b) Causing serious bodily or mental harm to members of the group; (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (d) Imposing measures intended to prevent births within the group; (e) Forcibly transferring children of the group to another group." http://www.unhchr.ch/html/menu3/b/p_genoci.htm

was sanctioned under the guise of democracy in the geopolitical context of Cold War anti-communist fears in the US (Grandin, 2003; Manz, 1988).

The argument of the report rests on an interpretation of the UN Convention on Genocide and its criterion of intent to destroy a group, rather than motive.[20] A primary question asked in cross-disciplinary literature on genocide addresses the nature of the modern nation-state[21]; specifically, the paradox of an administrative state created by its people and charged with the well-being of its populace which in turn attacks its own citizens (Hinton, 2002). State deployment of fear and violence[22] as a method of infrastructural efficacy (cf. Mann, 1984), I would argue, cannot be justified by mere claims that guerilla programs might resonate with Mayan communities, especially given the emphasis on real and potential support. Jonas (1991; 1998; 1999, 2000) suggests that the civil war occurred because, after the 1954 CIA-backed counter-revolution, no options existed within the electoral

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[20] Intent is distinguished from motive, or the force animating the crime, arguing that while the motives of the Guatemalan state may have been to stop counterinsurgency or defeat a Communist threat, nonetheless the intent of the state was genocidal in its pursuit of those goals through focused, coordinated terror and violence against Mayas (Grandin, 2003). Specifically, the CEH reports on justifications made by Guatemalan military analysts for the virulence of the counterinsurgency, founded on military perceptions of Maya communities as particularly susceptible to a guerilla movement. In their own reports, military analysts emphasized lack of national integration of Maya groups, their ethnic and linguistic plurality, and what Grandin calls the "castelike isolation of highland indigenous communities" (Grandin, 2003, p. 349).

[21] Anthropologists have pointed to the problems in characterizing states as totalized agents. Geertz urges anthropologists to focus less on the formal properties of states and more on the calculated operations of political actors (Geertz, 2004). Scheper-Hughes calls attention to the small wars, invisible genocides, and everyday violence of nation-states and those operating with impunity within them (Scheper-Hughes, 1993b, 1996), which she places on a spectrum with larger-scale conflict.

[22] Working with women widowed during the internal conflict in Guatemala, Linda Green has referred to "fear as way of life" and has discussed the social embodiment of violence (Green, 1998, 1999). I agree with Margold (1999) that Taussig's similar concept of a "culture of terror" (Taussig, 1986) may efface resistance and that instead threat, torture, and imprisonment as endemic social controls must be examined as specific practices rather than a culture.

system to change structural inequalities. While she questions whether the civil war was truly a Maya war versus a war fought on Maya territory, she also suggests that the increasing structural contradictions for many Maya in the western highlands as migrant laborers losing their subsistence base created demands for change within Maya communities.

Stoll (1993) argues against "solidarity" explanations for violence that locate the origins of violence in the Ixil region with structural inequalities and their expansion. He lists three such motivations for army repression: 1) the seizing of indigenous lands, 2) the displacement of indigenous labor for plantation work, and 3) the disruption of indigenous organizing that threatened cheap labor. Instead, Stoll suggests that the presence of the guerrilla motivated army repression, focusing on military rather than economic strategy. While I agree that the presence of guerrilla explains the fact of army repression, it does not explain the form that repression took; specifically, the seemingly indiscriminate community massacres at the height of genocide. I suggest, rather, the brutal nature of army repression unleashed on Maya communities in the Ixil region is linked to the reproductive and productive autonomy of those communities, perceived as potentially reproducing revolution should it take hold.

In discussing the Ixil area in the late 1960s, Colby and van den Berghe (1969) note a shift in nearly autonomous production in earlier generations to greater wage dependence among indigenous groups. They stress the importance of Mayan exportation of labor and the prevalence of male migration. In the decade before the

worst of the genocidal violence in the Ixil region, indigenous men were selling their labor, with an estimated 30-40 percent of able-bodied men working on coffee or sugar plantations at any given time. Men labored and entered into market relations, they suggest, in order to earn money for consumption and basic foodstuffs. Manz (1988) notes, however, that seasonal migration was a supplement to subsistence agriculture prior to militarization for many in the Ixil region.

Equally important, if not more so, in the autonomy of local indigenous communities, are patterns in the social organization of reproduction. Two institutions in particular maintained indigenous reproductive autonomy before the civil war; inter- and intra-community endogamy (R. Adams, 1991; Brintnall, 1979; C. A. Smith, 1995) and local obstetric care by traditional birth attendants (Glei & Goldman, 2000; Glei, Goldman, & Rodriguez, 2003). Traditional birth attendants attend nearly all births (approximately 98 percent) in highland indigenous communities, with instances of hospital or physician attention usually driven by obstetric emergencies (Glei et al., 2003). State efforts beginning the 1950s to train traditional birth attendants had progressed little in the Ixil region, and were abandoned altogether during the conflict (J. Foster et al., 2004).

An important dimension of the threat that indigenous highland communities posed to the Guatemala military and state was that of productive and reproductive autonomy – the possibility of reproducing revolution. Indigenous communities were not only actively excluded by the state, and men in those communities forced to participate in migrant wage labor. Those communities managed exclusion in the

highlands through local maintenance of reproduction without state control or intervention. State violence disrupted the social organization of production and reproduction, first by killing men and later by killing entire villages.

Demographic Disruption

Although over 200,000 individuals are estimated to have been killed during the conflict (CEH, 1998) and over 1 million displaced (DiGeorgio-Lutz & Hale, 2004), demographic patterns of violence for highland region, including El Quiché, have been difficult to establish. Ball et al. (1999) have used CIIDH data from the truth commissions to establish patterns of violence along axes of authorship (the state, the army, civil patrols), intensity, and geographical distribution that corroborate the categorization of the state's genocidal violence as reaction to a perceived threat of counterinsurgency, but inflected by historical trends of racism and social inequality. That the violence in Guatemala had an ethnic component is clear from the CEH report (CEH, 1998). For victims of known identity in the CIIDH database, 81 percent were identified as indigenous (Ball et al., 1999).

One of the less-frequently emphasized aspects of genocidal violence globally is its gendered component – that is, the ways in which men and women may be disproportionately killed at different phases of genocidal violence (Holter, 2004; A. Jones, 2004). Over the course of the internal conflict in Guatemala between 1960 and 1996, of cases in which sex of the individual is known, 85 percent of the victims of violence were men.

Men were disproportionately victims in the initial years of the conflict – many of them community leaders who were the targets of political violence. Ball et al. (1999) discuss the gendered nature of the conflict:

> Most of the protagonists in Guatemala's armed conflict were men: from the decision-makers responsible for the counterinsurgency, to the troops that carried out much of the terror, to the villagers forced to serve the government cause in the all-male civil patrols. Although the guerrilla movement recruited women into its ranks as armed combatants and in their support populations, the revolutionary movement was also largely male-dominated. Similarly, most of the victims of state violence were men. But as the terror turned massive and indiscriminate during the government assault on rural communities, women became a greater proportion of the dead and disappeared.

Using conservative estimates based on these statistics, between 130,000 and 140,000 indigenous men were killed over the course of the civil war, or approximately 8 percent of the male indigenous population of 1980. Given the extreme regional concentration of the violence, that percentage can only be higher in the department of El Quiché, where over 300 community massacres took place, and where the fieldwork for this paper was conducted.

The CEH suggests, moreover, that the seemingly indiscriminate violence of 1981-1983, when the percentage of women killed rose to its highest, can in part be explained by changing army tactics in the face of village adaptations. Men, as has been discussed, were already highly mobile in their management of local production and migration for wage labor, and so were able to flee villages for periods of time. The report suggests that, as men began to leave the communities when they were warned the army was coming, the army began to kill all of the residents to prevent men from leaving and to make them face dire consequences if they did. Moreover,

village massacres that included women would affect the perceived ability of those villages to reproduce revolution.

Census and population data for Guatemala, especially during the worst years of the civil war, provide poor population estimates for the Ixil region; moreover, Guatemalan censes historically have underreported indigenous populations.(Lovell & Lutz, 1996). The data available suggest that the gendered aspect of genocide continues to affect Guatemala's demography. According to population data of the 2004 Population Database, Guatemala's sex ratio began a precipitous decline between 1989 and 1990, and between 1993 and 1994 Guatemala's sex ratio dipped below 1.00. The skewing of the sex ratio has been exacerbated, undoubtedly, by migration out of the country by both refugees and (predominately male) migrant workers. Such migration, however, can itself be interpreted as consequence of the internal conflict, either directly in the case of refugees or indirectly in the case of increased migration due to deteriorating political and economic conditions. However, comparison of the male:female sex ratio over time in Guatemala with Honduras and Costa Rica shows that those countries do not show the same decline, even though Guatemala's ratio was comparable with the region's prior to the 1990s. Closer inspection of the sex ratio by age cohorts reveals that, between 1950 and 1980, men outnumbered women until around age 60 to 64. However, by 1985 women outnumbered men slightly between the ages of 30 and 39. By 1990 that was true of women between the ages of 25 and 44, and by 1995 women outnumber men for all age groups nationally for ages 20 and older.

To address adequately the demographic impact on indigenous communities in El Quiché, such data on sex ratios must be coupled with data on ethnicity. Lovell and Lutz (1996), in comparing Maya survival in Guatemala since conquest, point out that between 1770 and 1870, Mayan population is estimated around 70 percent. That figure begins to fall beginning in 1880, until in the 1964 census the Mayan population is for the first time reported below 50 percent - statistics they suggests may have been manipulated with the emergence of the *ladino* nation state and its non-indigenous development agenda. They discuss the falling documented percentage of indigenous peoples in Guatemala in terms of acculturation (cf. Early, 1982) as well as the effects of coerced labor and internal migration, involving nearly 400,000 indigenous in the 1960s – they write that "Maya fertility must surely have been affected by these massive, disruptive movements" (Lovell & Lutz, 1996, p. 403).

Table 5.1 presents descriptive data from Keb' from the reproductive health survey conducted with women of reproductive age; data presented are from women with partners. The average age of women interviewed who had ever been pregnant was 32.2 years in Keb'. Age distribution by five-year category was also similar to that in Jun, suggesting that fertility outcomes such as average number of children per woman and child mortality – all age dependent variables – could be compared between the two communities. The two communities did differ by the average number of years of education among women who have been pregnant, with women in Keb' only 1.2 years. Only 38.2 percent of women who had ever been pregnant

had ever attended school in Keb'. Only 27.2 percent of women were literate in Keb'. Protestants were in the minority in Keb', where 76.4 percent were Catholic and only 10.9 percent Evangelical Protestant. The vast majority of women who had ever been pregnant, 93.7 percent in Keb', were currently married or in a union. Economic data from Keb' was more limited than in Jun, with women often politely declining to discuss specifics of household income. About 28 percent of women reported that they made decisions about food purchases without any input from their husbands. About 31 percent of women said they were solely in control of household funds, while another 50 percent said that they did not control household money at all (larger than in Jun); the remaining 19 percent of women reported shared responsibility for household money with their husbands.

Table 5.1: Descriptive statistics, Keb' (N=59)

Variable		N (%)*
Women's age, mean (SD)		32.2 (8.9)
Years of education, mean (SD)		1.2 (2.3)
Woman's age	18-24 25-29 30-34 35-39 40-44 45-49	14 (25.5) 8 (14.5) 12 (21.9) 6 (10.9) 8 (14.5) 7 (12.7)
Ever attended school	Yes No	21 (38.2) 34 (61.8)
Less than 6 years of education	Less than 6 6 or more	34 (75.6) 11 (24.4)
Languages spoken at home	Spanish K'iche', Ixil, or both Spanish and Mayan	2 (3.6) 52 (94.6) 1 (1.8)
Religion	Catholic Protestant Maya/other Non-practicing	42 (76.4) 6 (10.9) 7 (12.7) 0 (0)
Maternal literacy	Yes No	15 (27.2) 39 (70.9)
In a union	Yes	51 (92.7)

	No	4 (7.3)
Husband's education < 6 years	Yes No	37 (77.1) 11 (22.9)
Total bi-weekly income less than Q600	Yes No	10 (76.9) 3 (23.1)
Husband contributes < 100% of income	Yes No	4 (7.3) 6 (10.9)
She alone decides food purchases	Yes No	14 (28.0) 36 (72.0)
She alone controls money	Yes No	17 (30.9) 35 (63.6)
She does not control money	Yes No	26 (50.0) 26 (50.0)

* where noted, mean and standard deviation (SD) are reported

My semistructured interviews with men in Keb' complement as well as expand on the data on reproduction and reproductive health I collected in Jun. Because of Keb's experiences during the civil war as a CPR, in my interviews with men I took a life history approach, asking men to recount some of their experiences growing up and during the civil war. I also incorporated more direct questions about masculinity and Maya identity into my semi-structured interviews, rather than reserve these narrative and cultural questions for more extensive, open-ended follow up interviews with closer informants as I had done in Jun. Finally, because I encountered many more cases of reproductive loss in Keb', I was able to focus on men's direct experiences of reproductive loss.

Marriage

Several differences in marriage patterns emerged in Keb'. More men that I talked with said that they were in unions rather than having had a formal wedding ceremony in church in order to be married. [23] Men in unions rather than in

[23] Civil union is recognized under Guatemalan law as "*unión de hecho*" in Articles 173-189 of the Guatemalan Civil Code. A man and woman can declare a union before a community official, such as

marriages chose not to marry because of the expense of the ceremony, and some of the younger men in unions were in the process of saving for a wedding ceremony. While men said that there was no stigma to being in a union rather than in an marriage, but the younger men who were saving did feel that a wedding put an official seal on their relationship and allowed them to demonstrate that they were in an upwardly mobile, rather than poorer, couple.

Men like Diego brought up a current marriage strategy he had employed that had been mentioned in Jun as a more a relic of the past: elopement, or more correctly "robbing" a bride. Diego said that in the past a man might, with family or friends, "steal" a woman from another community. Typically this is done with the permission and cooperation of the bride and possibly even the tacit or explicit approval of some of her family members, and may be a carefully orchestrated adventure that helps the woman break from her natal community. The man might then send his father to return the young woman and ask for her father's approval. In Diego's case his wife was only 15 at the time of the elopement and her family in Chel did not approve, and after she was returned she stayed with her family for several months more before her father relented and she returned to Keb'. Part of the reason for the continuation of this tradition is the greater distance between and isolation of communities relative to Jun. But Don Ernesto pointed out that, during the civil war, families were split apart when members were captured and placed in

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the *alcalde*, after sharing common residence for three years. Such a union carries the same legal effects as marriage. Men in Keb' might consider themselves in unions even if they had not lived with their partners for three years.

development poles. There were often escapes conducted by those on the outside, including to rescue girlfriends or wives, paralleling the current "robbing" of women.

Remarriage

In Keb' I heard multiple stories of men who were in second or even third marriages or partnerships because they had been separated from their wives during the civil war or their wives had been killed. This was true for Don Zacarias, who was separated from his first wife during the civil war. While in hiding, he began a relationship with his current wife; as he put it, a man needs someone to tend his fire and prepare food. His first wife is still alive and he has made contact with her, but he says that she has another life now and it is painful for her for them to talk. Don Ernesto has had three wives. He separated from his first wife because she repeatedly slept with other men. He said that he had had one child with her, a son, but that he had died of an illness with a rash that he thought was measles. He came to Jun from an Ixil area with his second wife to escape violence during the civil war. She was captured in the mountains four years after they came to the area and was taken to a development pole. She managed to escape once before, but finally eventually returned to the development pole because of hunger and malnutrition.

Marriage and money

As in Jun, in Keb' there was variation in the ways in which households managed their money. In some households men managed more or all of the money, in other households women managed, it, and in others men said that they managed

money together. Men in these interviews had incomes that ranged from Q6000 per month to Q3000 for the entire year. Because of the three crops that were cultivated and reserving some stock, most households had some monthly income, with larger influxes of cash with larger timed harvests. Poorer men like Juan and Lucas let their wives take care of all of the household money; Lucas admits that if he were to manage the money he might drink it all at once, as he has done in the past.

There were two related patterns of money management in Keb' – when men had established their own household, they or their wives kept their money, but when they still lived with their fathers, they gave their money to their fathers. This is true for Umberto, who is the youngest of his brothers, and he notes that it was expected of him as the youngest son to remain in his father Don Felix's home and care for his father and mother rather than move out to start his own home. Men in Keb' like Jacobo and Javier noted that they lived with their parents for two or three years before moving out because of the expense. After they had saved with their fathers for years, and completing construction of their new residence, they would receive a land inheritance from their fathers and move.

In Keb' I asked men directly what makes for a happy marriage and what makes for problematic marriages. Men agreed that marriages require care and respect, and that in particular that the man must care for and respect the woman. The concept of respect had multiple meanings. On the one hand, respect means that men treat their wives with a measure of sexual restraint, having sexual relations when she wants rather than demanding sex when she might not. This meaning is

evident from my interviews with men in both Jun and Keb', who said that men must respect their wives by having sex less frequently while they are pregnant. Respect also signifies treating wives as "an equal," "a human being with rights," and "respecting her opinion" and "thinking" before you chastise your wife. Diego says that problems arise in a marriage "when there is no respect for the woman." Jacobo said that husband and wife have an obligation "to work together or suffer together," and noted that a woman "completes and maintains" her husband. Several men noted that economic hardships may lead to problems, as well as men's drinking, or men's hitting their wives, which according to Anastasio is a sin. Problems may also arise from "jealousy, or if the man is very rigid," according to Javier. Respect goes both ways, however, and Diego said that problems arise "when the woman does not respect the man," and "when she does not do her work."

Pregnancy, childbirth, postpartum

Men in Keb' expressed many of the same concerns about pregnancy and preparation for birth as did their counterparts in Jun, including saving money and getting together clothing and cloths for the child. Acquiring the cloth for infant diapers in Keb' infant was a much greater challenge that in Jun, and the advice men received to get cloth together prior to delivery was real wisdom. Diapers were much more likely to be old shirts or pants from adults that were cut into pieces for infants. No disposable diapers were used. Both are true because of the greater scarcity of cloth in general in Keb' without the proximity of grocery and clothing stores, including the *pacas* or large shipments of donated clothing from the US.

Most of the men in Keb' reiterated the cautions I had heard in Jun during pregnancy, including not lifting heavy object and not getting too hot. They also mentioned falling during pregnancy as a risk, and explicitly mentioned not hitting women during pregnancy as important. Don Anastasio and Don Rene, both of whom are practicing Maya healers, said that it was imperative that women have protective ceremonies performed during their pregnancies. Don Ernesto and Don Zacarias also performed protective ceremonies for women when they were pregnant.

Men in Keb' uniformly said that it was important to respect the 40-day rest period after birth for women, and that they or female relatives would help during that period. Anastasio mentioned that *comadronas* and healers had modified their practices during the war. As in Jun, many *comadronas* in Keb' used the *temescal*, or *chuj* in K'iche'– a wood-heated steam bath – to heat the pregnant woman's body and uterus before and after the delivery. During the war, it was nearly impossible to do this in the Communities of Populations in Resistance, so many *comadronas* began to use heated rocks wrapped in leaves and placed on the womb to heat the body. While *comadronas* have rebuilt and continue to use the *temescal*, others have decided that they will continue to use heated rocks.

Mala hora

In writing about folk illnesses like *susto, nervios,* and *mal de ojo,* Green (1999) argues that the illness experiences of Mayan widows of Xe'caj should be read as instances of "social memory embodied." "The women have never recovered from their experiences of fear and repression; they continue to live in a chronic state of

emotional, physical, and social trauma" (Green, 1999: 246). She stresses widows' illnesses as kind of political statement, writing "In this situation, illness related to political violence is a refusal to break ties with the person who was killed or disappeared through the maintenance of illness" (Green, 1999: 247).

A separate but related illness exists in Keb' called *mala hora* (literally "bad/sick hour") in the community which affects not only those were affected during the war, but all members of the community. *Mala hora*, or *mal de espiritu* ("soul/spirit sickness"), is a hot illness that causes anxiety and dread, vomiting, nausea, dizziness and vertigo, lethargy, and sometimes a greenish diarrhea. It may last from a few days to weeks. While in general the symptoms are acute and short-lived, if untreated they may be fatal, especially for children and infants. The etiology of *mala hora* is complex. *Mala hora* derives its name from the hour of the day – around midday – at which individuals are often affected. The illness comes on women or children if they are outside the house around noon, or on men during their work in the fields. Anastasio, one of Keb's healers, described the illness in this way:

> Sometimes, you have worked hard in the field all morning, and you rest for a few minutes. All of a sudden, everything around you becomes very hot and very still, and you can feel a pressure on you. It is the spirits of the dead, who have come to take you with them, to pull on your spirit when you are weak…it happens when you are tired. Women who walk around during the day are at risk…especially pregnant women…children as well.

Some individuals are more susceptible to *mala hora* because of their experiences during the civil war, such as nearness to a bomb explosion that caused *susto*, or startling. However, *susto* is itself a separate illness, often chronic in adults.

Mala hora is a ubiquitous risk – the dead are always among the residents of the community. Conditions of weakness or vulnerability, such as hard work, pregnancy, and age allow for the illness to take hold. Time of day is important as well – the middle of the day, which recalls the time constraints of military and self-surveillance during the civil war.[24], in that during the day individuals were most susceptible to army attack. *Mala hora* is especially pernicious in its effects on pregnant women, in that it can cause spontaneous abortion as well as death to the mother.

All of the men I spoke with said that their wives had received prenatal care delivered with a *comadrona.* Their options for health care beyond the *comadrona* were extremely limited in the event of an obstetric emergency. None of the men I spoke with said that the *comadrona* had referred them to prenatal care outside of the community, even in cases in which an obstetric emergency had developed. Men said that, in case of an emergency, they would call on the local health promoters, Maya healers, as well as Cuban doctors if they were present. If those measures were unsuccessful, then they said that members of the community would carry the sick infant or mother out of the community in order to reach doctors and ambulances in Chel for transport to the hospital in Nebaj.[25] Helicopter transport has also been arranged for critically ill but stable patients. Javier, who had worked with Doctors Without Borders, was able to arrange for helicopter transport of his child with

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[24] During the worst of the violence around the community (roughly 1981-1991) the communities organized into surveillance patrols that would watch the main routes for the army. Male leaders were placed in charge of surveillance of the community members themselves, maintaining strict control of movement during the day and use of fire during the night.

