Imperial Splenda: Globalization, Culture, and Type 2 Diabetes in the U.S. and Japan

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Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Sociology in the Graduate School of Duke University

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ABSTRACT

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Abstract

Globalization scholars have disagreed about the effects of globalization on the production and reproduction of difference: Do fundamental differences endure, do cultures converge, or is there hybridization? This dissertation analyzes the durability of distinct medical cultures in two technologically advanced healthcare systems that rely on an evidence-based, biomedical approach. Durability refers to the tendency to maintain or develop diverse, even idiosyncratic, practices and beliefs—even as the forces of globalization are perceived to be pressing health practices everywhere toward a single global standard. To do so, this dissertation offers a comparative, empirically based argument using the case of type 2 diabetes in the U.S. and Japan. As an inductive, theory-constructing project, the argument has at its foundation 11 months of ethnographic field work in Japanese hospitals and clinic exam rooms, 115 semi-structured interviews with patients and biomedical health practitioners in Japan, and 25 interviews with American health care providers and patients. I argue that physicians in both research sites, Okayama, Japan and North Carolina, USA, practice empirical biomedicine, but that empirical biomedicine is not all there is to biomedical practice. Practicing physicians in both contexts act not only on increasingly globalized professional standards, but also on local knowledge, on their own explanatory models for type 2 diabetes, and in reaction to local patient populations’ explanatory models.
Further, local knowledge and patient interactions shape the ways in which practicing physicians interpret global standards and best practices. Occasionally, they may even be reshaped beyond recognition without interfering with physicians’ self-evaluation as participants in a universal, standardized scientific project. The interaction of globalizing standards of practice, local knowledge, and local explanatory models of illness can result in dramatically divergent medical practice across different social contexts—in this case, the U.S. and Japan.
Dedication

For my grandmother, Sheila.

And for Kazue and Nakahara-sensei.

何度もお世話になりました。
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1. Introduction

1.1 Two Countries, Two Epidemics, One Disease

The room is a standard classroom, with linoleum floor, fluorescent lights, and institutional windows overlooking a parking lot. Fifteen or so students, most of them males over the age of 40, sit uncomfortably at long tables facing a whiteboard, on which a nurse has drawn several figures illustrating insulin receptors. Having finished her explanation, she is erasing the figures.

“Next, let’s talk about food. Please turn to page 38 in your books.”

We obediently flip through the pages of our hospital-issued textbooks until we come to a page with pictures of several different meals, accompanied by nutritional information.

“Well, what are good foods?”

A gaunt man in work clothes raises his hand. “Produce,” he says.

“Rice!” says a woman in the back.

“Japanese foods,” says another.

“Konnyaku.”

The nurse nods approvingly and launches into a practical explanation of healthy meal planning for the management of type 2 diabetes. She points to photographed examples of appropriately balanced and proportioned breakfasts, lunches, and dinners. Every meal pictured includes a bowl of rice.

A little while later, the nurse prompts us for “danger” foods.
“What should we be careful of?” she asks.

“Fried foods.”

“Western foods.”

“Eating out.”

“Beer and sake, things like that.”

The older man next to me turns and looks at me forlornly. Even though I am sitting in the class as a student, I am wearing my hospital issue lab coat and identification card.

“But it’s ok to drink a little sake, right?” he asks me hopefully.

This class was one of a team-taught diabetes education series for outpatients offered by an urban public welfare hospital in western Japan. The series is free and requires no referral, although physicians, nurses, nutritionists, or social workers refer most of the “students”. It takes a month to complete the entire series—a considerable investment of time and effort. While no one tracks the completion rate for the entire series, a month of class observation suggested that attendance is high and relatively consistent.

Rates of type 2 diabetes are rising rapidly in Japan, and bringing the epidemic under control is a top priority for physicians and policymakers alike. By 2002, public health authorities estimated that more than 12 million people in Japan were hyperglycemic (Kawamori 2002). The World Health Organization (WHO) estimates that at least 7.1 million Japanese already suffer from type 2 diabetes—a number that can only
rise when millions more already suffer from hyperglycemia. By comparison, 17.9
million U.S. residents have been diagnosed with type 2 diabetes, in a country with twice
Japan’s population (American Diabetes Association 2007). While the rate of type 2
diabetes is indeed higher in the United States, Japan is not far behind.

These worrisome statistics have not gone unnoticed by Japan’s Ministry of
Health, Labor and Welfare. In the context of an aging population, the diabetes
epidemic, along with a host of other so-called lifestyle diseases, could seriously threaten
the current structure of the Japanese health care system. Under the current system, all
Japanese citizens receive medical insurance through one of several sources, depending
on their employment situation. The most basic medical insurance covers 70% of medical
and pharmaceutical costs, while the patient burden is 30%. The patient burden for those
who receive health insurance from large corporate entities is typically around 20%.
Meanwhile, health care costs are controlled by a “point system” set by the government;
each visit, procedure, product, and prescription medicine is assigned a point value.
Japan enjoys one of the best organized, most efficient health care systems in the world,
but the specter of widespread chronic disease in Japan’s aging population threatens to
bankrupt the system.1

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1 There are many ways to measure the relative efficiency of a health care system, but the most basic is to
simply compare percentage of GDP spent on health care to measures of population health. Japan spends
approximately 8% of its GDP on health care and enjoys some of the best scores for population health in the
world (OECD 2006). Infant mortality is half that of the United States. According to OECD data, the United
States spends twice as much as Japan on health care as a percentage of its GDP, but its infant mortality rate
The policy response has been quick, and occasionally baffling to outside observers. In 2008 the MHLW introduced a massive diabetes screening program that would probably have been controversial in North America. Since visceral fat is associated with diabetes risk and the ratio of waist girth to hip girth is a fast and inexpensive primary screening tool, the Ministry of Health, Labor and Welfare set out to measure the waist of every Japanese worker in workplace and city health centers. City governments strived to meet a severe goal: measure the waistlines of at least 65% of their eligible residents. Men with waists larger than 33.5 inches and women with waists larger than 33.4 inches are referred to a physician for dietary education and testing.

The MHLW scheme has proved cheap, safe, effective, and relatively uncontroversial. And yet is it inconceivable to most Americans that such a system be implemented in the United States. Well aside from the institutional differences between the two countries, the mass semi-public measurement of waists by public health workers seriously offends American sensibilities. American newspaper articles about the initiative portrayed the waist-measuring initiative as quirky and Japanese, rather than as

remains twice that of Japan. More dramatic social stratification, stratified health care access, and lifestyle factors in the U.S. probably contribute to this difference. Nonetheless, the wholesale creation of an inexpensive, accessible, top-notch health care system may be one of the most impressive and enduring successes of post-War Japan.

a sensible and potentially imitable public health measure. Lining up American workers in their own workplaces and wrapping a tape measure around their waists seemed not only laughable, but intrusive—even a little disgusting.

As the case of the tape measure wielding Japanese health worker demonstrates, the sense of possibility for public health interventions is very different between the U.S. and Japan. These differences grow not only from institutional differences in the organization of health care delivery, but from differences in what lay people (and medical professionals) will tolerate from public health authorities. Different conceptualizations of appropriate and inappropriate uses of the body, and different ideas about who is responsible for maintaining the body, can create very different possibilities for public health interventions.

The differences between American and Japanese approaches to diabetes go well beyond public health efforts to measure the girth of the Japanese people. The ways that physicians describe and treat the disease, and the ways that patients explain its origins and prevention, reveal major empirical differences between diabetes experience and care in the two countries.

The diabetes education session described above touched on a few of those differences. The recommendation that white rice should be eaten at most meals, for instance, would not make it into an American diabetes education session. Quite the

3 See article above.
opposite, most American health professionals recommend that their patients minimize white rice consumption—many go so far as to say it should be avoided entirely. The explicit emphasis on the particular danger of foreign foods would also seem odd in an American context. Most Americans are under the (quite possibly accurate) impression that nothing is unhealthier than American food.

Other differences emerge in the clinical context. Outpatients with type 2 diabetes in Japan are seen by physicians much more frequently than their counterparts in the United States. This is in line with broader differences in health care utilization between the two countries: OECD data show that the average American patient has around 4 health visits per year, while the average Japanese patient has more than 13 health visits annually. At a very minimum, patients with type 2 diabetes in Japan are expected to visit the outpatient clinic once every two months—but most are seen at least once a month. Nearly a quarter of the diabetes patients at the suburban hospital where I did my fieldwork were seen once every two weeks. In contrast, the American Diabetes Association recommends that type 2 diabetes patients be seen by a doctor only once every two months. And most Americans with diabetes—even those with reasonably good insurance—do not go nearly that often (Spann et al. 2006).

In other words, when it comes to frequency of health visits for diagnosed type 2 diabetes patients, the gold standard for best practices in the U.S. is considered to be the bare minimum in Japan. When physicians at an urban welfare hospital in Japan
explained to me that most of their type 2 diabetes visit only once every 2 months, they seemed almost apologetic. "We’re just too busy here," explained one internist I shadowed at the downtown medical center.4

Once in the Japanese exam room, many parts of the consultation will seem familiar to those who have spent time in American diabetes clinics: the physician will discuss glycosylated hemoglobin (HbA1c) results, note the patient’s weight, discuss lifestyle factors, and adjust medication. A large part of the short exam will be given over to diabetes education—that is, explaining the disease and its implications. But other aspects of the Japanese exam will seem unusual. In suburban and rural clinics, patients will probably self-report their weight; no nurse will weigh them. Some patients will not have full-blown diabetes at all, but rather impaired glucose tolerance (IGT). Many patients will carry a techou, a small notebook in which they have carefully recorded daily food intake. Patients may be admitted for purposes of behavior and lifestyle training or modification. Occasionally a physician will declare a patient cured. And, of course, the recommendations for meal-planning will differ significantly.

To manage the same disease, Japanese physicians recommend rice and small amounts of fish, while American physicians and co-medicals recommend low carbohydrate diets and warn against white rice. Japanese physicians emphasize frequent contact with a physician, while more and more patients in the U.S. are served

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4 See field notes February 2009.
by nurse practitioners or not at all. Japanese physicians encourage their patients to maintain careful records, while American physicians take a “broad strokes” approach. All of these differences can potentially affect patient outcomes.

How do we explain these differences? Both health care systems emphasize evidence-based medicine, exist in technologically advanced societies, and are filled with cosmopolitan professionals. Many elite Japanese physicians completed research fellowships abroad and rely on international, English-language medical journals. While American physicians know little about Japan, Japanese physicians know far more about American health care and standards of medical practice than most Americans.

As the following chapters will show, Japanese physicians have a long tradition of empirical medical research and are embedded in global professional networks that connect them to American medical researchers, yet their contemporary as well as historical ideas about best practices in medicine differ from standard American practice. Further, patients in the two countries talk about their illness experience in profoundly different ways. They give one another different advice regarding the prevention of diabetes, and imagine health maintenance differently from their American counterparts. These differences lead directly to different patient behavior, and in turn to different forms of doctor-patient relationships.

I will argue in the following chapters that physicians in both my research sites, Okayama, Japan and North Carolina, USA, practice empirical biomedicine, but that
empirical biomedicine is not all there is to biomedical practice. Practicing physicians in both contexts act not only on increasingly globalized professional standards, but also on local knowledge, on their own explanatory models for type 2 diabetes, and in reaction to local patient populations’ explanatory models. Further, local knowledge and patient interactions shape the ways in which practicing physicians interpret global standards and best practices. Occasionally, as we will see, they may even be reshaped beyond recognizability without interfering with physicians’ self-evaluation as participants in a universal, standardized scientific project. The interaction of globalizing standards of practice, local knowledge, and local explanatory models can result in dramatically divergent medical practice across different social contexts—in this case, the U.S. and Japan.

Thus we observe what I call the *durability* of distinct medical cultures, even in technologically advanced healthcare systems that rely on “western” allopathic medical theory. “Durability” refers to the tendency for professionals and patients alike to maintain or develop diverse, even idiosyncratic, practices and beliefs—even as the forces of globalization are perceived to be pressing health practices everywhere toward a single global standard. The following chapters will demonstrate that distinctive practices endure in approaches to type 2 diabetes in the U.S. and Japan, both on the part of patients and on the part of physicians. Local knowledge and local explanatory models—
culture—play a major role in shaping health practices in each context and appear remarkably resilient in the face of technological globalization.

1.2 Literature Review

Many distinguished social scientists have analyzed medicine as a social enterprise; the insight that social structure and culture imprint health practices is not new. In the American context, the institutional origins of medical prestige (Starr 1982), the social and political process by which diseases are defined (Conrad & Schneider 1980), and fundamental social causes of the distribution of disease in our society (Link & Phelan 1995; see Aneshensal 1994; George 1996; House et al. 1994) have been well explored. European scholars such as Foucault have also tackled medicine and medical knowledge as a social construction (Foucault 1963, 1965), and popular accounts have chronicled some major differences between American and European medicine (Payer 1996).

Like the research presented here, the evidence from North America and Europe suggests that culture plays an important role not only in how doctor’s advice is understood, but also in the actual content of that advice (Waitzkin 1989; Schouten et al. 2007). Researchers have found that socioeconomic or cultural gaps between doctors and patients in the United States result in different levels of healthcare utilization between social groups (Andersen 1995), misunderstanding and hostility in both directions (Abrums 2000), and occasionally tragic failures of communication (Fadiman 1997).
These studies suggest that culture plays an important role in medical practice, but offer little leverage for explaining the relationship between medical systems and cultures outside Europe and North America. They demonstrate that culture plays some role, but without the perspective provided by explicitly comparative work we lack a sense of its contours. Thus the relative lack of comparative studies of the practice of medicine in other cultures and countries not only prevents us from understanding other medical systems, it prevents us from fully understanding even the medical systems we do study. This dissertation project seeks to fill that gap by engaging in comparative analysis of health beliefs and practices surrounding a single disease—type 2 diabetes—in two technologically advanced, but culturally and institutionally different contexts—the U.S. and Japan.

Evidence from North America and Britain also suggests that social institutions profoundly shape medicine. Paul Starr’s work traces the institutional origins of American medicine (Starr 1982). Institutional arrangements define the opportunity structure in which medicalization theorists identify the politics of disease definition (Conrad & Schneider 1980; Brown 1995; Light 2000). And a comparison of the United States and Canada or Britain yields interesting results: different institutionalized approaches to medicine yield different rates of diagnoses (Richardson 1989; Armstrong-Hough unpublished) and pharmaceutical use (New York Times 2001).
However, most of these studies scrutinize countries with similar social and political traditions compared to the diverse arrangements available around the world. Given that there are such diverse institutional arrangements, cultural contexts, and practices of healing around the world, even among countries that rely primarily on allopathic or empirical biomedicine, focusing on North America, Britain, and the Anglophone diaspora misses some of the best potential cases.

1.3 Case Selection

The U.S. and Japan were selected as cases for this project because they are both technologically advanced health care systems practicing primarily allopathic biomedicine. Both countries have long traditions of evidence-based medicine, as well as folk traditions. In both countries, physicians and other medical professionals participate in an increasingly global community of health researchers and professionals.

The United States is widely considered to be both a leader in empirical medical research and a paragon of medicalization. American research medicine, often state-subsidized, accounts for a major percentage of new pharmaceuticals, and leads the world in the development of new medical procedures (Conrad & Leiter 2004; Conrad 2005). The U.S. is also a major center of medicalization, the social process by which medicine and the medical paradigm become gradually more relevant to laypeople’s daily lives (Conrad & Schneider 1980; Clarke et al. 2003).
The primary reason for choosing the United States as a case, however, is simply that it has already been studied so much. English-language literature in medical sociology has understandably focused its attention on the United States, and to a lesser extent the United Kingdom. Thus in many ways the U.S. works as a reference case in order to relate international evidence to contemporary American sociological theory on medical practice. By including the United States, this comparative project is able to draw on, critique, and contribute to contemporary medical sociology.

Like the U.S., Japan is an affluent country, its GDP per capita exceeding $30,000 per year. (CIA World Factbook) It has experienced a significant increase in stratification since the beginning of its long recession in 1991, but if anything this has made its distribution of resources look more like that of the highly stratified United States. Not only do Japanese doctors practice the same allopathic biomedicine as their colleagues in North America, but Japanese biomedical life sciences research is highly advanced and routinely makes contributions to international research medicine (Triendal and Swinbanks 1997). Japanese and American medical communities share the same empirical approach to the production and adjudication of best practices in medicine. And decades of exchange programs, fellowships, and cooperation agreements between Japanese and American universities have brought generations of Japanese physicians to American medical centers on a temporary basis. Yet anthropological studies of Japanese medical culture suggest that certain health practices and beliefs continue to rely on quite
distinct medical paradigms and symbolic structures (Ohnuki-Tierney 1984; Lock and Norbeck 1987; Lock 1993; Traphagan 2004; Long 2005). Thus, while the standard of medical care available to Japanese and middle class Americans may be the same, the cultural content of that medical care is quite different.

The final reason for choosing Japan is that it is surprisingly under-studied by medical sociologists. At the beginning of this project, Japan was the second-largest economy in the world (by the time of writing, China surpassed Japan for the number two spot.) It is a major producer of medical technology, a major force in global popular culture, and a prime opportunity to examine modernity outside of familiar western contexts. Yet remarkably few medical sociologists have studied Japan. Instead, Japan has been the purview of medical anthropologists and Japan specialists. In part because Japanese language and culture are perceived to be difficult and time-consuming to acquire, its study has been left to area specialists concentrated in other disciplines. This project approaches Japan with a sociological eye and the hope of contributing to the medical sociology, globalization, and comparative literatures, but also with frequent reference to the work of scholars from other disciplines with a long tradition of studying Japan.

1.4 Data

The core data for this project was collected through semi-structured interviews with physicians, co-medicals, patients, and other laypeople in Okayama, Japan between
February 2009 and August 2010\(^5\), and in North Carolina, USA between February 2010 and October 2010. The Japanese interview set includes 115 interviews of varying length\(^6\) with biomedical professionals from hospital presidents to endocrinologists to nutritionists, and lay participants from retired businessmen to rice farmers. Interviews were conducted entirely in Japanese, digitally recorded, and transcribed for analysis. Because the resulting qualitative dataset proved to be enormous, I supplemented close readings of these transcriptions with qualitative data analysis using TAMS Analyzer, a coding program that allows qualitative researchers to code each transcribed interview using text mark-up.

Interview participants in Japan were drawn from two non-probabilistic samples, one from a rural community, which I will call Hosekijima,\(^7\) and one from the urban heart of the prefecture, Okayama City.

_Hosekijima_ is a relatively small community of fewer than 20,000 residents. Despite its small size, it boasts a great deal of socioeconomic diversity. Its northernmost border includes low mountains dotted with small peach and persimmon orchards and small-scale industrial grape production, mostly run by aging couples. At the foot of the mountains, older residences are interspersed with rice paddies that run right up to the

\(^5\) Fieldwork was conducted in Japan from September 2008 to August 2009, but I did not begin the interview stage until February 2009. Additional interviews were collected during a return visit to the field site in July and August 2010.

\(^6\) The shortest interview in the Japan sample lasted 20 minutes; the longest lasted more than 2 hours.

\(^7\) Due to privacy and confidentiality concerns and as outlined in my IRB protocol, the real name of the town used for my rural sample is to be kept confidential.
train tracks that cut the community in half. Like many inaka communities, the median age is very high here and many of the middle-aged children have moved to more urban parts of the prefecture, sometimes returning to help with the rice harvest. Moving further south, Hosekijima seems briefly suburban. Small apartment buildings cluster around the station and along a concrete grey landscape of grocery stores, two family restaurants, and inexpensive retail stores, all surrounded by large parking lots. But moving further south still, the commercial strip ends abruptly; the old commercial center of the town feels eerily abandoned, with dusty storefronts and few signs of life. Finally, the southernmost parts of the community lie along the shore of the Seto Inland Sea, supporting a small fishing industry. Hosekijima supports aging orchard owners and rice farmers, commuters seeking a quiet and cheap bedroom community within reasonable distance of the city, fishing families, and more than a few retirees.

The Hosekijima sample was recruited using a modified snowball sample, relying on multiple close ties to the community developed over a period of years. The sample is entirely composed of laypeople; there are no physicians or nurses, though there are many people professionally involved in care for the elderly. A family of rice farmers provided introductions to at least 30 other families in the northern, agricultural half of the community. I spent many days biking around the more rural parts of the town with
Keiko-chan\textsuperscript{8}, the energetic matriarch of a farming family who frequently joked that I was a “replacement daughter” (\textit{ko no kawari}) standing in for one of her own children who had gone abroad. Keiko-chan and her family made it their mission to introduce me to the people who made up their social world, and many of those individuals and the individuals they referred are included in the sample. Other Hosekijima participants were recruited through two public school teachers, a foreign language teacher, and the owner of a small restaurant. Further participants were recruited in turn from the individuals they introduced.

The urban sample is composed of respondents living and working within the boundaries of Okayama City, a prefectural capital of more than 650,000 people. Okayama City is the 16\textsuperscript{th} largest city in Japan and became a national “designated city” during the course of my fieldwork. Though clearly urban by American standards, Japanese from other parts of Japan as well as Okayama itself refer to Okayama City derisively as \textit{inaka}—countryside. Okayama City has a pattern of urban density similar to post-World War II American cities. It is urban in the city center, and suburban in the outlying communities that have been absorbed into the city in the past two decades.

The city sample was also recruited using a snowball approach beginning from multiple initial contacts. I did not conduct any interviews in either location until I had completed nearly 5 months of near-daily participant observation in a variety of medical

\textsuperscript{8} All names have been changed to protect the privacy of participants.
contexts, which meant that by the time I began interviews I was well integrated into the city’s medical community. Contacts from my field sites at a suburban private hospital, an urban public welfare hospital, an urban university medical center, and a suburban kanpo (Chinese medicine) clinic were my first urban interview participants. They in turn introduced me to colleagues at other health care sites and recommended me to patients and friends.

Non-professionals were more difficult to access in the urban environment. I relied on personal contacts including fellow graduate students, a city librarian, a professor, and two friends working as youth organizers for the prefecture—“youth” in this case means people ranging in age from 19 to 35—to introduce me into social networks outside the direct patient population for the hospitals at which I worked. I also presented 5- to 10-minute explanations of my research to adult education classes at an urban library. The librarians kept my business cards and short descriptions of my research on their reference desk and scheduled interviews for me when patrons expressed interest in participating.

The interviews are only part of the diverse collection of evidence I draw on for this project. I also reference 11 months of fieldwork in several medical facilities in western Japan, including six months of participant observation in the outpatient diabetes clinic of a suburban private hospital, a month at an urban welfare hospital, repeated visits to a kanpo (Chinese style) clinic, and even a week spent shadowing house
calls with a “country doctor” in a rural part of the prefecture. During this time I was permitted to sit in on interactions between doctors, nurses, and patients in exam rooms and spent hundreds of hours observing and participating in the daily operation of the clinics. I also participated in two diabetes education programs: one run like a support group that incorporated friendly, accessible explanations of type 2 diabetes and its management, and the other a more formal, classroom-style program. Part of my responsibility (and privilege) as a visiting member of the hospital staff was to attend weekly all-hospital assemblies, doctors’ administrative meetings, and a variety of social events with my medical colleagues throughout the year.