[25] While this did not occur for any maternal or infant health emergencies while I was in Keb', in one instance a man with obstructive kidney stones was strapped into a chair and carried out by a team of men who alternated carrying the chair in pairs.

pneumonia to Guatemala City. When his child died after three days in the hospital there, he felt that in some ways the additional effort had made the death that much more difficult.

Contraception

Men in Keb' also expressed a range of views on contraception. Domingo, Javier, Lucas, and Nataniel endorse using the calendar or rhythm. Lucas said that for him the rhythm method meant avoiding sex during his wife's period, which means he is likely having sex during the fertile period of her monthly cycle, between periods. Maximiliano and Fidel say that their wives use Depo Provera. Rene endorses an herbal method involving ground avocado pit; of note, his own wife cannot have more children. Umberto is thinking about using Depo Provera; Don Anastasio is thinking about using the rhythm method. Most of the men who were planning to have more children had no idea how many children their wives wanted. Victor opined that, although he and his wife had not discussed this, ultimately a couple should respect the wishes of whichever partner desires to have more children.

Fatherhood

In general, men in Keb' felt that being a good father meant providing their children with material goods, providing them with a positive example, and providing them with opportunities. Fathers need to "orient" their children, showing how to do chores, how to work in the fields, and how to respect their elders. Simon, like many of the men, emphasized in particular that they wanted their children to go

to school because he had not had the chance to receive an education. These men said that, if their children did not go to school, they would likely have hard lives working in the fields like they did. Men seemed equally enthusiastic about education for girls as for boys. Diego mentioned that it was important to educate his daughters because "otherwise, girls are at loose ends, and then get pregnant."

Having children is important for the couple as well. Bonifaz mentioned that having children helped his marriage, because he had been anxious after a year and a half of marriage without children. "You have to have children," he said, " to be a human being." Lucas reiterated that it was the obligation of children to take care of their fathers when they are older, so fathers should care for their children when they are young.

Men in Keb' were less sanguine about direct childcare. Domingo mentioned that, when his wife was away, he would make tortillas. Lucas mentioned that men should hold and hug their children to give their wives a chance to do other work. However, Jacobo and Lucas said explicitly that men could not be expected to be involved in childcare because they were out of the house during the day in the fields. Maximiliano admitted sheepishly that his travels kept him from helping much with childcare. Gerardo and Nataniel recounted experiences that were in line with general opinions that, if a child became sick, it was the obligation of the father to ensure the child was seen by a healer or health promoter and pay for necessary medicines.

Masculinity and Maya identity

When asked about being a man, many men reiterated some of the same principles that they had discussed as being important to being a good husband and good father, including that of respect. Gabriel said that a good man "communicates with his family and serves his community." Nataniel mentioned that "to be a good man, you must be honorable, simple, humble." Anastasio emphasized "respect [your] neighbor and the rights of others, and don't have spines in your heart [envy]." Bonifaz discussed hard work, saying "as a young man you feel free, but as a man you have to work for your family." Maximiliano said that "to be a good man is to have respect for yourself and others, to prepare yourself in various ways. Age makes you a better man."

Because I am interested in the intersection of ethnicity and gender, I asked men their opinions about Maya culture and Maya identity. The majority of men I interviewed had very straightforward answers, referring to language, dress, and customs like playing the *marimba* as important, to be continued with the next generation, and to be celebrated. Jacobo wants his children to learn to speak "all 22 Mayan languages!" Men had different opinions about the importance of other elements of the Maya cosmovision, or Maya religion and healing practices. Healers, not surprisingly, felt that these religious elements were at odds with their own beliefs; this was true for some Catholic and well as some Evangelical Protestant men. Some men like Victor, Maximiliano, and Gerardo directly linked Maya identity with experiences of racism and discrimination. Victor and Bonifaz linked the civil war with this racism by a *ladino* government. Other men like Felix and Nataniel felt

like there was less racism against Maya than there had been when they were younger.

Men also explored meanings of *machismo* and discussed differences between *machismo* among *ladino* men and Maya men. Gerardo said that someone who is *macho* "is bossy (*mandon)* and doesn't let his sons or his woman participate." Nataniel said that "a *macho* man thinks too much of himself, feels superior, and makes others feel less than him." Gabriel said that being *macho* means "you are very altered. You make yourself out to be big, you don't show good character, and you don't' respect those around you." Maya have different languages, ways of dress and customs and *ladinos* might try to put these down; Gerardo linked this moment of cultural devalorization to *ladinos* being *machista.* Importantly, many of the men emphasized that there were no physical differences between *ladino* and Maya men, that they were all human beings ("the same blood, the same flesh" according to Anastasio) and therefore deserved the same human rights and freedoms from discrimination.

Men without children

Because of the small size of Keb' and the early age at marriage and first childbirth, there were relatively few men who were 18 but who did not yet have children. I have included some of Gabriel's statements above with married men with children. Gabriel lives with his parents and gives his earnings over to his father for general household expenses; his mother makes purchases of food for the family and his wife helps his mother prepare food. He works with his father in the fields

and does not yet have his own land, although he does know the land that his father will likely give him and works on that land. In discussing family, Gabriel pointed out that he felt like the "clock was ticking" to have children since he got married (about 8 months before the interview).

Anacleto and Benjamin are both high school students who spend most of the year out of the community attending a boarding school. Because the circumstances of our discussion were unique, I will describe the interview in a bit more detail. I met Anacleto and Benjamin during one of their return trips to Keb'. Home for the vacation period, they were both dressed in clothing not typically seen in the community, reflecting their time away in the urban centers. Both had on clean, stiff, dark jeans, polo-style shirts with collars, and black leather dress shoes with thick rubber soles. Their dark hair, cut longish in the front and short on the sides, was slicked back, and I detected the slight odor of cologne. They asked me if I wanted to join in a game of soccer at the far fields near the southern entrance to town after lunch. They had heard that I was willing to play goalie, and thought I might want to play with them against the other teams.

At the match I ended up playing in a fullback position rather than in the goal, and while the game itself was enjoyable, part of the fun for me was the field itself. Because of the limited amount of flat space in the area, the field has been built on a reasonably even slope at the foot of hill near the southern entrance of the community. I must emphasize, however, that "even" is a relative term in a highland community, such that the entire field was at a west-to-east upward grade, with the

northeastern corner curling vertically at a steep angle. The entire eastern half of the field was exposed rock. So for one half of the game each team would literally fight an uphill battle, with the field itself something of a protagonist.

As for the game itself, it provided yet another opportunity to observe and participate in the dynamics of the community, especially in the interactions between men. The teams playing were regular, stable teams that played against other communities' teams. Anacleto, Benjamin, and I were playing on the "C" team – that is, the third-best (or alternatively worst) team in the community, and we were playing against the "A" team, or best team. However, with the two visitors, we ended up winning handily, much to the frustration of our normally better opponents. This frustration led to some strong words between Anacleto and another man concerning some contested off-sides calls. That man, named Maynor, who I had noticed early on in my fieldwork to be one of the most optimistic, sunniest individuals in the community, with a constant smile on his face, was surly and aggressive. He and his wife, however, had lost an infant just hours after the child was born earlier that week, and, as other members of my team would explain to me, deserved some slack, especially since he was not drinking to ease his loss, which they respected.

That evening a knock on the clinic door indicated another visit by Anacleto and Benjamin, who had dressed up again as if up for a night on the town, and hoping for some diversion before heading back to the cardamom fields the next day. The two young men had made plans for us for the evening, having visited the *alcalde*

earlier that night in search of alcohol. The *alcalde* had stored away some whiskey for New Year's and they had managed to purchase two eighths.

Once the whiskey had been opened, both young men were anxious to discuss the topic on both their minds – their *novias,* or girlfriends. Each had been dating someone they met while at school. Twenty-year old Anacleto showed me a photo of his girlfriend, an Ixil young woman in his same year in school. He talked about her in glowing terms, and was obviously quite enamored. He said that he had had girlfriends in the past – one in the Ixcán, two others in Keb', but no one he wanted to name, and understandably so. He said that he had had sex with a couple of them, but not very often. He and his current girlfriend, with whom he has been for 10 months, they have sex every 15 days, and they use condoms for protection, although not every time. He said that he was worried about pregnancy but not about sexually transmitted infections, because neither one of them had had a sexually transmitted infection before they started seeing one another, and they have not had sex with anyone else since. He had not used condoms when he had sex with other girlfriends.

Twenty-two year old Benjamin spoke of his girlfriend in the capital, a younger woman from Uspantán, which is another highland urban area. She goes to a different school than he did, as he had graduated earlier that month. The two of them were at religious schools, so it was prohibited for them to have girlfriends or boyfriends, so when they spent time together they lied and said that they were siblings. Both of them were concerned, however, because other girls had been expelled for having *novios.* They had not had sex, he said, because of the

restrictiveness of their school, but neither did he offer additional information about his sexual or romantic past, avoiding questions about the latter.

Both young men said that they were sure that they were going to marry these young women, even though they were from outside the community. Anacleto said that his girlfriend would be visiting over the holiday and that he was both excited and nervous – that this was something of a test for the two of them. She, being from Nebaj, she was visiting from far away and had grown up in the city, so Anacleto feared she would not be used to life in the *campo* (countryside) and the relatively austere conditions there. But since they wanted to get married, and since he planned to return to the community in order to receive his share of the ECA land, it would be important for her to see the life that he planned to live. Both young men said that, after their experiences in school, they felt like they would not want to marry a woman from Keb'.

These two young men's accounts shed some light on the contradictions they faced after going outside of the community for more education. They had adopted some of the masculine flair or poetics (Herzfeld, 1985)

Mayan masculinity

As argued at the beginning of this chapter genocide affects the reproduction of individuals as well as social collectives over time and with lasting repercussions, and this has been the case in Guatemala and in the community of Keb'. By focusing on men in Keb' I try to show how reproductive disruption through genocidal violence has gendered dimensions. Nevertheless, these dimensions are conditioned

by some of the broader elements of K'iche masculinity as evidence in both Jun and Keb'.

In an important and oft-cited discussion of American masculinity in the 20th century, Brannon (1976) provided a somewhat colloquial but nevertheless enduring map of four elements that characterize the American male sex role. Those elements are 1) No Sissy Stuff: men should avoid attributes considered to be feminine or effeminate; 2) The Big Wheel: men should achieve status, power, and success; 3) The Sturdy Oak: men should be strong and independent; and 4) Give 'Em Hell: men should be capable of aggression and even risk. While the limits of sex role theory (Butler, 1993; Di Leonardo, 1991) and practice (Messner, 1998) have been thoroughly explored, Brannon's blueprint provides concepts that are useful for breaking down the edifice of masculinity and for comparison with the examples of masculinities in K'iche' communities.

Based on my interviews and work with men in Jun and Keb', I can identify several elements that recurred repeatedly in descriptions of masculinity as well as their characterizations of reproduction. While these elements are by no means the only important aspects of Maya masculinity, nor are they static over time or apply to all Maya communities equally, nevertheless they provide some structure to the larger tent of hegemonic Maya masculinity. These four elements are 1) productivity, 2) control, 3) respect, and 4) growth.

Productivity: Make Something (of) Yourself

In both Jun and Keb' men repeatedly refer to the importance of their work for

their own sense of self as well as for their roles in their families and communities. Men are exhorted to work by their elders, they feel pride when the do work and shame when they do not. Some men in Keb' define being a Maya man as going out to plant, to harvest. Weavers in Jun see their economic productive activity as defining their contributions to their families.

Control: Hand on the Wheel

In both communities, men give examples with respect to reproductive decision making as well as to marriage and fathering in which they valorize men's ability to be in charge. Men should avoid being bossy, but at the same time men in Keb' and Jun endorse that men should be able to occupy positions of authority in their homes, even as they should respect the decisions of others and the authority of their direct elders. Men should also remain in control of themselves.

Respect: Humble but Hard

In Jun and Keb' men discuss that Maya men both demand and provide respect, a position which requires that they remain humble while at the same time firm. Men should display this respect as a virtue. However, men are not required to defer to unreasonable authority, nor should they allow themselves taken advantage of by their wives or their children.

Growth: Boys Will Be Boys

As men grow and age, they become more of a man. A young man is expected to display all of the characteristics of a man, but in reality younger men are not fully developed, and it is expected that they might have lapses of productivity, control, or

respect which may take the form of drunkenness, infidelity, promiscuity, or laziness. Men develop as they take on more responsibilities, such as marriage and fatherhood.

In the next two chapters I will examine how these elements of ideal, or hegemonic Maya masculinity, are challenged by some of the exigencies of reproduction, including childbirth and contraception. I examine the roles of other stakeholders in the broader context of reproductive health, including biomedical providers and *comadronas.* I will look at men's own experiences, as well as the roles of hegemonic masculinity and *machismo* in men's navigation of reproductive decisions.

Chapter 6: Conceiving Risk[26]

As seen in chapter 3, different meanings of risk attach to pregnancy and childbirth for men in Jun and Keb'. In this chapter I will continue to explore how meanings of reproductive risk influence the management of pregnancy for three distinct groups of health care providers: local physicians, regional workers for an international nongovernmental organization (NGO) working to improve health quality in maternal and infant health services, and K'iche' Maya traditional birth attendants (TBAs), or midwives, referred to as *comadronas* in Spanish. I first review the context of reproductive health care in Guatemala. I then take a local, contextual perspective on risk, arguing that theories of risk focusing on the state as a source of power and the administration of risk may be inadequate for conceptualizing local meanings of reproductive risks for groups at the edges of state power like TBAs. Many TBAs work within a multi-layered discourse of risk within which they rate their clients' pregnancies as well as evaluate each other's worthiness of the title *comadrona*. Indeed, *comadronas* perceive their relationship to the supernatural as a mitigating force against the risks associated with pregnancy in rural Guatemala.

Maternal and infant health in Guatemala

Guatemala has a rocky history of provision of maternal and infant health care.[27] At the time of my research the Guatemalan government provided health care

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[26] This chapter is an edited version of a previously published manuscript (Dudgeon, 2012)

[27] Given the scrutiny by the international community of Guatemala as a violator of human and indigenous rights in the past century, Guatemala's failure to provide adequate access to maternal and infant health care to its citizens has increasingly been articulated as a human rights issue (Hall Martinez & Scott Jones, 2000). Several international human rights instruments which have been ratified in Guatemala have been linked to reproductive rights, including the Universal Declaration on

through the Ministry of Public Health and IGSS[28], or its Social Security system. Through the 1990s and 2000s reproductive health care fell under the aegis of the Ministry of Public Health (or MSPAS)[29], and a series of programs were initiated and terminated – discontinuity characteristic of the government's lack of legislative of policy framework for addressing fertility regulation. In 1989 a Women, Health, and Development Program was developed within MSPAS, focusing on issues such as women's health, domestic violence, and gender discrimination within the health sector. MPSAS once sponsored a Reproductive Health Unit dedicated to the introduction and promotion of modern contraceptives, including female sterilization. Both Catholic and Protestant religious groups objected to the aims of the Unit, and the Unit, along with the Women, Health, and Development Program were abolished after 1996. In their place, a National Maternal Infant Program was installed in MSPAS, with the explicit goal of improving maternal and infant health indicators, in particular infant and maternal mortality.

The Maternal Infant Program serves Guatemalan citizens primarily through the three levels of health care traditionally provided under the Guatemalan Constitution and discussed in the Introduction – hospitals, health centers, and health posts. The focus of these services is mainly on prenatal care, birth management, and postnatal care. Importantly, the emphasis of the program is safe

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Human Rights, the Convention on the Elimination of All Forms of Discrimination Against Women, the Convention on the Elimination of All Forms of Racial Discrimination, and Convention No. 169 for Indigenous and Tribal Peoples of the International Labor Organization.

[28] *Instituto Guatemalteco de Seguridade Social*
[29] Formally, the *Ministerio de Salud Publica y Asistencia Social* in Spanish, or Ministry of Public Health and Social Assistance.

pregnancy and delivery, with fewer services available for other aspects of reproductive health such as contraception, pap smears, STD information or treatment, or breast cancer examinations.

The 1996 Peace Accords mandate the lowering of both infant and maternal mortality and the addressing of indigenous and rural health concerns. Pursuant to these goals, Guatemala's health system was reformed through the 1997 Health Code to incorporate public and private health organizations into a health sector coordinated by the MSPAS to develop a comprehensive health care system. The Maternal Infant Program evolved into the Ministry of Reproductive Health in the early 2000s, along with a parallel plan for indigenous health in 12 departments called the Extension of Coverage Plan. Both have been implemented under Guatemala's comprehensive care system known as the Integrated National Health System, or SIAS.[30]

This discussion of maternal and infant health is important because it represents separate strategy for dealing with Maya communities. As I have argued in Chapters 2 and 3, for most of the 20th century, the government of Guatemala interacted with its rural population as a sovereign rather than a disciplinary power. State administration of rural Maya in particular was achieved primarily through the use of coercion and force rather than infrastructure or social services. This

[30] Such organization has been slow in emerging, however, with only 5 percent of Guatemalans receiving basic health care through the program at the time of my fieldwork.

reinforced the exclusion of indigenous groups from the state[31], maintaining a semi-feudal concentration of land and resources in the hands of a small minority, maintaining some of the highest levels of inequality between the richest and poorest in the Latin American region (cf. Haritatos et al., 2007). In the aftermath of the civil war, and in parallel with the activities of international organizations such as the United Nations and bilateral and multilateral NGOs, Guatemala has seen increased administration of the biopolitical life of rural Maya, with a particular emphasis on reproduction and reproductive health (Geronimus, 1992, 1996; James, 1994).

Risk among Biomedical Health Care Providers

I encountered incredible plurality in the meanings of infant illness and death among groups of health care providers during my research in Jun. Conducted from December 2001 until May 2003, my ethnographic and epidemiological fieldwork focused on Maya men's experiences of reproduction as well as men's influences on maternal and infant health. While in Jun, I was able to work with several groups of health professionals, including physicians and epidemiologists working with the Ministry of Health, several local and regional health NGOs, and collective organizations of TBAs. In the departmental capital of Quetzaltenango, I attended conferences and training sessions on maternal and infant health at the departmental office of the Ministry of Health for regional doctors and hospital staff, which

[31] As discussed in Chapter 3, political debate within Guatemala has historically focused less on the inclusion of indigenous communities and more on the degree to which sovereign versus disciplinary and regulatory power should be exercised by elites in the administration of those communities (Grandin, 2000). Strategies have included privatization of land and indigence laws with forced labor directed at indigenous groups (Handy, 1984).

included lectures and slide presentations that focused on measurements of mortality and morbidity, vaccination campaigns and their outcomes, and epidemiological data on the quality of health care provided by the Ministry of Health. My observations and interviews with those groups provide insight into the differences and similarities in concepts of reproductive risk between groups, as well as implications for the provision and health care by those groups.

The concept of risk arose very concretely during a presentation given by a local physician working for the last several years with maternal and infant health NGOs receiving funding from the USAID in Quetzaltenango. In that time his work with the NGOs had shifted focus from the training of TBAs to the assessment of indicators of quality in different health care settings run by the Ministry of Health, such as hospitals and health clinics. Those measures included assessments of such factors as presence and quantities of essential supplies and medicines, numbers of beds in different wards, and sanitation in and around the facility. In his presentation on quality control, one portion of his material centered on the creation of "emergency plans" with couples during their pregnancy. The NGO's focus on education around the concept of preventative measures for obstetric emergency was targeting the vast majority of the couples in indigenous communities like the K'iche' community in Cantel in which I worked, who planned to deliver in their own homes with TBAs rather than in a hospital. Although some of these same couples would readily go to the hospital if the pregnancy were to be complicated, others were more resistant. Emergency plans ostensibly allowed couples to have a course

of action in place in the event of an obstetric emergency—planning ahead who might drive if delivery occurred at a time when buses were not running, having some money set away to pay for the transportation, and deciding the different roles husband, extended family, in-laws, and TBA would play. Part of each plan was training in how to recognize signs of danger in the pregnancy and during labor. This was a continuation of some elements of training that had been given to TBAs in Maya communities by earlier NGO projects but with some focus on education for couples.

The theme of the talk—introduced as part of the justification for emergency plans—was that the conceptualization of the risks of pregnancy had to change among providers in Guatemala. As discussed in the presentation, an "old" way of thinking about pregnancy was that some subset of pregnancies had complications that had to be managed such as obstetric emergencies that required physician intervention. The speaker's project advocated a new perspective promulgated by the NGO—the perspective that "every pregnancy is at risk." Pregnancy was to be thought of as an inherently unstable period, during which time the health of both mother and fetus was at risk. Rather than wait for an obstetric emergency, or rely on prenatal care to sort women into categories of complications, pregnancies by their very nature should be thought of as risky in and of themselves.

There were immediate murmurs of dissent from the crowd of physicians and mutterings throughout the rest of the talk. Discussion afterward was brief—but heated—and revolved around the statements of several physicians in the audience

that pregnancy is a normal, healthy biological process, a part of life, and that to call pregnancy inherently risky flew in the face of basic reproductive physiology. The presenter's response was conciliatory, saying that much of the risk of pregnancy was dependent on context—limited resources, rural, poorly educated, and indigenous. But he did defend his position that pregnancy and delivery are complex physiological processes, that some part of that process might go wrong with any pregnancy, and that every pregnancy is at risk.