In addition to the interviews and ethnographic component, I distributed a short pre-interview instrument to members of an all-women gym in Hosekijima. The 53 participants responded to open format questions about preventative medicine and ideas about how to stay “healthy.” The questions about type 2 diabetes, influenza, and immunizations, were loosely based on Arthur Kleinman’s (1979) explanatory model measurement instrument and adapted for the Japanese cultural and linguistic context. I adapted the instrument by first adapting the areas of inquiry Kleinman suggests to three specific cases of health and well-being: a chronic disease, a communicable disease, and a

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9 Not Hosekijima.
8 The suburban private hospital at which I was based gave me the title “visiting international researcher” (lit. gaikokujinkengakui). My identification at the urban welfare hospital, on the other hand, read “intern” (kenshuuiin). In other contexts I was typically introduced as a visiting international researcher from the sociology department at Okayama University (Okudai no shakaigakubu no gaikokujinkenkyuuin). Please see the “research ethics” section for more details.
common biomedical prevention practice. I then translated the resulting instrument into Japanese myself. Next, I informally focus-grouped the Japanese instrument with several informants in Hosekijima: a worker at an eldercare facility, a rice farmer, a housewife, and two teachers. They argued for several changes in wording and organization, most of which were incorporated into the final instrument. The Japanese pre-interview instrument and an English translation can be found in Appendix D.

The purpose of the pre-interview instrument was to determine the best approach to semi-structured interviews in the rural context rather than to provide the basis for a quantitative analysis, but the results are nonetheless interesting and are mentioned in some of the following chapters. Since the instrument was set out on the front desk of the gym and it is impossible to determine how many potential respondents saw the survey but did not fill it out, it is impossible to calculate a response rate. The gym is part of a franchise in which membership to any location entitles members to use the facilities at any other location, but the manager estimates that the Hosekijima location attracts approximately 100 regular members each week for near-daily low impact workouts and camaraderie.

The empirical component for my second research location, North Carolina, is much smaller. I gathered 25 in-depth, semi-structured interviews from medical professionals and lay respondents in Durham, North Carolina. Since an enormous body of work already exists on the explanatory models of American type 2 diabetes patients, I

Twenty medical professionals working with type 2 diabetes patients at various local medical centers were initially recruited through an endocrinology fellow working in the Duke University Medical Center, who generously contacted colleagues on my behalf. Initial interviews led to further introductions. Medical professionals in my North Carolina sample work in a variety of contexts, from major university medical centers to a regional hospital to a neighborhood clinic to the local VA hospital. They also come from a variety of professional backgrounds; the sample includes endocrinologists, internists, nurse practitioners, physicians’ assistants, a nursing professor, nurses, and diabetes educators. Lay participants were recruited either through a snowball sample or through posters placed at various locations around Durham. However, since only 5 interviews were conducted with American laypeople, they are used for illustrative rather than analytical purposes in the following chapters. A much larger sample would be required to capture the diversity of lay attitudes in North Carolina, and I do not make any attempt to argue that this handful of interviewees are representative. Instead, for American lay and patient interviews I rely on the large pre-existing literature mentioned above.
Obviously, the U.S.-based empirical component of this project is on a much smaller scale than the Japan-based empirical work. This lopsided approach is premised on the presence of a large, high-quality body of work on the sociology of health in the U.S. Priority was given to establishing an empirical foundation for comparing Japan and the U.S., given that a great deal of thoughtful work in medical sociology and the sociology of health is already conducted in the U.S. Since a reasonable amount of empirical evidence already existed for the U.S. case, more attention was given to gathering evidence in Japan.

The lopsided approach is also premised on my own training and cultural background. As a U.S.-trained American sociologist, American cultural and institutional approaches to health and health care are far more familiar to me than those of Japan. Whenever I conduct fieldwork or analyze data from Japan, the U.S. serves as an implicit comparison.

**1.5 From Methodology to Methods**

This project is an inductive, qualitative, comparative study of the plurality of biomedicine (Kleinman 1995). It uses an inductive “grounded theory” approach to producing and interpreting sociological knowledge from interview data. In grounded theory, data collection tools are continually re-evaluated and redeveloped throughout the collection process (Charmaz 1983, 1990, 1991; Glaser & Strauss 1967, Lofland & Lofland 1984, Strauss 1987). But it is also a comparative case study, using data from a
variety of sources, including themes and categories emerging from these interviews, across two cases, the U.S. and Japan, to generate a clearer understanding of the relationship between globalization, biomedicine, and cultural context. In this section I address this methodological choice, beginning with a discussion of grounded theory as an approach to interview data and concluding with a discussion of case-based theory development.

Grounded theory can mean many things. There are three major approaches to grounded theory to choose from, not to mention a variety of other niche approaches (Miller & Salkind 2002). Even among the three best-recognized approaches, there remain significant differences in epistemological commitments and assessments of methodological rigor. The most rigid approach embraces a “systematic” design, with prescribed data analysis steps that include open coding, axial coding, selective coding, and finally the production of an explicit, visual representation of the theory generated (Strauss & Corbin 1990, Miller & Salkind 2002). The more flexible “emerging design” emerged as a critique of this rigid procedural approach. Glaser (1992) emphasizes that the point of grounded theory is to allow categories to emerge from the data, rather than to rely on preconceived categories and constantly submit to rigid procedures. The final and third approach, constructivist design, rejects clearly delineated analytical stages, diagrams that “obscure” experience, and overdetermined theoretical constructs (Charmaz 1990, Charmaz 2000, Miller & Salkind 2002).
My approach is closest to that of Charmaz (2000) or Lamont (2000), but combines elements of all three of these variants. Though the size and linguistic complexity of my data led me to rely on a highly methodical approach towards organizing and analyzing the data, including open and axial coding along the lines of Strauss & Corbin (1990), I believe that the flexible, interpretive approach of Charmaz (1990, 1991, 2000) is more sensitive to the subjective experience of participants. To the extent possible in a project with a single researcher for approximately 140 participants sharing their ideas in two languages, I attempted to emulate Charmaz’s close attention to the subjective meanings shared by participants and rejection of obscure language and theoretical constructs (Charmaz 1990, Miller & Salkind 2002). I subscribe to the claim that a good analysis and ensuing theory will “fit the realities in the eyes of participants, practitioners, and researchers” (Miller & Salkind 2002).

Finally, before beginning the interview process in the Japanese field sites I interacted with health care providers, patients, and the lay people I interviewed in unstructured encounters outside the context of the interview, which many Japanese participants treated as a formal occasion. I shared offices with physicians and shadowed them on their rounds and clinic hours for months on end. I sat in nurses’ stations and chatted over lunch. I attempted (entirely unsuccessfully) to make myself useful at the reception desk, and wore a sash as a greeter in waiting rooms alongside clerks, giving directions to patients seeking a particular clinic or ward. I participated in diabetes
education classes and clinical examinations, seeing the same diabetes patients week after week until we were fixtures in one another’s schedules. I had the point system and the financial organization of the Japanese health care system explained to me countless times by medical administrators and senior physicians gravely concerned about the future of Japan’s unique system. This participation in and observation of the “natural discourse” of physicians and patients was especially important because interviews alone are less constrained by the realities of actually working with patients and thus may allow physicians and other biomedical professionals to talk about medical practice in a “more abstract or idealized fashion” (Loewe & Freeman 2000). Interviews are “time-out” moments where both physicians and patients may present idealized depictions of the patient-provider relationship and their own models of diabetes, but participant observation can offer insight into lived experience of clinic life. Combining participant observation with interviews allowed me to compare discourses in the formal setting of the interview with more natural discourses in the exam room, classroom, and waiting room.

I conducted semi-structured interviews with members of each of these populations using an interview instrument designed to elicit discussion not only of one’s own experience treating or living with illness, but also one’s perception of how and why others became sick. A central question I put to participants in this project was, “Why is there an epidemic of type 2 diabetes at all?” This interview instrument was not static; as
I conducted more interviews (and sometimes interviewed the same individual on multiple occasions), I returned to and adjusted the interview. Semi-structured interviews were treated as an iterative process, in which the interview instrument was adjusted to accommodate ideas and categories that emerged in previous interviews. Appendix A contains the “baseline” questions or topics that were addressed in every interview, regardless of the stage at which the interview was conducted.

I returned to the instrument at regular intervals to add questions and prompts that touched on emerging themes I had not anticipated at the time the instrument was created. In line with classic grounded theory approaches, I self-consciously re-evaluated the instrument after approximately every 10 new interviews. This process was repeated through 115 interviews in Japan, and 25 interviews in the U.S. While the U.S. sample was much smaller, it was still within the range grounded theory methodologists consider adequate, and I approached those interviews with the same openness to new themes. By the end of my interviews with U.S.-based providers, the cadence and themes of these interviews had become familiar.

There was reason to believe that respondents in the rural sample from Hosekijima may have very different explanatory models, health practices, health idioms, and health concerns from the urban/suburban sample. Rural Japan is demographically and socioeconomically distinct from urban Japan—it is greyer, more agricultural, and has lower average incomes (Traphagan 2004). Medical anthropology suggests that health
maintenance practices may differ between urban and rural communities (Traphagan 2004, Lock 1980). I used a pre-interview instrument, mentioned above, to examine potential differences in responses regarding health beliefs before beginning interviews in Hosekijima. In fact, the broad contours of the responses to questions about prevention were very similar across the rural and urban samples.

After transcribing the digitally recorded interviews, I coded and analyzed responses in three stages. Two of the stages were similar to the open coding and axial coding steps embraced by Strauss and Corbin (1990,) discussed above. In the open coding step, I built a “codebook” in TAMS Analyzer by poring through the transcripts line-by-line and tagging repeated themes, equivalencies, or connections between ideas that emerged from the interviewees themselves. In the second stage, I did a second line-by-line check using the whole (at this stage unwieldy) codebook in order to code sections that were incompletely coded in the first stage because certain themes had not yet been assigned codes. In the third stage, I used axial coding to identify references to concepts such as “risk is universal/ particular,” “Western food does not match Japanese bodies,” and “biomedical etiology.” Axial coding was conducted using automated search-and-code features in TAMS Analyzer rather than line-by-line. Although I characterize this step as axial coding, I did not approach the process as rigidly as Strauss and Corbin (1990). Instead, I thought of it as a highly methodical version of Charmaz’s (1990) more flexible strategy for collecting and analyzing interview data. The large size
of the dataset, however, necessitated a somewhat more methodical approach to processing.

After coding was complete, verbatim statements on the themes that had emerged as relevant were drawn from the dataset through simple searches for codes and code co-occurrence. This produced pages of quotes for every thematic subsection. From those pages, I chose quotes that represented the others and touched on core themes. Before quotes were used in chapters, I examined them again in the context of the whole interview.

In the case of the Japanese verbatim statements, I translated the statements to English myself with reference to the overall context of the interview only after they were chosen for inclusion in a chapter. I strived to present the Japanese statements in language that did justice to their complexity and, in many cases, banality. Translating quotes can introduce awkwardness into the statement that was not present in its original language, which I worry contributes to the exoticization of Japanese culture for American audiences. When researchers and popular writers present Japanese statements in a style that makes interviewees sound more like Yoda than an average person, the result is that Japanese are further marginalized as “other.” By presenting respondents statements in colloquial English as much as possible, I hope to minimize this misperception. Whenever I translate a statement, I include the original Japanese
transcript within the quote or in a footnote, so that Japanese readers can have access to the original wording and, if necessary, add to or challenge my own interpretation.

I have now spent several pages discussing grounded theory and my approach to it, but this is also a cross-national comparative project. Lamont (2000: 251) writes, “Cross national comparisons reveal otherwise invisible patterns, making national contexts useful sociological laboratories.” I rely on a diverse collection of sources, including analyses of popular and professional literature, readings of pamphlets and manuals aimed a variety of audiences, findings of other scholars, and participant observation to supplement the cross-national comparison of interview themes across my two cases, the United States and Japan. The cases in this dissertation are bounded by place, and the cultural and institutional contexts that are embedded in place.

1.6 Situating Myself: Researcher, Outsider, Foreigner, Student

In Japan, and especially in the relatively rural prefecture where I conducted fieldwork for this project, I am visibly marked as a foreigner and an outsider. While my first name looks misleadingly like a common Japanese name, my blonde hair, light eyes, and unpronounceable surname all mark me as different. Upon meeting in person, there was no mistaking me for a member of either the Japanese ethnic or political community. My status as a foreigner living in Japan and speaking Japanese was remarked upon by

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11 The first empirical chapter, on the narrative surrounding the origins of type 2 diabetes in the United States makes particularly heavy use of these non-interview sources.
participants and certainly affected all parts of the research process, from gaining permission to work at my clinical field sites, to interview recruitment, to how respondents described and discussed the diseases in the interview instrument.

Further, Japanese medical establishments tend to be rigidly gendered spaces. Physicians are men; nurses are women. Medical clerks may be either, but hospital leadership at all the sites included in this project was entirely male. Nurse stations are female spaces, occasionally visited by physicians and technicians with their own workspaces. Shared physicians offices are usually male spaces; except for one or two days a week when a part-time female internist visited the hospital, my cubicle was the only one of twenty in our shared office occupied by a woman. When nurses or female medical clerks came to our office for any reason they announced themselves as they entered, apologizing for interrupting. In contrast, neither physicians from other offices nor male administrators and clerks announced themselves as they entered or left.

In this male space, I was the only female. My placement in this office by the hospital president reflected a sort of ambiguity in my status that remained throughout my fieldwork. As a foreigner, a woman, a PhD student from a respected university, and a sociologist, it was never clear where I was to fit in. The hospital president placed me in a prominent cubicle in the largest shared physicians’ office and insisted I wear a white lab coat, but also made my immediate supervisor the Head Nurse. As a result, I passed between the clearly delineated masculine and feminine spaces daily, standing behind
the Head Nurse at morning all-hospital meetings but also attending the all-doctor meetings closed to nurses and other staff.

In the shared office, I was the only female, the only foreigner, and the only non-physician. In the nursing stations, I was the only woman in a lab coat. In the hallways, I was the only non-Asian foreigner. When a delegation of volunteers visited from another hospital, my colleagues were introduced in a sentence. My own introduction took an entire conversation. I was an outsider everywhere.

And yet this outsider status, and the resulting ambiguity about my place in the hospital hierarchy, was exactly what allowed me to enter any of these spaces at all. The confusion over how I fit into the overlapping hierarchies of gender, age, and profession frequently contributed to a certain degree of privilege. My presence in the physicians’ office scrambled so many gender boundaries, that it was simply easier for most of my colleagues there to treat me as an honorary man. After the first flush of formality in the autumn, by mid-winter I was invited to parties for medical staff and had almost learned to decipher the peculiar informal speech patterns of middle-aged men, as my colleagues gradually stopped speaking to me in more formal registers. I became worried that I was picking up the bad habits of “men’s speech” myself.

After several months, it seemed clear to everyone that I had some place at the hospital. After all, I showed up three days a week for full shifts, attended all meetings, gave several presentations, interviewed many of the medical and nursing staff, and
participated in social activities. I do not think it ever seemed clear to anyone, though, what exactly my place was or ought to be. Instead, the small hospital and its staff simply got used to having me around. Had I been Japanese myself or even appeared “more” Japanese and not presented such a jumble of status contradictions to the social world of the hospital, I doubt I would have been able to traverse so many of its social spaces.

Being an outsider can sometimes mean not knowing the right questions—certainly something I suffered from throughout the course of my fieldwork in Japan. But outsider-ness also makes it much, much easier to ask questions at all. My childish insistence on knowing, “But why?” would never have been humored in a Japanese colleague or researcher. Instead, my irritating barrages of questions were not only humored, but embraced and eventually even anticipated. Interviewees and hospital staff took on the role of teachers. Whatever my degree of intelligence otherwise, and despite my ability to converse freely in Japanese, as a foreigner I was assumed to be approximately on par with a small, drooling child when it came to understanding Japanese history and culture.

Age, too, marked me as different from the vast majority of colleagues, informants and interviewees involved in this research. The participating physicians at my primary field site tended to be older; many had children in my age range. This may have contributed to a certain tendency among my office mates to take care of me, to explain
things that they assumed must be mysterious to me, and even to attempt to guide my research.

The president of the suburban hospital, for example, saw me in the narrow hallway behind the outpatient clinic one winter morning and approached me. “I realized that to understand the future of the Japanese health care system you must understand DPC. We don’t use DPC here yet. I will send you to the welfare hospital for a few weeks to study DPC,” he declared. “Prepare yourself today.” Within days all my previous commitments at the suburban hospital were canceled, I was put in front of the welfare hospital board to formally ask for permission to observe their medical center, and I found myself in “studying abroad” at a large, urban welfare hospital. My relative lack of interest in DPC, a system for managing inpatients, was a nonissue. I did not return to regular shifts at the private hospital until a month later. On other occasions I was unexpectedly shipped off to a geriatric hospital, an elder facility, and a country doctor, all because one of my superiors came to the conclusion that I simply had to see some other clinical context in order to “understand Japanese medicine.”

Spending a month “studying abroad” at the urban welfare hospital was, in fact, a valuable and elucidating experience. This project would have suffered without the relationships, interviews, and observations I had the privilege of forming there. But the point is that neither the plan nor the timing of my sojourn to the welfare hospital were my own. The president wished to direct my education in the organization and practice
of Japanese health care. Especially given my relative youth, this made perfect sense within the hierarchy of the hospital—he was the teacher, I the student. This student-teacher dynamic characterized many of my relationships with key informants in Okayama medical establishments.

1.7 Organization of the Dissertation

The following empirical chapters, after a literature review and explication of the theoretical framework, are organized in descending order of imagined social space: world, nation, exam room, and private sphere.

Chapter 4, “Diabetes in the World: American Narratives on the Origins of Type 2 Diabetes,” uses the findings of previous explanatory model researchers and an analysis of popular literature on diabetes in conjunction with interview data to argue that the American narrative on the origins of the type 2 diabetes epidemic emphasizes the universality of risk and illustrate the perception that illness arises when one treats the body in ways that are “unnatural.” The price of modernity, according to this model, is stress and the constant temptations of a sedentary lifestyle and unwholesome foods. Since risk is universal to everyone in this modern context, those that fall to so-called “lifestyle” diseases are cast as individually responsible for their disease.

In Chapter 5, “Diabetes in the Nation: Japanese Narratives on the Origins of Type 2 Diabetes,” I use data gathered from in-depth interviews, participant observation, and a review of Japanese popular intellectual literature to argue that Japanese narratives about
diabetes emphasize the *particularity* of risk to the Japanese body, and suggest that illness arises from a disconnect between Japanese bodies and non-Japanese food culture. The road to health is a return to an imagined traditional Japanese lifestyle that has been lost to globalization and westernization.

In Chapter 6, “Diabetes in the Exam Room: Explanatory Models in Professional Context,” I use interview data from Japanese and American medical professionals and ethnographic observations from multiple clinical field sites to argue that medical professionals in both countries take a pragmatic approach to negotiating with patients in order to elicit cooperation and participation in their own self-management, switching between different models of the provider-patient relationship as they see fit to the situation. But while American health care providers talk privately about diabetes and patients with diabetes in pessimistic terms, Japanese providers maintain high expectations and hopes for type 2 diabetes outcomes both inside and outside the exam room. This difference suggests that professionals in Japan rely on different explanatory models from their American counterparts—one that renders them far more optimistic about patients’ future.

In Chapter 7, “Diabetes in the Home: Private Experiences of Diabetes,” I use interview data from Japanese patients, laypeople, and physicians to address personal explanatory models surrounding type 2 diabetes. Respondents articulated a model of health that revolves around the idea of an “ordered” home life. In particular, order
comes from careful adherence to a classification of time and relies on a clear division of
domestic labor. Having a “rhythm” to one’s life, and observing regular, unchanging
hours for core activities like waking, eating, and bathing were identified as key to a
healthy life. But the responsibility for this temporal maintenance falls largely on
women: women work to organize the time of loved ones into a healthy, regular rhythm.
Men without mothers, wives, sisters, or daughters to take care of them are thus thought
to be particularly at risk of illness.

In Chapter 8, “Conclusions, Problems, and Implications,” I reflect on the
implications of these four empirical chapters for the literature on globalization and for
medical sociology. I also note previously unanticipated problems with this study,
including the trouble with relying on previous studies on American patients’ models of
type 2 diabetes rather than collecting data specifically for this project. Finally, I outline
future directions for this line of inquiry.
2. Literature Review

The following subsections offer an introduction to the multiple literatures that are relevant to this project, including the nursing and clinical literature that often frames American health providers’ perspective on type 2 diabetes and patient behavior.

2.1 The Growth of Type 2 Diabetes in the U.S.

Type 2 diabetes is a serious public health problem. New diabetes diagnoses have increased by more than 50% since 1990 (American Diabetes Association 2002). By 2002, inpatient care for patients with type 2 diabetes in the U.S. totaled more than $40 billion annually, nursing home care for type 2 diabetes patients totaled $13.8 billion, and American patients made 62.6 million diabetes-related health visits (American Diabetes Association 2003). And there is every reason to believe that new diagnoses will continue to grow dramatically. One oft-cited projection estimates that diagnoses will have increased 165% by 2050 (Chapell 2002).

Even as more resources have been directed toward health education for patients and potential patients, the results are mixed. Post-diagnosis self-management education programs appear to make some progress toward improving psychosocial well-being and glycemic control (Rickheim et al. 2002). But studies suggest that diabetes education programs that focus on “merely” educating rather than imparting concrete self-management skills and habits may be of limited use when the goal is to improve health outcomes (Saarman et al. 2000, King et al. 2002). Americans diagnosed with type 2
diabetes have poorer outcomes than their counterparts in Japan and experience a greater number of serious complications (Sone & Yamada 2010).

Research on patient decision-making in the United States has attempted to elucidate why post-diagnosis health education has such limited and uneven results (Pierce & Hicks 2001, Whittemore et al. 2002). Many patients expect clear-cut interventions from their doctors and nurse practitioners; patients want a cure, but they are confronted with the reality of chronic illness (Pierce & Hicks 2001, Whittemore et al. 2002). Many patients are surprised and even alienated when so much of the responsibility for decisions about treatment is placed on their own shoulders, rather than the shoulders of their health care providers (Saarman et al. 2000).

The patient empowerment literature currently in vogue in American nursing research suggests that eliciting patient participation in health decision-making and thereby supporting their sense of autonomy renders patients more likely to accept and enact provider-recommended health behaviors (Anderson et al. 2000, McCarley 2009, Solodky et al. 1998). The patient empowerment approach is extraordinarily popular among the nurse practitioners that participated in interviews for the present research, and interviewees frequently referenced studies supporting its efficacy. The message of this body of work is that “rather than persuading or coercing a patient to participate in health promoting behaviors, like following a proper diabetic diet or adhering to a program of daily physical activity, healthcare providers should create an environment
where a patient internalizes or accepts the value of the desired behavior” (Malek 2006). Encouraging patients to take control of their own treatment, self-manage their condition, and internalize the value of preventative care is certainly less expensive than the intensive provider-patient interaction that might otherwise be required to “control” the diabetes (Kennedy & Rogers 2002).

“Non-compliance” is commonly offered as an explanation for poor diabetes control in American patients. Improving adherence to treatment recommendations made by physicians and nurse practitioners has been a major goal of research on type 2 diabetes patient behavior for at least the past three decades (e.g., Stantis & Ryan 1982, Glasgow & Anderson 1999, Leichter 2005). Recent studies of non-compliance suggest that the majority—indeed, the vast majority—of patients do not follow the standard recommendation to engage in physical activity 3 to 5 times per week (Kirk et al. 2003).

2.2 The Literature on “Noncompliance” and Other Patient Behaviors Associated with Type 2 Diabetes That Drive Health Care Providers Crazy

Explaining and explicating patient behavior—and, far less commonly, physician behavior—occupies a central place in social scientific health research. Scholars from sociology, anthropology, psychology, public health, nursing, social medicine, and interdisciplinary health services research have generated a variety of conceptual frameworks for this purpose. Among the most important of these are the concepts of locus of control, efficacy, health belief models, and explanatory models.
2.2.1 Locus of Control and Efficacy

Locus of control research has also contributed much to understanding why some patients respond to health recommendations and intervention plans, while others do not. Broadly, individuals with an internal locus of control expect that they are able to influence future outcomes. Those with an external locus of control, on the other hand, expect that future outcomes are mostly determined by forces outside of their own control. An internal locus of control is associated with a more proactive approach to health and greater compliance with health care provider recommendations, while an external locus of control is associated with a more fatalistic attitude toward health (AbuSabha & Achterberg 1997, Pearlin et al. 1981).