I was initially surprised by the vehemence of the other physicians' reaction to the premise that all pregnancies are risky. At face value, it seemed a rather subtle shift, and a realistic one in a setting of limited resources and historically poor indicators of maternal and infant mortality. Moreover, my first thought was that any expansion of the field of health care (making every pregnancy the domain of doctors rather than just a few high risk pregnancies) would be embraced rather than rejected outright. In speaking with some of the physicians in the audience after the talk, this perspective did play out in their comments—but about the presenter and the NGO, not about themselves. As one physician put it, "This idea of all pregnancy being risky, it's nonsense. Look around. Look in the hospital and in people's homes. The vast majority of pregnancies turn out fine. Saying that every pregnancy is risky is just a way for projects to expand, to self-justify, and to get more funding. We need to spend money on the pregnancies that are actually in trouble, rather than projects with fancy talk about risk." The presenter had his own insight into the crowd's reaction: "I've seen this reaction before, when I give this talk. They

have an older idea of risk, one that's based on their training as doctors, that risk is about pathology, about being sick. They see risk as out there somewhere, a germ or an accident, rather than a part of the process of pregnancy and childbirth."

Between these two comments I see a fundamental shift in the way risk connects the individual pregnant woman to the population served by biomedicine. For the physicians, risk is more discrete, with pathology an outside threat. For the NGO worker, however, it is more pervasive, a field that is navigated rather than a threat encountered. Moreover, physicians are removed from the universe of blame except insofar as they fail in their intervention in the pathological pregnancy. But from the perspective of the NGO worker, blame extends in all directions, such that it becomes intelligible that lack of prenatal care is a risk factor for poor pregnancy outcome. This second perspective resonates strongly with Agamben's (1998) state of exception, in which a condition of constant emergency allows the powers that be to suspend rights and exert total control – a mechanism to import the older, sovereign rules into modern structures of power.

Because I did research with *comadronas* in Jun as well as with biomedical providers, participating in training sessions as well as interviewing *comadronas,* can contrast the perspectives *comadronas* have on risk with those of other health care professionals. Before discussing those differences, it is appropriate to review the

Traditional Birth Attendants in Guatemala[32]

[32] When referring to programs or data that are global or regional, I will use the term TBA, while I will use *comadrona* when referring to the specific communities in which I did research. However, the terms in this dissertation are interchangeable.

Ample evidence suggests that midwives have delivered women and their neonates among indigenous Maya in Mesoamerica before contact with the Old World, and TBAs continue to attend a high percentage of births in rural Guatemala. The Guatemalan government began issuing permits to these midwives based on examinations in 1935, and since 1955 Guatemala's Ministry of Health has engaged in the training of midwives. In 1969, the Maternal Child Health Division of the Ministry of Health was created, with concomitant growth of TBA training, such that by the mid-1970's approximately 6,000 of an estimated 16,000 practicing midwives had received training.

The training of TBAs has fallen from favor among international policymakers. WHO examined the training of TBAs beginning in the 1970s, promoting their integration into formal health care as a way to extend coverage of maternal and child health services (Asturias, 1949) into the mid-1980s. By the 1990s, however, stakeholders such as WHO had begun to shift funding away from TBA training due to its unclear impact on outcomes (Replogle, 2007). In the World Health Report 2005, WHO said of TBA training that "[t]he strategy is increasingly seen as a failure" (70) with provision of professional skilled care the most effective intervention (Christenson, 2008).

The causal impact of TBA training has been difficult to assess in Guatemala and elsewhere because of the ecological nature of the intervention and the quasi-experimental assessment of outcomes before and after the intervention in or between communities and areas where multiple other variables are left

uncontrolled (and uncontrollable). Outcomes that have been assessed include improved referral by TBAs, increases in women's antenatal and emergency obstetric care, and improved maternal and neonatal mortality and morbidity. In a multi-country meta-analyses of the impact of TBA training, Sibley and colleagues found that TBA training in Guatemala may have had some non-significant improvement in TBA knowledge and significant, if small, positive association with TBA referral and maternal use of services (Sibley, Sipe, & Koblinsky, 2004) and reduction in perinatal mortality and birth asphyxia mortality (Sibley & Sipe, 2004). These results were limited, however, by the quality of TBA training evaluation. Focusing on four randomized control trials, they found that one study reported significant reductions in stillbirths, perinatal death rate, and neonatal death rate (Sibley et al., 2007).

In 1995, only 35 percent of women in Guatemala delivered with a doctor or nurse, while 55 percent delivered with a TBA, and ten percent delivered with a family member or alone ("Guatemala 1995: Results from the Demographic and Health Survey," 1997). In 1990, the Institute of Nutrition of Central America and Panama (INCAP) began the Maternal and Neonatal Health Project, which focused on the predominantly indigenous highland population of Quetzaltenango of approximately 150,000. This project was funded by USAID and MotherCare Project of John Snow, Inc., also known in Guatemala as *Proyecto Cuidado Materno* (a literal translation of MotherCare Project in Spanish). A major component of that intervention was the training of TBAs from March to May 1991 to detect, manage, and refer obstetric and neonatal emergencies and complications. Training in the

region continued through the 1990s. However, MotherCare did not have its funding renewed by USAID in 1999, which then funded the Johns Hopkins affiliate, JHPIEGO. However, many of the same in-country staff continued to work with the new JHPIEGO projects, with some continuity of TBA training. In analyzing the effects of the MotherCare intervention, O'Rourke (1995) found that there was an overall increase in TBA referral after the intervention. However, Bailey et al. (2002) found that, from 1990-1993, the intervention might have increased referral of postpartum complications, but that it did not seem to have had any effect on referral of obstetric and neonatal complications generally.

Social science research on *comadronas* in Guatemala (cf. Berry, 2006; Cosminsky, 1982; Geronimus, 1992; Glei et al., 2003; Goldman & Glei, 2003; Greenberg, 1982) has contrasted *comadronas* who have received some formal training, and those who attend births with knowledge and practices based on their own experiences of their own pregnancies or attending the deliveries of others. The distinction to some extent was based on their own self-identification, but boundaries between the two categories are not rigidly fixed and have blurred over time. Many *comadronas* in communities like Cantel began attending births without formal training. However, during their careers as midwives, most of these women will have received some kind form of formal training, either from the Ministry of Health, or organizations like the Institute of Nutrition of Central America and Panama (INCAP), MotherCare, or JHPIEGO.

Stratification and risk

Implicit in the discussion—and much more explicit in my ongoing work with physicians and hospital workers—is the idea that the reproduction of some groups is riskier than that of others. The reproduction of indigenous Maya occurs in a dense cloud of risk, not unlike the very real fog hanging over the chilly corn fields of their highland mountain communities, where distance, inaccessibility, poverty, illiteracy, and culture obscures access to biomedical facilities and blurs perceptions of dangerous reproductive practices. Hospital staff I had previously interviewed in two neighboring departments (Dudgeon, 2000) felt that a major contributor to Guatemala's high infant and maternal mortality was the late arrival of complicated deliveries such as prolonged labor, obstructed labor, hemorrhaging, and asphyxia. Arriving far into the course of the complication, many of these cases were "too late" to be managed by biomedicine. This lateness was framed as needless and exacerbated by informational and cultural barriers. Such barriers included the *comadrona*, who perhaps did not recognize the complication in time or who, along with the patient and her family, did not want to go to the hospital until the final moment.

This differential field of risk echoes Ginsburg and Rapp's (1995b) use of the concept of stratified reproduction, a situation in which the reproduction of members of some groups is encouraged and facilitated, while that of others is limited, hindered, and even despised. As this dissertation progresses, I will refine that concept further in analyzing K'iche' men as reproducers who simultaneously

participate in a system of stratified reproduction even while they, as indigenous men, also participate in a gendered hierarchy. The present discussion about biomedicine and *comadronas* also adds to the concept by highlighting how the stratification of reproduction leads to reproductive risks, even as those very risks reinforce the reproductive stereotypes about K'iche' Maya discussed above that allow for stratification.

Comadronas **in Jun**

It may not come as a surprise that these opinions contrast with the attitudes toward risk held by some of K'iche' *comadronas* in Jun. Each hamlet in Cantel, including Jun, is served by a number of *comadronas* (*iyom* or *ilonel* in K'iche'). Some of those *comadronas* practice only in the hamlet in which they live, while others may have clients spread over several communities in the municipality. Some of them work only with a few patients, such as members of their extended family, while others have many more clients and support themselves through their work as midwives. Some of those women are in their seventies and have been practicing for decades with little formal training, while others are in their twenties and have received government or NGO training courses with little real-world experience. Many of them have delivered numerous infants both before and after receiving government or NGO training. While some are relatively isolated in their practice, the majority participate in a loosely organized guild, which has focused on facilitating training by outside groups as well as soliciting material contributions.

The most active and those with the highest client load tend to be in their fifties and sixties, delivering a dozen or less to over one hundred infants a year.

As informal and poorly integrated members of the biomedical obstetric care community, any interaction with other healthcare providers has meant for many midwives a risk to both their personal integrity and professional credibility. Obstetric emergencies that resulted in trips to the hospital were failures for these birth attendants, rather than the smooth shift in levels of care envisioned by NGOs and hospital staff (cf. Berry, 2006). The antagonism and derision they met in hospitals was often humiliating, but more damaging for many was the insult to their reputations as professionals and, less commonly, the potential animosity and retribution they might face from families that had a difficult delivery or poor delivery outcome. Moreover, 'false alarms' in which trips are made that are later deemed unnecessary can be equally damaging. The importance of professional credibility depended in large part on the zero-sum dynamics of midwifery practice in a small community, in which professional rivalries and jealousies led to a fairly continuous background discussion of blame and insinuation with and about other midwives. Such discourse in large part operates to maintain a hierarchy of reputation of 'good' and 'bad' midwives in an area in which no one midwife can attend all deliveries, but many work to function as health care providers at as high a capacity as possible. Such friction between midwives must be balanced against the solidarity they maintain as a group in order to prevent other midwives from infringing on their territory and to compete as a group for attention from and to

avoid harassment from outside organizations such as the Ministry of Health and NGOs. *Comadronas* who work together to form groups are more likely to receive support (like funding, training, and equipment) and less likely to encounter problems when they do go to hospitals or interact with physicians, because they may develop ties with hospital staff and physicians and may, therefore, be perceived as cooperative, albeit ancillary, pieces of a larger techno-bureaucratic healthcare system (cf. Davis-Floyd, 1996). Locally, however, *comadronas* negotiate the complex, risky moral landscape of relationships that exist within the group of midwives themselves.

Comadronas are generally categorized as unskilled providers and auxiliary health care workers who best serve the needs of their patients in the referral of emergent complications and in the management of uncomplicated pregnancies up to the point at which biomedical health care has adequately expanded to provide those services, rather than occupying a role as valuable and legitimate health care providers in their own right. That being said, many Guatemalan physicians, nurses, and other allied health care providers, including those discussed above, work closely with *comadronas* and respect them as *individual* providers even if they may not highly value their structural position as TBAs. As Hinojosa (Christenson, 2007) has observed among Kaqchikel Maya in Guatemala, formal health care providers often value midwives primarily as a means to the ends of biomedicine rather than as legitimate health care providers. In other words, formal health care workers may

pursue the administration of reproductive life *through* the *comadrona* rather than its care *by* the *comadrona.*

Supernatural Pacts

The distinction and importance between trained and untrained birth attendants is a contested political issue among *comadronas* themselves in Cantel, because registration carries with it some authority, recognition, and qualification for benefits like medical supplies. In fact, some *comadronas* even make distinctions between real and fake, but not according to training—rather, according to destiny.

A familiar narrative found throughout Latin America is the pact with the devil, in which some member of the community is said to strike a Faustian bargain for money, sex, and power, thus, explaining their rapid, easy, or sizeable acquisition of material goods. In his classic treatise on the subject, Taussig (1980) discusses devil pacts at sugar plantations of the Cauca Valley in western Colombia and tin mines in Oruro, Bolivia to argue that as labor becomes commodified for rural peasant groups in the shift from household to capitalist economy, peasants lose control of the means of production while commodities, rather than labor, appear to be the source of value and profit. Rather than suggesting envy or repressed desire for these material goods, devil pact narratives instead represent moral condemnation of the clash between use-value and exchange-value, in which social relationships among things hide, replace, and supersede those among people. "Instead of reducing the devil-beliefs to the desire for material gain, anxiety, 'limited

good,'[33] and so on, why not see them in their own right with all their vividness and detail as the response of people to what they see as an evil and destructive way of ordering economic life?" (Taussig 1980:17).

By contrast, Edelman (1994) emphasizes not the universal transition to agrarian capitalism and wage-labor, but instead specific local context and other forms of exploitation, such as male sexual dominance in his analysis of devil pact narratives from northern Costa Rica. In expanding Taussig's argument, Edelman points out an important dimension of Taussig's analysis is the barren transient nature of the profits of the devil pact. "Those making contracts are believed to die prematurely and in pain, land purchased with ill-gotten gains will become depleted, livestock will not thrive" (Edelman, 1994, p. 59). Edelman (1994) argues that devil pact stories grew up around one wealthy landowner and not others in part because of his sexual promiscuity. A more general formulation is that new social and economic relations are interpreted and represented as supernatural—"The basic argument is that in rural Latin America devil-pact stories constitute a significant, nearly ubiquitous cultural matrix through which to view relations of power and exploitation and through which to express a variety of socially conditioned anxieties and psychic conflicts" (Edelman, 1994: 60).

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[33] This is a reference to Foster's concept of the image of limited good (G. Foster, 1965) as it applied, in his formulation, to peasant societies broadly. The image of limited good refers specifically to the cognitive orientation that "all desired things in life … *exist in finite quantities and are always in short supply* insofar as the peasant is concerned [and] … *there is no way directly within peasant power to increase the available quantities*" (296; original emphasis).

Dealings with the supernatural in Latin America are not limited to the diabolical. Paul's work in San Pedro La Laguna on Lake Atitlán in the department of Sololá in the 1960's and 1970's describes the recruitment of *comadronas* and their roles in the community (Paul, 1975, 1978; Paul & Paul, 1975). Women in San Pedro, as in other communities, had dreams in which they were called by supernatural beings to become midwives and would undergo illnesses and suffering before entering the midwife role. Paul interprets these dreams and illnesses as elements in the transformation of identity from an ordinary woman to an extraordinary midwife, resolving the identity crisis through rites of transition and psychic dramas and allowing women to overcome their husbands' resistance to their new roles. Although Paul's analysis alludes to forces of modernization, both in terms of *comadronas* who use modern contraceptives like the birth control pill and the IUD, as well as in the economic benefits that accrue to *comadronas*, she suggests that supernatural election of *comadronas* in a large part stands against these modernizing trends.

More recent ethnographic work shows continuity with Paul's descriptions. In discussing beliefs and rituals among *comadronas* in the Kakchiquel community of San Lucas Tolimán, also on Lake Atitlán, Walsh (2006) explores three thematic domains in women's practices as *comadronas*: sacred calling, sacred knowledge, and sacred ritual. I encountered similar themes in my work in Cantel where many, although not all, of the women in the *aldea* who worked as *comadronas* reported very similar dreams and visions in which they received direct instructions or some

sign that they were "destined" to attend births. Kakchiquel women described having dreams or visions in which they received communication from a divine force, such as God or a saint, instructing them to become a midwife or to symbolize that they had a sacred calling. Walsh (2006) notes that all the women with whom she worked initially rejected that calling. At some later point, sometimes years after their initial calling, they described falling ill, and only regained their health once they had begun their work as a *comadrona*.

Angel Pacts in Cantel

Doña Magdalena is a thin, soft-spoken woman who was not sure of her exact age but believed herself to be around 61 or 62. She describes herself as *muy humilde* (very humble), and indeed she made little eye contact during our discussions. Her slow answers suggested a limited fluency in Spanish. Nonetheless, her answers were full and expressive, and she kept meticulous written records of her patients over time. Magdalena learned in a dream she was destined to become a *comadrona*.

> I had a dream. It was before there was a session for training for *comadronas*—16 years ago, maybe more. I was lifted up into the sky and there were angels. There were three girls and one man, and they were tall and had blue eyes, and their skin was white, white, white—like yours, they looked like *gringos* like you. They smiled at me and gave me a little white cloth, the kind you use to clean the face of the child when it is born. Then I had another dream and I saw this same white cloth again.

She said that her husband was also having dreams at that time. He did not want his wife to work as a midwife, because it meant that she would be learning new concepts. However, he had dreams in which a doctor dressed in white came to him and said not to punish his wife but instead to allow her to work as a *comadrona*. In

the dream, the doctor assured him that this was Magdalena's destiny and that, even though she is learning, that this was what she was supposed to do because it would help others.

Another midwife, Doña Sebastiana is a plump woman even by local standards, in her late 40s, with a round, smiling face, tiny bright eyes, and perpetually rosy cheeks. Her husband, an even more impressively rotund man with a bushy graying beard, worked as self-described *hombre de negocios* (businessman) as a dealer in *corte* (a textile) that he sold in Quetzaltenango. He also held a position in the municipal government. The two of them have 13 children together, the youngest a four-year-old who would appear periodically with his siblings during our interview. When I interviewed her, Sebastiana said that she had been a midwife for eight years. She said that she started as a *comadrona*, because a physician from INCAP had come to give a training session. All of the women who attended the training session were already *comadronas* except for her and her friend. Before that she had never attended a birth but felt as if she could become a midwife because she had already had several pregnancies. The training only lasted for five days at the culmination of which she felt ill-prepared to attend any deliveries. When she asked the physician for more training, he suggested that she observe births at the hospital. So, for the next seven months, she went several days a week to observe how deliveries took place at the regional hospital in Quetzaltenango.

Doña Romelia, was 50 years old when I interviewed her. She had also been working as a *comadrona* for about eight years. A heavy-set but energetic woman

who, unlike many women in the community her age, had gone completely gray, she was a mother to four surviving children: a daughter who brought us a cup of hot *atole* (a corn-based beverage) during the interview and three sons. She would have had six children, but her first child died after a month and her third after eight days. She did not know why they had died exactly, but she thought that the first had had a cough, and that both were small and weak when they were born and did not want to take milk. Her husband is a 51-year-old field laborer who is the owner of his own *milpa* (corn field), but who also works on occasion weaving or baking bread. Although Romelia feels that she was destined to become a *comadrona,* she did not feel that way because of dreams or visions. Instead, her mother had been a *comadrona* and Romelia had seen how she practiced throughout her lifetime, as well as during the deliveries of Romelia's own children. One day her mother was not at home when someone came to fetch her for a delivery, so Romelia took her place. She said that first delivery was not at all difficult, and so she started working as a *comadrona,* with training at the hospital in Quetzaltenango on the weekends for eight months, sometimes for 12 or even 24 hours at a time. Romelia's mother lived with her but passed away while she was training. With less help at home, her husband wanted her to stop the training. Nonetheless, Romelia persisted.

Women may not recognize their dreams immediately as indicating a vocation, or they may choose not to take up the obligation of midwifery. Many women emphasize their reluctance to work as a birth attendant for fear of their husband's disapproval, community gossip, and the work outside the home.

However, invariably, women who avoid their destiny will encounter problems like bad luck or failing health. Such was the case for Doña Francisca, who, at 52, towers in stature over many of the other women in the community. Despite her size, Francisca is a quiet woman who enjoys talking about the months she spent in the United States visiting a son and working as a housekeeper. While there, and upon her return to Guatemala, she thought she would not continue as a midwife.

> For several years I decided that I no longer wanted to be a *comadrona*. However, I became sick. My back hurt, and I had no energy. I did not know what was wrong, but a *kamal b'e* (traditional healer) told me that it was my destiny to be a *comadrona*, and if I avoided it I would always suffer. It is a burden, to work this way, but I have to do it.

These narratives of sacred calling—what I term "angel pact" narratives—parallel those of devil pacts, but with some important structural oppositional qualities beyond the dichotomy of good and evil. These are women rather than men. Men in the community may also discuss themselves as involved in a sacred calling, in particular men who work as Mayan priests (*sacerdotes Maya* in Spnanish or *kamal b'e* in K'iche'). But in both Taussig (1980) and Edelman's (1994) discussions, women did not participate in devil pacts, and for Edelman the aspect of reproduction and fertility associated with women was of particular importance to the social practice of assigning devil pacts. The *comadronas* in my study profess to have received the sacred calling and entered into service themselves, rather than ascribing the narrative to someone else. These women were all reluctant to follow a sacred calling that was thrust upon them. Rather than eager to seek out a deal, they saw their pact as a burden to be avoided rather than a boon, and as an offer that was

unavoidable. In contrast, it is the consequences of the bargain that become the unavoidable destiny for the bargainer in the devil pact but not the deal itself.

The *comadronas* work for the benefit of others rather than themselves through a positive, divine force, whereas in the devil pact the gains accrue directly to the individual bargainer. Although the maker of the devil pact may choose to share some of his wealth, the overall effect of the presence of the diabolical in the community is a negative one. Finally, while both sets of narratives include a departure from baseline, the negative and positive effects of the agreement occur at very different times in the narrative. In the devil pact, the positive benefits are immediate, but the long-term consequences are stagnation, ruination, and ultimately damnation. For *comadronas,* it is the initial rejection of the offer that has demonstrable negative consequences in terms her health and well being, while the benefits accrued for accepting the sacred calling may be somewhat equivocal. Many of the midwives I interviewed were straightforward about enjoying their work and spoke with pride about their proficiency as a *comadrona.* Some worked to translate that into other areas of women's health and advocacy, both within the group of *comadronas* as well as in the community. But many women also professed that their activities were an ongoing burden from which they would seek reprieve if it did not mean forfeiting their health.

However, similar to devil pact narratives, these angel pact narratives do aid in the interpretation of changing social relations along several dimensions, as they work to resolve and justify some contradictions in the work of *comadronas*. On the

one hand, when women become *comadronas,* they enter into a vocation that carries with it both responsibilities as well as respect. They become responsible for attending births and delivering infants: a painful and difficult process with unique risks and potentially horrible outcomes. That vocation, if it is their true calling, confers on them the right to walk freely in the streets at whatever time of night or day, an autonomy denied to most women. They are also allowed to enter into a community of other women, many of whom become strong friends and allies through their work as *comadronas.* Finally, women who work as *comadronas,* now more than in the past, enter into relations with their patients in which they are paid for their services. Most midwives acknowledge that, in the past, *comadronas* might receive some reciprocity, such as a meal or some local produce for their services. Now, most have a payment scale according to which they either charge a fixed fee for antenatal visits as well as delivery and postpartum massages and steam baths, or by which they charge patients per visit, with a larger fee for delivery. Some women go so far as to say that the receipt of money, or large sums of money, for work as a *comadrona* is *awa'* in K'iche' or *pecado* in Spanish: "sin."

The angel pact narratives help to justify this distinct position *comadronas* hold in the community with respect to other women, while at the same time continuing to operate as women in what has been in Cantel a very woman-centered sphere of knowledge and practice. Angel pact narratives allow women to negotiate the risks inherent in the local, shifting moral economy surrounding their work as women as well as the changing risks of operating as medical providers in a field

increasingly penetrated by governmental and nongovernmental administrators of maternal and infant health. Angel pacts also allow these women to negotiate the risks they encounter in their profession, delivering infants without access to emergency obstetric services with the potential for injury or death or mother and child. *Comadronas* mobilize these narratives to complement and to resist government and NGO programs for training birth attendants, pointing to an authority beyond those programs for legitimating their own practice both with respect to less authentic birth attendants who have been trained but were not called, as well as regarding the biomedical model of pregnancy and delivery, which would question their abilities to deliver infants safely and without complication or to recognize complications should they occur.

Interestingly, there are elements of the devil pact in birth attendants' discussions of their practice and their reflections on the practice of other *comadronas* in Cantel expressed through the use of oxytocin. Oxytocin is a hormone naturally produced during labor that strengthens uterine contractions, and a synthetic analog of oxytocin can be administered to facilitate birth. Injections of oxytocin are widely used by many *comadronas* with whom I worked to induce or speed labor and delivery, often at the request of women and families, despite cautions against this practice in TBA training sessions because of the difficulties in dosing. Although no individual *comadrona* will admit to using oxytocin herself, many I interviewed were more than willing to indict other *comadronas*. Below is a

specific conversation that was repeated in its general outline with many *comadronas.*

MD: Do you ever use injections during delivery?

Comadrona: No, I never use injections [of oxytocin].

MD: Do you know anyone who does?

C: Oh, many do [lists some names]… You know who uses it a lot? [Name]. She has so many patients that she is running back and forth between deliveries, so she will give the injection to one patient to hurry [the delivery] up, then she goes to the other delivery.

Most *comadronas* I interviewed gave similar answers to questions about the use of injections to hasten deliveries, and some preferred not to answer the question at all. Accusations of the use of oxytocin are associated with the distinctions made between real and study-only birth attendants and their authenticity. Those that have been destined to deliver babies need not use oxytocin, while those who have only studied do so because of their lack of natural ability and sacred calling. Indeed, some midwives' use of biomedical technology may raise questions as to their authenticity—provoking allegations of their entrance into a kind of devilish pact with a medical system that shuns the ways of the traditional *comadrona* and her belief in the supernatural forces that keep risk at bay.

Men and reproductive decision-making

As discussed in Chapter 3, my research on men's influences on reproductive health afforded me the opportunity to talk with men as well as *comadronas* about the different roles they perceived men played during pregnancy, delivery, and in childcare. Few of my closest male informants had direct experience with obstetric

emergencies, but some had heard of instances in which women had been taken to the hospital during childbirth, and many had strong opinions about the proper course of action in such an emergency. Among couples that received prenatal care from *comadronas*, men expressed a wide range of views on the subject of complications during delivery ranging from absolutely no travel to a hospital under any circumstances to having an emergency transport plan in place. I want to focus here on some of the dynamics of the decision-making process in obstetric emergencies, with attention to men's roles, in light of that prior discussion.

A number of recent quantitative studies in western Guatemala have discussed the importance of considering multiple actors, including men, in analyses of decisions surrounding delivery complications. Fonseca-Becker et al. (2013) found that men are the primary decision-makers in the use of biomedical care in obstetric emergencies, with mothers-in-law and *comadronas* also exerting influence. Carter (2002) found that women reported their husbands to be the principal decision-maker in emergencies that required immediate use of funds. Becker et al. (2010) reported that, for a variety of decisions, including household purchases, child illness, medicine purchases, and obstetric emergency, the majority of women were included in these decisions, but fully 38 percent of couples were concordant in reporting that the wife was not involved in the final decision in obstetric emergencies. Moreover, these women tended to underestimate rather than overestimate their role in decisions relative to their husband's reports. Collectively,

these studies point to the privileged position many men occupy in households in western highland Guatemala.

My own qualitative interview data with men, women, and *comadronas* provide context for these survey data. As I have shown, when asked about decision making in the household relative to emergent situations such as an obstetric emergency, many men state that others in the household might potentially be involved in the decision to go to a doctor or hospital, including a *comadrona,* a female relative (sometimes that same *comadrona*) such as his mother or the mother of his wife, or male relative such as his father or the father of his wife. Men's comments suggest that relatives are more likely to be involved if the couple lives with those relatives, especially if the couple is younger and/or if this is the woman's first pregnancy. Similarly to the quantitative studies, men's responses to questions about decisions to go to a hospital or physicians varied from including their wives or deferring to them completely to maintaining that they would make the decision in such an event. Other men said that, because she was the health care provider attending the delivery, the *comadrona* would necessarily be involved in the decision, or even make the decision herself.

As reflected in Chapter 3, an important distinction I found in men's comments about obstetric emergencies, and reproductive decision-making generally speaking (e.g., contraception utilization, pregnancy timing, family size, etc.) was that, while many men said that women should be included in decisions and that they, in fact, did include them in reproductive decisions, ultimate authority in

the making and execution of those decisions lay with the husband. Many men felt that their wives' opinions were valuable and that discussing such matters as reproductive decision making *entre las chamarras* (literally "between the covers" or in bed with one's partner) could improve a relationship and build trust and intimacy. However, the final authority rested with the man, such that were the couple to have some disagreement about a decision, his would necessarily be the last word in the matter.

Returning to the specific example of emergency obstetric decisions, *comadronas* agree that men exert authority in such situations, and several cited examples in which they had to argue, plead, or in some cases bargain with husbands to prompt transport to a biomedical provider. Doña Elena, a youthful-at-fifty-ish *comadrona* as well as local contraceptive provider told of how she had, in the face of refusals from a husband, written up on the spot a "legal document" she asked him to sign absolving her of responsibility, at which point he acquiesced. Men's authority could be swayed or subverted, but it was nonetheless a reality *comadronas* acknowledged.

At the same time, men acknowledge the authority—and the authoritative knowledge (cf. R. Davis-Floyd & C. Sargent, 1997)—of the *comadrona* within the domain of pregnancy and childbirth. Many men do not equivocate in expressing that pregnancy and deliver are *cosas de las mujeres* (women's things) and, while they may be present in the house during a delivery, the details are best left to the professional: the *comadrona.* Men occupy, therefore, a tenuous position in which

they have both given over and maintain authority simultaneously. That ambiguous position becomes less tenable in an obstetric emergency in which they may be quickly required to make decisions about a process they have, in accordance with longstanding mores regarding women's privacy during childbirth (Cosminsky, 1982; Paul, 1974; Ruz, 2000), remained outside.

The cultural logic of the angel pact—the call to service—operates in such moments both to legitimate the decision-making of the *comadrona,* to provide her a supernatural shield from the risks inherent in her profession, and to contradict the imperative of biomedical intervention. Midwives who have received a spiritual call occupy, in many households in which they deliver, a more secure position—their knowledge and practice based on a mutually understood foundation of divine inspiration and intervention. Yet midwives who have been called should, therefore, be less likely to encounter complications and more capable of surmounting them when they do, obviating the need for biomedicine. While men were less explicit on this point, my impression was that the authority of called *comadronas* with established records of successful deliveries continues to leverage their influence on men's decisions in obstetric emergencies based on their recommendations, while *comadronas* who have training but do not subscribe to a calling may be more likely to be challenged by men (or other family members) in the event of an obstetric emergency. Under such circumstances a "called" *comadrona* may be brought in to manage the emergency, which may resolve under her supervision or may progress to emergency transport but with further delay. The importance of the angel pact

narrative and its disruption of typical gendered patterns of decision making, however, goes to the heart of *comadronas'* attending deliveries in the context of masculine authority.

It is at this point in my argument that I return to the earlier discussion in this chapter of the "every pregnancy as a risk" and the role of biomedicine in both the mediation and creation of a field of risk which K'iche' men, women, and *comadronas* occupy. As detailed at the opening of this chapter, the increasing availability of biomedical services for communities like Jun means that new options for delivery are available, including physician-attended delivery, hospital delivery, surgical delivery, and neonatal intensive care. The decisions to make use of these options typically require resources, such as money and transportation, as well as actions, such as negotiating with predominantly *ladino,* male physicians, that fall under the domain of K'iche' men's authority. This is true even as the objects of those decisions – successful delivery of a healthy infant to a healthy mother – fall outside of men's domain and in the domain of women and *comadronas*, as discussed earlier. This tension, I argue, produces some of the profound ambivalence men feel about their roles in reproduction and reproductive health. It also conditions the risks that *comadronas* navigate.

Conclusion: Risk and Reproduction in Guatemala

Distinctions in the meanings of risk among different groups of health providers point to the distinct vested interests of those various stakeholders. Health care professionals, physicians, NGO workers, and TBAs operate as mediators

of the risky state of pregnancy and childbirth with the potential for devastating negative outcomes for mother and infant. Yet each of these groups operationalizes risk differently. As has been pointed out by physician informants, NGOs may appear to expand definitions of risk to justify their projects, vacillating among different poles of risk (midwife training, quality control, emergency plans) and perpetuating a state of emergency, albeit local and focal. Physicians and hospital workers, as purveyors of biomedicine, focus instead on the heroic mastery of risk when it arises as pathology rather than its constant presence as part of normal pregnancy. However, hospitals may also recognize the limits of their resources and abilities. Knowing that they cannot possibly handle the patient load, they, in fact, depend heavily on the labor of TBAs to manage the vast majority of uncomplicated deliveries.

Moreover, health care providers occupy very different locations in the field of obstetric risk. In particular, TBAs, unlike their physician and NGO counterparts, maintain very risky positions because of their occupations. In the angel pact narratives, *comadronas* manage the risks that their practices pose *to themselves* both by the risk of poor outcome within the community as well as the risks they encounter as marginalized health care providers.

For hospital and NGO workers who are caught between biomedicine and "traditional" birth practices, risk serves as a bridge between the two – a connection made by their differences, as biomedicine is less risky and traditional more risky (cf. R. Davis-Floyd & C. Sargent, 1997). Medicalized risk factors differ from lay discourse

insofar as they encompass and extend beyond what *comadronas* are trained to recognize and manage. For physicians, risk also captures the moment of transition in the division of labor between *comadronas* and hospitals, with *comadronas* managing "normal" pregnancies and hospitals managing "high-risk" pregnancies. The uneven distribution of danger between bodies that is calculated, assessed, and managed through techniques such as quality assurance brings with it the forensic threats of accountability and compensation. For many Guatemalan physicians, this means exclusion of pregnant Maya women and their *comadronas* until a moment of crisis is reached, while for the more global perspective of the NGO worker, it extends that state of exception to the entirety of pregnancy and birth, including the provision of health care.

Ultimately, Maya women and the *comadronas* who attend them remain objects of administration and repositories of blame. The risks they run within their own communities are often minimized, unattended, or obscured by the management of the statistical risks of reproduction. Angel pact narratives emerge, I argue, as *comadronas* resist the biomedicalization of their field while at the same time negotiating competition among themselves in an occupation that is, as a cultural ideal, without personal reward. The shadow of oxytocin parallels devil pacts as an extra-natural explanation for ill-gotten rewards and exploitation of natural abilities. Rather than lying outside the forces of modernization, however, angel pact narratives, like their devil pact counterparts, show the connections between traditional roles like that of the midwife and the powers of the Guatemalan

state and capitalism. Finally, the role of the *comadrona* requires ongoing negotiation of one's position in a field of other competing midwives, such that identity and authenticity are constantly re-dreamed or threatened by illness for many *comadronas* rather than accomplished once and for all.

Chapter 7: Conceptions and contraceptions

In this chapter, I examine the dynamics of contraceptive use in Jun and Keb'. I begin with an examination of widely held beliefs surrounding intra-uterine devices and possible damage to the developing fetus in the context of contraceptive use in Guatemala. The transformative capacity of contraceptives more generally is examined, looking at fears about interfering with the complex process of fetal development as well as the broader concept held by some K'iche' Maya that biomedicines and biomedical technologies are inappropriate for indigenous bodies. A particular case of fetal transformation is then examined, that of a young girl born with malformation of the upper and lower extremities in Keb'. Taking a gendered perspective, I explore the roles men as well as women play in contraceptive decision-making and the consequences of those decisions in K'iche' communities.

Contraception in Guatemala

The prevalence of overall contraceptive use in Guatemala has risen steadily among both *ladino* and indigenous Maya groups, although at different rates. From 1978 to 1998, contraceptive prevalence increased from 28 percent to 50 percent among *ladinos* and rose from 4 percent to 13 percent among Maya (J. Bertrand et al., 1999; J. T. Bertrand et al., 2001). Tubal ligation, oral contraceptive pills, and timing of intercourse were the most popular methods, but Depo Provera injections replaced oral contraceptives in popularity among Maya groups. This rise is due in part to government expansion of contraceptive access. As reviewed in the previous chapter, goals established in the 1996 Peace Accords mandated the lowering of both

infant and maternal mortality. Guatemala's 1997 Health Code was reformed to incorporate public and private health organizations into a health sector coordinated by the Ministry of Public Health and Social Welfare (MSPAS) which has created an integrated health sector, or SIAS, that administers Guatemala's Ministry of Reproductive Health.

The 2002 National Maternal Infant Health Survey (ENSMI) survey (Guatemala, 2003) reports 43 percent contraceptive prevalence among women in unions, approximately 20 percent lower prevalence than in the country with the second lowest prevalence, Honduras (PAHO, 2007). Moreover, different age groups show different patterns of contraceptive use, with only 23 percent of women aged 15-19 and 35 percent of women aged 20-24 – the lowest rates in the region, and more than 30 percent lower than Nicaragua. Regional data place contraceptive prevalence of modern methods in Guatemala among women aged 15-44 between 1996 and 2000 at 31 percent, exactly half the prevalence of Latin America as a whole, while in 2002 total fertility in Guatemala was 4.6, the highest in the Central American region (Santiago & Bastos, 1995; Scheper-Hughes, 1993a).

Despite rises in overall contraceptive prevalence, the IUD remains an unpopular contraceptive method in Guatemala. ENSMI 2002 (Guatemala, 2003)data suggest that only 2.2 percent of women in unions use IUDs, lower than the 1995 prevalence of 2.5 percent and in the face of an overall estimated unmet demand for long-term contraceptive methods of approximately 11.3 percent (Santiso-Galvez & Bertrand, 2004). Among major contraceptive providers in Guatemala in 2001, only

the then USAID funded APROFAM was a major distributor of IUDs, which constituted 14.7 percent of their new users, as opposed to 6.2 percent by Guatemala social security and 3.1 percent by the ministry of health, while Depo Provera injections dominated service provisions for new users by all three major providers (67 percent for the ministry of health, 41 percent for social security, and 39 percent for APROFAM).

Contraceptive danger

While a number of supply-side barriers exist to IUD insertion, fears and rumors about the IUD also limit acceptance of the IUD. In Jun, I found that, although many women had never heard of the IUD, among those that had there was a pervasive rumor that it could become stuck in the head of the fetus.[34] Although IUDs were available in Quetzaltenango[35] none of the 147 women with whom I conducted structured interviews on contraceptives used the IUD, although overall contraceptive prevalence was over 20 percent, of which approximately 97 percent was Depo Provera use. This avoidance of the IUD is not confined to Jun; a 2003 Population Council study listed fear of infants born with IUDs in their head of the fetus as the most prevalent of 15 rumors about IUDs (Brambilia & Taracena, 2003). This widely held belief in Guatemala is also prevalent in other parts of Central America (Katz, Johnson, Janowitz, & Carranza, 2002).

One of the *comadronas* with whom I worked who was introduced in the previous chapter, Doña Elena, also worked with APROFAM as a community

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[35] At the time of my field work the copper IUD, or *T de cobre*, was available in Quetzaltenango

contraceptive provider in Jun. In discussing different contraceptive methods, she briefly discussed the rumor about the IUD. While an ardent supporter of contraceptive use, she admitted that she did think that it was possible that an IUD could be stuck in the head of a developing fetus. While she had never seen it herself, she said that she had heard about it from other midwives. According to her, the head of the infant was very delicate both inside and outside the womb – it was so soft that the IUD, which was hard, could press into the fontanel and damage the baby. She also mentioned, however, that she had also heard that infants were sometimes born to women who were using IUDs completely normal, but holding the IUD in one had at birth, gripping it playfully like a baby rattle.

The IUD is not the only perceived danger to the fontanel of the infant in Jun. For all infants, the fontanel could fall in and cause the infant to become sick. I saw numerous infants brought to the Health Post with *caida de mollera*, or fallen fontanel, another widely spread condition both within and outside Latin America. In Mexico and Central America it has been related to the falling of the hard palate as well as to the possibility of soul loss through the fontanel. According to Kay (1982a), fallen fontanel is best conceived as a culturally interpreted symptom rather than a culturally bound syndrome, with features and treatments specific to cultural context that may change over time. This perspective aids in interpreting meanings of IUD embedding as well.

In many ways, the IUD embedding can be seen as an extension of fallen fontanel, itself a culturally interpreted symptom. The fontanel is, from a biomedical

perspective, a vulnerable area of the fetal and infant skull, and the fontanel may become sunken, tense, or damaged with dehydration, meningitis, or trauma. In Guatemala, high levels of child malnutrition – approximately one million children under five were chronically malnourished in 2006, or 49.3 percent, around 70 percent of whom are indigenous – increase the risk of conditions like fallen fontanel.

Many Maya are skeptical about contraceptives, often along religious lines. Many families in Jun practice a syncretic Catholicism and see any contraceptive use as sin and an attempt to subvert the natural order and the will of God. While the percentage of the Guatemala population that practices some Protestant or charismatic religion has grown to comprise over half the country (and over half of Jun), Protestants also share many Catholics' distrust of contraceptives as sinful. Infants born with IUDs embedded in their heads bear the visible mark of the sins of their mothers. They also embody the punishment for that sin in the form of a damaged infant. Doña Elena's vivid description – in the context of a longer discussion about contraception as *not* being a sin – helped with this insight. In her telling of the infant with the IUD in her hand, I could visualize the defiant infant shaking her IUD rattle, showing off that it had not stopped her, a playful, even devilish, imp. I bring up this example to stress not only the moral ambiguity around contraceptive use, but also the relative advantage of other, more thoroughly covert methods of contraception – namely, Depo Provera injections.

Contraceptive ambiguity

Focusing on the negotiation of contraceptive use within couples brings into relief the ambiguities that surround contraceptive decision making for K'iche' women as well as for men. As reviewed in Chapter 3, men play important roles in contraception. Contraceptive use and effectiveness often depend on men's involvement (Grady, Klepinger, & Nelson-Wally, 1999; W. P. Handwerker, 1989); condoms and withdrawal require partner negotiation (P. Schneider & Schneider, 1995). Men influence the use of female-centered methods, such as oral contraceptives and injections, in that men may control economic resources required to access these methods, or may sanction women's use of these methods (Ward et al., 1992).

The context of contraceptive availability is an important determinant of contraceptive use in both Jun and Keb'. At the time of my fieldwork, several contraceptive methods were available free of charge from the Health Post as well as the Health Center, including oral contraceptive pills, Depo Provera shots, and condoms. Diaphragms and spermicidal gels could also be procured, although these were not kept in stock and required that the patient request them specifically. All of these methods were also available through APROFAM, which had a local provider in Jun (a *comadrona*) as well as local providers in seven of the other hamlets of Cantel. These contraceptive promoters obtained their products from an APROFAM supervisor, a *ladino* promoter.

Masculinity, *machismo* and contraception

As I have argued with respect to other aspects of reproduction, understanding K'iche' men's behaviors and experiences concerning family planning requires trying to understand Mayan men *as men and as Maya*. I will highlight two aspects of K'iche' masculinity introduced in Chapter 3 that play a direct role in contraceptive use – productivity, control, and respect.

One attribute highly prized in men is productivity, both in work and in the home as reproductive agents. Mayan men, especially as adults, are expected to work hard so that they can provide for their families. I have also demonstrated that K'iche' masculinity is associated with having children. Normatively, men are expected to marry, and children are expected to follow soon after, as evidenced in the norms expressed in the *pedimiento* as well as men's own attitudes and ideas about

Control and respect play an important role in Mayan men's lives, and is an important element in *machismo* in Latin America more broadly (Gutmann, 1996; Lancaster, 1992). While conscious of the need to avoid gender stereotypes (L. Brannon, 2011), I argue that Maya masculinity has some identifiable elements and is characterized by a kind of *machismo* that, not unsurprisingly, differs from *machismo* in other parts of Latin America.[36] Both men and women in Jun as well as Keb' say men are *macho*, but not exactly like *ladinos*. *Ladino machismo* embodies a brasher, more flamboyant masculinity, while Maya *machismo*, incorporates or coexists with elements such as humility, dedication, and hard work. I will refer to this Maya form

[36] Drawing on her work in Colombia, Mexico, and Los Angeles, Browner (1986a, 1986b, 2000) has discussed how *machismo* may differ substantially in different areas and across time.

of *machismo* as *Mayachismo* – a neologism not used by any of the members of the communities of Jun or Keb', although definitely chuckled over by several of the men and women I used the word with over as a interesting term that pointed to a distinction they recognized.

I want first to turn return to these concepts of control and respect. As previously discussed, control and respect are two dimensions of hegemonic masculinity in the K'iche' communities in which I worked. Men's exertion of control and or requirements for respect, I argue, are not necessarily experienced as *machista* by K'iche' Maya men or women; these are in fact ideal characteristics *in moderation* and prized by men and women alike, although to different degrees. Men in Jun, according to both men and women, *should* be in control of themselves and should exert influence in their homes, and they *should* respect and require the respect of their families and community members.