Locus of control is sociologically patterned. Since external locus of control places individuals at higher risk for complications as a result of noncompliance (Bush 1988), this patterning can contribute to socioeconomic and racial disparities in health outcomes (Pearlin et al. 1981).

2.2.2 Health Belief Models

Another approach to the relationship between lay assumptions about health and patient behavior is the Health Belief Model (HBM). HBM research dates as far back as the 1950s and has been embraced widely since Rosenstock formally developed it in 1966 (Rosenstock 1990). In its simplest form, the HBM lays out a process by which patients are thought to come to decisions regarding whether or not to act on health interventions,
weighing the chances of the intervention or prevention making a difference against perceived susceptibility and perceived threat of the particular disease (Becker et al. 1977).

Health beliefs can have concrete consequences. Harris and Linn (1985) found that the health beliefs of 93 male patients with diabetes were correlated with multiple measures of compliance. In particular, patient health beliefs were strongly correlated with metabolic control (Harris & Linn 1985). But the formal HBM can be rigid, and its cost-benefit style analysis can obscure the role of phenomenological factors. Thus medical anthropologists and medical sociologists with a more phenomenological bent often prefer a broader, and frequently less easily quantifiable, approach to health beliefs.

2.2.3 Explanatory Models

Explanatory models include ideas about the etiology and appropriate management of illness that make sense of the experience of illness within a specific cultural context (Kleinman 1980, Poss & Jezewski 2002). Kleinman’s classic perspective on the role of explanatory models is that the process of constructing illness from disease through the development and articulation of an explanatory model is “a central function of health care systems… and the first stage of healing” (Kleinman 1980: 72). Explanatory models are anchored in the explanatory systems and social structural arrangements of a given society’s health care system(s) (Kleinman 1980: 73). Kleinman argued that “in the United States and other technologically advanced Western societies, lay accounts of
sickness (especially those of the educated, secularized middle class) not infrequently are heavily influenced by the biomedical paradigm, and consequently more and more a disease orientation is incorporated into illness models in the popular sector of their health care systems” (Kleinman 1980: 74).

Research on the explanatory models of immigrant communities has yielded recommendations to American providers to make recommendations within the paradigm of patient models. Chesla et al. (2009), for example, find that a sample of Chinese American immigrants understand their own health and illness in terms of balance and specific food practices; the authors call on providers to frame their own recommendations to members of this population within this paradigm of balance. “Health prescriptions delivered in Western biomedical terms directly challenge cultural valuing of balance in emotional, social, and physical realms.” (Chesla et al. 2009: 1815)

Most research on explanatory models aimed at clinical practitioners follows roughly this model: a minority group is identified, its health beliefs summarized, and concerns about how patients interact with the biomedical model voiced.

2.2.4 Health Beliefs and the Individual

Medical anthropologists have linked the emphasis on “self-care” in the treatment of type 2 diabetes in the U.S. with a peculiarly American capitalist logic (Ferzaccia 2000). The linking of self-discipline, productivity, and health creates a powerful value system internalized by patients as well as professional practitioners. Ferzaccia (2000) argues that
this logic actually produces, rather than destabilizes, hybrid and “idiosyncratic” self-care regimes that medical professionals tend to label “non-compliant.”

Medical sociologists and medical anthropologists generally agree that the medical model, which limits its scope to disease rather than illness, approaches disease as an abnormality or failure of normal biological processes (Kleinman 1980, Brown 1995). The medical model assumes itself to be generalizable, potentially blinding those who embrace it to the potential role of cultural understandings of illness (Reinmann et al. 2004).

Clinicians may be suspicious of supposed cultural or group differences, especially since when they encounter patients in clinical contexts they usually encounter than as individuals, and not as people embedded in communities and cultural contexts. Some of the literature on cultural factors in diabetes care emphasizes that “race and ethnicity serve merely as proxies for the resources, values, beliefs, and behaviors… that are assumed to correlate with them.” (Walsh et al. 2002) Rather than treating the communities created by socially salient categories of race and ethnicity as social fact, this literature seeks to break down these “proxy variables” to discover the underlying, individual-level characteristics that account for group-level differences in health behavior and belief (e.g. Walsh et al. 2002)

The drive to identify individual-level characteristics that predict outcomes like health service utilization, compliance, and clinical outcomes accords with the medical
model, which severs biological processes and the people associated with them from their socio-cultural context. In doing so, and focusing instead on individual-level expressions of culture, it serves to erase race and stratification as a fundamental causes of chronic illness.

Similarly, the emphasis on control, self-management, and responsibility in clinical discourse on diabetes serves to continually reassert the individual as the only unit of analysis that matters (Ferzacca 2000, Broom & Whittaker 2004). Borovoy and Hine (2008) write, “Those who fail to meet the exacting demands of lean diets, regular exercise, and frequent monitoring are often blamed for their lapses in ways that reinscribe the individual as the sole navigator of his or her destiny, independent of social context or history.” Biomedical perspectives on diabetes in the United States thus reify the concept of individual health, at the cost of relational or social conceptualizations of health more common among laypeople (Loewe & Freeman 2000).

2.2.5 Studies Conducted on American Diabetes Explanatory Models

Type 2 diabetes is an extraordinarily difficult disease to manage, and rates of nonadherence to medication and lifestyle regimens recommended by biomedical health care providers are high in the U.S. (Kirk et al. 2003). Perhaps because type 2 diabetes is such a source of frustration for both providers and patients, a great deal of research has been conducted on the explanatory models specifically associated with diabetes in the
United States. Here, I will review some of the major themes in the multiple literatures that have tackled lay models of type 2 diabetes in the U.S.

Medical anthropologists, nursing and public health researchers have extensively explored the explanatory models of American type 2 diabetes patients. Most of these studies suggest that diabetes patients embrace hybrid explanatory models that mix biomedical explanations with ethnomedical understandings of diabetes etiology or treatment. Studies link poor medication adherence in type 2 diabetes patients with “suboptimal” beliefs about the nature of diabetes (Mann et al. 2009).

Loewe and Freeman (2000) argue that American physicians and patients use different explanatory models to understand illness, and that this difference accounts for much of the frustration surrounding diabetes management for both parties. Relying on an analysis of patient and physician descriptions of disease etiology and meaning, the authors outline the most common explanatory model held by each group and demonstrate the ways in which these two models are at odds. When patient and physician explanatory models do not accord, health care providers perceive patients as having suboptimal beliefs about health that get in the way of rational medical care.

Many investigations of patient explanatory models of diabetes come from clinicians and psychologists. While this tradition uses a slightly different vocabulary, it seeks to measure patient models of illness in similar ways to Kleinman (see Hampson et al. 1990, Glasgow et al. 1997, Hampson et al. 1995, Hampson et al. 1997). In one of the
largest studies, a sample of 76 Latino Americans and 116 Americans of European heritage were asked to discuss the etiology of diabetes, as well as how they perceive its seriousness, nature, impact on themselves, and expected future course (Chesla et al. 2000). Through these open-ended questions, interviewers elicited patients’ explanatory models (called “disease models” to recognize the more limited scope,) and classified patient disease models as either experiential, biologic, or psychosocial. Latinos were more likely than European Americans to express an experiential model, which is to say that even after repeated probing they were less likely to offer a narrative of the biologic process of the disease.

Another major study from this tradition relied on interviews with 452 adult diabetes patients to explore personal models for diabetes (Lange & Piette 2006). While the severity of physical symptoms was a strong predictor for believing diabetes to be a serious issue, sociocultural facts were a strong predictor of beliefs regarding the “controllability” of diabetes (Lange & Piette 2006). Like most examinations of patient explanatory models, patient “personal models” were typically “medically consistent.” In other words, patient models tended to accord reasonably well with biomedical models of the disease. The bulk of the literature on lay explanatory models of type 2 diabetes finds significant overlap or hybridization with biomedical explanations (Broom & Whittaker 2004).
When patient models of diabetes mellitus do no accord with the biomedical model, which researchers almost always assume to be the model held by health care providers, even social scientists often describe patient models as problematic while taking for granted provider models. Where patient models stray from biomedical models, their models are deemed mere “beliefs” that exist outside the health care system (Angelucci 1995), targeted as “suboptimal” (Mann et al. 2009), and associated with “noncompliance” and “poor adherence” to the strategies favored by their providers (Leichter 2005). “Cultural competence” efforts in medicine and public health began with the intention of helping to explain and address the role of cultural difference in patient behavior and thus allay some of the disparities in health outcomes. But these efforts have been shown to risk trading in monolithic conceptions of culture, in which “Anglo-American” culture is contrasted with aberrant or pathological “ethnic” culture (Santiago-Irizarry 2001, Borovoy & Hine 2008).

Perhaps not surprisingly, then, a great deal of the literature on diabetes explanatory models in U.S.-based populations focuses on marginalized groups. The explanatory models of Mexican-Americans (Poss & Jezewski 2002), other Hispanic groups (Chesla et al. 2000), African-Americans (Allan 1998), Asian immigrants (Chesla et al. 2009), and aging Russian Jews (Borovoy & Hine 2008) have all been studied—in some cases extensively. But while each of these groups is found to be at least partially characterized by an explanatory model that integrates biomedical as well as community-
specific understandings of illness, working or middle class Caucasian Americans are sometimes left assumed to hold basically biomedical understandings of type 2 diabetes. This imbalance reifies the idea that “mainstream” American populations hold non-problematic, acultural ideas about health, while ethnic and socioeconomic outsiders hold ethnic, culturally-specific ideas about health.

This is similar to findings in non-U.S. populations, who are frequently treated as less biomedicalized than their American counterparts, and thus more likely to have idiosyncratic explanatory models. Lai, Lew-Ting, and Chie (2005), for example, find that diabetes patients in Taiwan combine biomedical practice with cultural “beliefs.” The belief among Taiwanese that increased water consumption will dilute blood glucose, for example, is treated as an ethnomedical practice (Lai et al. 2005). When working and middle class Americans engage in the arguably equally unorthodox behavior of “knocking insulin out” of their pancreas by applying pressure to their back, however, medical professionals simply consider the behavior non-compliance (Ferzacca 2000).

The concept of noncompliance has caught the critical interest of social scientists in recent years. Sociologists and anthropologists note that American health care providers may “[read the] different values and choices [of their patients] as failed self-management or noncompliance.” (Borovoy & Hine 2008: 5) Where the biomedical model takes a primarily biological definition of health and well-being and takes for granted that maximum biological “health” ought to be the goal of diabetes care, patients
“make more complex decisions about value and risk, weighing health benefits against
the costs of rigid self-control.” (Borovoy & Hine 2008: 6-7)

Some medical anthropologists and sociologists have commented on the
problematic nature of deeming patients noncompliant and bound to all-powerful
cultural influences while treating health care providers’ perspectives as uncontroversial
focused their energy on explicating patient—rather than provider—behavior (see Becker
dynamics in the exam room, have explored the gap between patient and provider
perspectives and its implications for health and well-being (Waitzkin 1989, Conrad &

Arthur Kleinman remarked more than two decades ago that “the ethnography of
the physician’s care lags far behind the phenomenological description of the experience
of illness. We know much more about the patient than the healer” (Kleinman 1988: 210).
Even clinicians themselves have noted and criticized the overemphasis on patient
experiences of chronic illness to the detriment of research on provider experiences
(Davies 2007). This dissertation, with its critical emphasis on provider perspectives in
every chapter, attempts to problematize provider perspectives and behavior at least as
much, if not more, than patient and lay attitudes and behavior. Medical professionals
are not outside of culture; they are practitioners of culture, affected by the social world
in which their work is embedded at least as much as are their patients (Kleinman 1988, Payer 1988, Loewe & Freeman 2000).

Another critical question that this study asks, which is almost entirely absent in the existing literature on explanatory models of type 2 diabetes, is, “What are the prevailing lay explanations of diabetes at the population level?” We know much about patient explanations of why diabetes happened to them, but little about how people explain the epidemic of diabetes. While the popular and cultural context is frequently referred to in studies on diabetes explanatory models, no studies of which I am aware collect evidence of the prevailing explanations of diabetes etiology from laypeople who do not (or do not yet) have type 2 diabetes themselves. Since community-level attitudes toward the nature of health, illness, and well-being are thought to so influence the ways in which patients, once diagnosed, form explanatory models, this seems to be a major gap. From a theoretical perspective, elucidating the relationship between the explanatory models of providers and patients with the social context in which they are formed—and doing so based on empirical evidence—is critical.

2.3 Biomedical Models, Medicalization, and Globalization

Medicalization, the process by which medicine and the medical paradigm become increasingly more relevant to daily life, has been an important force in shaping American (and indeed Western) society (Zola 1972). The medical paradigm is a way of thinking of the world in medical terms—classifying everything from emotions to the
economy as “healthy” or “sick.” As medicalization progresses, the medical establishment and the paradigm that governs it are assigned a privileged place in society, sometimes at the expense of more traditional authorities such as religious leaders or even parents. Certainly the historical shift from a supernatural to a natural etiology of illness was a critical component to the broader shift in cultural authority from traditional religious and community sources to the professional representatives of reason and the scientific paradigm. This process is well-recognized, and equally well debated, among those who study the developed West.

More recently, medicalization scholars have argued that the process of medicalization itself is transforming. Clarke et al. (2003) argue that medicalization itself has shifted in intensity and focus, heralding a new age of “biomedicalization.” The authors use classical as well as contemporary studies of medicalization to identify a qualitative change occurring around the year 1985. In the past, medicalization meant the spread of the medical paradigm and the redefining of social behavior as medical turf, as described in Conrad’s classic phrase “from badness to sickness” (Conrad & Schneider 1991). Clarke et al. seem to agree that pre-1985 medicalization was just that: an increasing tendency to (re)define previously unrelated areas of life as the jurisdiction of medical authority, in which socially deviant behaviors came to be defined as illness.

Biomedicalization, these authors argue, represents a simultaneous intensification and refocusing of this process that, among other things, directs its energy towards health.
Thus while medicine under the era of medicalization attempted to manipulate or control natural processes in order to address illness, under biomedicalization it attempts to actually transform or modify processes in order to change health. “The shift to biomedicalization is a shift from enhanced control over external nature (i.e., the world around us) to the harnessing and transformation of internal nature (i.e., biological processes of human and nonhuman life forms), often transforming ‘life itself.’ Thus it can be argued that medicalization was co-constitutive of modernity, while biomedicalization is also co-constitutive of postmodernity.” (Clarke et al. 2003)

As biomedicalization is increasingly understood to be the global or nearly global dissemination of a broad social process, its study incorporates arguments about the nature of globalization. Finkler (2004) uses fieldwork carried out in a Mexican hospital to examine the nexus of medical knowledge and culture. She argues that medicine (or biomedicine) is reinterpreted by cultures even as they embrace it, and thus that diagnoses do not have the same meaning across different cultural contexts. According to this logic, medicalization would take on different forms in different cultures.

Another study, also in Mexico, finds that the social and economic networks among non-biomedical health practitioners are themselves extremely complex (Nigenda et al. 2004). Both this and Finkler (2004) address not how globalization merely expands Western medicine, but how globalization affects the traditional medical models embraced by an estimated 80% of the world’s population. It is worth noting that the
“non-biomedical” models of traditional, alternative, and faith healers that Nigenda et al. document bear considerable resemblance to the Western medical paradigm, with practitioners granted a certain cultural authority based on their possession of privileged knowledge. Lock (1980) found a similar pattern among “traditional” practitioners of Chinese medicine in Japan.

Globalization works in both directions. It is not only the vehicle by which “Western” medical practices and biomedical models may spread, but also a potential vehicle for non-western practices. Frank et al. (2004) point out that there is a long history of transcontinental diffusion of medical or quasi-medical knowledge, and the current era of globalization is no exception. Using semi-structured interviews with German doctors, they examine the ways in which the spread of traditional Asian practices has altered the practice of conventional Western medicine. They find that most of the doctors in their sample practice “hybridization,” mixing practices or ideas such as acupuncture with Western practices—a finding that challenges the notion that the Western medical paradigm referred to in the literature on medicalization is a monolithic, homogenizing force. Such findings parallel Makhija (1997) and Malnight’s (1995) models of economic globalization.

Finally, some medical anthropologists envision medicalization as a tool used to subject and subvert non-western populations (Biehl 2004, Hunt 2004). These writers also recognize the phenomenon of hybridization, however. In her work on colonialism and
medicalization, Hunt (2004) points to a category of “hybrid middle figures” trained by missionaries to be medical practitioners or teachers, but acting as intermediaries. These intermediaries did more than simply translate medical paradigms—they transformed them and, in the process, made them their own.

3.1 Contexts

In his classic study of medical cultures in Taiwan, Arthur Kleinman explores the process by which individuals develop different explanatory models of healing. He argues that “cultural context” influences a population’s general beliefs about health and healing, which in turn shape the “health care system” in important ways. “Health care system” is in quotation marks here because Kleinman uses the term to refer to the complex social system of healing, not simply the political economy of medicine as one might assume. This “health care system” in turn supports explanatory models, which people construct in response to specific disease or illness episodes. Importantly, Kleinman writes that “the metaphors used to articulate both patient and practitioner explanatory models disclose substantial cultural patterning.” (Kleinman 1981: 107)

In Kleinman’s original formulation, explanatory models are highly personal stories about how and why illness affects a particular person. I, however, use the term “explanatory model” more broadly than many researchers do, because I assume that all people have explanatory models for illnesses with which they have any familiarity, even those with which they do not have personal or professional experience. Explanatory models are stories about why type 2 diabetes affects a particular person, but the explanatory model itself can be articulated by anyone—friends, family, health care
providers, acquaintances, and even total strangers can have explanatory models about illness which are not their own. In contrast, I use the term “narrative” to indicate the stories people tell about why diabetes affects their communities or populations in general. During the course of fieldwork I discovered that the question, “Why do you think people get diabetes?” and the question, “Why did you [or your close loved one] get diabetes?” elicit very different answers.

Other anthropologists of Asian medical practice have noted the relationship between wider cultural context and beliefs surrounding illness and healing. Ohnuki-Tierney’s work focuses on the relationship between cultural context and general beliefs about illness, directly relating “daily hygienic behavior” in Japan to what she calls the “basic Japanese symbolic structure” (Ohnuki-Tierney 1984: 8). Identifying “value systems” and “patterns of interpersonal relationships” as two important structures that are reproduced from the wider cultural context into health beliefs, Ohnuki-Tierney’s approach is to outline the conceptual structure of Japanese health practices. While Kleinman focuses on the diversity of health care sectors in Taiwan and the interpretation of their very different explanatory models, Ohnuki-Tierney focuses on the way that biomedicine is transformed by “the Japanese sociocultural milieu” (Ohnuki-Tierney 1984: 9). Recently, a new generation of anthropologists is exploring the phenomenon further through studies addressing the relationship between distinctive Japanese symbolic structures and specific health practices (Traphagan 2004).
Finally, still other medical anthropologists of Japan have emphasized hybridity in medical practice, further breaking down the boundary between “traditional” medicines and allopathic medicine. Margaret Lock notes that Japanese medical practice “did not usually operate within an integrated approach to health and illness or to mind and body,” but rather “practitioners appeared to be engaged in an attempt to remove physical symptoms in a fashion reminiscent of that of most biomedical physicians, although their tools were those of traditional medicine” (Lock 1980: v, vi). Another study of mothers in the Philippines found that urban women are enthusiastic consumers of pharmaceuticals—but they often use these pharmaceuticals to treat locally defined illnesses (Whyte, Can Der Geest, and Hardon 2002: 25).

All three of these approaches inform my focus on the plurality of biomedicine. That is, rather than emphasizing the contrast between biomedical models and local models, the work presented here emphasizes that biomedicine itself is a diverse social enterprise and that a plurality of explanatory models are not only available but thriving within its boundaries.

Medical sociologists and anthropologists alike emphasize the profoundly social nature of medical practice, but most work on the subject has been restricted to single-case studies. This dissertation project was intended to take the insights of these theorists and pushes them beyond being simply interpretive statements into a global comparative
framework by comparing a single medical practice across two distinct cultures.\textsuperscript{1} The goal is to move beyond interpreting difference through single-case studies to explaining difference within a global framework that draws on multiple cases.

### 3.1.1 Approaches to Globalization: Converging or Diverging?

The literature on globalization and the debate within it over the nature of the most recent wave of globalization provides another context for this project. I briefly mention five major approaches to the concept of cultural convergence as a result of globalization. These lines of research represent different ways social scientists have theorized about the fate of culture in globalization. Does globalization mean than previously distinct cultural practices converge into one largely undifferentiated global culture? Or does the global social landscape remain uneven, and do pre-existing cultural differences remain even as certain practices such as use of technology globalize?

Work adhering to the *McDonaldization* thesis suggests that the world is becoming increasingly rationalized—and thus standardized (see Ritzer 1993, Mlinar 1992). Work adhering to the "clash of civilizations" thesis, on the other hand, suggests that fundamental differences between civilizations and societies remain—and that globalization is more likely to exacerbate these differences than mitigate them (see

\textsuperscript{1} Initially, I hoped to develop cases across three distinct cultures: the United States, Botswana, and Japan. However, time and other resource constraints rendered this initial proposal unfeasible. Reaching fluency in Japanese took two years of intensive study, the fieldwork in Japan another year, and the U.S.-based interviews nearly one more year. Attaining an appropriate level of linguistic and cultural competence to completed interviews in Botswana in addition to the U.S. and Japan was simply unreasonable within the time constraints of a graduate program.
Huntington 1996). This project challenges the McDonaldization thesis by suggesting that the spread of rationalized systems like empirical medicine do not necessarily wash away pre-existing cultural patterns. But my approach is also not that of Huntington—while different societies may rely on very different metaphors to understand and articulate healing, these metaphors are not the result of the kind of essentialized civilizational difference Huntington claims. This project recognizes the constructedness and changeable nature of these different cultural approaches to healing and the body.

Two more categories represent research programs with less totalizing positions. First is the world polity perspective, which suggests that while we observe the celebration of cultural differences at the local level, at the same time the underlying structures of political, economic, and cultural models are homologized (Boli & George 1997; Meyer 2000). World polity theory describes how and why common institutions and institutional structures have been adopted on a global scale, especially following World War II. This project takes this common institutional basis as a point of departure, but focuses attention on a different level of analysis: person-to-person interactions and semiotic production, where cultural difference may remain more durable.

The fourth category is a less coherent group of research arguing that the globalization of culture is superficial, merely forming a thin crust of similarity over continuing and fundamental differences. The strong version of this argument is “McJihad”—everyone in the world may like Coca-Cola, but people still kill one another
over cultural difference (see Barber 1996). A less polemical and overdetermined version, however, can be found in many cautionary articles questioning just how far “globalization as homogenization” can go (see Schuerkens 2003: 214-216). In this approach, globalization is seen as simultaneously homogenizing and particularizing.

Some of these perspectives correspond with Pieterse’s (2004) tripartite division of paradigmatic approaches to globalization and culture. Pieterse argues that most social scientific work on culture and globalization falls under the rubric of McDonaldization, the clash of civilizations, or hybridization (Pieterse 2004: 41-58). This division identifies one final approach beyond those already mentioned: hybridization. Pieterse argues that this approach challenges nineteenth century notions of cultural purity and encourages us to think about globalization as producing global mélange, not mere convergence or divergence (Pieterse 2004:59). This is an intriguing way of thinking about the processes by which societies around the globe receive, reformulate, and re-export cultural material and innovations from one another. It helps us understand, for example, how traditional healing systems like Chinese medicine and acupuncture have been repackaged and globalized over the last four decades. The possibility of hybridization, both within personal explanatory models and in broader cultural responses to global flows of biomedical ideas and technology, is thus an important underpinning for this project.
3.2 Initial Theoretical Framework

One of the reasons medicine is such an interesting subject is because it is a privileged area of knowledge, a set of beliefs and practices made sacrosanct by its close relationship to empirical science. In many countries, allopathic medicine is believed to be above tradition, belief, and culture—a value-free arbiter of truth rather than a fundamentally social practice. This makes medicine a fascinating and challenging subject for social scientists, and gives it something in common with another important subject of sociological inquiry: the market.

The similarities between the market as a social institution and medicine as a social institution are not just rhetorical. The literature on the sociology of markets provides a model for this project. This project draws on the sociology of markets to develop a theoretical framework for a global medical sociology, a way of approaching the social practice of medicine on a global scale. The initial theoretical framework for this project was modeled on the concept of comparative institutional advantage.

The concept of comparative institutional advantage helps economic sociologists simultaneously grasp the empirical multiplicity of market forms and the theoretical possibility of multiple “successful” market forms (Hall & Soskice 2001; Hamilton & Biggart 1988). It argues that there is no single ideal market type applicable to every social context. Rather, markets evolve to reflect the social and cultural context in which they necessarily operate—and their efficiency is contingent on this evolution.
Based on the current evidence, this is a plausible model for understanding medicine as a fundamentally social enterprise. Certainly there are many “forms” of medicine operating in the world, with considerable diversity present even among those that are primarily allopathic or empirical. Is it possible that there is no single form of medical practice that can produce optimal results in every country? That instead of global convergence on a single kind of medicine as more and more resources are poured into globalizing American-style medicine, we can instead expect only profound variations on a theme?

Like Hamilton and Biggart have argued about markets (1988), my initial theoretical framework argued that variation could be explained within the “universal” arena of biomedical practice by analyzing a handful of key dimensions that influence the actual practice of medicine in different societies. Tentatively, I theorized that there are three major cultural dimensions of variation across biomedicines: models of the body, models of authority, and models of responsibility.

Models of the body delineate the appropriate uses of the body in a particular culture, differentiating between use and abuse. Consider, for example, the practice of female genital mutilation (FGM) or female circumcision. Referring to the practice as FGM at all betrays the revulsion it inspires in many western men and women. Clearly, most Americans find the removal of the clitoris to be an abuse of the body. The issue is not simply that such a practice violates the integrity of the body. As traditionalists
across Africa point out, these same Americans find practices such as tattooing, male circumcision, breast implants, and certain other forms of radical cosmetic surgery acceptable. But while these practices are perceived by Americans as an appropriate—if occasionally tasteless—use of the body, the removal of a source of sexual pleasure is perceived as an abuse. Thus differences in the evaluation of what is an appropriate use of the body, and how that body is bounded, contribute to very different reactions to quasi-medical procedures like egg implantation in a surrogate mother or female circumcision.

The second dimension is the model of authority in a particular society. This is similar to Hamilton and Biggart’s focus on how models of legitimate authority influence firm characteristics and therefore the structure of national markets. For example, Hamilton and Biggart (1988) found that variation in the size and structures of firms in Japan, Korea, and Taiwan was closely related to distinct models of authority in each country. Models of authority dictate expectations of who has power and how they exercise that power. For example, a recent New York Times editorial by an American doctor bemoaned the great mistake other female doctors make by wearing blouses that are too low cut or open-toed shoes that show off their pedicured toes (New York Times 2006). The doctor argues that these young doctors undermine their own authority by dressing in an “unprofessional” manner, causing patients to selectively ignore their instructions or advice. What the author is identifying is a disconnect between the mode
of self-presentation most Americans expect from those who exercise social authority, and the way in which the young doctors in question present themselves.\textsuperscript{2}

The third dimension is the \textbf{model of responsibility}.\textsuperscript{3} This captures who in a particular society is made responsible for personal health. In the United States, where medical treatment is treated as the responsibility of the individual, patients are cast as consumers of healthcare. In Ireland, on the other hand, medical care is a right and patients receive rather than consume medical procedures. In the United States, the model of responsibility for health is centered around the individual, while in Ireland it focuses on the state. These differences can have important implications for health-seeking behaviors and doctor-patient interactions.

A potential fourth dimension would be the model of legitimation in a particular society, as distinct from the exercise of legitimate authority. This would include the way in which medical claims are legitimated in a particular society. In the United States, such claims are typically legitimated by reference to biomedical science. Science is treated as a universal arbiter of truth. And while important minorities such as religious fundamentalists contest this view, science has remained a powerful source of legitimacy for American medical professionals (Starr 1982). But as the example of the politically

\textsuperscript{2} Gender plays an important role here, as I expect it will for all my cases. It is worth mentioning that, while the author mentions a few examples of male doctors undermining their authority by growing beards, most of the author’s examples are of women dressing in overtly feminine ways. The implication that, at least for this established doctor, accentuating one’s femininity can poison one’s ability to exercise authority.

\textsuperscript{3} Idea and example attributable to Suzanne Shanahan.
powerful American Religious Right suggests, science is not the only potential source of legitimacy. Religion, tradition, reverence for individual life, and reference to social values can emerge as alternative sources of legitimacy, and the relative power of each of these sources could profoundly affect medical practice.

Given the incredible global dominance of “science,” however it is imagined, as a source of legitimacy I did not anticipate any variation on this dimension. In recent decades even one of the most established formal systems of medical theory and practice, traditional Chinese medicine, reorganized itself around “scientific” principles. Medical anthropologists working in East Asia have noted the tendency for non-allopathic practitioners to emphasize how their own practices fit within a scientific, biomedical paradigm (Lock 1980). This suggests that even “traditional” systems of medical thought now look to science as a source of legitimacy. Thus, while I would like to assert that this dimension is distinct from, for example, the model of authority in a particular society, I do not include it among the three critical dimensions outlined above in which I would expect variation in a comparison of two technologically advanced biomedicines.

These three dimensions are meant to help organize thinking about differences in cultural practices of medicine. One of the goals of this dissertation was to locate each case on each of the three dimensions—that is, to accurately characterize the attitudes of laypeople and health care providers I interview in each of the following three categories.
What are appropriate uses of the body? Who exercises legitimate medical authority, and how? And who takes responsibility for individual health?

The theory outlined here is not normative. I am arguing that different configurations on these three dimensions lead to different modes of practice. I do not argue that one model is inherently more or less effective than another. I suspect that health outcomes are more likely to be determined not by which model of the body doctor or patient hold but rather by whether or not doctor and patient share a model of the body, as well as a host of other social structural factors. This expectation is in line with Arthur Kleinman’s findings on East Asian healthcare systems (see Kleinman 1981, 1989).

2.3 Theory Redux

While I approached the empirical component of this project as an inductive, theory-building exercise, I entered the field having already identified the three dimensions outlined above as potentially important directions. As such, I conducted fieldwork with three guiding questions in mind: What are appropriate and healthy uses of the body? Who exercises legitimate medical authority? And who takes responsibility for individual health? These framing questions were intentionally broad, to allow myself to recognize new categories and possibilities as they emerged in the course of data collection. Some aspects of this initial framework proved useful, while others proved simply irrelevant.
What are appropriate and healthy uses of the body? In the U.S. case, healthy uses of the body are those identified by respondents as “natural,” which are treated as universal to all people. The reverse of natural, healthy uses are those identified with stress and modernity, like troubles with debt or “scary chemicals” in food. In Japan, on the other hand, “Japanese” treatment of the body is perceived as the most healthy and appropriate, but respondents see this as particular to members of the Japanese racial-cultural community rather than universal to all people. “Japanese” ways of treating the body include consuming traditional foods such as rice and fish, traveling on foot, and observing a system of hygiene practices that purify (e.g. through baths and onsen visits) rather than simply clean (e.g. through cleansing the hands before eating.) In interviews and popular literature, Japanese commenters emphasize the particularity of Japanese practices to Japan, arguing that Japanese bodies and Japanese culture are unique, and uniquely intertwined.

Who exercises legitimate medical authority, and how? In both countries, medical authority is demonstrated through membership in a privileged professional community, but is imprinted by overlap with racial, gendered, and generational hierarchies. Thus, while health care providers in both countries stress that their authority comes from membership in a professional community with access to specialized knowledge unavailable to laypeople, in practice their authority is buttressed or eroded by the systems of power, authority, and legitimacy that permeate their respective societies. In
the highly stratified United States, then, status differences between provider and patient can be profound and providers voice frustration over the foreign social universe of non-middle class patients. In Japan, income differences between provider and patient (and between patient and patient) are minimized, but expectations about the gender (masculine) and generation (greying) of the most trusted practitioner frame medical encounters. Further, the character and extent of medical authority can be quite different—Japanese physicians are able to make demands of their patients that might surprise American health care providers.

Finally, who takes responsibility for individual health? Of all the dimensions I initially identified as potentially important, the responsibility dimension showed the most variation between the U.S. and Japan. The very way in which I initially worded this question betray my own assumption that health was an individual attribute, and that an individual would be responsible for it. Most U.S.-based providers in this study and many patients in other studies construct the individual as the unit of analysis at which health and illness occur, as well as the unit that is responsible for maintaining health. But Japanese providers, patients, and other lay people assert not only the individual but also the family, the health care system, and the nation itself as the key sites of health and illness. As such, not only the individual patient but also the patient’s family and health care provider are responsible for health maintenance and, in the case of most of the patients in this study, the management of chronic illness.
This project is about the plurality of biomedicine, not about a showdown between biomedicine and supposedly more organic “ethno-medicines.” Explanatory models and narratives about the origins of type 2 diabetes are hybrids of biomedical and folk concepts at both sites, in all samples. This is a point worth emphasizing: there is no such thing as a purely objective approach to diabetes, in principle or in any of the 140 interviews collected. Not only lay explanatory models, but also physician and other health provider explanatory models are hybrids. Professional as well as lay explanatory models of diabetes incorporate both biomedical and folk elements.

Nor are biomedical health care providers undifferentiated representatives of a faceless, seamless biomedicine. Like their patients, practitioners creatively construct and refer to explanatory models and narratives about health, illness, and well-being that are influenced by a complex constellation of symbolic structures reflective of local context. Differences in training, value systems, local knowledge, and linguistic background affect practitioner explanatory models, and in turn affect medical practice itself.

As ways of thinking about the body, authority, and responsibility in health contexts diverge, so do the characters of biomedicine in each context. In the U.S., biomedical models align with a capitalist ethic of productivity and responsibility, and the individual is continually reinscribed as the primary category of being and object of medicine. In Japan, biomedical models align instead with discourses of nationhood, membership in a unique racial-cultural community, and gendered domestic labor.
Biomedical discourses on the possibility of wellness and the risk of illness exist within the framework of the family and the community, not the individual.

So much of the literature on biomedicalization has suggested that the increasing status of biomedicine acts on, influences, or even colonizes local models of health, illness, and healing (Biehl 2004, Hunt 2004). But I propose that local models instead colonize biomedicine. The character of biomedicine in any context, including at elite medical centers in the United States, is profoundly shaped by underlying patterns of understanding the body, authority, and responsibility. These underlying models influence provider behavior as much as patient behavior.

Explanatory models, bound to local contexts, work on provider and patient behavior by framing what makes intuitive “sense.” At the same time, globalization profoundly affects the language in which these models are expressed. Japanese laypeople hypothesizing about the origins of diabetes, for example, frequently refer to evolution, genetics, and scientific biomedicine to support their narrative. American lay narratives about the origins of diabetes also rely on quasi-scientific claims about evolution and human natural history. But even while relying on global, cosmopolitan references to explain illness, Japanese and Americans use them to construct profoundly different narratives about the causes, treatment, and appropriate prevention of diabetes.

One way of thinking about this use of shared biomedical language is in terms of technologies of rationale. Because biomedicine and its accouterments enjoy such high
status in both societies, biomedical language is an important source of legitimation for these narratives and explanatory models. As these technologies of rationale are dispersed by globalization, we see rapid convergence in some aspects of the language professionals (and eventually laypeople) use to articulate the etiology and nature of diabetes. The vocabulary of biomedical stories is increasingly shared. And yet the stories themselves—both of diabetes’ origins in the population and etiology in the individual—remain distinct.
4. Diabetes in the World: American Narratives on the Origins of Type 2 Diabetes

“Our country, indeed the entire developed world, is facing a health epidemic of frightening proportions. It’s not caused by a virus, a bacteria, or anything we can catch. Instead, this burgeoning epidemic is the result of our modern lifestyles, lives in which high-fat, sugar-filled food is everywhere we turn, in which we can go days without doing anything more strenuous than turning the key in a car or flipping channels with a remote.”

The Complete Idiot’s Guide to Diabetes, page 7

“Today we were just talking about the [high] no-show rate of someone’s clinic, and she’s got mostly type 2’s. I said, ‘That’s how they got that diabetes.’”

Endocrinologist, North Carolina

In this chapter I argue that American popular discourses about diabetes emphasize universal risk and illustrate the perception that illness arises when one treats the body in ways that are “unnatural.” The road to health is imagined to be a life closer to natural rhythms, in contrast to the stress- and temptation-filled lives that are possible in modern America. This powerful American narrative on the origins of the type 2 diabetes epidemic emphasizes universality of diabetes risk to all citizens of modernity, alongside the idea that groups associated with certain lifestyles put themselves at higher risk. Diabetes is frequently related to obesity, with moralistic overtones that overshadow the socioeconomic and genetic patterning of diabetes risk.
An enormous amount of work has already been completed on the explanatory models of type 2 diabetes patients in the United States (Loewe & Freeman 2000, Schoenberg et al. 2005, Broom & Whittaker 2003). This chapter integrates and synthesizes findings from the various literatures on patient models of type 2 diabetes with an analysis of popular narratives in the burgeoning popular literature on diabetes and interviews with American health providers and a small number of lay respondents.

The following sections rely on an analysis of contemporary popular literature on type 2 diabetes, both that aimed at people with new diagnoses and that aimed at the general public, and interviews with a small sample of health care providers who work primarily with type 2 diabetes patients (N=20) and a merely illustrative sample of laypeople (N=5) in North Carolina to piece together a portrait of the major themes in the discourse on the origin of diabetes in the United States.

growing in the United States. Answers to the questions, “Why do you think you got diabetes at the time that you did?” and “Why do you think diabetes rates are rising in this country?” can be very different. Yet an understanding of the wider context in which patients creatively construct their explanatory models is key to understanding those models, since explanatory models exist within and are only interpretable within the context of a complex social system of healing. Explanatory models are constructed by individuals in response to a specific disease or illness episode, but they are patterned in important ways by the wider sociocultural context (Kleinman 1981). This chapter is about that context.

4.1 Modernity and Risk

Anthropological contributions to the literature on type 2 diabetes explanatory models in the United States have found that patients tend to identify social, economic, or relational factors when describing the origins of their own diabetes (Schoenberg et al. 2005, Mercado-Martinez & Ramos-Herrera 2002). While lay articulations of the origins of diabetes exhibit much overlap with biomedical models, especially in the language in which they are presented, they also embrace the influence of the wider social context and many patients point to “changing life circumstances” as the fundamental cause of their own diabetes (Schoenber et al. 2005, Poss & Jezewski 2002, Hunt et al. 1998).

In particular, personal models of diabetes etiology in U.S. populations emphasize the central role of stress (Schoenberg et al. 2005, Loewe & Freeman 2000, Cohen et al.
One anthropological examination of the diabetes explanatory models of 80 American patients from a diverse sampling of backgrounds found that across all ethnic groups the majority of American patients identified stress, in one form or another, as the origin of their diabetes (Schoenberg et al. 2005). The authors identified several variations on stress as it relates to the onset of diabetes in patient explanatory models; the etiologic stressor was characterized as either sudden and proximate, protracted and proximate, sudden and distal, or protracted and distal (Schoenberg et al. 2005:179-180). But in all iterations, stress was singled out as the explanation for the arrival of type 2 diabetes.

These studies focused only on the personal explanatory models of current type 2 diabetes patients. But the explanatory models of these patients were not developed in a vacuum; they were creatively constructed and are continually revised with reference to stories, metaphors and ideas surrounding type 2 diabetes in the wider sociocultural context. This is the very reason medical anthropologists like Kleinman expected that explanatory models would show cultural patterning (Kleinman 1980: 107). Analysis of patient explanatory models is incomplete without a portrait of this context. Yet remarkably little work has been done on the role of wider discourses on type 2 diabetes.¹

¹ In one important exception, Rock (2003) examines the construction of type 2 diabetes as a major public health problem in Canadian public policy. Rock (2005) analyses the presentation of type 2 diabetes in two Canadian newspapers and two American magazines, and is used throughout this discussion.
What is the inner logic of the story Americans tell themselves about the rise of type 2 diabetes? Why do Americans think other people get type 2 diabetes?

Rock (2005) found that the most common framing device in North American journalistic coverage of type 2 diabetes is “Type 2 diabetes is associated with certain groups,” and that articles associated with this framing device present “modern lifestyles as the main cause” of the diabetes crisis (Rock 2005: 1834). This section extends Rock’s (2005) analysis, which focused on media portrayals, by looking to the materials newly diagnosed type 2 diabetics are presented with in order to be educated about diabetes: popular guide books and the popular literature on the rise of type 2 diabetes.

Much like the news articles examined in Rock’s (2005) analysis, the introductions to popular handbooks for newly diagnosed patients explain the diabetes epidemic in terms of a modernity that tempts us all with high-calorie food and the freedom to be as sedentary as we wish.

“Our country, indeed the entire developed world, is facing a health epidemic of frightening proportions. It’s not caused by a virus, a bacteria, or anything we can catch. Instead, this burgeoning epidemic is the result of our modern lifestyles, lives in which high-fat, sugar-filled food is everywhere we turn, in which we can go days without doing anything more strenuous than turning the key in a car or flipping channels with a remote.”

_The Complete Idiot’s Guide to Diabetes_, page 7

This passage, from a popular series available in grocery store checkout aisles, presents risk in universal terms. Racial, national, and socioeconomic differences in risk for type 2 diabetes are absent. The origins of the diabetes epidemic are located explicitly in the
availability of cheap calories and the opportunity to avoid strenuous activity, risk factors that are universal to those living in “the developed world.”

The idea that modern life poses a risk to every body is common in popular self-help books and pamphlets introducing the type 2 diabetes epidemic. This may take the form of labeling diabetes a “global” problem affecting the whole developed world, or even contrasting the low diabetes rates of populations that subsisted on “pre-modern” diets with skyrocketing rates once those populations were exposed to “modern lifestyles” and “western food” (e.g. Hurley 2010, Pollan 2009, Spero 2006, Boaz 2002).

The introduction to one book aimed at newly diagnosed patients and their families introduces type 2 diabetes according to this familiar frame:

“Diabetes is a global health problem… Diabetes is concentrated where food supplies allow people to eat more calories than they need so that they develop obesity, a condition of excessive fat.”

*Diabetes for Dummies*

Framing diabetes as a global problem and presenting as fact the idea that it is a problem associated with *plenty* casts the epidemic as a cost of modernity born equally by all developed nations, and all people within those nations. That this “cost” is born disproportionately by lower-income, racially marginalized peoples living in economically marginalized areas of this developed nation is never mentioned in the mainstream literature aimed at patients.

If the risk for diabetes comes hand-in-hand with modernity and humans living in “wealthy,” modern societies are the ones “facing [this] health epidemic of frightening
proportions," then just what is so dangerous about modern lifestyles? Popular literature on the diabetes epidemic, which has exploded in recent years, emphasizes a disharmony between the world human bodies evolved to thrive in and the modern world in which they live. In some cases, authors argue explicitly that humans are naturally suited for hunter-gatherer lifestyles. Because “modern” lifestyles include food surplus, sedentary work, and the stress that comes along with modern responsibilities, they are at odds with the lifestyle to which human bodies are naturally adapted.

In its more sophisticated forms, the concept of evolution is key to the premise that humans are naturally suited to hunter-gatherer lifestyles. This version is clearly articulated in *Mismatch: The Lifestyle Diseases Timebomb*, a recent work of popular science. The cover shows two stick figures, side by side. The first carries a spear. The second pushes a shopping cart. The back of the paperback edition reads:

“Our evolution designed us for a world very different from that in which we live now. Within a mere instant, in evolutionary terms, we transformed our environment and created a mismatch between our world and our bodies.”

*Mismatch: The Lifestyle Diseases Timebomb*

The thesis of *Mismatch* is a more sophisticated version of the same idea presented in the grocery store check-out aisle guide mentioned above. Where once humans had to expend energy to capture or produce food, modern lifestyles demand little more than pushing a shopping cart or, in *The Complete Idiot’s Guide to Diabetes* version, “turning the key in a car.” Modern, convenient lifestyles make lifestyle disease possible.
Quasi-scientific language can be a powerful source of legitimacy in claims about the nature of the human body. But in the U.S., where the word “evolution” generates controversy, the story may be framed more softly. While the scientific concept of evolution may be the subject of a much-decried culture war, the basic concept of adaptation to natural environments is in fact widely accepted, and is embraced by intelligent design creationists (Nakhnikian 2004). Where explicit reference to evolution is missing, there are instead oblique references to an imagined pre-modern past, to which human bodies were better suited:

“As chronic illnesses go, diabetes is relatively new. Arthritis, in contrast, has been around forever. Cavemen had arthritis. Dinosaurs had arthritis. There was no evidence of T2D, though, prior to 10,000 years ago. It started with the rise of agriculture. Hunter-gatherers don’t get diabetes, but growing grains and herding animals resulted in the consumption of more calories, more carbohydrates and more saturated fat.”

Diabetes: Sugar-coated Crisis, p. 10

Rhetorical references to cavemen, the African Savannah or pre-modern man conjure up images of a shared natural history, and further buttress the assumption that all humans in modern, resource-rich societies are at risk for type 2 diabetes. At the same time, they provide insight into the kind of lifestyle that would support a diabetes-free population.

Since the problem is that modern life does not match the lifestyle to which human bodies are best adapted, the way to stay healthy is to live in a way more similar to the life to which they are adapted. Portrayals of the life for which human bodies are best-designed or adapted can be quite colorful. One of the more strident proponents of
this approach claims, “Mimicking our hunter-gatherer ancestors is the best way to cure diabetes” (Boaz 2002). Less dramatically, other authors suggest lives with less stress, fewer carbohydrates, and fewer processed foods.

If the road to diabetes perdition is paved with “modern” lifestyles, the road to salvation is paved with “natural” lifestyles. In interviews, respondents also associate “natural” with health, although they are more likely to do so by expressing suspicion of “processed” foods than by suggesting that humans should only eat what they can manage to kill with a spear. Foods filled with chemicals rather than “real” ingredients and fast food are identified as unhealthy, while “natural,” “real” foods are healthy. Asked to describe how people in America could avoid getting diabetes, a mother of two children and returning student explained,

“Not so much processed food, I guess, natural, not necessarily home grown but food that’s made out of real ingredients that aren’t canned, that don’t have chemicals.”