I argue that K'iche' men are *machista* in so far as they exert excessive or unnecessary control within their households and demand excessive or undeserved respect from the members of their household. For their wives, this may mean direct control over day-to-day activities, such as when women may leave the house or who may visit. It may even extend to domestic violence when men feel their control has been challenged or subverted.

Patterns of Contraceptive Use

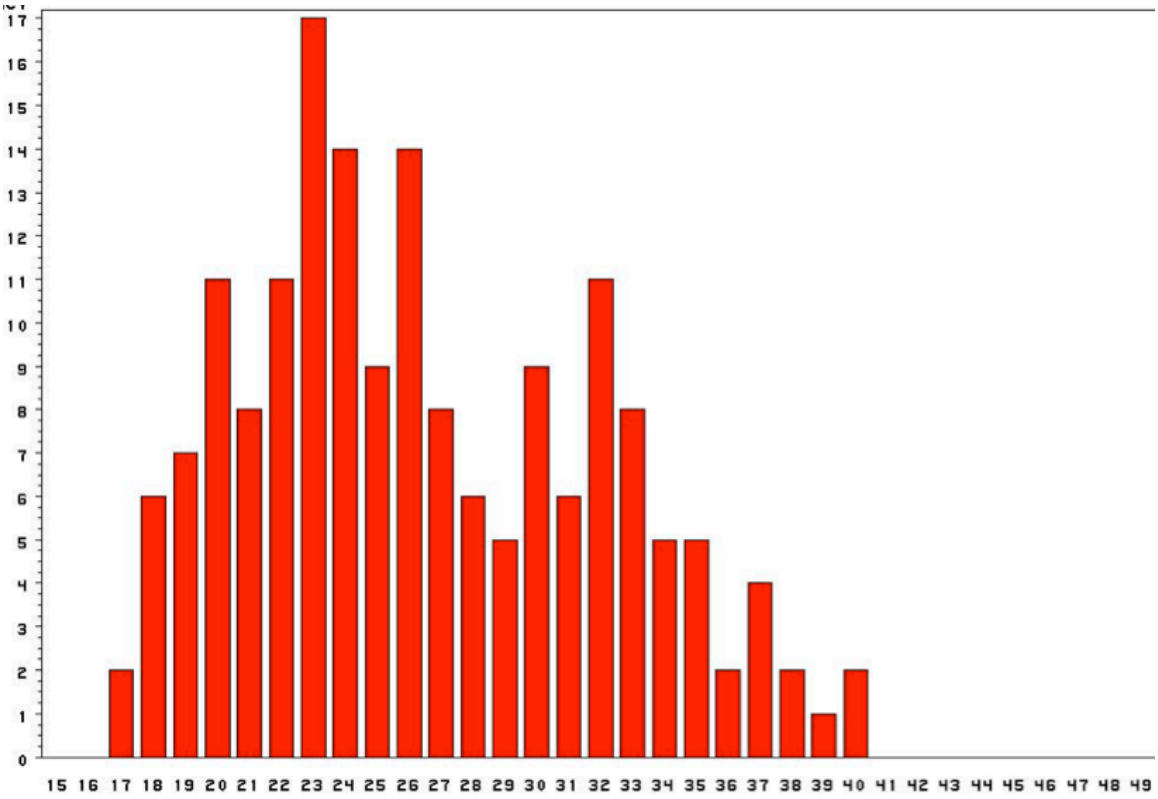
To address these patterns of contraceptive use, retrospective data on contraceptive users from both the *puesto de salud* of Jun as well as a local APROFAM

provider (n=167) were collected, giving a minimum number of ever-users in the community in the past five years. I also conducted an exit survey of women receiving pap smears (n=26) and tubal ligations (n=16) during a two-day health fair provided by APROFAM.[37]

One hundred sixty-seven women, 84 of whom were residents of Jun, had initiated a modern contraceptive method at the *puesto* or from APROFAM between 1996 and 2002. Approximately 92 percent of these were Depo Provera users – the rest used either pills (7.5 percent) or condoms 2.5 percent. The 2.5 percent of condoms users are men, and men only comprised 2.5 percent of all users. In this sense condoms are not a normatively male form of contraception, in that few men use them, while at the same time the only form of contraception that seems to be directly controlled by men.

[37] At the fair surgical sterilization at a subsidized discount was offered for both women and men as well a Pap smears. Surgical sterilization cost Q25 and pap smears Q30. The normal cost of tubal ligation and male vasectomy was Q300 in the APROFAM clinic.

Figure 7.1: Age at initiation of contraceptive use: 1996-2002



Of the 741 women of fertile age in the community, at least 14 percent had used some modern contraceptive in the past five years. Keeping in mind that this is a minimum number of initiators, this is still a figure comparable to regional and national contraceptive prevalence among Maya women. In Figure 1, initiators of Depo Provera and OCPs between 1996-2002 have been combined and age at initiation has been graphed. For Depo Provera injections and OCP use, the average age of user initiation is 25.7 years. A bi-modal distribution of these women, who ages ranged from 17 to 42, exists. Initiation increases until age 23, and then plateaus and decreases until age 29. There is then a second peak at age 32-33 and then a subsequent decrease.

In Jun, comments about contraception from male and female informants, as well as *comadronas,* helped me to make sense of this pattern. Hugo had wondered if his friend's first wife's early contraceptive use of Depo Provera might have contributed to their later problems having children. David, a father of three, had thought about contraception after his third child, but wanted his wife to wait just a little longer in case they decided on a fourth, because you could not be sure what the chemicals in contraceptives did to your body. Rosalia, a 22 year-old woman who worked as one of my field assistants who was unmarried, was taking OCPs because she had been diagnosed with irregular periods likely due to polycystic ovarian syndrome, but worried that she would not be able to have children later because of her OCP use, independent of the reduced fertility associated with polycystic ovaries. Angela, a 27 year-old mother of two, had started using Depo Provera soon after her second child. She had her first child when she was 19, soon after marriage, and was very happy to have had two children early. "Now I can use the shot and not worry – we know we can have children." Doña Elena, in typical fashion, was even more direct.

> Few women who just married come to me for contraception. I think they should, so that they can wait and enjoy each other, save some money, build a house. But the father-in-law [of the young woman] will say "Why would you build a house if you don't have children?" So the couple will stay with the father-in-law, with his father. She would never use contraception first [before having children], because then if they have problems [conceiving] it is to blame.

The pattern in Figure 1 confirms these ethnographic observations. Many women are waiting to initiate contraception until they have had one or two children already and their fertility has been proven. Those women then use contraceptives

to delaying second or third births. The increase in contraceptive initiation by women in their thirties likely represents women avoiding further pregnancies once they have completed their desired family size and more tightly control the end of their reproductive careers.

What role do men play in these patterns? In Chapter 3 I discussed men's attitudes towards contraception. Men express a range of opinions, including support, skepticism, and opposition to contraceptive use. While it is more difficult to make direct observations about behavior, particularly with respect to something as intimate as contraceptive use, I was able to discuss contraceptive use frankly with many male informants. Many men are cooperating with their wives, in that they know about their wives' use of Depo Provera or OCPs and decided with them when to start. Some men accompany their wives on visits to a contraceptive provider to demonstrate their cooperation. When I had the opportunity to ask one man who appeared to be in his late 30s or early 40s during a visit with his wife to get her Depo Provera shot, he said that he came because he felt like it was important that he take an interest in her health and provide her support, and that they had decided together only to have two children. He knew other people saw him come, but he felt like his family was his business. But some women in the community do not tell their husbands when they are using contraceptives, in particular Depo Provera.

Although few men had received condoms at the Health Post, men did have opinions about them. I was not able to track down the men who had gotten condoms from the Health Post, but handful of men I had talked to had used condoms

in the past and did not particularly like them. The men who opined on condoms associated their use with paying for sexual services from sex workers in Quetzaltenango. Hugo said that he had a friend who had not used a condom when having sex with a sex worker and then had a sore on his penis – therefore, every man should use a condom if he has sex with a sex worker to avoid disease.

Given the central location and public nature of the health post, it is difficult but not impossible for women to receive contraceptives there without arousing some questions in the community and subsequently their husbands' knowledge. However, it is precisely because some women hide their contraceptive use from their husbands that they choose to pay private providers – Dona Elena estimated that fifteen of her thirty-five clients, or around 43 percent, hide their Depo Provera use from their husbands. Indeed, the popularity of Depo Provera injections over pills may lie precisely in this possibility of hidden use, a view Dona Elena endorsed.

Depo Provera use, even in couples in which there was cooperation, is not unproblematic. In discussing Depo Provera use with Victoria, she mentioned that some cautioned against Depo Provera, saying that it causes a woman to become *muy hombre,* or more masculine, for two reasons. First, she had heard that it changes women's bodies to be more masculine. Second, it potentially allows women to have sex without becoming pregnant – like a man.

The concept of unmet need was addressed in Chapter 4, and my experiences in Jun as well as Keb' further complicate any simple concept of unmet need for contraception in those communities (cf. S. Becker, 1999; A. K. Blanc, 2001;

Casterline & Sinding, 2000; Lindstrom & Hernandez, 2006; Wolff et al., 2000). My analysis of hospital data from registers of births in Quetzaltenango has shown that over 98 percent of women with three or more children who delivered in the hospital in 1996-1997 wished to delay their next birth by more than two years (Dudgeon, 1998), suggesting a huge unmet need for contraception in the department. Moreover, the omen in Jun tend to discuss men's family planning along a spectrum of possibility and desirability that depends on themselves, their partners, and divine fate. Some of the women I interviewed said that they wanted to contracept but that their husbands would not let them. Other women explicitly did not want to use modern contraceptive methods like Depo Provera or OCPs. Some of those women did muse that they might not want to have more children *right now,* but that they would accept whatever God sent them. Pregnancy and childbirth are seen by some women (as well as men) as determined by God, and they hope that God will allow them to avoid a birth – even if they understand the basic mechanics of conception. Other women are anxious to use some method of contraception, but either know or feel that their husbands would not approve. And other women are currently using contraceptives – some cooperating with their husbands, others hiding their contraceptive use from their husbands. For them, relationships with husbands entail negotiation to achieve desired fertility goals, and those goals may change over time. I will return to this variability in attitudes towards contraceptive use in Chapter 8, where I will use quantitative data to explore determinants of use. For now, I want to emphasize that the women with whom I was able to discuss

contraceptive use, including *comadronas,* expressed a wide range in approaches to contraception.

Pap smears and tubal ligations

I collected data in the form of an exit survey of women who had received a Pap smear or tubal ligation at an APROFAM health fair held at the Health Center in Cantel that reveal patterns of men's involvement in reproductive health matters. Many of the women reported receiving their husband's advice about going to have the procedure done, approximately 88 percent, rather than that of their mothers, children, mothers-in-law, or friends, which was around 15 percent. This pattern was true for women who received Pap smears or who had a tubal ligation. Women who received tubal ligations were on average 32.4 years of age. However, a wide range of ages were represented – women as young as 22 were sterilized after having four children. The average number of children for these women – their completed fertility – is 4.8. This number is comparable to a number derived from a crude analysis of the *aldea* census of 5.0 births for women near the end of their reproductive careers.

Again, then, we have evidence from this survey that men are involved and interested in the lives of the women in their lives. Two men accompanied their wives to the operation, and, in interviews, they listed economic factors as most important in their decision, as well as concerns about their wives. These men wanted their wives to be healthy, and to support their decision to have fewer kids. They emphasized economic factors for sterilization, but also mentioned the

possibility for better sex. Both of their wives reported that the two men did not want to use contraceptives apart from the female sterilization procedure.

Contraception in practice

As I have presented in Chapter 3, men in Jun and Keb' have priorities related to contraceptive use that they related to their overall family and household health. Both men and women in Jun report that it is necessary for a couple to decide together if they want to use contraceptives. However, women were more likely to report that either the man or the woman would make the decision, but almost all men agreed that the couple would together make the decision. Men and women may perceive the decision-making process differently, and they may report differently how those decisions are made.

Men's attitudes toward children and their priorities for their children's health often revolve around the provision of the material conditions for the production of household health while leaving some details of maternal and child health to their wives and to *comadronas.* Daniel, in reflecting on his own attitudes toward deciding with his wife to contracept, was that he wanted to give his children the best possible – *lo mejor posible*. Of course, the definitions of best and possible vary. For Daniel, who has opened businesses and describes himself as an entrepreneur, he planned to send his two children to private high school and maybe further and he prized their academic achievements. For other men the best possible means that he works hard so that he can provide for his family. But as Daniel

pointed out, part of providing for his two children meant that he and his wife space their births so that they can concentrate resources on a few children.

In my time in Jun I would see that education was an important priority for parents. Many fathers with whom I spoke wanted to give their children more and better educational opportunities than they had had as children. In particular, men said that their children did much less household, weaving, or agricultural work than they had done when they were the same age. Mothers tended to place more emphasis on nutritional or health services than do fathers, but still speak much more about the importance of education when talking about spacing births. Men thus prioritize their maximization of productivity in taking care of their children along with producing the maximum number of children.

A family case study reveals some of the important differences in what contraceptives mean for men who are using contraceptives. The cases of four men in a single family – two brothers and two of their brothers in law – illustrate how men experience contraceptive use very differently even as they are actively cooperating in using contraceptives.

Daniel, Alfonzo, Pedro, and Marcos are all members of the extended Kek family into which Pedro Saq' married. Their families are relatively well-off – Daniel and Alfonzo are partners in a successful business in town with their father, Marcos works for that business, as did Pedro until several years ago. All of their wives use Depo Provera and have one or two children. Daniel is 41 years old and has two children, aged eleven and seven. He works as a teacher and runs several small

businesses. His wife has used contraception since their last child. She also works as a *comadrona* and contraceptive provider in Jun and has worked with health projects outside the community. Daniel actively supports his wife's decision to use contraceptives and to have a job, which sometimes requires overnight stays outside of the community.

Alfonzo, 38, has recently returned from the United States, where he spent two years working in a car wash. There with him were his wife and the younger of his two sons, who is now four, while his older son, nine remained in Jun with his wife's parents. Now working again in the family business, he has a two-story house, a truck and a car. Alfonzo is known for doting on his wife and his children. His wife does not work outside the home. Of the three brothers in the family Alfonzo is the "lucky one" according to Daniel who has had the most success.

Marcos is 37 years old and is married to Veronica, a nurse. He has a history of drinking, womanizing, and physical violence toward both his wife and his oldest daughter, who is fifteen. His youngest daughter is eight. He had a son die at eleven several years ago. He lives with his parents-in-law outside of his natal community. Sober for three years and participating in AA, he attributes his diagnosis with diabetes as the impetus to change his lifestyle.

Pedro is 28 and he and his wife Andrea, also a nurse currently studying for university, have a six year-old son. Moving from his community, he worked in the family business for five years, and then sought employment in a similar but better-paying job in Quetzaltenango. Pedro is recently unemployed, and has been drinking

more than frequently, leading to several drunken bouts that have included verbal and physical abuse of his family.

The contrast between the four couples, however, is striking. Both Daniel and Alfonzo have finished high school and are successful businessmen. They cooperate closely with their wives, who at times work outside the home. Marcos and Pedro, on the other hand, have problematic relationships with their wives that include histories of heavy drinking and physical abuse. Their wives are both nurses and work outside the community, while neither Marcos nor Pedro have finished primary school. For all of these couples, contraception is part of a conscious plan for improving their families, offering their children *lo mejor*. However, for Daniel and Alfonzo contraception has allowed them to realize economic goals as resources that are not used toward more children have been allocated more directly toward their personal projects. For Marcos and Pedro, the benefits of contraception are, so far, less tangible. Their wives have achieved higher levels of education than the vast majority of women in their community, with Veronica continuing her nursing education during my fieldwork. Their children are in private schools. But they have only a slightly improved standard of living.

Pedro in particular links using contraception with other problems in his life. Other men have chided him for having only one child, questioning if he is really a man – especially since his wife works outside the home. He privately fears that her work gives her opportunity to take advantage of not risking pregnancy, and expresses doubt about marrying so early.

It is important to note that Pedro and Marcos are not seen by most of the community or by their wives as bad men – in fact, this is precisely the point. They collaborate with their wives in many ways, and they want to have smaller families. However, the negative aspects of contraceptives have been minimized for Daniel and Alfonzo, but not for Marcos and Pedro. For Marcos and Pedro, their wives' contraceptive use has meant that these women spend more time outside the home and that they have attained a higher level of education than their husbands.

Marcos and Pedro, I believe, fear not having control and balance in their households and their lives. Though they are economically productive, they feel a relative dependence on their wives and on their wives' families – this in spite of the fact that they are more financially secure than other men in their community. Contraception has complicated that loss of control, and crystallized some of the issues these men feel about their positions. They have sought to reassert control over themselves and in their families, and at times this has taken the form of drinking alcohol, pursuing relationships with other women, and physical violence. Daniel and Alfonzo, however, have maintained productivity, control, and balance in that they have good paying jobs and investments that have allowed them to take advantage of having fewer children. They can afford to allow their wives to work outside the home if they wish, or not. They weather criticisms from others outside their families in part because they are progressing, moving their families forward.

A key feature of these examples is the interaction class and gender in any analysis of contraception in a Maya community like Jun. As was argued in Chapter 3,

class and ethnicity are very difficult to separate, even within the context of a single community. I do not refer here to radically different relationships to means of production, but rather in the sense of important relative differences in economic access and social position related to gender. There is no single "Mayan" masculinity, although ways of being a Mayan man differ from other regional masculine types (cf. Gutmann, 1996; Lancaster, 1992). These examples show that contraceptives are for men a potential, but not a necessary, source of anxiety about their masculinity. For some women it is easier to hide their contraceptive use – as we have seen, Depo Provera injections and private local providers make this possible – while for others, their collaboration with their husbands can have unintended consequences for the couple.

Contraceptive transformation

Turning to Keb', a Community of Populations in Resistance (CPR) during the Guatemalan civil war highlights some effects of the civil war on reproduction in the predominantly indigenous highland region of Guatemala in the department of El Quiché, one of the most violent theaters of civil war. As in Jun, my fieldwork in Keb' focused on men's involvement in and experience of healthy reproduction as well as reproductive loss. Because of the smaller overall population of Keb', I collected fewer case studies of men and couples using contraception, which I will discuss briefly. I then move on to discuss a very specific case of contraceptive use as it related to an infant born with birth defects.

In Keb', all births were attended by *comadronas.* In addition, traditional healers, or *curanderos* in Spanish, played important roles in providing health care to the community. Biomedical health care was limited to a small Health Post stocked with basic medicines and run by local health promoters under the guidance of a local health coordinator as a part of the Extension of Coverage program. The community was also visited by Cuban doctors once every week to two weeks. Among the census of women of reproductive age (18-45) conducted among 63 women, contraceptive prevalence was similar to that of Jun, at around 20 percent; all contraceptive use in Keb' was Depo Provera injection. The similar prevalence of contraceptive use compared with Jun was in spite of much lower average maternal and paternal education and incomes, as I will review in Chapter 8. As in Jun, the use of Depo Provera injections Keb' was not unproblematic.

One prominent healer in Keb', Don Sebastian, was involved in the health care of many women in the community. He described to me how some couples came to him both for pregnancies and for their children's illnesses, with pregnant women sometimes coming to him to perform ceremonies so that their pregnancy would go well and so that they would have an uncomplicated delivery. He said that couples should come together for these ceremonies of protection, because the baby that was developing in the uterus of the woman was part of the father and part of the mother, and so that they as a couple were susceptible to attack and both their participation was required for the defense of the fetus. This kind of prophylactic ceremony was important, he said, because so many couples came to him during childbirth with

complications.

Don Sebastian described a particular case of a couple from a nearby community that had experienced multiple infant deaths. He reported that the couple, who were Ixil relatives of his wife, had suffered the deaths of seven infants, all after living approximately two weeks to two months. Don Sebastian asked questions of his table, beans, and stones to determine what the cause of the repeated reproductive loss might be. "It came out of the question that the two of them had the same day on the Mayan calendar, and that there was a *choque* [a collision] because the two were equal. To solve the problem I had to look for their day for the two of them and then perform a ceremony on that day to talk with the *nahual* and to ask the *nahual* to allow them to have children, and they now have several."

The *nahual* is a spirit-animal-guide that comes into being on the day that an individual is born and is related to the Maya calendar day name of one's birthday. For Don Sebastian the *nahual* is an aspect of the divine, of God, that also pertains specifically to the individual. I was curious why the *nahual,* as an aspect of God, would want to cause problems or sickness for an individual. Don Sebastian's response was that, in the past, there was in the past much more harmony with the natural world and respect for the laws that governed it, with some days were more dangerous or more propitious than others. At present, however, there was a great lack of respect for these laws of the natural world. That many people were less connected, less in tune and respectful of these rules and processes, that only made it

more likely that an individual might not follow the pull of her *nahual,* rather than uniformly causing the conflict. Every individual is different, he said, and most do not respect the desires of their *nahuales.* Moreover, each *nahual* has plural aspects that might lead one not only to good but also to evil. In his description, *nahuales* could be difficult and capricious in their desires, reflecting their nature as primordial forces. Thus an individual might become sick or might fall into vice *because* of her *nahual.* Again, the work of the Maya priest is to discern the nature and operation of the *nahual* both in the production of individual illness or vice as well as in the overall trajectory of the life-path of the individual. The priest must ask God, he must speak with the *nahual* as individual aspect of the divine, to request that the *nahual* not punish the individual with sickness or vice any longer.

Don Sebastian was adamant about not treating women for any illness who were also using Depo Provera as contraception. The problem, he said, was that he did not want to have problems with the medicine Depo Provera crossing with the natural medicine he used. On the one hand, he said, he felt that the people in this community are *naturales,* literally "naturals," which is a words sometimes used as a synonym for indigenous or Maya. That meant that their bodies were more accustomed to natural medicine, as opposed to *ladino* bodies or foreign bodies like my own that were both more built for and more used to artificial medicines like pills and injections. That did not mean that pills and injections didn't work on Maya bodies, but rather that there was less affinity for artificial medicines and more affinity for natural medicines. Also, he said, natural medicines and artificial

medicines worked along different lines, they had different powers, and so they could "cross" in someone who was trying to use both, with unhealthy consequences – a kind of drug interaction between indigenous and biomedicine related to local differences in indigenous bodies. He said that he felt like a woman was the one who had to make a decision to use medicine like Depo Provera, because she is an adult and it is her body, but that she would then have to live with the consequences of her decision, one of which was that he could not treat her while she was using the injection. Finally, he said, Depo Provera is a medicine for pregnancy, which is an issue for women, and so not his domain of expertise, but more the domain of the midwife and thus more difficult for him to handle.

Don Sebastian mentioned one case in particular in which there had been such problems. The daughter of another villager, now 4 years old, had been born with congenital deformations, such that all four limbs were poorly developed, with some webbing of the feet and hands. Since her birth she had had multiple surgeries to correct some of these deformities, and was scheduled for additional surgeries as she grew older. I had spoken with one of the surgeons in the municipal capital, a Guatemalan doctor who had asked that I pass along his inquiries about her health and assurances that they would continue with the corrective process, but who said that he could not be sure what might have caused her congenital malformations.

In this case, Don Sebastian felt that the deformities had been caused by Depo Provera injections that the mother received. He said that he was unsure if the couple had previously been using Depo Provera injections, had accidentally become

pregnant unbeknownst to them, and then had received an additional injection while pregnant, or if they had tried to use the injection knowing they were pregnant in order to provoke an abortion. He did know that part of the problem was that they had also come to him to try a natural remedy while also using Depo Provera, specifically *té de limón* (an herbal lemongrass tea), and that the medicines had crossed and caused the deformities in the baby. He said that, from that time on, he would only treat women who had ever used Depo Provera in the past for nothing more serious than a headache or diarrhea. He mentioned, however, that he felt this way about pregnant women in general, in that they were in a delicate, vulnerable state and he preferred to treat them externally only, giving them a massage or blowing on them rather than giving them a tea that they would ingest and would affect them internally.

In the case I described, the interaction between biomedical Depo Provera and Maya healing occurs not only because of the incompatibility of the two forms of medicine, but also because biomedicine is seen as inappropriate for Maya bodies. The interaction is purported to produce a damaged fetus with congenital birth defects. However, the effect does happen at the intersection of the two forms of healing, rather simply in the use of biomedicine by Maya. That is, there is some fluidity and flexibility of Maya biologies in the use and incorporation of biomedicines like Depo Provera, as many Maya avail themselves of Guatemala's plural medical system.

Ultimately, however, for the residents of Keb' and other communities with active indigenous healers, strong ties exist between the individual and her biological and environmental place, as mediated by the *nahual*. While an aspect of the divine, the *nahual* is also animalistic in nature, connected with the natural world in which the individual is born and with passions and appetites. The *nahual,* which comes into being as the fetus develops and is born, may produce illness at any point in the life of the individual because of its nature, which may conflict with the path an individual chooses, such as to live a life out of balance, not in harmony with the *nahual* or more traditional practices – a particularly Mayan take on the fetal origins of disease.

It is this additional dimension that informs any simplistic reading of IUDs implanted in the heads of Maya infants, or indeed to the adoption of contraceptives more generally speaking. Both the fontanel and the womb are vulnerable as points of development of the individual, susceptible to biomedicine in ways not reducible to fear or ignorance. As more Maya adopt contraceptives, it will be the responsibility of providers to acknowledge these concerns, addressing the integrity of both developing Maya infants and a complex, plural system of beliefs and negotiating the dangers, ambiguities, and transformations these technologies make possible for Maya women and men.

Chapter 8: Epidemiologies of reproduction

Over the course of the preceding chapters, I have argued that reproduction is an important component in men's ideas about themselves and deeply influences how they behave as men in Jun and Keb'. I have also argued that men play important roles in reproductive decision making and in reproductive health outcomes, which are areas which necessarily involve other people in addition to those men, including women, children, and other family and community members. In this chapter I will use demographic and epidemiological data I collected in both Jun and Keb' to explore some of these relationships. I will also investigates patterns of I will begin with analysis of data from a demographic survey I conducted with women of reproductive age in the communities, focusing on women who had ever been pregnant.

A census of Jun was completed as part of the work of the members of the *auxiliatura* in November 2001, just prior to the beginning of my fieldwork in the community. With permission of the *alcalde auxiliar*, I used data from that census, which collected very basic demographic information on each member of the community, including household of residence, sex, and age. The census counted 672 women between the ages of 18 and 49. The average of women of fertile age 18-49 was 29.8 years (standard deviation 8.7 years). I used a similar community census conducted by the *alcalderia* in Keb' in August-September 2003, prior to my fieldwork there. Of the 64 women in the census, the average age of women there was 31.4 years (standard deviation 7.6 years).

I conducted a demographic and health survey using a version of the RAND 1995 Guatemalan Family Health Survey (updated for use in 2002 with changes of dates and date ranges) among a random sample of women of reproductive age in Jun and with all women of reproductive age in Keb'.[38] The average age of women included in the Jun sample (n=128) was 30.1 (standard deviation of 8.1), suggesting a sample that reflects the overall population. The Jun sample has been analyzed with a population weight based on probability of selection (n=640). In Keb, because of the smaller population, I conducted the same survey (again updated for use in 2004) among all 64 women of reproductive age in the community as a census rather than a sample.

Reproductive outcomes among women who have ever been pregnant

The two communities showed variation in several key reproductive health outcomes. In Jun, fewer than one in five women, or 18.7 percent reported having given birth to a live child who subsequently died. However, in Keb', that percentage was more than doubled at 41.8 percent. Causes of child mortality were similar in the two communities, predominantly respiratory tract infections and gastrointestinal illnesses (data not shown), but economic resources and medical access are greater in Jun, explaining some of this difference, along with the higher total fertility in Keb'

[38] In both communities, women who participated in the demographic and health survey were provided with a small remuneration for their time that was based on a small informal poll of community members' suggestions. Women in Jun received dry beans, sugar, and a small plastic container worth Q8 quetzales (US $1 dollar) total. Women in Keb' received carrot and radish seeds worth approximately Q8.

Descriptive statistics for contraceptive use for women who have ever been pregnant in Jun and in Keb's are shown in Table 8.1. Interestingly the two communities had comparable levels of contraceptive knowledge and contraceptive usage. In Jun, 77.7 percent of the women interviewed had ever heard of any form of artificial contraception (including oral contraceptive pills, intrauterine devices, condoms, male and female sterilization, and contraceptive injections) and 62.0 percent had ever used any form of contraceptive in Jun, including natural contraceptive methods such as withdrawal and rhythm methods. In Keb' 70.9 percent of women who had ever been pregnant reported having heard of some artificial contraceptive method, while 61.8 percent of the women interviewed reported having ever used some contraceptive method. Lower percentages of women said that they were currently using contraception at 20.4 percent for Jun and 23.4 percent for Keb'. In Jun, 34.9 percent of women using contraception are using Depo Provera injections, 9.3 percent using female sterilization, 2.3 percent using the OCP and 2.3 percent using an IUD. An additional 44.3 percent of women are using periodic abstinence (the rhythm method) or withdrawal. In Keb', 53.3 percent of women using contraception are using Depo Provera injections, one woman has an IUD, and the remaining 33.3 percent use the rhythm method. These figures for women who said they had ever used contraception and currently using contraception are similar to national statistics for contraception. Given my fieldwork experiences they represent that many women are actively controlling their fertility and, some for shorter periods and others for years concurrently,

adopting both natural and artificial contraceptive methods given access, even in K'iche' communities and in more remote areas of Guatemala.

Table 8.1: Descriptive statistics, Jun and Keb'

Variable		N (%)*	
		Jun (600)	Keb' (59)
Ever heard of any form of birth control	Yes No	471 (80.0) 121 (20.0)	39 (70.9) 16 (29.1)
Ever heard of any form of artificial birth control	Yes No	460 (77.7) 132 (22.0)	39 (70.9) 16 (29.1)
Ever used any form of birth control	Yes No	372 (62.0) 216 (36.7)	34 (61.8) 21 (38.2)
Currently using contraception	Yes	151 (20.4)	15 (23.4)

* where noted, mean and standard deviation (SD) are reported

To investigate different dimensions of men's influences on reproductive health, I limited these analyses to women who had ever been pregnant and who were currently in a marriage or union. The variables I investigated include if women initiated prenatal care in the first trimester, if they had any complication during the most recent pregnancy, every having heard of any contraceptive method or any artificial contraceptive method, and ever having experienced a neonatal death (within 40 days of birth) or an infant death (within one year of birth). Variables interrogated as potential risk factors for various reproductive health outcomes include religion, maternal literacy, maternal education, husband's education, household income, husband's percent contribution to household income, along with several additional indicators of household decision making, including whether women alone made decisions about food purchases or did so with their husband, and whether women alone handled money in the household versus handling money with their husbands together or whether they were not involved in

handling money. All of these variables were dichotomized for odds ratio calculation. These variables were chosen because they give insight into ways men might play roles in affecting these reproductive outcomes, as well as other risk factors that might affect or mediate the ways in which men might affect reproductive outcomes.

A complete census of women in Keb' of reproductive age was conducted. Small population size (n=59) meant that statistically significant results for most of these analyses (as based on calculated confidence intervals) were often not obtained, even when large effects were seen. One caveat, however, is that odds ratios in Keb' are based on true population odds derived from a census rather than estimates based on a sample of a larger population, as in Jun. Thus, confidence intervals do not indicate how likely the results were obtained by chance selection of a representative sample, but only give an indication of the small population size. Odds ratios greater than 2 or less that 0.5 in Keb' are discussed in more detail. For the calculation of crude odds ratios for cross-tabulations with empty cells, a value of 1.0 (weighted appropriately for the Jun sample) was added to the empty cell (Hosmer & Lemeshow, 2000).

Binary logistic regression analyses were performed using only data from Jun for trimester of prenatal care initiation, complication during pregnancy, ever hearing of or using a contraceptive method, and ever experiencing a neonatal or infant death. Of the variables for which crude odds ratios are presented, seven were chosen for logistic regression models, including religion, maternal education,

language spoken at home, husband's education, income, husband's income contribution, and maternal control of money. Logistic regression analysis allows for models which simultaneously control for multiple variables that might otherwise confound the association between predictors and dependent variables.

All of the variables that I chose for analysis might plausibly be independently associated with the different reproductive health outcomes. From a more classic, demographic transition/development perspective, one would initially hypothesize that "modern" markers of development would be associated with improved outcomes, including higher levels of maternal and husband education, increased income, Spanish speaking in the household (W. P. Handwerker, 1986). As has been discussed, religion is a powerful sociocultural influence in Guatemala and in Maya communities (Stoll, 1983, 1993; Warren, 1978). Models emphasizing the importance of women's empowerment might emphasize maternal control of resources and contribution to income (Bossen, 1984; W. P. Handwerker, 1989; Sanderson & Dubrow, 2000).

My research interests as well as my fieldwork experiences helped shape the variables chosen for analysis. For example, the dichotomization of income around Q600 was influenced by my examination of income data as well as my experiences that suggested that Q600 earned every two weeks represented an important demarcation between families. The same is true for level of education; finishing sixth years of education and receiving a diploma represents a major milestone.

Although I was skeptical about models emphasizing modernization, even after my fieldwork in these two communities it would prove hard to anticipate which variables would show the strongest associations. For example, Grace (2010) has demonstrated that, among Maya groups in Guatemala, education is not an independent risk factor influencing contraceptive use; instead that relationship is confounded by Maya ethnicity. Having seen very palpable differences in wealth, education, and men's involvement in the lives of their wives and families, I thought all of these variables might have impacts. I suspected that level of education might play a role in contraceptive adoption, while I thought that income level might have the largest impact on access to health care and thus on neonatal and infant mortality.

It is important to point out again that the analyses presented here were limited to respondents who were in partnerships with men. This was because of my research interests in men's influences on reproductive health, with a particular focus on husbands and partners. The subsequent analyses do not contrast, for example, households with and without husbands. This an important caveat in the interpretation of results, because in these analyses I am only indirectly addressing the question of whether or not men are important in determining reproductive health outcomes. Rather, I am contrasting different characteristics of households that include husbands in order to gain insight into which characteristics are associated with different reproductive health outcomes. These data allow me to make some claims about how men influence reproductive health.

Prenatal care initiation

Table 8.2 presents crude odds ratios for prenatal care initiation in the first month of pregnancy. In Jun, religion and income were significantly associated with prenatal care in the first trimester, with Catholic women and women in higher income families more likely to begin prenatal care in the first trimester. Women who had less than six years of education and women who did not control money in their households were at significantly lower odds of initiating prenatal care in the first trimester. In Keb', lower income, maternal illiteracy, and maternal handling of household money were associated with later prenatal care; shared or husband's handling of money was associated with care in the first trimester.

Table 8.2: Prenatal care in first trimester, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	2.5 (1.6-3.9)	0.000	1.0 (0.1, 12.2)	1.000
Maternal literacy	0.8 (0.4-1.4)	0.401	0.2 (0.04-0.9)	0.040
Maternal education < 6 years	0.6 (0.4-1.0)	0.033	1.8 (0.1-32.0)*	0.674
No Spanish spoken at home	0.8 (0.5-1.3)	0.311	0.6 (0.1-6.5)	0.687
Husband's education < 6 years	0.7 (0.5-1.2)	0.247	0.2 (0.02-2.1)	0.187
Total bi-weekly income less than Q600	2.3 (1.3-3.9)	0.003	4.0 (0.1-120.2)*	0.423
Husband contributes < 100% of income	1.1 (0.6-1.8)	0.800	0.1 (0.01-2.7)	0.178
She alone decides food purchases	1.5 (0.9-2.3)	0.095	0.6 (0.1-2.9)*	0.132
She alone controls money	0.9 (0.5-1.6)	0.707	0.3 (0.1-1.1)	0.070
She does not control money	0.6 (0.3-0.9)	0.025	1.8 (0.4-7.2)	0.416

*values calculated after empty cells replaced by 1

Results of binary logistic regression analysis for initiation of prenatal care in the first trimester of pregnancy are presented in Table 8.3. In that model, only language proves to be significantly associated with initiation ore prenatal care in the first trimester (OR 3.4, CI 1.1-10.3), with women who regularly speak only K'iche' in their homes more likely to initiate prenatal care in the first trimester. In Jun, speaking some or only Spanish in the home was, in my experience, and indication that some members of the family, usually children, were more less comfortable speaking K'iche', often children who were themselves receiving more education. These households may have been less likely to seek early prenatal care because they might have been less likely to seek early advice from a *comadrona,* even though a *comadrona* was likely to eventually attend their delivery.

Just as important to note are the resultant non-significance of both religion and income in regression analysis, even though both variables have crude odds ratios greater that 2.0. In stepwise addition of covariates to the model (analyses not shown), these two variables do not confound one another, but their relationship to initiation of prenatal care is confounded by husband's percent contribution to household income and husband's level of education. Put another way, when controlling for these paternal factors, *there is no longer a significant relationship between either income or religion and initiation of prenatal care in the first trimester.*

Table 8.3: Prenatal care in first trimester, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	.160	.340	.220	1	.639	1.2 (0.6-2.3)
Maternal education < 6 years	-.001	.397	.000	1	.998	1.0 (0.5-2.2)

No Spanish spoken at home	1.221	.567	4.637	1	.031	3.4 (1.1-10.3)
Husband's education < 6 years	.356	.301	1.399	1	.237	1.4 (0.8-2.6)
Total bi-weekly income less than Q600	.431	.341	1.595	1	.207	1.5 (0.8-3.0)
Husband contributes < 100% of income	.180	.322	.312	1	.577	1.2 (0.6-2.3)
She alone controls money	.160	.340	.220	1	.639	1.2 (0.6-2.3)

Complications during pregnancy

Complications during pregnancy, including bleeding, illness, seizures, or loss were grouped and crude odds ratios presented in Table 8.4. In Jun, Catholic religion, husband's education, maternal literacy, household income, women making decisions about food purchases alone, and women not handling money in the household were associated with increased odds of reporting a complication during the last pregnancy. Conversely, women's sole handling of money and fewer years of women's education were associated with lower odds of reporting a complication during the last pregnancy. In Keb', Catholic religion and women's sole handling of household money was associated with very low odds ratios, while women who were literate and who made decisions alone about food purchases had higher odds ratios, though not significant.

Table 8.4: Any complication during pregnancy, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	2.3 (1.6-3.4)	0.014	.15 (0.01-1.9)	0.138
Maternal literacy	2.4 (1.4-3.3)	0.001	2.4 (0.5-11.6)	0.260
Maternal education < 6 years	0.5 (0.3-0.8)	0.005	0.3 (0.02-5.5)*	0.424
No Spanish spoken at home	0.1 (0.06-0.3)	<0.001	0.2 (0.01-4.7)*	0.394
Husband's education < 6 years	2.6 (1.0-6.9)	0.047	0.2 (0.01-1.9)	0.138

Total bi-weekly income less than Q600	2.1 (1.4-3.3)	0.001	0.7 (0.03-18.1)*	0.810
Husband contributes < 100% of income	0.9 (0.6-1.3)	0.428	1.5 (0.6-40.6)*	0.810
She alone decides food purchases	2.0 (1.3-3.1)	0.002	3.2 (0.7-14.8)	0.143
She alone controls money	0.4 (0.3-0.8)	0.006	0.5 (0.1-2.5)	0.366
She does not control money	1.8 (1.2-2.8)	0.007	1.0 (0.2-4.2)	1.000

* values calculated after empty cells replaced by 1

Table 8.5 shows the results of logistic regression analysis for complications during pregnancy in Jun. Fewer years of maternal education are again protective, with significantly lower odds of a complication, while only lower income remains significantly associated with reporting a complication, controlling for other variables. In stepwise addition of covariates to the model (analyses not shown) both religion and husband's level of education no longer remain significantly associated with complication during pregnancy when controlling for income.

Table 8.5 Any complication during pregnancy, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	.352	.280	1.588	1	.208	1.4 (0.8-2.5)
Maternal education < 6 years	-1.037	.315	10.831	1	.001	0.4 (0.2-0.7)
No Spanish spoken at home	-.202	.352	.329	1	.566	0.8 (0.4-1.6)
Husband's education < 6 years	.166	.266	.390	1	.532	1.2 (0.7-2.0)
Total bi-weekly income less than Q600	.859	.301	8.160	1	.004	2.4 (1.3-4.3)
Husband contributes < 100% of income	-.103	.284	.131	1	.718	0.9 (0.5-1.6)
She alone controls money	-.574	.334	2.955	1	.086	0.6 (0.3-1.1)

Contraception: knowledge and use

Crude odds ratios for women's having ever heard of any contraceptive method are presented in Table 8.6 and having ever heard of any artificial method in Table 8.7. Income and husband's contribution to household income were weakly positively associated with having heard of any contraceptive in Jun, while no Spanish spoken in the home was protective against having heard of any contraceptive method. In Keb', maternal literacy and women's deciding food purchases alone had higher odds of having heard of any contraceptive method.

Table 8.6: Ever heard of any contraceptive method, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	1.0 (0.7-1.5)	0.910	0.8 (0.08-8.3)	0.852
Maternal literacy	1.2 (0.7-2.1)	0.487	2.5 (0.6-10.4)	0.200
Maternal education < 6 years	0.7 (0.5-1.1)	0.148	0.5 (0.06-5.1)*	0.585
No Spanish spoken at home	0.3 (0.2-0.6)	0.000	0.8 (0.08-8.3)	0.852
Husband's education < 6 years	0.9 (0.5-1.7)	0.719	0.2 (0.02-1.6)*	0.131
Total bi-weekly income less than Q600	1.5 (1.0-2.3)	0.047	1.2 (.07-18.3)	0.913
Husband contributes < 100% of income	1.7 (1.1-2.5)	0.014	0.2 (0.1-3.6)	0.278
She alone decides food purchases	0.8 (0.6-1.2)	0.196	2.3 (0.4-12.2)	0.325
She alone controls money	1.6 (1.0-2.5)	0.064	1.5 (0.4-5.6)	0.557
She does not control money	1.4 (0.9-2.2)	0.092	0.8 (0.2-2.8)	0.760

* values calculated after empty cells replaced by 1

In Jun, similar patterns were seen for reporting having heard of an artificial method of contraception as for any method of contraception, as shown in table 8.7. Catholic religion, no Spanish spoken in the home, and reporting sole decisions about food purchases meant significantly lower odds of having heard of any artificial contraceptives. However, higher income, greater contributions of husbands to

income, and sole management of household money were significantly associated with having heard of an artificial contraceptive. Different trends were seen in Keb' where women purchasing food alone meant they were more likely to hear about artificial contraceptives, but greater contributions of husbands to household income was protective against having heard of artificial contraceptive methods.

Table 8.7: Ever heard of any artificial contraceptive, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	0.7 (0.5-0.99)	0.047	0.6 (0.06-5.3)	0.606
Maternal literacy	0.7 (0.4-1.4)	0.349	2.5 (0.6-10.4)	0.200
Maternal education < 6 years	0.9 (0.6-1.4)	.0750	0.5 (0.06-5.1)*	0.585
No Spanish spoken at home	0.3 (0.2-0.6)	0.000	0.8 (0.1-8.3)	0.852
Husband's education < 6 years	0.7 (0.3-1.4)	0.298	0.2 (0.2-1.6)*	0.131
Total bi-weekly income greater than Q600	1.7 (1.1-2.6)	0.012	1.2 (0.1-18.3)	0.913
Husband contributes < 100% of income	2.2 (1.4-3.5)	0.000	0.2 (0.01-3.6)	0.278
She alone decides food purchases	0.6 (0.4-0.9)	0.027	2.3 (0.4-12.2)	0.325
She alone controls money	1.9 (1.1-3.3)	0.013	1.4 (0.4-5.6)	0.557
She does not control money	1.3 (0.8-2.0)	0.258	0.8 (0.2-2.8)	0.760

* values calculated after empty cells replaced by 1

Because of the overall similarities between any having heard of any method of contraception and methods of artificial contraception, logistic regression analysis of only the latter is presented in Table 8.8. In that model, lower income is associated with having heard of an artificial method of contraception. While this result may seem counterintuitive, in my fieldwork experience I encountered many women who, while their households did not have high incomes, were interested in contraceptive use. These women and their husbands may be more likely to contracept *because* of

their lower incomes and their desires to have fewer children. There is a significant association between being in a household in which the husband is solely responsible for household income and women's having heard of artificial contraception, likely related to women's increased contacts outside the home with wage earning. Not speaking Spanish in the home is associated with lower odds of having heard of artificial contraceptives, suggesting that K'iche' language may be a barrier for contraceptive use in ways it is not a barrier for access to other domains of reproductive health care such as timing of prenatal care.