Participants identified “processed food” and the chemicals it contains as major barriers to leading a natural, healthy lifestyle. Importantly, the food this mother identifies at healthy does not need to be homegrown or homemade in order to qualify as natural. She has two children who she is raising mostly on her own and has returned to school in addition to holding down a job; home cooking is out of the question most nights. Rather, “natural” is a keyword she looks for when she is buying pre-prepared or partially prepared food for herself and her children.
The equation of “natural” with safe, and “chemical” with unsafe has also long been a theme in interviews designed to draw out American patients’ explanatory models (Loewe & Freeman 2000, Ferzacca 2000). With diabetes patients, this can manifest itself in the belief that medications are the proximate cause of illness. Loewe and Freeman (2000: 387) noted that some type 2 diabetes patients say in interviews that they believe that a medication administered by a biomedical professional actually precipitated their diabetes in the first place. Many health care providers interviewed for the present study noted that patient concerns about going on insulin usually stemmed from the belief that insulin had led directly to an acquaintance or relative “losing a foot” or experiencing other complications. And one endocrinology fellow in the present study, Dr. Shaw, noted that she often needs to “educate” patients who want to lose weight but have struggled on their own and hesitate to try medication. “A lot of times people are afraid of using weight loss medications or they don’t know what’s in there,” Dr. Shaw explained. “They don’t want to use something over the counter because they’re afraid it may have some crazy chemical.” Dr. Shaw identified a new generation over-the-counter weight loss aid that she believes to be safe and effective, but says that she has to work hard to assure patients that it is not full of those “crazy chemicals.”

This lay emphasis on the “natural” can be a source of great frustration for medical professionals, because some patients posit biomedicine as the opposite of “natural.” Nurse Waugh, a nurse practitioner with decades of experience and a
mouthful of certifications, spends about 20 hours a week working with both type 1 and type 2 diabetes patients:

Nurse Waugh: “People come in, and they want something that’s natural, or they don’t want it. They don’t want to take a drug.”

Interviewer: “What does that mean, though?”

Nurse Waugh: “Okay. So they don’t want to take a drug. They don’t want to take any other drugs that are sort of traditional prescription drugs, but they will buy anything from some Joe Schmo in Tijuana, Mexico as a supplement, and the supplements are not regulated. There’s absolutely no guarantee of what is in there. There are people on the Internet selling hormonal extracts that are extremely dangerous to people.”

(Nurse practitioner, North Carolina)

Nurse Waugh is essentially observing that lay definitions of “safe” and biomedical definitions of “safe” do not always coincide. Her patients associate health and safety with the “natural” treatment, which they perceive as free of potentially harmful, unnatural chemicals because it is supposedly derived from herbs, animal extracts, or minerals. Drugs, in contrast, are seen as potentially full of these harmful, unnatural chemicals. The nurse practitioner, on the other hand, believes the drugs are safe and health-inducing based on her faith in the accurate production of biomedical knowledge through clinical trials and peer review, and is mystified by her patients’ behavior.

But even many biomedical professionals demonstrate a suspicion of the unnatural-seeming chemicals that seem to saturate modern life. For instance, when asked why the rate of type 2 diabetes seemed to be rising so rapidly in the United States,
Dr. Austen, an endocrinologist, pointed to obesity as the most proximate cause. But she also theorized that the obesity epidemic could be caused not just by overeating, but also by the presence of unnatural chemicals in American fast food:

“I think it is obesity. I think obesity is increasing because we are an inside desk working culture versus an outside farming culture. I think we have access to easy food. We are a fast food culture, and I’m not sure, sometimes I almost wonder if it’s not just the calories but something in that food that is intercalated with our membranes that have made us more insulin resistant, something to do with the fats that—maybe the trans fat or just—all the fake, weird chemicals that are put in foods.”

(Endocrinologist, North Carolina)

Here, Dr. Austen mirrors many of the same themes present in patient and popular explanations of the origins of the type 2 diabetes epidemic. She contrasts contemporary lifestyles with an imagined past, and critically assesses “easy food.” She is suspicious of the “fake, weird chemicals” that accompany industrial food production and processing, mirroring a popular patient theory traded on diabetes support forums that rising rates of diabetes are attributable to some sort of environmental toxin rather than caloric intake.²

In the U.S., narratives about diabetes emphasize universal risk and illustrate the perception that illness can arise when one treats the body in ways that are “unnatural,” whether through a lifestyle to which the human body is poorly adapted or through the

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² This possibility is raised in a recent and already influential popular book, *Diabetes Rising: How A Rare Disease Became a Modern Pandemic, And What to Do About It* by Dan Hurley.
consumption of “fake, weird chemicals.” Modern lifestyles are portrayed as placing those who embrace them at risk of type 2 diabetes.

But all this simply means that modern individuals must work at maintaining themselves, work at resisting the temptation to succumb to a sedentary lifestyle and a life of easy processed food. In the next section, I discuss how this universal risk narrative slips so easily into a story about culpability. This section primarily explored the first question: What is the inner logic of the story Americans tell themselves about the rise of type 2 diabetes? The next primarily addresses the next question, “Why do Americans think other people get diabetes?

3.2 Control and Culpability: “My-Fault” Diabetes

As we sat in her sunny office in a Veterans Affairs hospital, Dr. Eliot, an endocrinologist, described her concerns about the negative assessments many type 2 diabetes patients face after their diagnosis. While she works primarily with older male African-American veterans with whom she might seem to have little in common, she says she strives to approach them with the same sympathy and benefit of the doubt she would extend to a friend. “I have a friend of a friend from before I was even in endocrinology, she has type 2 diabetes, and when I met her she said, ‘I have my-fault diabetes,’” Dr. Eliot explained. She was taken aback that her acquaintance seemed to

3 Throughout this dissertation all participant names are changed to protect privacy.
blamed herself for a chronic disease that affected every aspect of her life. “And I’ll never forget that,” Dr. Eliot went on. “It made such an impression on me. And so yeah, I don’t subscribe to that thinking [that treats etiology as blame].”

This was the first time I had heard the term “my-fault” diabetes to differentiate type 1 diabetes from type 2 diabetes, but it would not be the last. Patients themselves carefully police the distinction between people with type 1 diabetes, a condition that is usually auto-immune and unrelated to lifestyle factors, and type 2 diabetes.

The question of “fault” is itself a fault line between type 1 and type 2 patients on patient forums and support sites, where patients with the two distinct conditions sometimes mingle. Internet forums aimed at people working to manage diabetes are usually civil, supportive environments where patients exchange information, nutrition tips, and peer support.¹ When the friendly, positive tone of these forums is interrupted, it is almost always over the question of who or what is to blame for type 2 diabetes. These “fault” discussions run hundreds of posts long and, in sharp contrast to the positive overall tone of the support forums, are emotional and even acrimonious.²

² For an example, see the thread “Did I Cause My Diabetes?” at http://www.diabetesforums.com/forum/type-2-diabetes/43416-did-i-cause-my.html. Accessed 2/28/2011. This discussion runs more than 150 posts long, and includes all the elements common to divisive discussion of who carries the blame for rising rates of type 2 diabetes: posters with type 1 diabetes who argue that nutrition and lifestyle are the primary etiologic factors, posters with type 2 diabetes who call those with type 1 diabetes self-righteous, serious questioning of the causal relationship between obesity and diabetes by those with type 2 diabetes, suspicion that toxic chemicals rather than calories are responsible for the
When the question of fault emerges, type 1 diabetes patients often argue that “the science” shows that lifestyle factors lead to type 2 diabetes, while type 2 diabetes patients accuse the type 1 diabetes patients of self-righteousness and a sense of moral superiority.

Providers, consciously or unconsciously, may contribute to the moral divide between type 1 and type 2 diabetes. Anecdotes about the subtle and not-so-subtle ways that providers rank their patients with metabolic and renal disorders abound. One physician, intending to comfort the family of a woman on dialysis when her kidneys failed following a massive infection, told her son that everyone at the dialysis center was sympathetic because, unlike most of the dialysis patients, her renal failure “wasn’t her fault.”

Posters to support forums share occasional stories about harsh, judgmental health care providers.

In interviews, providers say that this sort of explicit moralizing is probably rare, but candidly point out that it is difficult not to sympathize more with type 1 diabetes patients, who played no role in producing their condition, than with type 2 patients, who they view as having played some, if limited role, in producing their condition. Dr.

epidemics of type 2 diabetes and obesity, and accusations that type 1 diabetes patients believe they are morally superior to type 2 diabetes patients.

6 Personal communication 11/2009.

Hardy, an endocrinology fellow, reflected that while it was exceedingly rare for his colleagues at a university medical center to explicitly use moral language to differentiate between patients with type 1 and type 2 diabetes, it was hard not to recognize a difference in the etiology of the two conditions.

Just to give you an example, maybe late-onset type 1 diabetes where it’s an autoimmune diabetes. It’s nothing they did to bring it on, versus a patient who is extremely obese and has never followed a particular diet or taken any medication. And not to say you look at one or the other with more sympathy exactly but… There’s definitely with diabetes a particular… A lot of it is sort of self-inflicted, so, of course, you kind of think about that a little differently.

(Endocrinology Fellow, North Carolina)

Dr. Hardy, who colleagues repeatedly identified in interviews as an example of a doctor who is particularly gifted at communicating with patients, suggests that most of the difference between provider approaches to type 1 and type 2 diabetes patients is subtle and perhaps even unconscious. In other parts of his interview, he emphasizes that a good doctor is someone who does well by his patients, regardless of how he evaluates them personally.

In interviews, American health professionals carefully distinguish their type 1 patients from type 2 patients, not only in disease etiology but also by personality type. Dr. Austen, an elegant endocrinologist at a university medical center admitted that even though she routinely publically explained the etiology of type 2 diabetes as primarily genetic, she frequently catches herself thinking or saying small things that suggest that these patients are guilty of some moral failure. Sitting in her office one afternoon, she
said she could even think of a point earlier that same day where she caught herself making that assumption. “Today we were just talking about the no-show rate of someone’s clinic, and she’s got mostly type 2’s. I said, ‘That’s how they got that diabetes.’” She paused before going on. “Probably it’s genetics… Sometimes you’ll have the same body weight person, same sedentary lifestyle and you have the wrong genes and the other person doesn’t…” She trailed off.

Dr. Austen is torn between two stories about why these patients developed type 2 diabetes while others did not. Her first, unprocessed reaction is that the same laziness or relaxed attitude that she believes led them to skip appointments is at the root of their disease. But she catches herself, and qualifies her explanation with a genetic narrative. Still, after this qualification she returns a second time to the issue of the patients’ personality:

With her clinic, I just said, “They have the type B personality.” They just forget or like they—they got busy, didn’t want to really cancel, and so she had five people… The first five people didn’t show in her clinic. It’s kind of a personality.
(Endocrinologist, North Carolina)

As an experienced medical researcher in addition to her practice with patients, Dr. Austen is careful to point out that the etiology of type 2 diabetes in a given patient is complicated, and that while lifestyle factors like overeating and too little physical activity directly affect the chances that a person will develop diabetes, the relationship between patient behavior and diabetes is mediated by genetic risk. Still, she continually
returns to the issue of “personality,” associating type 2 diabetes patients with a lack of initiative or discipline.

Lay narratives about the origins of type 2 diabetes are also “linked to underlying discourses of “morality surrounding the actions of the self in relation to health” (Sunday, Eyles & Upshur 2001:65, cited in Schoenberg et al. 2005). Clearly, the ethic of individual responsibility and discipline runs throughout American discourses on the growth of type 2 diabetes. Rock (2005) previously found in a qualitative analysis of two American magazines and two Canadian newspapers that the most common framing device in journalistic coverage of type 2 diabetes is “Type 2 diabetes is associated with certain groups.” (Rock 2005: 1834) The articles associated with this framing device present “modern lifestyles as the main cause” and “stressed informed individual choice” as a remedy (Rock 2005: 1834).

In lay interviews, sympathy for people with diabetes one knows personally is mixed with a sense that patients bear responsibility not only for having developed diabetes, but also for failing to manage their condition so as not to develop complications. Jackie, a 30-year old parole officer in rural North Carolina, described her reaction when a colleague had to retire after losing his foot to complications of type 2 diabetes.

He wasn’t taking his medication and he was eating candy. I love ***** to death, but he was an idiot. It’s that thing where I can’t help you if you can’t help yourself.
(Parole officer, North Carolina)
Earlier and later in her interview, Jackie blames corporations, chemicals, and marketing for both the epidemic of obesity and the growth of type 2 diabetes in the United States. When asked if she blamed anyone or anything for the unhealthy lifestyle she saw all around her, she answered laughingly, “What’s the name of the guy who invented marketing?” But her evaluation of her colleague with diabetes is more complex. While Jane may be angry with McDonald’s and corporate America for enabling Americans to eat huge portions of what she called processed, unnatural food, she also reserves some harsh words for the person she knows living with type 2 diabetes. Her colleague is an “idiot” for allowing himself to become so ill and for persisting in eating candy and ignoring the medication his doctors recommended.

There is plenty of fault to go around.

In *Illness as Metaphor*, Susan Sontag notes that illnesses have always been ranked by the degree to which the people they affect are perceived to be morally responsible for their own suffering (Sontag 1978, cited in Broom & Whittaker 2003). The difference between evaluations of those living with type 1 and type 2 diabetes dramatically demonstrates the role of moral responsibility in these assessments.

If the origins of the type 2 diabetes epidemic are located explicitly in the availability of cheap calories and the opportunity to avoid strenuous activity, then they are also implicitly located in the “choice” of some people to indulge in those cheap calories and avoidance of activity. If stress and the temptations of comfort food and a
sedentary lifestyle are universal risks to modern humans in technologically advanced countries, then there must be some explanation for why some fall to temptation and others do not. After all, a third of Americans may be obese—but that means that two-thirds are not obese. Those that fall to so-called “lifestyle” diseases are thus imagined to be in some way responsible for their disease.

Obesity plays a major role in coloring the moral narrative about type 2 diabetes (Broom & Whittaker 2003: 2374). News segments, books, informational pamphlets, and respondents repeatedly link the diabetes epidemic to obesity. Diabetes patients have been shown to internalize this, incorporating obesity linked to overindulgence or failure of discipline in their explanatory models. One interviewee cited in Broom & Whittaker (2003: 2374) told researchers, “I think diabetes is just fat people eating too much fat.” The rhetorical linking of obesity, lack of self control, and illness makes it all too easy to cast the type 2 diabetes epidemic as a morality tale about personal responsibility, at great cost to patients living with the disease.

### 3.3 Of Race and Risk

One of the difficulties with the very idea of a wider narrative on the origins of the type 2 diabetes epidemic in the United States is that the United States is, of course, an extraordinarily diverse country and the type 2 diabetes epidemic is anything but evenly distributed across it. In the contemporary United States, African-Americans are nearly 1.8 times more likely than Caucasians to suffer from type 2 diabetes (National
Diabetes Factsheet 2011). The CDC estimates that an astonishing 18.7% of non-Hispanic African-Americans over the age of 20 live with diabetes (National Diabetes Factsheet 2011). In comparison, 10.2% of non-Hispanic Caucasian Americans are estimated to be living with the disease.

Diabetes education materials produced for and by African-Americans present a slightly different narrative about the origins of the epidemic, not only because African-Americans are statistically at greater risk for the disease but also because reflections on the natural history of humanity so frequently conjure up images of the African savannah. While Caucasian Americans use such images to emphasize the universality of risk and shared heritage as humans, African-American materials use the same images to demonstrate the social context of diabetes risk.

_The Black Health Library Guide to Diabetes_, for example, uses images of African hunter-gatherers leading an ancient lifestyle as the prototype for a diabetes-free lifestyle,

> Across the sunbaked sands of the Sahara desert travel a race of people whose day-to-day lives, like those of their ancestors, are relatively untouched by western influences. They are the Broayas, a small but unique tribe of nomads. Dark-skinned and straight-haired, they are blessed with extraordinary physical endurance and no obesity. They also have no diabetes."
> _The Black Health Library Guide to Diabetes_, p. 31

This story is almost identical to the one portrayed in “mainstream” diabetes guides. But the purpose of this rhetorical image is not to reaffirm the universality of risk for diabetes for all modern humans because of a shared natural history. Rather, the explicit purpose
of the anecdote about Africans who have hung on to their pre-modern way of life is to illustrate that African-Americans are not constitutionally vulnerable to type 2 diabetes.

As the book goes on to argue,

“For some races, the evidence that diabetes runs along racial lines is undeniable. But that’s not the case for African-Americans. If it were, black Africans would have the same high rates of diabetes that African-Americans have. In reality, Africans have relatively little diabetes.”

_The Black Health Library Guide to Diabetes_, p. 32

The argument, then, is that type 2 diabetes is not really a racial disease in the sense of genetic risk, though African-Americans’ high rates of the disease may at first make it appear that way. Social structure, rather than biological structure, renders African-Americans at higher risk than other Americans. This stands in contrast to the narrative presented in materials produced for non-specific American audiences, where the epidemic is framed as a cost of modernity, a risk borne equally by all developed nations, and all people within those nations. The recognition that this “cost” is borne disproportionately by marginalized peoples is specific to literature aimed at the “specialized” audience of African-American diabetes patients.

The language of choice is also different in this version of the diabetes epidemic’s story. It is the lifestyle that African-Americans have been _subjected_ to that explains the higher risk for type 2 diabetes in the African-American community.

“And so for our grandparents’ parents, the act of being forcibly uprooted and thrust in the midst of a new culture, with new foods, and new labor-saving machines, may have set the stage for a present-day diabetes
epidemic that began to appear as black folks adopted more western ways.”

The Black Health Library Guide to Diabetes, p. 33

It is not that choice places no role in this narrative, but choice is situated within a broader (and, at least initially, foreign) social context that powerfully shapes the lifestyle that puts African-Americans at higher risk for illness. As we will see in the next chapter, this narrative is much closer to Japanese explanations of the type 2 diabetes epidemic than the narratives that dominate other American health materials.

3.4 Conclusions

I have argued that the most common American narrative about the origins of the diabetes epidemic emphasizes universality of diabetes risk to all people living “modern” lifestyles. This narrative suggests that illness arises when one treats the body in ways that are unnatural, such as by consuming heavily processed foods full of chemicals, overeating, or not having to work for one’s food as ancestral hunter-gatherers did.

Since risk is treated as universal to those who must live “modern lifestyles,” those that fall to so-called “lifestyle” diseases may be imagined to be in some way personally responsible for their disease. All who live modern lifestyles are at greater risk for diabetes, but only some succumb. Further, diabetes is frequently related to obesity, with moralistic overtones that often overshadow the socioeconomic and genetic patterning of diabetes risk. In contrast, patient literature aimed at African-Americans
provides a powerful alternative narrative that emphasizes that risk is not borne equally by those living in contemporary America.

Few scholars have addressed lay narratives about the origin of diabetes as expressed by those who do not have a current diabetes diagnosis, and little work has been done on the discourse surrounding diabetes that patients encounter when they first receive a diagnosis themselves. The stories patients encounter about the origins of diabetes in the population—rather than in their own personal experience—can significantly affect the ways that patients themselves frame explanations of the disease’s appearance in their own lives. This chapter attempted to provide some of that necessary context.

The explanation of diabetes risk as universal to all people living under modern circumstances, the language about modern man’s ill adaptation to modern convenience, and the implication of personal lifestyle “choices” in the elevated diabetes risk of certain groups may seem unremarkable, even familiar. It is a story that makes intuitive sense to many Americans, whether the journalists in Rock’s (2005) study, or the doctors, lay people, and producers and consumers of the diabetes literature discussed here. The next chapter, however, shows that Japanese respondents and popular literature offer a very different story about the origins and nature of the diabetes epidemic.

Limitations of This Chapter
In the next chapter, I will present an analysis of the most common Japanese narratives surrounding the rise of type 2 diabetes in Japan, relying in part on interviews with a diverse sample of laypeople with no personal history of diabetes. In retrospect, collecting a similar sample for the United State in combination with the analysis presented here would have made for a better portrait of the most common American narratives on diabetes as an epidemic. While a great deal of interview research has been conducted with type 2 diabetes patients, little research exists on perceptions of diabetes in those with no personal history of the disease. The analysis here would have been stronger with a larger collection of lay interviews with which to support and critique the themes evident in patient guides, self-help books, popular literature on the epidemic, and provider interviews. Unfortunately, in-depth interviews with a representative sample of lay people with no personal history of diabetes was beyond the scope of this dissertation project. The collection and analysis such interviews would be a useful future direction for research on the social context in which patients construct explanatory models of type 2 diabetes.
5. Diabetes in the Nation: Japanese Narratives on the Origins of Type 2 Diabetes

In this chapter I argue that the Japanese narratives about the origins of type 2 diabetes emphasize the particularity of diabetes risk to Japanese, and identify origins of the epidemic in the adoption of a foreign way of life. Interview participants describe the Japanese body as hyperadapted to a “traditional” Japanese diet, and at risk of being imbalanced and polluted by foreign foods. Western and Chinese foods are singled out as particularly bad for the Japanese body, though often imagined to be suitable for foreign bodies. Biomedical health care providers participate in and reinforce this narrative by emphasizing an evolutionary explanation for high diabetes risk in the Japanese population.

5.1 Introduction

In the previous chapter, I argued that medical professionals and lay people in the U.S. emphasize the universality of diabetes risk to all citizens of modernity. In the U.S., diabetes is frequently related to obesity by interviewees, with moralistic overtones that overshadow the socioeconomic and genetic patterning of diabetes risk. Here, I will argue that the most common narrative emerging from interviews and interactions with Japanese participants eschews the idea of universal risk. Instead, the diabetes epidemic is cast as a morality tale about the nature of Japanese identity, mirroring a popular and intellectual trend that stretches back at least as far as Japan’s modernization period. This
narrative emphasizes the particularity of diabetes risk to the Japanese body in contemporary, globalized Japan. Lay participants employing this narrative describe the Japanese body as uniquely, evolutionarily adapted to traditional Japanese food and lifestyle practices, and thus maladapted to certain “foreign” elements such as meat and oil. They argue, in effect, that the Japanese body is uniquely hyperadapted to Japanese culture, and that it becomes imbalanced and polluted by foods and practices that are not “Japanese.” While non-Japanese foods are perceived as suitable for foreign bodies, they are described as unsuitable for Japanese. Physicians and diabetes educators participate in and reinforce this explanatory mechanism by emphasizing an evolutionary explanation for high diabetes risk in the Japanese population.

In this chapter, I will first briefly outline the history of Japanese discourses on Japanese uniqueness (typically referred to as nihonjinron) and engage some contemporary analyses of it from the scholarly literature on Japan. I will then turn to the interview data, analyzing the various explanations of diabetes risk as potential products of the same discourse. Finally, I will examine the ways that lay and provider narratives about the origins of the diabetes epidemic reinforce one another and the popular sense that Japanese physiology and culture are uniquely intertwined.

5.2 Nihonjinron

_Nihonjinron_ refers broadly to the body of popular and intellectual literature that explicates and examines the origins of the Japanese people’s purported uniqueness.
Japan’s thriving publishing industry produces and markets new popular books on topics that are supposedly uniquely Japanese each year, from neurologists claiming that Japanese social practices shape their brains (Hayashi 2009), to ruminations on the effect of Japan’s four seasons on Japanese society’s approach to death and dying. This cultural phenomenon makes commonplace the idea that Japanese are profoundly different from the rest of the world, physiologically as well as culturally.¹

The nihonjinron tradition in Japan dates at least to the Meiji period (1868-1912), when Japan opened its borders to foreign trade and embarked on a rapid game of industrial and colonial catch-up with economically and militarily powerful western nations.² The West, of course, was fascinated by Japan, and non-Japanese writers produced scores of texts detailing its seemingly exotic customs and locales. But no one wrote more about the Japanese and Japanese-ness than the Japanese themselves. While there are notable nihonjinron works by foreigners, such as The Chrysanthemum and the Sword, this chapter is concerned with Japan’s vibrant domestic discourse about its purported uniqueness.

¹ The claim that Japan is environmentally unique also surfaces occasionally. A Japanese trade minister anticipating the Nagano Olympics once famously claimed that Japanese snow was different from snow in the rest of the world, thus necessitating the use of Japan-made ski equipment (Kerr 2002). "Foreign skis will not work in Japan because Japanese snow is different," he argued in the midst of a protectionist trade dispute (Woodall 1997).
Nihonjinron discourse produced by Japanese authors has variously asserted that because Japan is an island nation, its people have evolved as a distinct race (Watanabe 1954, Dale 1994); that the Japanese language is a linguistic isolate that conditions native speakers to think in uniquely Japanese ways that no foreigner, no matter how fluent, can understand (Tsukimoto 2008); and that the Japanese form relationships of dependence that reject boundaries between the self and others (Doi 1981, Dale 1986). Nihonjinron writings, and the cultural products they have influenced, tend to be self-orientalizing. They are bricks in the grand, and often contradictory, narrative of Japanese identity in global context (Iwabuchi 2002).

Some scholars have argued that the global historical context of the birth of modern nihonjinron discourse facilitated a particular fusion of racialized and cultural determinisms that persists today. Yoshino (1998) argues that in the prewar period “ideas of culture developed alongside impassioned debates about racial boundaries and racial origins. These in turn helped to refine and popularize a sense of the Japanese as a distinct ‘ethnic group’—minzoku—a concept which fused images of race with images of culture.” Japan’s particular heritage as a racially othered imperial power alongside the small club of European colonial powers in the early decades of the twentieth century probably contributed to the popular sense that the Japanese were profoundly unique.

Of particular concern to nihonjinron producers and consumers during Japan’s colonial period—and even today—is the relationship between Japan and the West on the
one hand, and Japan and the rest of Asia on the other. A racial outsider to the industrialized nations of other continents, but a colonial power in its own region—this dual position was a continual site of dynamic conflict for Japan, culturally as well as politically. *Nihonjinron* discourse is historically concerned with establishing Japan’s place in the world in relation to Asia; it characterizes, displaces, and continually rearticulates “Japan” as “in but above” and “similar but superior to” Asia (Iwabuchi 2002). Distinguishing Japanese from other Asians, racially as well as culturally, and positioning them as the rightful leaders of Asia and equals of Western powers was a major discursive project of modernizing Japan (Yoshino 1992, Iwabuchi 2002).

Many Japan scholars have argued that the historical context in which *nihonjinron* emerged contributes to a fusion of the cultural and the physiological—a tendency to conflate cultural and physiological traits (Dale 1994, Morris-Suzuki 1998, McVeigh 2004). Scholars have also noted instances in which culture is imagined to be embodied in Japanese physiology, as in the argument that the Japanese language is associated with unique brain function (see Tsunoda 1978, Dale 1986). In other words, *nihonjinron* cosmology can suggest that cultural Japanese-ness begets physiological Japanese-ness. Japanese culture forms Japanese bodies.

But most Japan scholars have focused on the more common claim in *nihonjinron* discourses on uniqueness: the claim that the physical environment has simultaneously influenced both the physicality of the Japanese and Japanese culture itself (Dale 1994).
The Japanese environment is said to have shaped Japanese physiology, resulting in a small-statured race habituated to eating fish, as well as to have shaped Japanese culture, resulting, for instance, in a culture with a supposedly unique appreciation of nature and the ephemeral. Descriptions of supposed physiological as well as cultural uniqueness in nihonjinron writings often locate the origin of difference in a particular Japanese experience of nature (Morris-Suzuki 1998, McVeigh 2004).

Some social scientists read the narrative emphasizing co-evolution of Japanese bodies and culture in the context of a particularly Japanese physical environment as confusion. McVeigh (2004) observes,

“Some Japanese, socialized to associate tradition, heritage, pastness, values, and language with physical appearance, seem particularly apt to confuse race—meaning physical traits shared by a group—with what is learned. For some Japanese, certain physical traits are essential ingredients of nation-ness, and are somehow linked to behavior and thinking patterns (i.e. ‘culture’)... The consequence is that ‘Japanese culture’ is something only the Japanese people themselves can possess.” (McVeigh 2004: 191)

“Confusion” is an unfortunate word choice here; it suggests an inability to distinguish between physical and cultural traits. Rather, I argue, most nihonjinron-style discourses on supposed Japanese uniqueness distinguish these categories while simultaneously assuming that they are coterminous in the (exceptional) case of Japan. Fusion is a better way of describing the relationship between body and culture in nihonjinron-influenced discourse.
The “Japanese” body, culture, and nation are inextricably linked in Japan’s popular as well as intellectual *nihonjinron* discourse, and this conceptual fusion persists well beyond the shelves of *kokugaku* sections of bookstores. It is not simply that an individual must meet all three criteria in order to be considered Japanese, but rather that it is imagined that any person who meets one criterion will naturally meet the others. In this cosmology, Japanese nationality presupposes Japanese physiology and culture; this can be observed in Japan’s blood-based approach to citizenship (Ortloff & Frey 2007) and insistence that even families that have lived in Japan for generations with Korean names give them up for proper Japanese ones before receiving citizenship (Nahm 1988, Min 1992). And Japanese physiology presupposes Japanese culture and nation, as is suggested by Japan’s preferential acceptance of economic migrants who can prove a Japanese bloodline because, it was argued, they would “fit in” to Japan (Tsuda 2003).

The Japanese nation, Japanese bodies, and Japanese culture are imagined to overlap to the degree that if one is “Japanese” in one sense they can naturally be assumed to be Japanese in the others as well.

Thus Japanese identity is imagined to be a single package, in which nation, body, and culture are coterminous. Nation, body, and culture may be recognized to be discrete categories in the abstract, but are not in practice; rather, anyone who is Japanese in one sense is expected to be Japanese in the others as well. Individuals and groups who do not reflect this trinity—and there are many—become profoundly unsettling.
Brazilian-Japanese guest workers, Japanese nationals raised overseas, children of mixed parentage, and Japan’s Korean minority all upset the correspondence between these categories. The interruption of the ontological fusion between nation, body, and culture makes these groups objects of moral uncertainty—but also of popular interest.

The debate over the place of Japanese children raised overseas captures this sense of uncertainty. As post-war Japan grew to be a major economic power, Japanese companies sent elite executives, managers, and workers to staff their locations overseas. Many of these men—and they were almost always men—brought families. Their children, born in Japan and raised overseas, seem credibly bicultural on the surface. They are fluent in multiple languages. Many were even sent back to Japan during their summer vacations in America or Europe in an attempt to assure their continued linguistic and cultural development as Japanese.

As the first generation of these overseas nationals have become adults, they have been the subject of a number of newspaper editorials in Japan on “the returnee child problem” (kichokushijo mondai) (Goodman 1992). The editorials typically argue that the overseas children possess critical skills in foreign language and culture that Japan needs to embrace in order to remain globally competitive. But the context of these articles is always that the overseas children are not embraced, that they are somehow not truly

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3 For English-language examples, see “Home is Where Hardship is for Japanese Returnees”, Japan Times, April 19, 2005; and “Schools Aim to Cultivate Returnee Students’ ‘Second Culture,’” Japan Times, August 5, 2008.
Japanese, and that there is something just a little disconcerting about their very existence. Indeed, most non-editorial articles on the population focus on the fact that returnees are frequently the victims of bullying, shut out of normal social relations, and deeply unhappy.\(^4\) When Japanese nationality, physiology, and home culture do not line up, the result is perceived to be dysfunction.

**I argue that the interruption of this ontological fusion between nation, body, and culture is also at the heart of the discourse on diabetes risk in Japan.** As medical professionals and lay people alike face a growing epidemic, they understand and approach it through a pre-existing explanatory model based on the assumptions of popular *nihonjinron* discourse, in which Japanese bodies are not only unique from foreign bodies, but also inextricably tied to and dependent on Japanese culture and nation. This model posits that when the three, mutually dependent elements of Japanese identity are thrown into disharmony, the result is a failure to thrive—illness.

In the case of diabetes, I argue that illness is understood to be a consequence of growing disharmony between two of the three elements of that trinity: the Japanese body and Japanese culture. Interview participants and other informants describe the Japanese body as uniquely, evolutionarily adapted to traditional Japanese food and lifestyle practices, and thus maladapted to certain “foreign” elements such as meat and

oil. They argue, in effect, that the Japanese body is uniquely hyperadapted to Japanese food culture, and that it becomes imbalanced and polluted by foods and practices that are not “Japanese.” When the Japanese body is no longer aligned with Japanese culture, its fate becomes uncertain.

Health care providers participate in and reinforce this explanatory model by emphasizing an evolutionary explanation for high diabetes risk in the Japanese population. Because the Japanese body is adapted to a diet of fish and rice, they explain, it is at a higher risk for diabetes in the context of a westernizing food culture that contains “foreign” elements such as meat and oil. “Japanese” foods that may contribute to diabetes risk, such as white rice and convenience fare, are erased from this discourse. Medical professionals and educators thus employ a standard, globally recognized evolutionary explanation for risk in a way that has profound—and distinct—local meanings.

5.3 The Body-Culture Disharmony Narrative

More than 100 interviews with physicians and patients in western Japan suggest that a narrative about disharmony between Japanese bodies and the encroachment of foreign cultural influences is the most common approach to understanding the diabetes epidemic in Japan. In the interviews, respondents discussed their personal ideas about the origins of type 2 diabetes in Japan and around the world, impressions of people with
diabetes, beliefs about prevention, and opinions regarding the effectiveness of various
treatment options.

Many respondents hypothesized that the pre-historic Japanese physical
environment is the source of a unique Japanese cultural and physiological heritage, and
that Japanese culture can maintain uniquely Japanese bodies. Medical as well as lay
interviewees’ emphasis on the particularity of diabetes risk to Japanese bodies was
sharply different from discussions of risk in American popular discourse and
interviews. Japanese interviewees perceived diabetes risk as something faced
particularly by Japanese as a people. While American respondents referred generally to
“people” or “humans” when discussing risk, Japanese respondents referred to “the
Japanese.” And while American respondents frequently disharmony between human
bodies and modernity to explain illness, Japanese respondents typically reference
disharmony between Japanese bodies and a culture they see as increasingly incorporating
foreign influences.

In this section, I will first present and analyze the most common lay narratives
about the origins of diabetes in the Japanese population, and argue that these narratives
suggest an underlying explanatory model identifying a disconnect between Japanese
bodies and Japanese food culture as a source of illness. Next, I will present and analyze
the narratives embedded in explanations of the origins of diabetes presented by
physicians, nurses and co-medicals like nutritionists, and examine the ways in which these narratives rely on and reify the model shared by most lay respondents.

5.3.1 Lay Narratives

Japanese lay respondents argue that their bodies are evolved to a Japanese cultural milieu that is rapidly being lost to westernization. In interviews, their explanations of the origins of the diabetes epidemic repeatedly return to three key themes. First, they employ popular notions of evolution to explain why the Japanese body and Japanese food naturally go together. Second, they identify western food as the most proximate cause for diabetes in Japan, rather than changing patterns in the consumption of Japanese food. Finally, they distinguish western bodies from Japanese bodies, positing that western foods are suitable for western bodies, but not for Japanese bodies.

5.3.1.1 Co-Evolution of the Japanese Body and Japanese Culture

The most common narrative offered by interviewees draws first on popularized concepts of biological evolution. Junichi, a successful businessman and owner of an eldercare facility in his mid-70’s, is representative of this type of explanation:

日本人は、〜な〜原始時代の原始〜ま、お猿に近い時の人間〜ま、それか、日本の人の生活は、〜木の実とか〜根を食うたり〜した。先祖がね。体質を持っているから、〜ま、欧米なんかは、肉食の体質をずっと先祖から受け継いで、いるでしょう？

Japanese people’s origins in primeval times, at a time when people were close to monkeys... At that time, the lifestyle of Japan’s people was to eat seeds, fruits, and roots—things like that. [Those were our] ancestors, and we have their
constitution. In the West, people have inherited the constitution of their ancestors who ate meat from long, long ago, right? (Businessman and owner of retirement home, rural Japan)

Junichi collapses pre-historical time, tracing Japan’s origins all the way to a time when “people were close to monkeys.” This phrasing mirrors arguments about Japan’s purported racial purity made by conservative commentators like Shoichi Watanabe, even though Junichi himself does not identify as nationalist or even culturally conservative. While Junichi abhors nationalist politics and carefully refers to distant ancestors as “Japan’s people” rather than “Japanese,” the idea that Japanese people have evolved to a distinct diet on the Japanese archipelago for as long as humans could be considered human strikes him as natural and unproblematic—even scientific.

For most respondents, evolution explains why Japanese bodies are specifically suited to Japanese food. Yui, a 38-year-old upper-middle class mother who spent several years of her childhood abroad while her father ran his company’s Southeast Asian operations explained,

糖尿病になりやすいというか、たぶん、食べ物が日本人は日本の物を食べて、魚とかみそ汁とか、野菜を食べたりとかしてたのに、それで日本人の体のつくりに合った食べ物だったのに、違う文化がメインになってしまったので、合わないでしょう、体と食べ物がそれで糖尿病になっていると。

As for being prone to diabetes, it’s probably that Japanese people ate Japanese things—fish, miso soup, vegetables. So Japanese people’s bodies were formed to match those foods. However, since a different culture has become mainstream, the body and the food it consumes no longer suit one another. They don’t match, and so there is diabetes. (Volunteer translator, urban Japan)
This narrative argues that the physical reality and cultural heritage of pre-modern Japan worked together seamlessly to produce the Japanese. Seamlessly, the story goes, until modernization with its western trappings brought foreign foods and new lifestyles to Japan. Then the Japanese body—previously in such harmony with the Japanese lifestyle—was shifted out of balance. An urban man in his 30s explained in English,

“We used to [be healthy] because we have very good genes. But it turned out we don’t have genes against those—all the calorie food... We are genetically very bad against nowadays food. We are less competitive that way.”

(Professional, urban Japan)

This respondent makes a claim common in interviews: that Japanese genes are essentially “good”, but that they are ill adapted to contemporary diet. His explanation highlights the flipside of the idea that Japanese are uniquely hyperadapted—that the very traits and features that can be seen as evidence of Japanese uniqueness or superiority are caught in delicate balance with their context. According to its logic, the very traits that evidence Japanese racial-cultural superiority in one context can handicap in others.

The idea that Japanese bodies are physiologically unique as a result of evolution is central to many lay explanations of diabetes risk. Occasionally respondents drew explicitly on *nihonjinron* articles of faith, such as the retired businessman and his wife who hypothesized that Japanese were at higher risk for diabetes when they ate “rich”
western food because Japanese intestines are of a different length than those of foreigners (Interview 090713_001). Japanese intestines, they argued, are longer than foreigners’ intestines because the Japanese historically ate a vegetarian diet. They explained that long intestines are well adapted for a diet of vegetables high in fiber but not for “American steaks.”

The “Japanese intestines are longer than foreign intestines” idea is familiar to consumers of popular nihonjinron. While the claim is less usual in literature on diabetes, it has long been a staple of television quiz shows and “medical” documentaries in Japan. Tsutomo Hata made the claim internationally famous in 1987, when in his capacity as a former agriculture minister he told Washington that Japan could not accept imported American beef because Japanese have uniquely long intestines, rendering the consumption of too much beef dangerous (Haberman 1988). A few years later, in 1994, Hata became the 80th Prime Minister of Japan.

More commonly, though, lay respondents mirror nihonjinron structures and assumptions without explicitly marshaling classic nihonjinron arguments. While most interviewees aligned Japanese food and food culture with Japanese bodies, they did not explicitly reference nihonjinron texts or thinkers. Instead, they cited their own vague impressions (insho) and feelings (kanjiru). Like Junichi and Yui, quoted above, respondents did not see themselves as consumers or proponents of nihonjinron
arguments, but still mirrored the symbolic structure of those arguments when they talked about the origins of type 2 diabetes.

5.3.1.2 Japanese Bodies and Western Food

It should already be becoming apparent that respondents do not simply believe that the Japanese body is prone to diabetes, but rather that the Japanese body is prone to diabetes in the context of a nontraditional food culture. According to this model, Japanese bodies, having been formed according to an ancient Japanese food culture, face the risk of falling to illness when they stray too far from that food culture:

そうですね。なりやすいというか、やっぱり、何千年も何万年も日本人がしてきた食生活、体のつくりがそういうふうになってるので、過剰にたくさんお砂糖とか油とか、そういうものを摂るとなりやすい体なんだな、というところが思いますね。どうなのか。実際にそういう話を聞いたような気がするんですけど。

Ah, yes, Of course, thousands of years ago—tens of thousands of years ago—Japanese people developed their dietary lifestyle (shokuseikatsu) and their bodies were formed according to it. I think that an excess of sugar or fat… consume that sort of thing and the body is prone to [diabetes.] I wonder… Actually, I feel like that’s the sort of thing I’ve heard about [its origins].
(Graduate student, urban Japan)

「だから私達は日本人だから、元々の日本人の食生活に少しまった、変えた方が良いのかなあ。ただ、もちろん、日本食がベストではないけども、日本人にとっては日本食が、もうちょっと、」

We’re Japanese people, so shouldn’t we return to our original Japanese food lifestyle? Of course, Japanese food isn’t the best, but for Japanese people Japanese food is just a little more… [trails off]
(Restaurant owner, rural Japan)
Respondents identify the same nutritional culprits as American interviewees—sugar and fat—but they frame them in different ways by repeatedly referencing what they imagine to be a vanishing historical food culture shared by the Japanese as a people. A plurality of respondents (47%), lay and medical professional alike, including both quoted above, use the word *shokuseikatsu* (literally “food lifestyle”) to refer to ancient diet rather than shokuji (food), tabemono (food), or nichijo no inshokubutsu (daily dietary intake). *Shokuseikatsu* carries connotations of culture; it is closer in meaning to “eating habits” or “lifestyle” than to diet in a nutritional sense. *Shokuseikatsu* refers to both the nutritional and cultural content of food.

Further, sugar and fat are not merely threats to the Japanese body—they are *foreign* threats to the Japanese body. Overwhelmingly, Japanese respondents identified western food as the most proximate explanation for rising diabetes rates. A pre-diabetic woman in her mid-50s, when asked why the rate of diabetes is rising in Japan, responded:

「それはやはり洋食でしょう。欧米化の食事でしょう。日本人本来の和食。」

*Western food, of course. The westernization of food. From their origins, Japanese people had Japanese food.*

(Small business owner, urban Japan)

There is certainly a good argument to be made that the “westernization” of the Japanese diet has contributed to rising diabetes rates. Diabetes educators and specialists are quick to point out that the proportion of calories coming from fat climbed steeply in
the postwar era. The American occupation, economic globalization, and the prosperity that followed connected Japan to an increasingly global fast food culture. The lay respondent quoted above, like many physicians and public health experts, located the beginning of the shift towards western food in the early part of the Showa period—the same period when the proportion of calories from fat began to rise.

But the reality is not so simple, especially since when most respondents were pressed to specify the meaning of “westernization” they referred to conspicuously foreign styles of food such as hamburgers and pasta rather than changing portion sizes. The average store-bought, Japanese-style lunch bento box in Japan contains anywhere from 500 to a whopping 1335 calories\(^5\), for example, while a hamburger at a Japanese McDonald’s clocks in at only 275 calories\(^6\) and a quarter-pounder with cheese clocks in at 556 calories.\(^7\) Bento boxes, ramen stands, tonkatsu joints, and donburi chains like Yoshinoya serve up some of the most calorie-packed convenience food available.\(^8\) Yet it is foreign styles of food that are identified as high in calories due to sugar and fat. In fact, the perception gap between calories in “Japanese” fast foods and “Western” fast foods is so great that McDonald’s Japan produces tray liners detailing the calories in

several of its most popular products side-by-side with traditional convenience foods. The McDonald’s products have fewer calories.

The rest of the fast food industry has encouraged the perception that western food is harmful to the body while eastern food is healthy, or even healing. Ajisen Ramen, a national chain that has recently begun expanding beyond Japan, markets itself in Japan with the catchphrase “Making food that is not only delicious, but good for you,” (おいしいだけでなく、だからよい食品作り). Ajisen markets itself on the basis of the supposed healing properties of its ingredients through 本站, an ancient Chinese approach to healing and preventing illness by eating “balanced” and “delicious” food. In this context, “balanced” refers to the balance of ingredients and tastes according to correspondences set out in traditional Chinese medical philosophy (Mayanagi 1998). In any other context, “balanced” would be a misnomer when applied to Ajisen dishes. While Ajisen does not publish the nutritional content of its products, chains serving similar トンカツ broth ramen dishes do; similar bowls at Tenkappin Ramen, which also advertises its dishes as healthy, contain between 800 and 1100 calories.

Ethnographic studies of fast food culture in Japan have found that Japanese participants frequently equate fast food with western style food, but not with more
traditional Japanese convenience foods (Traphagan and Brown 2002). Thus hamburgers and pizza are unquestionably fast food, but ramen, bento boxes, and sushi occupy more ambiguous territory (Traphagan and Brown 2002: 122). In interview responses to the present study as well, several respondents mused that one of the reasons for the ubiquity of western food in Japan is simply that western food is convenient, whereas Japanese food takes time and “must be prepared by hand”. One rural respondent in her 70’s, for example, associated westernization with convenience food and Japanese food with “slow” food. “In a word, it’s westernization, isn’t it? Yes. So now what I’m talking about is slow food—I want to return people to Japanese food…”11 Western food and industrially processed foods are frequently conflated here: Japanese food is definitionally homemade, while western food is convenience food.

Once patients become pre-diabetic, or are instructed by their doctor to exercise more caution with regard to their daily caloric intake, most patients reach the conclusion that even Japanese convenience food is not very good for them. But it is important that people who have not yet had any reason to closely monitor caloric content have the impression that Western food and Japanese food exist at opposite ends of a spectrum, where Western food is dangerous and Japanese food healthy. Vague but widespread impressions of what is healthy and what is not shape daily practices for the majority of the population. They also indicate the explanatory model underlying health beliefs and

11 Original Japanese: 「まあ一言で言えば欧米化になるんじゃないのかな。うん。うん。だから言ってるのはその、スローフード、であの一日本食に戻したい…」
behavior for much of the population—a model that, all other things being equal, suggests that the more proximate a product or practice is to conceptions of Japanese culture, the more healthy it is.

5.3.1.3 Western Food for Western Bodies

While Japanese are thought to be at high risk for type 2 diabetes because they have strayed from their “traditional” diet, westerners are thought to largely escape risk because their bodies are evolutionarily suited to it.

In the past... Oh, how to put it? Instead of meat, Japanese people ate things like rice and vegetables. So the calories were low. And then the liver... the liver or the pancreas making insulin? [With that diet] even though the functional capability [of the liver and pancreas] diminished, it was fine. However, today’s dietary lifestyle is nothing but meat and high calorie foods. I think that people like Americans and Westerners, they've eaten that sort of diet forever and so their bodies have become genetically able to withstand that diet.

(Housewife, urban Japan)

Western bodies go with western food, but Japanese bodies do not. The implication is not that Western food is inherently bad. Rather, the Western diet is perceived as particularly bad for Japanese. It is, as one successful businessman put it, “ill-suited” for the Japanese body (karada ni awanai) and so the result of a westernizing diet is illness—in this case rising rates of diabetes.
This is a logical extension of the idea that Japanese food culture and Japanese bodies co-evolved, and is demonstrated in several previous quotes. When interview respondents suggest that Japanese are evolutionarily adapted to a Japanese diet, they frequently offer western bodies and the western diet that goes with them as another example of the same phenomenon. Junichi, the successful businessman quoted at the beginning of this chapter, supports his claim that the Japanese body evolved to eat a meat- and fat-free diet by asking rhetorically, “In the West, people have inherited the constitution of their ancestors who ate meat from long, long ago, right?”