Table 8.8: Ever heard of any artificial contraceptive method, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	.219	.313	.490	1	.484	1.2 (0.7-2.0)
Maternal education < 6 years	.219	.313	.490	1	.484	1.2 (0.7-2.2)
No Spanish spoken at home	-.955	.421	5.145	1	.023	0.4 (0.2-0.9)
Husband's education < 6 years	.051	.255	.039	1	.843	1.1 (0.6-1.7)
Total bi-weekly income less than Q600	.766	.278	7.557	1	.006	2.2 (1.2-3.7)
Husband contributes < 100% of income	.657	.295	4.962	1	.026	1.9 (1.1-3.4)
She alone controls money	.496	.320	2.407	1	.121	1.6 (0.9-3.1)

Crude odds ratios for having ever used any contraceptive method are presented in Table 8.9. In Jun, maternal literacy and fewer years of maternal

education were associated with having ever used contraception, while women households in which she alone managed money were less likely to have used contraception. In Keb', Catholicism, lower paternal education, lower income, joint contribution to household income and joint control of money were associated with higher odds of contraceptive use.

Table 8.9: Ever used any contraceptive method, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	0.8 (0.6-1.1)	0.103	2.3 (0.4-13.0)	0.320
Maternal literacy	2.1 (1.3-3.3)	0.003	0.8 (0.3-2.5)	0.705
Maternal education < 6 years	1.8 (1.2-2.5)	0.002	0.4 (0.04-3.7)	0.418
No Spanish spoken in home	1.0 (0.7-1.4)	0.857	0.4 (0.04-3.4)*	0.403
Husband's education < 6 years	1.2 (0.9-1.7)	0.209	4.5 (1.1-18.3)	0.038
Total bi-weekly income less than Q600	1.0 (0.7-1.4)	0.955	3.2 (0.2-45.2)	0.389
Husband contributes < 100% of income	0.9 (0.6-1.3)	0.519	6.0 (0.3-101.6)	0.354
She alone decides food purchases	0.6 (0.5-0.9)	0.013	0.3 (0.09-1.1)	0.089
She alone controls money	0.9 (0.6-1.3)	0.547	0.4 (0.1-1.3)	0.128
She does not control money	0.9 (0.6-1.2)	0.406	2.2 (0.7-6.9)	0.187

Logistic regression analysis of ever having used a contraceptive method in Jun is presented in Table 8.10. In this model, shared contribution to household income is associated with having ever used a contraceptive, as is lower maternal education. Catholicism is protective of having ever used a contraceptive. The influence of income distribution likely has a similar basis for having used a contraceptive as it does for having heard of a contraceptive. However, lower

maternal education is not associated with having *heard* of a method, even though it is associated with having used one.

Table 8.10: Ever used any contraceptive method, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	-.584	.240	5.911	1	.015	0.6 (0.3-0.9)
Maternal education < 6 years	.565	.276	4.196	1	.041	1.8 (1.0-3.0)
No Spanish spoken at home	.404	.314	1.650	1	.199	1.5 (0.8-2.8)
Husband's education < 6 years	.164	.225	.535	1	.465	1.2 (0.8-1.8)
Total bi-weekly income less than Q600	.387	.247	2.452	1	.117	1.5 (0.9-2.4)
Husband contributes < 100% of income	.657	.262	6.292	1	.012	1.9 (1.2-3.2)
She alone controls money	-.172	.260	.437	1	.509	0.8 (0.5-1.4)

Neonatal and infant mortality

Crude odds ratios for having experienced a neonatal death are presented in Table 8.11 and for having experienced an infant death in Table 8.12. Neonatal deaths were more common among women who were Catholic, had less than 6 years of education, and among women who handled household money alone as well as among those who did not control money at all. This last finding suggests that women who handle household finances with their husbands (rather than alone or not at all) were at lower risk for neonatal death. In Jun, maternal literacy, lower maternal education, and controlling money alone meant lower odds of reporting a neonatal death, while not handling household money meant higher odds of a neonatal death.

Table 8.11: Ever experienced a neonatal death, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	4.5 (2.0-10.1)	0.000	1.2 (0.1-11.7)*	0.866
Maternal literacy	0.4 (0.2-0.8)	0.018	0.5 (0.1-2.7)	0.418
Maternal education < 6 years	3.0 (1.0-8.7)	0.044	0.5 (0.04-5.5)	0.532
No Spanish spoken at home	1.1 (0.5-2.5)*	0.797	1.0 (0.1-10.2)*	0.983
Husband's education < 6 years	9.9 (3.4-29.3)*	<0.001	0.6 (0.1-3.1)	0.581
Total weekly income greater than Q600	1.0 (0.5-2.2)	0.943	2.0 (0.15-26.7)*	0.600
Husband contributes < 100% of income	0.7 (0.3-1.4)	0.308	0.8 (0.04-11.3)	0.779
She alone decides food purchases	0.2 (0.1-0.4)	0.000	1.9 (0.4-8.0	0.401
She alone controls money	3.3 (1.6-6.8)	0.001	0.4 (0.1-2.2)	0.306
She does not control money	2.5 (1.2-5.1)	0.014	3.2 (0.7-14.0)	0.131

* values calculated after empty cells replaced by 1

Because relatively few neonatal deaths were experienced in Jun, language and husband's education were excluded due to empty cells from the final logistic regression model, shown in Table 8.12. In this model both religion and maternal control of household income were significantly associated with higher odds of neonatal death, with Catholic women had almost six times the odds of a neonatal loss as Evangelical women or those practicing Maya religions. Importantly, these associations are seen *even when controlling for variables like household income*. Fewer years of maternal education showed near significant association.

Table 8.12: Ever experienced a neonatal death, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	1.767	.468	14.252	1	.000	5.9 (2.3-14.6)
Maternal education < 6 years	1.194	.621	3.690	1	.055	3.3 (1.0-11.1)
Total bi-weekly income less than Q600	-.098	.445	.048	1	.826	0.9 (0.4-2.2)

Husband contributes < 100% of income	.174	.474	.135	1	.713	1.2 (0.5-3.0)
She alone controls money	.979	.389	6.347	1	.012	2.7 (1.2-5.7)

Similar patterns were seen in Jun among women who reported having an infant death (which includes neonatal deaths), as shown in Table 8.13. Catholic women, women in homes where no Spanish was spoken, women with husband's with less than six years of education, and women who alone handle household money were at greater odds of reporting an infant death, while women who decided about household food alone were at lower odds of reporting an infant death.

Table 8.13: Ever experienced an infant death, crude odds ratios

	OR (CI)	P value	OR (CI)	P value
	Jun		Keb'	
Religion	3.9 (2.1-7.2)	<0.001	2.2 (0.2-20.5)*	0.493
Maternal literacy	0.8 (0.3-1.7)	0.494	0.8 (0.2-2.9)	0.684
Maternal education < 6 years	1.5 (0.8-3.0)	0.196	0.2 (0.01-2.2)	0.177
No Spanish spoken in home	3.7 (1.3-10.4)	0.014	1.8 (0.2-17.1)*	0.624
Husband's education < 6 years	3.9 (2.1-7.2)	<0.001	0.7 (0.2-2.8)	0.483
Total bi-weekly income less than Q600	1.0 (0.6-1.8)	0.954	3.0 (0.2-39.6)*	0.404
Husband contributes < 100% of income	1.4 (0.8-2.5)	0.244	0.3 (0.02-5.3)	0.437
She alone decides food purchases	0.2 (0.1-0.4)	<0.001	1.3 (0.3-5.0)	0.669
She alone controls money	2.6 (1.4-4.5)	0.001	0.6 (0.2-2.3)	0.476
She does not control money	1.3 (0.7-2.4)	0.332	2.0 (0.6-6.8)	0.270

* values calculated after empty cells replaced by 1

Logistic regression analysis of having experienced an infant death are presented in Table 8.14. Catholicism, fewer years of husband's education, and joint

contribution to household income were all significantly associated with having experienced an infant death, while total income was not. Women along managing household funds was showed a near-significant association, lending additional weight to the hypothesis that women's control of household funds in Jun is not necessarily an indicator not of women's empowerment. Importantly, women's control of funds is not significantly associated with lower household income or with maternal or husband's level of education. Women's control of money in the household is significantly associated with joint contribution to household income

Table 8.14: Ever experienced an infant death, logistic regression (Jun)

	B	S.E.	Wald	df	p	OR (CI)
Religion	1.699	.407	17.437	1	.000	5.5 (2.5-12.1)
Maternal education < 6 years	.064	.449	.020	1	.887	1.1 (0.4-2.5)
Husband's education < 6 years	1.348	.380	12.579	1	.000	3.8 (1.8-8.1)
Total bi-weekly income less than Q600	.348	.386	.810	1	.368	1.4 (0.7-3.0)
Husband contributes < 100% of income	.802	.404	3.944	1	.047	2.2 (1.0-4.9)
She alone controls money	.652	.354	3.388	1	.066	1.9 (1.0-3.8)

Epidemiology of reproductive loss

In both Jun and Keb' relatively high percentages of women experienced some reproductive loss, including neonatal or infant mortality, miscarriage, or stillbirth. In order to investigate patterns of reproductive loss, I also analyzed data for subsets of women who had ever had a live birth, as well as women who had experienced miscarriage or stillbirth. Using data from the demographic survey conducted in the

two communities, in Jun 91.4 percent of women age 18-49 had ever given birth to a live infant; in Keb' the percentage was also 91.4 percent.

Tables 8.15 and 8.16 break down those percentages and mean number of live births by five-year age category, with women aged 18-24 grouped into a single category. In Jun, the percentage of women who had had at least one live birth increases with increasing age, with 83 percent of women 18-24 report having had at least one live birth, while over 90 percent of women 25-39 reported having a live birth and < 100 percent of women in the survey 40 and over had had at least one live birth. This rise is not linear, however; there is a slight dip in the percentage of women who have ever given birth at age 30-34. Although slight, this dip may represent a cohort effect related to the civil war between 1987 and 1996. In 1987 this group of women would have been at the beginning of their reproductive careers at 15-19 years of age. Women of that age category may have delayed first reproduction or not had the opportunity to have children. In Keb' the increase in percentage of women who had ever had a live birth is more linear, which may reflect the higher total fertility and earlier age at initiation of reproduction in Keb'.

Women in Jun show an increase in the average number of live births for each age category with no decrease in the mean number of live births for women with increasing age. However, in both Jun and Keb' the increase in average number of births with increasing age is also not linear. Between the 25-29 year and the 30-34 year age category for both communities there is a plateau in achieved fertility which

may reflect a cohort effect on the timing and number of live births during the civil war.

Table 8.15: Women with live births in Jun, n=592

	Ever had a live birth	Number of live births
Age category	N(%)	Mean ± SD
18-24	159 (83.2)	2.37 ± 1.30
25-29	107 (93.0)	3.67 ± 1.47
30-34	119 (90.8)	4.00 ± 1.85
35-39	95 (96.0)	6.46 ± 2.01
40-44	64 (100)	6.50 ± 2.98
45-49	48 (100)	7.00 ± 3.03

Table 8.16: Women with live births in Keb', n=58

	Ever had a live birth	Number of live births
Age category	N(%)	Mean ± SD
18-24	12 (75.0)	2.25 ± 1.29
25-29	8 (88.9)	4.38 ± 0.91
30-34	12 (100)	4.42 ± 2.23
35-39	6 (100)	7.00 ± 2.28
40-44	8 (100)	8.75 ± 3.54
45-49	7 (100)	9.00 ± 3.22

In order to examine these patterns more broadly, I analyzed data from the Guatemalan National Survey of Maternal and Infant Health (ENSMI) 2002, a publically available, nationally representative sample of women of reproductive age (15-49 years, n=9155).[39] For all women, approximately 77.6 percent had ever had a live birth. That lower percentage than in my own survey likely represents the inclusion of women aged 15-17 in the survey. In looking at all women in the survey, there is a steady increase in the proportion of women who have ever had a live birth

[39] The ENSMI data represent a subsample from the 1994 Guatemalan Census. The sample is drawn from 376 census segments of eight regions of the country and was conducted by the Guatemalan National Statistical Institute (INE).

by five-year age category, except for a slight dip in the percentage of women who have ever given birth at ages 45-49.

When those data are stratified by ethnic group, as perceived and reported by the interviewer, the results by age category differ. For *ladina* women, there is a steady and uninterrupted increase in the percentage of each five-year age category that has ever had a live birth. However, for indigenous women, there is again a dip in the percentage, this time for women aged 35-39. These women would have been aged 15-19 in 1982 and 20-24 in 1987. Although the drop in percentage is small, it would not be expected apart from some cohort effect that affected the category of women as a historical group, given that, all things being equal, each successive age category of women should show increasing percentages of ever pregnant, which is seen among births to ethnically *ladina* women. There is also a dip in the percentage of women who had ever had a live birth in the age category 45-49 for indigenous women, but not for *ladina* women. It is more difficult to interpret that dip, but it may also represent a cohort effect related to the civil war. It could also represent disproportionate survival of women who had never given birth in this final age category.

Table 8.17: Live births, ENSMI 2002

Age category	Live birth, all n=9155 n (%)	Live birth, ladina n=4078 n (%)	Live birth, indigenous n=4023 n (%)
15-19	394 (24.6)	208 (23.2)	186 (26.4)
20-24	1291 (73.5)	696 (69.4)	594 (78.9)
25-29	1463 (89.7)	817 (88.0)	645 (91.9)
30-34	1335 (94.3)	760 (93.4)	575 (95.7)
35-39	1076 (94.9)	644 (95.1)	432 (94.7)
40-44	843 (95.7)	497 (95.4)	346 (96.1)
45-49	701 (95.2)	456 (96.6)	245 (93.2)

Returning to the demographic survey among women of reproductive age in Jun and Keb' I look at the epidemiological patterns of reproductive loss in the community. Among women who reported having ever given birth in Jun, 19.9 percent, or one in five, reported that she had had a child who had been born alive but later died. In Keb' that number was 39.7 percent; two in five, or twice the percentage in Jun.

In Tables 8.18 and 8.19 child deaths are stratified by maternal age groups for the two communities. In Jun, there is a pattern of increasing percentage of women affected between women 18-24 to 25-29, then a dip in the percentage of women affected among women 30-34, and then an increase again among women 35-39 and 40-44 to over one-third of women. This dip for women age 30-24 may reflect the aforementioned relatively low average number of live births in that age group, as fewer average live births could explain a lower percentage of women experiencing a child death. In Keb' a different pattern emerges. There, women aged 30-34 and 35-39 report much lower percentages of ever having experienced a child death, less than 20 percent for both cohorts. This in comparison with women aged 40-44 (75 percent) and 45-50 (100 percent). Women in these age groups also report lower mean number of child deaths. These data suggest that there was lower child mortality for women who were just entering reproductive age during the civil war. This may be due, in part, to the overall reduced fertility of these age groups, as evidenced in discussion above. It may also be due, in part, to the fact that women in

this age group may not have survived the conflict in order to report on reproductive loss – they may in fact represent the very child losses that women fifteen or twenty years their senior report.

Table 8.18: Child mortality, Jun, n=561

Age category	Ever had a child death N (%)	Number of child deaths Mean ± SD
18-24	20 (12.6)	1.17 ± 0.38
25-29	20 (19.2)	2.00 ± 1.59
30-34	12 (10.8)	2.67 ± 1.77
35-39	28 (36.8)	1.57 ± 0.92
40-44	24 (37.5)	2.00 ± 0.83
45-49	8 (16.7)	2.00 ± 1.03

Table 8.19: Child mortality, Keb', n=58

Age category	Ever had a child death N (%)	Number of child deaths Mean ± SD
18-24	3 (18.8)	1.33 ± 0.57
25-29	4 (44.4)	1.25 ± 0.50
30-34	2 (16.7)	1.00
35-39	1 (16.7)	1.00
40-44	6 (75.0)	2.00 ± 1.41
45-49	7 (100)	2.00 ± 1.41

Table 8.20 shows data on child mortality from the ENSMI 2002. These data allow comparison with the Jun and Keb' data. On the one hand, the average number of child deaths among women who have ever had a live birth is higher in Jun at every age category in comparison with averages for all women nationally, although that difference is only statistically significant for the groups 25-29 and 30-34 (data not shown, two-tailed t-test, alpha=0.05). This suggests that younger women in Jun have more child deaths than do younger women, on average, in Guatemala. The difference in means for those two younger age categories is statistically significant when women in Jun are compared only with indigenous women in the ENSMI 2002,

again suggesting on average disproportionate numbers of child deaths among these younger age groups.

Table 8.20: Child Mortality, ENSMI 2002, all women (n=9155)

	Child death, all N=9155	Number of child deaths, all	Child death, *ladina* N=5312	Number of child deaths	Child death, indigenous N= 3839	Number of child deaths
Age category	N (%)	Mean ± SD	N (%)	Mean ± SD	N (%)	Mean ± SD
15-19	23 (1.4)	1.00 ± 0	11 (1.2)	1.00 ± 0	12 (1.7)	1.00 ± 0.00
20-24	162 (9.2)	1.09 ± 0.28	67 (6.7)	1.06 ± 0.24	95 (12.6)	1.11 ± 0.31
25-29	242 (14.8)	1.23 ± 0.47	107 (11.5)	1.22 ± 0.48	135 (19.2)	1.24 ±0.46
30-34	334 (23.6)	1.34 ± 0.66	146 (17.9)	1.22 ± 0.47	188 (31.3)	1.43 ± 0.76
35-39	321 (28.3)	1.48 ±0.90	169 (25.0)	1.38 ± 0.79	152 (33.3)	1.59 ± 0.99
40-44	330 (37.5)	1.74 ± 1.09	163 (31.3)	1.66 ± 1.01	167 (46.4)	1.82 ± 1.17
45-49	311 (42.3)	1.88 ± 1.16	166 (35.2)	1.74 ± 1.06	145 (55.1)	2.05 ± 1.26

Fetal loss

I also asked women Jun and Keb' about other aspects of reproductive loss, including miscarriage, or fetal loss before seven months of pregnancy, as well as stillbirth, or loss during the last three months of pregnancy. Approximately one in ten (10.4 percent) of women in Jun who had ever been pregnant reported that they had experienced a miscarriage and 13 percent of women had experienced a miscarriage in Keb'. Most of these women had only experienced one miscarriage in Jun, while 80 percent women had experienced more than one miscarriage in Keb'. Fewer women, 8.1 of those ever pregnant, reported that they had experienced a stillbirth in Jun, while only 8.7 percent of women ever pregnant reported a stillbirth in Keb'. Among those women in Jun whose stillbirth was attended, 14.3 percent were attended by a doctor and 85.7 percent by a *comadrona;* half delivered at home

and half in a hospital or clinic, reflecting the fact that midwives in Jun were allowed access to the clinic space for deliveries of stillborn infants. In Keb' all stillbirths were attended by *comadronas* in their homes.

Table 8.21: Fetal loss among women ever pregnant, Jun

Miscarriage (prior to 7 months)	Yes No	60 (10.4) 513 (89.6)
Miscarriage (prior to 7 months), by age category	18-24 25-29 30-34 35-39 40-44 45-49	16 (10.1) 12 (11.2) 8 (7.0) 0 16 (25.0) 8 (20.0)
Number of miscarriages	1 2 3	40 (66.7) 12 (20.0) 8 (13.3)
Stillbirth (at or after 7 months)	Yes No	44 (8.1) 497 (91.9)
Prenatal care providers (stillbirth)	*Comadrona* Doctor	24 (85.7) 4 (14.3)
Birth attendant (stillbirth)	*Comadrona* Doctor	24 (85.7) 4 (14.3)
Delivery location (stillbirth)	Home Clinic/hospital	12 (50.0) 12 (50.0)

Table 8.22: Fetal loss among women ever pregnant, Keb'

Miscarriage (prior to 7 months)	Yes	6 (13.0) 40 (87.0)
Miscarriage (prior to 7 months), by age category	18-24 25-29 30-34 35-39 40-44 45-49	0 1 (14.3) 0 1 (20.0) 1 (14.3) 3 (60.0)
Number of miscarriages	1 2 3 5	1 (20.0) 2 (40.0) 1 (20.0) 1 (20.0)
Stillbirth (at or after 7 months)	Yes No	4 (8.7) 42 (91.3)
Prenatal care provider (stillbirth)	*Comadrona*	4 (100)
Birth attendant (stillbirth)	*Comadrona*	4 (100)
Delivery location (stillbirth)	Home	4 (100)

Using municipal records from Cantel, I was able to compile a list of women who had given birth to a live infant in the previous12 months, as well as a list of women who had reported a stillbirth or an infant death in the previous four years. I had conducted a demographic, family and reproductive health survey with women of fertile age, but I wanted to ask a more specific set of questions to women who had recently given birth, with particular attention to men's behaviors during and after pregnancy. Because both stillbirth and infant mortality are relatively rare events in comparison with birth, I wanted to conduct verbal autopsies with women who had experienced one of those two kinds of reproductive losses within the past four years in order to examine a broader constellation of causes and reactions.

In Jun, I conducted a follow-up survey with all women who had experienced a documented reproductive loss within the previous 48 months, including a stillbirth (n=29) or an infant death (n=24). Names of women who were recorded to have either a stillbirth or an infant death in the municipal records in the previous four years were collected and these women were contacted in an attempt to census reproductive losses. Looking at these two groups side by side allows for a comparison of factors that might be associated with stillbirth as opposed to birth of a live infant, even if that infant would later die.