This question contains two interesting assumptions. The first is explicit— that early in human evolution, “at a time when people were close to monkeys”, the people from whom Westerners have descended were eating meat rather than the proverbial nuts and berries he argues made up the primeval Japanese diet. The second assumption is less explicit, but perhaps even more interesting. He assumes that Westerners do not get sick from the Western diet. Indeed, many respondents were shocked to hear that rates of diabetes were higher in the United States than in Japan.

5.3.1.4 Summary

I have argued so far that lay narratives about diabetes in Japan are distinguished by several characteristics. First, they reference popular notions of evolution to explain why the Japanese body and Japanese food naturally go together. Second, these narratives generally deem western food unhealthy for Japanese bodies, while taking for
granted the actual nutritional content of everyday Japanese food. Finally, they
distinguish western bodies from Japanese bodies, positing that the western diet is
suitable for western bodies, but not for Japanese bodies.

Together, the three elements of this narrative set up a correspondence between
Japanese food culture and the Japanese body on the one hand, and foreign food cultures
and their corresponding bodies on the other. They suggest that it is natural for Japanese
food culture and Japanese bodies to line up; when they do, diabetes is not a threat to the
population. But when they do not, as in contemporary Japan, Japanese put themselves
at risk. The primary model that most lay respondents rely on to make sense of the
diabetes epidemic thus symbolically aligns Japanese bodies with Japanese food culture,
and suggests that when the two are thrown out of alignment the result is illness. The
answer to the question of how to prevent or reduce the diabetes epidemic, then, is to be
more Japanese.

5.3.2 Biomedical Professional Narratives

Japanese physicians and co-medicals are not insulated from this model by way of
their professional training or commitment to science, just as American physicians and
co-medicals are not insulated from the most discourses surrounding diabetes in North
America. In interviews, during examinations, at diabetes education seminars, and in
informal conversation, Japanese physicians and co-medicals offer their own narratives,
which mirror and reify the same symbolic alignment of Japanese food culture and Japanese physiology present in lay explanations.

Professional narratives about the origins and causes of diabetes are more complex than lay narratives in large part because respondents with biomedical backgrounds have much more detailed knowledge of the disease and its etiology. But professional narratives also differ because the same individual may strategically employ several different approaches to explaining the disease to different patients, and these approaches may differ from the ways in which he or she thinks about the disease personally. The physicians and other medical professionals who graciously allowed me into their lives are by and large health care professionals, not researchers or professors. The majority of their work consists of real patient contact—internists in both the suburban and urban outpatient clinics saw as many as 30 patients in a single morning. Most of these doctors, nurses, and nutritionists took a pragmatic approach to presenting diabetes to their patients, switching between approaches according to what they believed would work with each patient.

These professional narratives are the narratives I examine here. I do not attempt to discern the interior or “real” belief of the individual medical professionals who agreed to participate in this study if and when they offer multiple explanations of the disease. The fact that medical professionals switch between multiple narrative approaches is evidence of professional fluency, not an attempt to conceal “real” feelings.
In this chapter, I analyze the narratives they present to patients and to me as explanations that are at least as professional and strategic as they are personal. I do, however, examine the private experiences of diabetes by medical professionals who have been diagnosed with diabetes themselves in Chapter 7.

Professional narratives about type 2 diabetes contain many of the same elements as lay narratives. First, they reference a shared primordial past specific to Japanese in order to explain Japanese susceptibility to the disease, mixing broad evolutionary explanations with explanations of individual genetic risk. Second, while they problematize the notion that all Japanese food is good for Japanese bodies to a greater degree than lay narratives, they share a preoccupation with the importance of returning to “traditional” Japanese food culture. This element leads to a key difference in food recommendations for Japanese patients: white rice, anathema to diabetes patients in the U.S., is a daily part of the recommended diet for Japan’s type 2 diabetes patients. Finally, biomedical narratives about the origins of the diabetes epidemic contrast the lifestyle of contemporary Japan with that of the traditional furusato, or hometown village.

5.3.2.1 Referencing the Primordial Past, Mixing Genetics and Evolution

Health care professionals, like lay people, also referenced a primordial past, in which Japanese bodies and food co-evolved, in order to explain the risk for diabetes to patients. In interviews and explanations to patients in exam rooms and diabetes classrooms, they connected individual genetic predisposition to a simplified description
of human evolution in which Japanese bodies came to be distinct from others. Health care professionals tell their patients that Japanese, having evolved in a particular environmental context associated with a particular diet, are genetically predisposed to type 2 diabetes. While this narrative is far more nuanced than that offered by lay respondents, it mirrors the symbolic alignment of Japanese bodies and Japanese food culture common to lay narratives.

First, professional respondents closely connected genetic predisposition, the evolution of the Japanese people, and Japanese food. Dr. Naka, a bilingual endocrinologist at a large urban hospital explained in a hodgepodge of Japanese and English,

なりやすい。日本人は昔はそんなスイートとか肉はあんまり食べなかったので、インシュリンが必要でなかった。More than thousands日本人はtook rice米を食べてましたから。インシュリン分泌が必要でなかった。それが第二after the World War the Second, we began to eat meat and sweets. They need more insulin but they don’t secrete insulin to meet that.非常にアメリカ人、ヨーロッパ人に比べて糖尿病になり易い、日本人は。

[Japanese] are prone to diabetes. Long ago, Japanese people didn’t eat sweets and meat, so insulin wasn’t so necessary. For more than thousands [of years] Japanese people took rice, and so insulin secretion wasn’t necessary. Then after World War II, we began to eat meat and sweets. Now they need more insulin, but they don’t secrete insulin to meet that [need.] Compared to Americans and Europeans, Japanese get diabetes much more easily.
(Endocrinologist, urban welfare hospital)

Dr. Naka says he presents this explanation to patients several times a week. He suggests that, until the postwar period, the Japanese body was adapted to the Japanese
diet. As new foods requiring more insulin secretion entered the Japanese diet, however, bodies no longer matched the foods they were consuming. The insulin secretion required for rice, which has a glycemic index close to that of pure honey, is left out of the story.

Other health professionals explicitly racialize discussions of type 2 diabetes with their patients. Their descriptions of rising diabetes rates focus on Japanese as a distinct genetic community, not on global change leading to a global rise in diabetes rates as the American narratives suggest. When asked why she thought Japanese were particularly prone to type 2 diabetes, a 30-year old nutritionist in an urban hospital argued,

「やっぱり最初は、その国料食べる… 元々のDNAって言うの。あのう、農産物とか、おもに植物類が、野菜とか食べる人種なわけで、お肉とか、あんまり食べなかったから、異質さそうだと思う。なんとなく感じさせかね…もともと人種的な問題だ。」

“Of course, in the beginning Japanese ate Japanese food. They say it’s inherent to Japanese DNA. Since Japanese were a race that mainly ate plants, they didn’t really eat things like meat… I think that is the dissimilarity [with other races].

Maybe that’s just my sense of it… It is essentially a racial question.”
(Nutritionist, urban hospital)

This nutritionist, like so many lay respondents, suggests that Japanese bodies evolved under unique conditions, resulting in unique bodies. The explanation of risk that she and other health professionals offer their patients is particularistic; the idea that Japanese are physiologically unique and adapted to Japanese food is reified rather than challenged.
Physicians and nutritionists are often very deliberate in their use this narrative and see it as a way of releasing their patients from the sense that the disease is their own fault.

“[High risk for diabetes] is because of the thrifty genotype. We are from our origins an island nation, and so we have a thrifty genotype that allows us to withstand not eating. I have it too. People who could withstand not eating survived.”

“Do you explain the genetic component to your patients?”

“Yes. And I explain it even for gout and hyperuricemia. For hyperlipidemia, too. There are a lot of different types of patients, but the patient who thinks, “I am just bad,” is pretty common. But it’s not that the patient is bad. There is a genetic component too.”

(Internist, Suburban private Hospital)

Explaining genetically patterned risk for diabetes and connecting it to the shared evolutionary history of the Japanese nation becomes a way to comfort patients who experience their illness as a personal failure. Referencing Japanese origins (motomoto) and nationality discursively moves the patient’s illness from the realm of the individual to that of the community. Physicians, nurses, and nutritionists working with type 2
diabetes patients use this strategy to encourage self-deprecating patients and shift emphasis away from alienating narratives of personal responsibility.

5.3.2.2 Preoccupation with Japanese Food Culture

Health professionals typically associated the recent upsurge in type 2 diabetes with the popularity of non-Japanese food, rather than changing ways of consuming Japanese food. Many medical professionals single out western food in particular. Japanese food, on the other hand, was described as basically healthy. Even with the contemporary tendency to overeat, participants suggested, Japanese food could not be unhealthy and thus not the source of the diabetes epidemic:

“Why do you think rates of diabetes have been rising in Japan recently?”

“I think there is a relationship between that and dietary habits (shokushukan). Um, it must be dietary habits. It’s fairly, um... obesity. Eating too much. Yes, it’s because people eat an incredible amount. And Japanese food—if you eat Japanese food it’s fine. Japan’s food is good, but things from foreign countries like hamburgers... well...”

(Head nurse, suburban private hospital)

While the head nurse acknowledges that contemporary Japanese eating habits are characterized by overeating, she does not see Japanese style food as the real source of
the problem. Rather, it is the over-consumption of foreign foods that precipitates disease.

Beyond suggesting that Japanese food is less dangerous than foreign foods, even in large quantities, respondents evidenced a preoccupation with “traditional” foods. Health professionals qualified their endorsement of Japanese food more carefully than lay respondents, but still emphasized that the best way to prevent diabetes was to return to traditionally Japanese food. While western food was only described as safe in small portions, Japanese food was identified as generally good.

「和食のようなバランスだったらいいけど、どうしても油使って、料理することが有るから。」

*It’s good if you can have a balance like Japanese food, but no matter how hard [my clients] try they use oil to cook.*

(Nutritionist, urban hospital)

Japanese food is contrasted to non-Japanese food, which is frequently described as oily. Like in the lay sample, physicians and co-medicals mixed references to “Japanese” diet in with discussions of healthy diet. In the process, “Japanese” food is marked as healthy and “foreign” food is dubbed unhealthy, sometimes with little regard to actual nutritional content. Japanese food, unlike foreign food, is imagined to be prepared with little cooking oil and low in sugar.

The sense that Japanese bodies evolved alongside Japanese food, and that the “traditional” Japanese diet is well suited to Japanese bodies contributes to a dietary recommendation that is strikingly different from those found in the United States:
Japanese medical professionals, co-medicals, and diabetes literature aimed at patients regularly recommend white rice as part of a balanced diabetes diet. In the U.S., white rice is ruled out of most recommended diets for diabetes patients due to its high glycemic index and status as a refined carbohydrate. A recent Harvard public health study seems to confirm this prejudice, finding that individuals consuming 150 grams of rice five or more times per week were at an elevated risk for type 2 diabetes (Sun et al. 2010).

In Japan, however, white rice is part of a balanced diet for diabetes patients. Diabetes education materials providing pictures of balanced meals include bowls of rice, and physicians and nutritionists include it in their dietary recommendations. A diabetes specialist interviewed at a prestigious national medical center in July 2010 said that he recommends his type 2 diabetes patients eat 150 grams of rice per day. When I hesitated, he laughed. “You’re surprised, aren’t you?” he asked. For type 1 diabetes patients, he said, he encourages “carb counting.” But for type 2 patients, he says he has never recommended it and never will. It is all a question of balance, and “rice is the backbone” (chushin) of the balanced Japanese diet. He went on to say of Japanese food,

ご飯と、魚と、というのは、やっぱり基本で良いと思うんですね。
やっぱり油を減らすということだと思う。

_I think rice and fish are fundamental and good. And of course I think it’s good to reduce oil._

(Diabetologist, urban national medical center)
Since rice is fundamental to the Japanese diet, it cannot be bad. Rather, the rise of a diabetes epidemic in Japan must be related to the proliferation of oil—a hallmark of westernization and food that is not truly Japanese.

One of the particular dangers of oil and other non-Japanese food is that its strong tastes can permanently warp the Japanese palate. A well-traveled neurosurgeon worried about changes to the Japanese diet he observed to take place during his lifetime said,

“I think it’s very important to get [used] to stimulating food when [children] are young… If they give many greasy, oily or salty things to their children, I think the brain will memorize those, they can’t satisfy them with subtle tastes. In Japan we used to have subtle-taste food… very subtle taste. Soup is very subtle taste. Miso soup is a bit salty, but we have many things in subtle taste—less oil, less salt…”

(Neurosurgeon, urban welfare hospital and university medical center)

A ward supervising nurse had similar concerns about the changing palate of the next generation of Japanese:

Lately here, we have come to say that Japanese food is good, of course but… there has been a shift from Japanese food culture to Western food culture. Western food culture is already becoming more common than Japanese. The younger
generation, in particular, prefer Western foods to Japanese side dishes. If we’re talking about children, it’s hamburgers and fried shrimp and things like that. That’s what they like. They like it and so that’s what the parents make. Those kids get big and then the nice things about Japanese food… how to put it? If they just eat whatever they like without learning the charms of Japanese food, I worry that eventually they will become like that [sick with diabetes.] Japanese are a fish-eating race. But young children… nowadays Japanese children like meat more than fish.

(Supervising ward nurse, suburban private hospital)

Changes to the Japanese diet not only cause health problems, but also threaten to permanently change the way that Japanese eat. Once the next generation becomes used to “unsubtle” food, its ability to enjoy the food tradition of their parents and grandparents is endangered. The neurosurgeon and nurse see cultural as well as physiological danger for Japanese in the popularization of western food styles.

5.3.2.3 Furusato Nostalgia

Professional narratives about the origins of diabetes are not restricted to the emphasis on the loss of Japanese food culture. Providers also conjure up nostalgic images of a past Japanese lifestyle, also thought to have been lost to urbanization, modernization and westernization. In diabetes education classes at both hospitals offering a diabetes curriculum, traditional furusato (hometown, village) culture was contrasted to contemporary Japan in order to partially explain the rising risk of diabetes for contemporary Japanese. Furusato culture is depicted as simple, hard working, and rooted in traditional Japanese values. People ate Japanese food, walked from place to
place, and experienced little stress. Contemporary Japan, on the other hand, is characterized by stress, irregular eating, and dependence on cars, bicycles, and public transportation.

Even the language of these explanations invokes nostalgia; descriptions of risk factors for type 2 diabetes frequently began with the words “long, long ago” (mukashi mukashi), the same phrase that typically precedes folk tales. Long, long, ago Japanese were not at risk for diabetes because they enjoyed a lifestyle lost to contemporary Japan. Contemporary residents of Japan no longer eat home-style Japanese food, exercise in the course of their daily work, or enjoy low stress lifestyles. Diabetes education materials from West Hospital, the suburban private hospital, include graphic representations of the contrast between the traditional Japanese lifestyle of the imagined past and contemporary lifestyle. The contemporary Japanese man at risk for diabetes is portrayed eating fried food late at night, has disordered eating patterns, faces stress from his relationship with his boss, and drives his car or rides a bicycle instead of going places on foot.

Medical professionals engaging in diabetes education efforts draw on this contrast to convey proper preventative behavior to patients. One endocrinologist, for example, explained the need for regular exercise by telling her class, “In old times Japanese exerted themselves (hataraku) a lot, but recently many people have cars and other convenient devices.” Like many statements about diabetes, this one refers
explicitly to Japanese. Similar to the “in old times Japanese ate such-and-such” lay narrative, the endocrinologist does not refer to modern man or citizens of wealthy nations—she narrows her statement to Japanese. But she also contrasts the current environment that causes sickness (in this case too much convenient transportation) with an imagined traditional past to which the Japanese body is more suited—though in this case the past to which she refers is much more proximate.

By harkening back to an imagined furusato culture, the disruption of which is imagined to have precipitated disease and dysfunction, Japanese health professionals emphasize their imagined homogeneity through shared cultural and physiological heritage. By conjuring up contrasting images of the village versus the city, foot travel versus motorized transportation, and washoku versus western food, they erase the emerging class differences that may contribute to different risk profiles for different parts of the population. Instead, the emphasis is on the shared trial of (mal)adjustment to a cultural milieu that is perceived to be increasingly westernized.

One physician referred to traditional Chinese medicine to explain the relationship between contemporary life and diabetes:
It’s the westernization of our food lifestyle, insufficient exercise, and probably stress. Chinese medicine (kanpo) and acupuncture say… When you tire easily, experience exhaustion, you have insufficient spirit (qi). In short, your energy is insufficient. If you think of it as a battery, it’s like the electrical current from the battery has been stopped. There are a lot of people who feel like this. They’re tired. And, well, they get irritated, they get stressed. That’s because the qi can’t move through the whole body. The number of people for whom the qi is not flowing is greatly increasing. When that is the case, it’s easy to get diabetes. So there are lots of people getting diabetes. They’re tired. I have the impression that there are lots of people stressed and irritated, and diabetes is spreading.
(Internist, suburban private hospital)

Like American interviewees, medical professionals in Japan see something wrong with the contemporary society in which they practice, as evidenced by increasing numbers of people who seem to be maladapted and sick with stress. But American and Japanese respondents use different metaphors to understand the ways this illness manifests itself, different explanatory models to explain it, and are nostalgic for different sources of health and well-being. While American respondents usually reserve their nostalgia for nature, suggesting that the more “natural” a lifestyle the more healthy, Japanese respondents—particularly medical professionals—express nostalgia for a village lifestyle. They imagine a version of Japan that they have never seen themselves, but feel previous Japanese must have enjoyed. If Japanese bodies—and spirits—are
maladjusted to the conditions of contemporary Japan, that must mean that there was a past Japan to which they were better suited.

5.4 Conclusions

Most academic considerations of *nihonjinron* “uniqueness” discourse have focused on analyzing relatively explicit arguments about Japanese practice and identity. But by considering the ways in which domestic discourses on “Japanese-ness” shape seemingly unrelated medical practices and ideas, we can observe the ways in which cultural construction and mass production of Japanese uniqueness mythology shapes the lived experience of ordinary people through the experience of illness. Unlike most analyses of popular *nihonjinron* narratives, this chapter examined lay as well as medical narratives of Japanese susceptibility to type-2 diabetes rather than explicitly *nihonjinron* cultural products. Yet many of these discourses on health and illness mirrored *nihonjinron* themes like the purported uniqueness of the Japanese body, the natural pairing of Japanese bodies and Japanese food culture, and nostalgia for a lost Japanese village culture.

Despite the ubiquity of references to evolution and adaptation (or maladaptation) in narratives about the origins of diabetes in both the U.S. and Japan, the symbolic structures underlying these narratives differ considerably. Japanese narratives on the rise of the diabetes epidemic posit a specifically Japanese body adapted to the context of a specifically Japanese culture. When the symbolic alignment between the
specifically Japanese body and Japanese culture is disrupted, and the body is subjected to foods and practices to which it is not adapted, the result is illness.

Both lay respondents and medical professionals used the concept of evolution to connect modern day diabetes risk to a distant past they describe as uniquely Japanese. Their use of an evolutionary explanatory mechanism to explain diabetes risk is not applicable to all humans adjusting to industrialized realities. Rather, the concept of evolution is used to suggest that Japanese are physiologically unique from the rest of the world. Respondents explain risk using a concept that seems to be universal—evolution—but wield it in the service of much more local ways of understanding the world. The seemingly universal, globalized language of science and medicine is thus used to express profoundly local concerns with Japanese identity and globalization.

“And they’re there. They are there. Your job is to convince them it’s not their fault.”
(American endocrinologist, VA and university hospital)

In the previous two chapters, I argued that Japanese and American narratives about the origins of the diabetes epidemic evidence two distinct underlying explanatory models for health and illness. In the U.S., narratives about diabetes emphasize universal risk and illustrate the perception that illness arises when one treats the body in ways that are “unnatural.” Since risk is universal, those that fall to so-called “lifestyle” diseases are easily cast as personally responsible for their disease, and the ethic of personal responsibility permeates discussions of the epidemic. In Japan, narratives about diabetes emphasize the particularity of risk to the Japanese body, and suggest that illness arises from a disconnect between Japanese bodies and non-Japanese food culture. The road to health is a return to an imagined traditional Japanese lifestyle that has been lost to globalization and westernization. The Japanese narrative emphasizes the shared Japanese cultural-racial community.

In this chapter, I examine the role of providers’ explanatory models of type 2 diabetes, models of authority and models of responsibility in exam room encounters with patients. I argue that medical professionals in both countries take a pragmatic approach to negotiating with patients in order to elicit cooperation and participation in
their own self-management, switching between different models of the provider-patient relationship as they see fit given the patient and situation at hand. Practitioners in both countries also recognize the power of medicalizing lifestyle recommendations when they explain treatment options to patients, self-consciously relying on medical authority to “sell” behavioral changes to some patients. But there is one difference between exam room strategies with important consequences for management of the type 2 diabetes epidemic in each country: expectations. While American health care providers in the sample report self-consciously monitoring and depressing their expectations of patients, Japanese providers embrace expectations of their patients that seem almost unreasonably high. This suggests underlying differences in the way that health care providers think and talk about diabetes, and has implications for the character of diabetes care in each country.

In a sense, though, this chapter is at least partly about similarity rather than difference. While health care providers working in the U.S. and Japan work with very different patient populations and within very different institutional realities, providers in both countries approach their interactions with patients with the same professional pragmatism. In both countries, care providers adjust the presentation of information about diabetes and even their own self-presentation to meet the perceived needs of individual patients. With one patient, providers may be rigid and polite, with another relaxed and informal. One patient may be issued strict orders, but another asked what
he wants to do to improve his quality of life. Even as health care providers in both
countries describe their (often very real) commitment to an idealized provider-patient
relationship model that empowers patients to actively participate in their own care, in
practice providers enact a variety of provider-patient relationship models. The content
and tone of interactions between type 2 diabetes patients and their health care providers
varies dramatically across context. But the greatest variation may not be between
practitioners working in the U.S. versus those in Japan, or even between individual
practitioners. Rather, the greatest variation may be between patients of the same health
care provider.

6.1 The U.S. Case

You can’t talk about lifestyle and — because every patient with — not every
but the majority of patients with diabetes also have high blood pressure.
So they’ve got all their medications for their diabetes, all their
medications for their blood pressure. They may have some
cardiovascular disease. The usually have hyperlipidemia of some
combination, so you’ve got the lipid issue to have to deal with, and
there’s always a little bit of depression in some but not all of them, and
then they’re worried about their osteoporosis or their joint disease and
their arthritis and — “I’m really here because I want to talk about my
husband who won’t come in.”
(Nurse Practitioner)

American health care providers face a very different institutional context and
patient mix than their Japanese counterparts. Among other things, U.S.-based providers
see their patients less frequently than Japanese providers. While interviewees cite the
lack of a universal health care scheme and different cultural assumptions about health
maintenance as possibly contributing to lower frequency of office visits for patients, the research findings on the relationship between insurance status and visit frequency are contradictory. Type 2 diabetes patients without insurance are six times as likely as those with insurance to go without necessary health services (Fox & Richards 2010). Yet other studies of type 2 diabetes patients suggest that there is little relationship between insurance status and frequency of visits (Harris 2000). This paradox could arise from the fact that type 2 patients from low-income groups and racial minorities have been shown to underutilize health services even when they are covered by insurance because they are less able to afford the patient burden of the cost of care (Vaughn 2004). In the U.S. there is no guarantee that the patient will be able to afford a follow-up visit or medications, even if they do have access to insurance. The fear of losing insurance may also play a role: providers report in interviews that some patients refuse to go on insulin because they fear their boss will find out and they will lose their job, which would mean losing their health coverage. The fact that, in the U.S., type 2 diabetes disproportionately affects patients from less privileged social backgrounds further magnifies the challenge (Vaughn 2004, Fox & Richards. 2010).