Women who had experienced an infant death were compared with those who had experienced a stillbirth or an infant death along several demographic characteristics. These two groups showed no statistical difference in average age at the time of the reproductive loss (31.0 for infant deaths versus 31.1 for stillbirths),

average years of education (3.2 years for infant deaths versus 3.2 for stillbirths), average number of lifetime pregnancies (including the reproductive loss; 5.4 for infant deaths versus 5.8 for stillbirths), average number of lifetime live births (including the reproductive loss, 4.7 for infant deaths versus 4.2 for stillbirths). A slightly higher proportion of male infants were stillborn (61 percent) than died as infants (52 percent). Finally, there was no difference in the average number of months in pregnancy at which prenatal care was initiated (4.8 for infant deaths versus 4.9 for stillbirths).

Several important patterns emerge from women's reports of their experiences during and after pregnancy. First, many women experience some adverse event during pregnancy, with a sick or drinking family member most common. Women also report that men worry more about their health during pregnancy, but that they are unlikely to change their level of economic support - a possible site for intervention. Women who have had a stillbirth differ little from women who have had an infant death, including age, level of education, number of births and pregnancies, and time at initiation of prenatal care. Women who have had a stillbirth are less likely to have received a tetanus vaccination than women who have had a live birth followed by an infant death, which may indicate some differences in prenatal care received. Women who had a stillbirth or infant death are more likely to report a death of a previous child than women who have delivered a live birth that has not been followed by death of the infant. This suggests that risk of poor reproductive outcome may be increased by previous poor

outcome, and that women in this K'iche' community who have had a poor reproductive outcome should be targeted for improved prenatal and postnatal care.

Discussion

The quantitative data reviewed in this chapter argue for new interpretations of high rates of fertility and reproductive loss and low rates of contraceptive use among indigenous Maya in Guatemala. First, these data suggest that simply being Maya in Guatemala is not in and of itself a predictor of or adequate explanation for those demographic and epidemiological outcomes.

Second, there is ample evidence that the civil war in Guatemala has had a real demographic impact on the reproductive trajectories of Maya communities like Jun and Keb'. The reproductive dips, reflecting delays and deferrals of reproductive careers, coincide with the violence of the civil war. This provides quantitative support for the experiences of reproductive disruption detailed in the previous chapters.

However, these data also suggest that K'iche' Maya groups have continued to achieve relatively high rates of fertility even in the face of the demographic disruption of the civil war. This reproductive resilience, so evident in the narratives and experiences of the men and women in Jun and Keb' presented in this narrative, is also supported by demographic data. Some of the cultural features of Maya communities that allowed for the survival and rebound of the K'iche' population after conquest, including Maya community endogamy within Guatemala's race-gender-class system and gender complementarity of responsible patriarchy, also

operated during the civil war. Those features continue to shape men's and women's attitudes toward reproduction, even as they evolve over time with changes in men's and women's reproductive behaviors and decisions in practice.

Finally, these data provide strong evidence that taking men into account in epidemiological models of reproductive health outcomes makes a difference. This is true not just because men are a part of reproduction. Three are real, important dimensions, such as shared decision-making, or husband's contribution to household income, that are predictors of reproductive health outcomes. Just a importantly, however, is that accounting for these different dimensions of men's influences on maternal and infant health actually reveals different relationships between reproductive health outcomes and more standard predictors, such as maternal education. In the K'iche' Maya communities of Jun and Keb', men make a difference in reproductive health.

Chapter 9: Conclusion

Hombres de maíz

After several months of living with Pedro and Andrea, I was asked by Pedro to hop into the large cab of his Volvo shipping truck for a short ride. Pedro was from a neighboring community, but had moved to live with Andrea after they had married. He had met her while working for her father and brothers as a fare collector in the bus and later as a bus driver, and that experience had helped him get his job as a driver between Quetzaltenango and the coast delivering manufactured products. He was proud of the shiny new truck and did not seem to share my trepidation as it wound through narrow dirt roads, its rear view mirrors perilously close to the tile shingles of houses we passed.

We eventually arrived at a small collection of one-roomed buildings made of adobe off the main road where his mother and one of his younger brothers lived. He invited me inside and I said hello to them both before his mother went out to make us tea. Pedro, freshly showered, hair slicked back, and in newly washed clothes, stood out against the backdrop of his mother's crowded, dusty room, lit by a single shaft of light from the doorway.

Pedro took the opportunity to tell me how he had met Andrea, and in particular how his future father-in-law had not approved of their relationship. Pedro was an attractive, charismatic man, but he came from a poor family and had not finished 6th grade – he had had to work from a young age as a weaver at a loom because his father had abandoned his mother and family. Andrea's father had high

hopes for his daughter, as he did for the rest of his children, and she had continued through school to train as a nurse. But Pedro had been persistent and eventually he came around, making him a driver. Pedro, however, had found the family business fractious and chafed having his in-laws as his bosses, and so had found another job.

He explained to me, however, that his father-in-law had made clear to him when he was pursuing Andrea that he would have high expectations for his future son-in-law as a wage earner and part of the family business. "He told me that we were not like our fathers who came before, who were just scratching in the dirt to making a living, working in the field for nothing. *No somos hombres de maíz."* (We are not men of corn).

Hombres de Maíz (Asturias, 1949) is the title of a novel by Nobel Prize winner Miguel Angel Asturias. That work draws on Maya cultural beliefs (including the *nahual,* or spirit-double) and describes conflict between Maya and *ladino* groups through magical realism. The title itself is derived from the Popol Wuj (literally People's Book), a post-Classic Maya text detailing creation myths and legendary figures such as the Hero Twins and their quests. I asked Pedro if he were aware of these references; he had heard of the Popol Wuj, but not the novel. He explained that, for him and his father-n-law, the phrase *hombres de maíz* referred to a way of thinking about Maya men that saw them as poor peasants only, whose nature dictated that they be farmers of corn. Pedro had great plans for himself and his family; he wanted his son to graduate from college and he wanted his family to

enjoy what he considered markers of wealth: a car, a larger television, cellular phones, a larger house. Being a farmer was not a part of that vision.

Several months later, I was walking with Daniel, one of Pedro's brothers-in-law and owner of some of the buses. "My heart is sad today, Mateo. Do you know why? Because the forest is burning." He pointed out across the community to the backdrop of the nearby hills against which it was nestled and, indeed, there were tendrils of smoking rising. He said that this was not uncommon, especially in the drier months, and that it was the responsibility of the community to work to preserve the environment. He went on to discuss some other responsibilities of stewardship, like farming. He detailed how, at each harvest, he and all the other men in the community would look at how well their crop of corn had done. He would look at the kernels of different sizes and colors and try to select the ears of corn that had grown the best that year to preserve for next year's planting. He showed me some kernels that he had in his pocket which he thought would do particularly well. "*Todavía somos hombres de maíz.*" (We are still men of corn).

Men and reproductive decisions

Throughout this dissertation I have focused on the ways in which K'iche' Maya men, as men, have negotiated reproductive decisions and experienced the process and outcomes of those decisions. I have been able to explore some of the broad structures that organize men's reproductive health generally, as well as the more specific context of reproduction in two K'iche' Maya communities. Broadly speaking, this dissertation explores the contours of demographic transition,

examining how K'iche' Maya men navigate changes seen in many parts of the world from high fertility and high mortality for infants, children, and young adults to lower fertility and lower mortality among these younger age groups. Men in these two communities, just like the women with whom they live, love, argue, work, and ultimately age and die, have played an active role in making decisions about when to have sex, when to marry, when to have children, how many children to have, and when to stop having children. At the same time their decisions have been fundamentally shaped and challenged by structural forces that play direct and indirect roles in their day-to-day lives. Some of the most important of these structural forces, such as level of income and education, show relationships with reproductive decisions that have been documented in Guatemala and in other parts of the developing world and which conform, broadly, to modernization narratives. Guatemala, and in particular Maya communities, have posed, if not a direct challenge, then at the very least an unexplained variable in explanations of birth, contraceptive, and infant and mortality rates. That variable is "culture," with indigenous or non-indigenous ethnicity proving repeatedly to be an independent risk factor for poor reproductive health outcomes in epidemiological models.

This work contributes to a substantial body of research in Maya communities in Mexico and Central America that has investigated the political, religious, economic, and family organizations in which men and women participate, as well as to conduct research that looks at the health practices and resources available in those communities. This literature has allowed me to conduct multisited research

that focuses on the lived experiences of reproductive decisions and reproductive outcomes. Moreover, I have been able to take as the primary object men's roles in reproductive health, which I locate in the context of work on Maya traditional birth attendants and traditional medical practices more broadly. This has allowed me to argue for some dimensions of Maya masculinity, including respect and control, which have played pivotal roles in men's approaches to reproductive decision making in several of the ethnographic examples I have detailed. These dimensions are coupled to many men's admitted hesitancy to engage in knowledge or direct involvement in areas of reproduction that are deemed to pertain more closely or directly to women, such as pregnancy and childbirth - an extension of the concept of respect that combines elements of chivalry and shame, distance and intimacy. Maya men, I argue, may find themselves in positions regarding reproduction in which they feel they must remain outside but also remain the ultimate arbiters, literally regarding the birthing room as well as more figuratively with contraception or pregnancy. This dissertation has sought to chart some of the patterns in the ways Maya men have negotiated this ambiguous position, which has ranged from active involvement and conscious rejection of what they perceive as older models of masculinity, to the embrace of more conservative, paternalistic perspectives on men's' roles, often derived from Christian models, to engagement with ideas about Maya masculinity which they trace to pre-conquest gender relations. Men draw on all of these sources for their participation in family and community life.

Men and reproductive risk

Ultimately, however, this dissertation is not simply a chronicle of men's experiences of an inexorable demographic transition to which they must adapt; rather, it is an argument against any simple reading of demographic transition as a universal, natural, or passive process. Maya communities, when conceptualized as a population, have on average higher rates of infant and maternal mortality, higher early morality, higher birth rates, larger completed family sizes, lower overall rates of artificial contraceptive utilization, and younger population structures. Men and women make decision about their reproduction, embracing some possibilities and resisting others, drawing on deep wells of cultural norms and expectations while at the same time exploring new, different, or original models for mapping their lives and making their families. This point is of critical importance for Maya communities because it complicates interpretations of Guatemalan population data that suggest that Maya communities are delayed in the trajectory of demographic transition relative to their non-indigenous ladino counterparts.

First, as has been argued in the first chapter, a high fertility, high mortality regime among Maya communities in the 19th and 20th centuries does not represent a natural or original condition. Instead it was the product of extractive colonial and post-colonial relations of power that relied on Maya labor and that demanded high indigenous fertility. Moreover, high fertility occurred in communities that were encouraged to form multigenerational households and rely on local kin groups for community organization of political power, but which discouraged broader kinship ties or regional political structures based on kinship or ethnicity. Analysis of

demographic transition in Guatemala must address both these prior conditions for high fertility and high mortality, as well as the genocidal violence that was directed at the perceived possibility of the reproduction of revolution in Maya communities at the end of the 20th century that followed the growing awareness within and among Maya communities of their exploitation as a source of labor and their viability as a population with shared cultural, ethnic, and economic interests.

Second, just as Maya patterns of fertility and mortality should not be seen as delays in demographic transition, neither is it true that some element of Maya "culture" or social structure- be it level of education, beliefs about men's and women's gender identities, or the importance placed on some economic roles, such as cultivation or weaving - is an obstacle in the path of demographic transition. Again, while it is true that Maya communities on average have lower rates of literacy, lower levels of complete formal education, and lower average incomes, there is wide variability within and between communities with respect to these variables as well as to these outcomes. Independent variables such as income, education, and literacy do not predict, in the communities in which I worked, contraceptive adoption or infant mortality as a straightforward relationship. Moreover, contraceptive prevalence in the two communities was nearly identical, despite substantial differences in levels of education and income.

Third, just as culture should not be seen as a monolithic variable that can explain differences in demographic transition, I argue that Maya men cannot be easily characterized as barriers to maternal or infant health, contraceptive use, or

reproductive health broadly defined. Using data from Jun, I have been able to show that several variables that characterize men are significantly associated with improved maternal and infant health outcomes and contraceptive use, including household income in households where men are the principle earners. However, I have also been able to show that traditional hallmarks of progress and modernity do not completely explain the relationships between men's reproductive health practices and their experiences of their decisions. One of the most important findings of this research involves the ways in which men may experience ongoing, conflicting evaluations of and relationships with their decisions about reproduction, including the use of contraceptives, limiting or not limiting family size, marrying early versus delaying marriage, and having monogamous, serial monogamous, or extramarital relationships. Using quantitative approaches like logistic regression analyses, I have been able to demonstrate how key variables such as men's level of education or contribution to family income, selected because of their relevance as predictors of reproductive health outcomes after long-term ethnography, significantly alter models of outcomes based on more traditional predictors.

Maya Masculinity and Reproductive Resilience

What is readily apparent from my research is that men's roles and experiences related to reproduction and reproductive heath are filled with conflict and require men to negotiate actively among competing demands and expectations. I have been able to use data from interviews and participant observation to demonstrate some of the areas in which men express equivocal beliefs about how

they should participate in different aspects of reproductive health, including contraceptive use, prenatal care, and childbirth and parenting. Men's responses demonstrate how central reproduction and family are to men's concepts of masculinity and masculine experience, while at the same time showing how K'iche' men feel both at a remove from *and* involved in their wives' and children's lives. Many of the K'iche' Maya men with whom I worked expressed their feelings about changing their roles as husbands and fathers from what they experienced with their own male role models. Interestingly, they are able to draw on new models drawn from outside their communities, as well as models taken from conceptions of a pre-conquest past. Women as well as men express some ambivalence about men's roles, tacking back and forth between what they characterize as more traditional male roles and newer models of masculinity. Importantly, men and women are able to articulate differences between Maya masculinity and other models of *machismo* perceived to derive from ladino groups, which some men experiment with, while other men see as inauthentic or unnatural, and which extend to contraception and family size.

I argue that reproductive resilience underlies the trajectory that K'iche' Maya and other indigenous communities have maintained relative to the precepts of demographic transition and that this resilience occurs in the face of the reproductive risk. In several chapters I have explored how reproduction experienced as a risky enterprise for both men and for women in terms of both uncertain health outcomes as well as, in the case of contraceptive use, uncertainty

about the consequences of delayed or avoided reproduction. Maya men and women have faced direct challenges to their reproductive trajectories, not only in terms of limited resources, but also in terms of the genocidal violence of the Guatemalan civil war. In the face of these challenges, these men and women have been able, although not without difficulty, cost, and loss, to maintain and grow their families and their communities.

The models of Maya masculinity I have described, a *Mayachismo* complex focusing on control, productivity, respect, and growth, traces a high effort behavioral coping strategy akin to John Henryism and the Sojourner Syndrome. I have focused simultaneously on men's own experiences as well as their influences on others to show how the hierarchical intersections of stratified reproduction and hegemonic masculinity. I have tried to simultaneously show the limitations of these rigid structural/hierarchical formulations in practice in the analysis of K'iche' Maya men who live out a form of responsible patriarchy in their communities and masculinities that are both held up as cultural ideals and racially discriminated against. Ultimately, there is not a strict dichotomy between Pedro and Daniel's statements about being or not being men of corn, *hombres de maíz.* K'iche' Maya men tack back and forth between different models as part of their strategies for survival, both cultural and personal, and those models influence their decisions about marriage, children, family, and community.

Men and reproductive health

As men are drawn into discussions of reproductive health, frameworks will be necessary to organize and hopefully explain the reproductive roles they play and the reproductive problems they experience. Given the centrality of sexuality and reproduction in human relationships, individual psychological explanations – such as motivations and desires – likely will be combined with explanations of structural shifts in social, economic, and political organization to account for kinds and distributions of different reproductive health patterns and problems. More nuanced theoretical approaches will help to account, for example, for the increased investment of some men in the reproductive health of their partners and offspring, with the simultaneously declining investment – or flight from fatherhood – evident in many parts of the world.

It is tempting to draw parallels to classic demographic transition theory to explain men's attitudes toward fertility, pregnancy, childbirth, and fathering. To be specific, a distinction could be drawn between the instrumental value of children and their intrinsic value; that is, children's value for other purposes relative to their value in themselves. Such an argument might run as follows: in high-fertility, high-mortality populations, children have higher instrumental and lower intrinsic value for men, insofar as children serve to contribute to parental wealth, ensure lineage and community viability as adults, and consolidate a man's position as a full and potentially prestigious member of a community. High intrinsic value for children may be mitigated by the high rates of early mortality. As mortality falls, and child survival is less tenuous, the intrinsic value of children will rise. Their instrumental

value, meanwhile, will have historically fallen as mercantilist and capitalistic economic systems limit the economic contribution of children to their parents and families. Resulting falling fertility rates will both reflect and contribute to the increasing intrinsic value of children, allowing few children to be heavily invested in for personal fulfillment. At the same time, the decline in instrumental value will release some men from responsibilities for partner and child welfare, in that men's instrumental needs must be satisfied in ways not involving their children. In particular, men may pursue personal success and enjoyment outside the context of family life—delaying marriage, initiating divorce, using birth control, and limiting participation in childcare.

Such a perspective complements other anthropological perspectives on demographic transition, including Caldwell's (1982) wealth flows theory and Handwerker's (1986) theory of gatekeeping, as well as the work of LeVine (1988), who has argued that different parenting strategies exist in agrarian and urban-industrial groups (i.e., agrarian groups maximize numbers of surviving children, and urban-industrial groups reduce numbers of children to focus on imparting skills to them). The perspective presented also incorporates a subjective component in the valuation of children rather than simply regarding children as part of a wealth flow or access to resources. Moreover, it could be used to explain developments in countries such as the United States, where the nuclear family has been shown to be eroding.

Using such a framework, several predictions can be made about men's attitudes toward reproduction and reproductive health. With the transition framework described above, one might expect an increase in the importance of individual child survival and investment in individual births, as well as investment in the reproductive health of women during, after, and between pregnancies. Furthermore, one might expect changes in men's subjective experience of reproductive health problems that interfere with healthy reproduction. These would include sexual dysfunction, infertility, spontaneous abortion and stillbirth, induced abortion, the birth of disabled children, and the reproductive health problems of their partners. Men in "pretransition" regimes would be expected to experience such reproductive health issues as social and economic problems, while men in "posttransition" populations would likely experience them as personal psychological problems.

My work in the K'iche' Maya communities of Jun and Keb' in Guatemala, although resonating with such an explanatory framework, ultimately argues against such a "male transition" model. Such an explanatory model, though it provides a useful starting point for envisioning reproductive health, is overly unilinear and deterministic, and does not recognize the plural relationships, positive and negative, existing between men and others, including their reproductive partners, within any single social group. Ideals of masculinity, male sexuality, reproduction, and fathering also differ greatly among societies that have not yet or only partially undergone demographic transition. This model projects Western sexual and reproductive

mores such as monogamy, fidelity, and responsible fatherhood, within a historical, quasi-evolutionary trajectory.

An alternative, anthropological account of the kind proposed in this dissertation would emphasize that men's subjective experiences of masculinity, reproduction, and fatherhood do not necessarily or invariably change over time as societies continue to "develop." Rather, concepts of manhood and masculinity, influenced by economic and social structures that simultaneously influence fertility regimes, have shifted with changes in those structures. Such changes may be caused by demographic transition, may accompany it, or may in fact cause it (Schneider and Schneider 1995), suggesting that the model described above would need to be carefully evaluated in local historical contexts.

Men's reproductive behaviors, rather than solely the product of individual decisions, occur within an ecological context that must be carefully investigated. Cultural anthropology demonstrates the paucity of information on the reproductive health of men and the processes by which men come to define and understand their own reproductive health needs. Far from a set of biomedical outcomes conceived of as separate from social constructions such as gender, reproductive health seems to play a part in actually defining systems of gender. Thus, future anthropological studies must further address how reproduction and reproductive health affect other areas of men's lives, including their notions of masculinity.

Finally, as the meanings of masculinity change, so have the meanings of reproduction, in ways that ultimately affect the healthy reproduction of men and

their families. Thus, understanding changing notions of gender and masculinity is a vitally important component of the reproductive health initiative in the new millennium, with anthropological research shedding new light on what it means to "be a man" in Maya communities and around the globe.

There are multiple and sometimes contradictory ways men can affect reproductive health problems. Therefore, much of the anthropological work discussed here attempts to trace the effects of men on women's reproductive health without systematizing or generalizing those effects. Few of the relationships between men's and women's reproductive health are universal, and even those that exhibit patterns (such as STIs and infertility) may not lend themselves to identical interventions in different contexts. Anthropology as a discipline is well situated to investigate which patterns of the relationship between men's and women's reproductive health are the most important in a given context and which are the most meaningful in terms of intervention.

Reproductive health problems cannot be universally defined because they require the local elaboration of meaning within particular cultural contexts. The meaning of reproductive health events usually involves multiple individuals, be they sexual partners, kin, service providers, or larger social groups. Thus, what a particular reproductive health problem means depends on one's subject position—as an HIV-positive heterosexual man, a poor multiparous, middle-aged woman, or a teenage recipient of an abortion—as well as on what is defined as a reproductive health problem and by whom. The meanings of reproductive health states are

important, not only in terms of effective treatment and intervention, but also because they involve the experiences of individuals as they negotiate healthy sexuality and reproduction.

The final issue involves the distinction between equality and equity in reproductive health. In many cases, trying to distinguish between the two assumes an "outside" perspective that does not take into account the needs and desires of the men and women experiencing reproductive health problems. Men and women must be allowed to aid in the definition and prioritization of reproductive health problems. From both a medical anthropological and public health perspective, this requires informing men and women about these problems as they are defined by biomedicine, but also providing new tools, such as critical awareness of class, race, and gendered inequalities, for their description of these problems. It also requires allowing men and women to explain reproductive health problems from their own perspectives and to gauge the importance of these problems for their own sexual and reproductive well-being. Among different groups, at different times, different decisions may be made about equality versus equity of reproductive health services. Ultimately, these goals of egalitarian and equitable services can be pursued only when individuals and partners, men and women alike, can positively define their own experiences of sexual and reproductive health.

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