Not unrelatedly, American patients are sicker on average than Japanese patients—they experience more co-morbid conditions and more complications than Japanese type 2 diabetes patients (Egede 2004, Halanych et al. 2007). American patients are more likely to be overweight, and much more likely to be obese (Gregg et al. 2010).
The plethora of health problems and complicating lifestyle factors mean that even more content must be crammed into the limited contact hours chronically ill patients get with primary care providers. In the context of constant crisis, type 2 diabetes often ends up on the back burner. The complications arising from the diabetes may be acute, but the progression of diabetes itself is slow and painless at first. While providers and patients are putting out other fires, type 2 diabetes smolders in the background.

As the quote from primary care providers above suggests, managing consultations in the exam room can feel like a three-ring circus. “Patients come in with five complaints,” said another nurse practitioner. “They have 15 comorbidities. Their diabetes often gets pushed back.”

Sifting through the tangle of comorbid conditions and multiple medications during relatively infrequent visits frequently takes precedence over the basic diet and lifestyle behavior counseling that most specialists agree is important for type 2 diabetes patients. Most primary care providers have never received training in diabetes education or nutrition counseling. And when patients come from what health care providers like to call “chaotic home situations” providers believe that even the best possible presentation of information to the patient may have little effect.

The professionals managing this three-ring circus also hail from different backgrounds than the health professionals that typically treat type 2 diabetes in Japan. While most patients with type 2 diabetes in Japan are seen by physicians—typically
internists, but occasionally endocrinologists or diabetologists—American patients are increasingly seen by nurse practitioners, a professional category all but nonexistent in Japan. Nurse practitioners can conduct physical exams and prescribe medication just as a primary health provider with a medical doctorate can, but nurse practitioners come out of a distinct nursing education tradition that emphasizes patient care, education and communication. Nurse practitioners have at least a master’s degree, though frequently a Ph.D., in nursing in addition to being registered nurses. They are licensed by state nursing boards rather than medical boards. Chart audits of family practices treating diabetes patients suggest that practices employing nurse practitioners outperform practices employing only physicians or physicians and physician assistants (Ohman-Strickland et al. 2008).

Another growing professional category that remains rare in parts of Japan is the certified diabetes educator. By 1999, there were more than 10,000 certified diabetes educators in the United States, half of whom were nurses (Seley et al. 1999). Certified diabetes educators fill some of the gaps in patient education that occur when patients have little face time with health care providers and their providers must focus their time on health crises more acute than the patient’s festering diabetes. They are trained to explain the disease in accessible ways, teach self-care techniques, conduct motivational interviewing, help patients set goals, and provide basic nutritional education. In short, they are trained to do the very things that fluster many primary care providers and,
because they are typically nurses rather than physicians, they are less expensive and able to spend more time counseling patients. Every U.S.-based health care provider interviewed cited the relative scarcity of diabetes educators compared to the number of diabetes patients as a problem for the medical centers or clinics in which they worked, but the fact that there are specially trained and certified diabetes educators at all distinguishes these medical centers from the field sites in Japan.

The prevalence of nurse practitioners, diabetes educators, and other non-physician co-medical professionals in American diabetes care contributes to a gender imbalance among providers treating diabetes. While in Japan type 2 diabetes patients are typically treated by (overwhelmingly male) physicians, American patients have more contact with nurses, nurse practitioners, and diabetes educators who are overwhelmingly female. Further, as women in the United States have entered medicine in large numbers they have concentrated disproportionately in “family-friendly” shiftwork specializations and lower paid primary care practice (Levinson & Lurie 2004). While only 28% of all physicians and 30% of endocrinologists in the United States are women (American Medical Association 2009, National Study of Graduate Medical Education in Internal Medicine Data 2000 cited in Rizza et al. 2003), more than half of female physicians go into primary care, compared to only 36% of male physicians (Tu & O’Malley 2007). The result is that the majority of health care providers specializing in diabetes care in the United States now are women, and that this trend can be expected to
continue as female physicians continue to pour into primary care and even more of the diabetes care burden is shifted to nurse practitioners.

This difference is borne out in my sample: of the twenty diabetes-focused health care providers interviewed for this chapter, all but two are women. The only two males in the sample are endocrinologists at an elite medical center; the women are endocrinologists, primary care physicians, nurse practitioners, nurses, and diabetes educators working directly with patients in a variety of medical contexts including an elite university medical center, the Veterans Affairs (VA) Hospital, a smaller regional hospital, and an urban clinic for low-income patients. Most of the professionals interviewed treat patients in more than one context and were able to offer comparisons of their experiences and treatment approaches across two or more institutional contexts.

The 20 diabetes-focused American health care providers participated in semi-structured, recorded interviews lasting from 35 to 60 minutes. They were asked to describe their patient mix, discuss their perspective on the growth of type 2 diabetes in the U.S., role-play diagnoses and explanations of type 2 diabetes, and talk about their strategies with patients in the exam room. Participants were initially recruited through an email forwarded to an email list of diabetes specialists at several medical sites in Durham, North Carolina containing a description of the study and an introduction by an endocrinologist at a local university medical center. Those who indicated interest were interviewed at their various work sites.
6.1.1 Models of Authority in the American Exam Room

Several patterns emerge in American practitioners’ conversations about treating type 2 diabetes. First, practitioners described their efforts to take a patient-centered rather than paternalistic approach to treating their patients, mirroring trends in research on diabetes treatment and education and possibly also reflecting the prevalence of nursing training in the sample. Health care providers also admit to having remarkably low expectations of their patients’ ability to manage their conditions. While they want the best for their patients, they believe that successful long-term diabetes management is a serious challenge for any person, even under the best of circumstances. And, as providers point out again and again, their patients are often not living in the best of circumstances. Thus providers are pessimistic about the course of type 2 diabetes and the chances of good outcomes for type 2 diabetes patients. Finally, providers approach their own medical authority pragmatically, relying on the high social status of biomedicine and play-acting at old fashioned paternalistic medical practice when they believe it will be therapeutically effective for a particular patient.

6.1.1.1 From Paternalism to Patientism

In interviews, U.S.-based health professionals refer to a past in which American medical practice was paternalistic and organized around the doctor rather than the patient. Paternalistic medicine is depicted as relying on a hierarchical authority structure that is no longer valid. In this now supposedly outdated style of medical
practice, the doctor (or other medical professional) orders and the patient follows. By
and large, respondents felt that this style of practice no longer characterized the majority
of American medical practice, but its last, stubborn vestiges were frequently cited as
sources of frustration for diabetes-specialized health care providers. While none of the
health care providers interviewed described their own personal practice style as
paternalistic, the majority of respondents described witnessing paternalistic practices
among other providers, usually physicians.

The shift away from paternalism, and the punitive approach associated with it,
was universally identified to be a good thing in interviews. The hierarchical, one-way
relationship that paternal practice demands of patients leaves many young health
professionals cold. While interviewees acknowledged that this style of practice remains
prevalent especially among a “certain generation” of physicians, not a single respondent
identified their own personal styles with paternalism. This is perhaps partly because
65% of respondents were trained in the nursing education tradition, which has
historically emphasized a patient-centered approach, rather than the medical education
tradition. Even as the nursing profession becomes more specialized (and many nurse
practitioners can cite as many years of education as their doctor counterparts), it remains
rooted in a patient-centered philosophy of care (Judd et al. 2009). Nurse practitioners
and physicians alike told stories of colleagues who engaged in paternalistic practices,
but without exception the subjects of these anecdotes were medical doctors.
More than simply not being interested in treating patients that way themselves, respondents argued, paternalist approaches just would not work with most of their patients. Anecdotes about paternalistic colleagues almost always had the same moral:

[At grand rounds] the subject got onto obesity or weight management or whatever, and one of these older docs came in saying, “Well, if they would just do what I told them to do…” There are some older people that have a very paternalistic view of the provider-patient relationship and that they’re supposed to just, you know, do everything that you tell them to do. And if you look at the psychology behind that, that’s not how it works when you’re working with adults.

(Nurse Practitioner [emphasis mine])

Interviewees argue that treating patients like children does not yield results. Every respondent from a nursing tradition and most of those from medical traditions made similar points about the inefficacy of paternalistic demands—the primary criticism of the old-fashioned provider-patient relationship is that it does not motivate most patients to make the changes required to manage their condition. Young health care providers’ stance against paternalistic medicine is not so much philosophical or ethical, then, as it is pragmatic.

Worse, when the patient is uncooperative or “noncompliant,” paternalistic practice can turn punitive and rely on scare tactics. Respondents identified older physicians practicing paternalistic medicine as the main source of negative feedback and scare tactics for type 2 diabetes patients. One nurse practitioner described how in the beginning of her career treating diabetes, she worked closely with a cardiac surgeon.
The surgeon would enter the room, announce to the patient that if he did not lose 100 pounds he would die, and then leave the nurse practitioner to deal with the aftermath.

Another nurse practitioner, Nurse Milne, described the problems that arise when paternalistic practitioners try to treat type 2 diabetes patients:

*Interviewee:* Instead of saying “What can we do so that you can do this?” or “What can we do that’s realistic?” or “How can I make—get you to get all of your insulin today?” they just go “Well, if you don’t do it, you’re going to have a heart attack. You’re going to end up on dialysis. You’re going to be blind. You’ll lose your toes,” that kind of thing. So I just think that’s part of it.

*Interviewer:* And patients don’t respond to that by—

*Interviewee:* Well, they cry.
(Nurse Practitioner)

Inevitably, paternalistic practitioners are frustrated by their patients’ seeming inability or unwillingness to follow orders. Frustration leads to threats, and threats further undermine the patient’s ability to play an active role in their own recovery or disease management. They cry, but they don’t get better.

The health care providers interviewed unanimously agreed that threats, “negative language,” and scare tactics did not lead to successful outcomes for patients with type 2 diabetes. As with paternalism more generally, criticism of scare tactics focused on their inefficacy rather than ethical concerns. “Scaring people to death is not going to get them,” explained a certified diabetes educator and nurse. “All it’s going to
get them to do is cover their ears or pretend it doesn’t exist.”\(^{12}\) In addition to being nasty, providers argued, yelling at patients is counterproductive. Because their dislike for paternalism does not stem from ethical concerns, even practitioners who describe a distaste for paternal style medical practice report using it as a strategy when they \(do\) think it will be effective. A young endocrinology fellow who otherwise embraces and works to put into practice less paternalistic, “patient-centered” interventions explained,

Things need to be individualized [in the U.S.] and people need to make their own decisions and doctors aren’t allowed to be paternalistic... And people here do not respond well to paternalistic—no, I take that back. Some people respond well to paternalistic doctoring, and other people do not, and I think it’s something that—not having a ton of experience I am already starting to sort of get the hang of who needs to be told, and the vets at the VA need to be told.
(Endocrinology Fellow)

One of the skills she has had to develop during her endocrinology fellowship has been determining which patients “need to be told” and which patients will respond negatively to traditional doctors’ orders. She explains that while using negative language is never effective with patients, embracing her authority as a medical professional and giving orders is sometimes an effective strategy. Thus while she accepts in theory that American doctors are no longer supposed to encourage paternalistic relationships with her patients, her actual practice is ecumenical.

\(^{12}\) Interview 100325_001.
The same strategy that works wonders with one patient is liable to end in disaster with another. While interviewees describes VA patients as responsive to paternalistic orders and advice, patients of low socioeconomic status with no military background are frequently characterized as resistant to authority, even when the “orders” are clearly in their own best interest. The same endocrinologist cautions that, At our indigent care clinic on ***** Road, having authority is... You might as well put on a police uniform when going there. It’s just like people are just not going to respond well to you. That’s a lot more “What do you think you need to do? These are your choices.” And if you ever say what you’re leaning toward, then it’s like my toddler. They’re like “Oh, I want to do the other thing.” (Endocrinology Fellow)

In the same week, then, this doctor may strictly order one patient to reduce his soda intake and log his blood glucose more often, but ask another patient what he wants to do to deal with his diabetes.

Successfully treating type 2 diabetes demands patient cooperation and even enthusiasm, which are not always easy characteristics to elicit from patients facing chronic illness and multiple comorbid conditions. If paternalism does not work with low-income patients, health care providers consciously shift their language and recommendations to avoid negative encounters. If providers assume or sense that another population is responsive to being ordered around, they shift their language and recommendations again. Importantly, even providers who report having a particular
philosophy of practice also report relying on multiple styles of practice depending on the patient in question.

The vast majority of interviewees describe using a patient-centered approach in their interactions with patients. Ideas about lifestyle changes in particular must come from the patient:

[The patient] will go say, “I guess my children are all overweight. Maybe I should do something about that.” I say—my favorite line is “I think you’re on to something. I think you’re on to something.” Almost no matter what they say, I think they’re on to something.

(Nurse Practitioner)

By allowing ideas about necessary lifestyle changes to come from the patient first, health providers reason, the resulting advice will be more applicable to patients’ particular needs and they will be more likely to follow through. Encouraging patients to brainstorm involves them in their treatment, and improves the chances that they will cooperate with whatever plan is settled upon. Further, it prevents provider assumptions or missteps that could endanger the patient-provider relationship.

The shift from physician-centered to patient-centered treatment profoundly changes not only the tone of the exam room encounter, but the entire approach to managing chronic disease. Patients must be given the tools to self-manage their own disease, and then coaxed, coached, and wheedled along by their unrelentingly positive provider. Rather than telling the patient what to do, the provider must educate the patient about the disease and then elicit ideas from which to design treatment strategies.
This approach dramatically recasts the health professional as support staff, placing the patient at the center of his or her own disease management.

“It’s better, but I think we have a ways to go because the old—well, when I was in nursing school the doctor model, the medical model, was the doctors told you what to do, and the patient just did it. You know what I’m saying? So I think now this whole team model is in vogue and empowering people to take responsibility. I think we had to. I don’t think that there is any other way to do it with chronic disease. If you want outcomes, if you want people to do better, they do have to take some responsibility. A medical team by itself cannot do it. The patient has a responsibility and a role, and it’s our job to support them.”

(Registered Nurse, Certified Diabetes Educator)

This new model of the provider-patient relationship rests on two moral assumptions.

First, the patient—and not the health care provider—has the right to direct his care. But also, the patient—and not the health care provider—bears ultimate moral responsibility for managing his own health.

In this model, the provider cheers from the sidelines. Health providers working with type 2 diabetes patients frequently make an analogy to “coaching” to describe this sort of relationship with patients. They give advice to patients and provide the occasional motivational speech, but in the end it is up to the patient to self-motivate and self-manage. According to the nurse and diabetes educator quoted above, in practical terms this means,

We’re just very positive. We’re very upbeat. We just say, “I don’t manage your diabetes. You manage your diabetes. I see you for small windows of time, a couple of times a year, and the same for your provider. And we don’t live your life 24 hours a day, so our job is to make sure that you have the most current up-to-date information and
understand why we make the recommendations and decisions that we do about your treatment because the hard choices are going to come well, it’s always after 5:00 on a Friday night and your doctor is not on call, or they’re out of town. So we want you to be the best informed consumer about you.”

(Registered Nurse, Certified Diabetes Educator)

The medical team can’t accompany the patient 24 hours a day. In the American health care system, they can’t even see most patients more than twice a year. Empowering patients to take an active role in managing type 2 diabetes is imperative when they have relatively little contact with health practitioners.

Giving patients a sense of control may be particularly important for managing type 2 diabetes. Women and men with chronic illness confront depression at a higher rate than the general population (Ford 2008), and many others experience depressive symptoms that do not meet the criteria for major depressive disorder (Gonzalez et al. 2011), or a generalized sense of defeat or failure (Charmaz 1991). People with type 2 diabetes have a particularly high rate of depression: more than 50% of patients present with comorbid major depression (American Diabetes Association Fact Sheet), so many that some providers that participated in this study report prescribing anti-depressants to patients immediately upon their diabetes diagnosis. At least one major meta-analysis suggests that the presence of depression may be a risk factor for developing type 2 diabetes, rather than the other way around (Mezuk et al. 2008). Many patients suffer from depression before they are diagnosed with type 2 diabetes, and their diagnosis may exacerbate their depression (Mezuk et al. 2008). In addition to managing a chronic
disease that may require changes to every part of their lifestyle, type 2 diabetes patients may be blamed for their disease by strangers, friends, family, and even some of their own health care providers. The barrage of negative assessments can eat away at patients’ sense of self worth and further impair their ability to make positive lifestyle changes or even function in daily life.

For people labeled as having “my-fault” diabetes, facing stigma and depression, patient empowerment approaches promise to be transformative. In theory, the patient-centered “empowerment” approach involves patients in their own care, cultivates independence, and gives them the opportunity to develop confidence and control over some aspect of their lives. When patients are empowered, the theory goes, they can feel that they are making decisions for themselves and see that the changes they have decided to make for themselves result in a better quality of life. Providers who embrace the approach argue that this can start a cycle of positive feedback that leads to lasting change and improved diabetes management.

But the embrace of patient “empowerment” also shifts responsibility for managing the disease even further into the individual patient’s court. The old paternalistic model of medicine may have restricted patient autonomy and created a power dynamic that makes contemporary patients and practitioners uncomfortable, but it also clearly defined the responsibilities of all involved. Patients were charged with following orders, but physicians were charged with managing the wellbeing of their
patients. In contrast, contemporary health care providers operating with a patient-centered model of care remind themselves to define their own responsibilities more carefully:

“I’ve been doing this for a while. I’m not frustrated, and I think it’s easy to get frustrated. I think you get frustrated with the patients, but you also get frustrated seeing how their health deteriorates as a result of the disease and of the choices that they make. I think also people take on like some kind of a sense of responsibility with them, and I think that you have to realize that in the end your responsibility is to educate them and to offer them the right therapies and to provide them with good medicine, to practice safe, good medicine with them and to help them make the right choices. But it’s their choice. You can’t save the world.”

(Nurse Practitioner)

While interview respondents were without exception deeply committed to their patients, they also constantly distanced themselves from bearing too much responsibility for patient wellbeing. Health care providers emphasized that successful disease management depends on the patient, not the health care provider. Patient wellbeing is re-cast as the result of patient choices, not the quality of their health care or health care provider.

In some cases the rhetoric of patient empowerment seems more focused on emphasizing that the responsibility for the disease and its management rests with the patient than on the responsibility of the practitioner to involve the patient in his or her own care. An experienced nurse practitioner described the difference between a patient that was easy to treat and a patient that was difficult to treat in terms of their willingness to be empowered:
Well, the ones that are easier for me to work with are willing to get control of their diabetes, and they’re not defeated. The other ones are very…they’re not really motivated, and the world is horrible, and their life is horrible, and they just can’t get on top of it even though I again offered to be accessible. And then once you empower them, they still won’t do it.

(Nurse Practitioner)

Here “empowerment” seems little different from the familiar rhetoric of personal responsibility. Medical anthropologists have linked the emphasis on “self-care” in the treatment of type 2 diabetes in the U.S. with a peculiarly American capitalist logic of personal responsibility and consequences (Ferzacca 2000). The linking of self-discipline, individual-level responsibility, and health creates a powerful value system internalized by patients as well as professional practitioners, and this logic may actually produce, rather than destabilize, hybrid and “idiosyncratic” self-care regimes that medical professionals tend to label “non-compliant” (Ferzacca 2000). In the quote above, patient empowerment is cast as a responsibility rather than a right. This provider feels frustrated with patients who, even after she goes to great lengths to make herself accessible and “empower” them, refuse to cooperate with the management strategies she recommends. The statement, “Once you empower them, they still won’t do it,” betrays a sense that, at least in practice, patient empowerment approaches are founded on an assumption that patients are personally, morally responsible for their own illness and its eventual outcome.
As previously mentioned, this emphasis on self-management and responsibility in American clinical discourse on diabetes can serve to continually reassert the individual as the only unit of analysis that matters (Ferzacca 2000, Broom & Whittaker 2004). Biomedical perspectives on diabetes in the United States thus reify the concept of individual health, at the cost of relational or social conceptualizations of health more common among laypeople (Loewe & Freeman 2000). But is this really the nature of biomedical models, as some of the biomedicalization literature suggest? Or could it be particularly characteristic of American and Anglophone biomedical perspectives?

6.1.1.2 Multiple Strategies

The rejection of paternalism may have shifted a burden of responsibility to patients, but it does not mean that health providers have given up their medical authority. Rather, the shift to patient-centered practice simply means that health providers see themselves as professionals with limited, though serious, responsibility to their patients. Saying that patients must decide for themselves to manage their disease is not the same as saying that patients know better than providers how to manage their disease. Health professionals emphasize that they may have signed on to the patient empowerment approach, but they are still the professionals and the patients still the patients. Of course, occasionally patients need to be reminded:

I’m getting a little irritated with it. It’s been really bad in the last year, and I’m just saying, I said, “This is what I’ve gone to school for so that I know more than you do.” You’re coming here for our professional opinion—Not for us to say, “You’re right. You need to be on this
concoction on the Internet, and obviously these people on the Internet have figured out that this is the magic cure and we didn’t.”
(Nurse Practitioner)

Health professionals point out that patients may get faulty information from acquaintances, Internet advertising, or even celebrities like Oprah, and they are frustrated when patients privilege these non-expert sources.\(^{13}\)

Frustrations aside, many health providers working with type 2 diabetes patients find recourse to biomedical authority therapeutically useful. Many patients blame themselves for their condition, and just as many are blamed by those around them. The association with obesity only exacerbates the stigma of what some patients call “my-fault” diabetes.\(^{14}\) Sensitive health care providers recognize that many patients, especially female patients, are embarrassed by their condition and by the fact that they know they must lose weight in order to better manage their diabetes. Since most endocrinologists and nurse practitioners specializing in diabetes care agree that scaring and shaming patients into lifestyle changes does not work, they must be careful to show patients that they are not judging them for their lifestyles behaviors. Rather, they are offering professional advice.

It’s easy to sort of, I think, approach a weight loss discussion by offering these medical things. It takes away the stigma a little bit for people because what I’m saying is not “You look ugly” but— “I think this would

\(^{13}\) Oprah’s treatment of type 2 diabetes is the source of some difference of opinion. While a few of the health professionals were glad to see any awareness raising, others called it “judgmental” and “a disaster.”

\(^{14}\) “My-fault” diabetes is type 2 diabetes, as differentiated from “no-fault” or type 1 diabetes, an autoimmune condition unrelated to lifestyle factors.
be good for your health.” …I think one of the important things about obesity counseling and type 2 diabetes counseling is setting goals and writing them down and then giving people specific tasks like I want you to—I give prescriptions for things like “I want you to eat so and so calories a day” or I write them a prescription to cut down on sodas, and sometimes I feel like again like medicalizing it a little bit to try to take the stigma away—

(Endocrinologist)

This endocrinologist, rather idiosyncratically, actually writes lifestyle prescriptions for her patients. Doing so emphasizes two points with her patients. First, her recommendations for weight loss do not come from her personally believing her patient is unattractive or deficient in any way; they arise from her professional training as a doctor. She even makes a point of telling many of her female patients that they look beautiful just how they are, but that if they want to treat their diabetes then they need to start a weight loss plan. Explicitly separating personal evaluations from professional evaluations, and cosmetic evaluations from medical evaluations, helps her to cut through the shame and confusion many patients experience when confronted with weigh loss.

Second, writing prescriptions for lifestyle behavior lends gravity to daily behaviors that may otherwise seem unimportant to patients. Writing a prescription gives medical authority to the recommendation to cut out soda or walk to the mailbox three times per day. Without the prescription, patients are likely to believe that taking the oral medication for their type 2 diabetes is more important than walking to the mailbox. One of the ways the endocrinologist can signal to patients that diet and
exercise are as important as pharmacological interventions is by writing a prescription for one just as they would the other.

Just as providers sometimes play-act at giving paternalistic orders, they also consciously medicalize lifestyle recommendations.

Health care providers are pragmatic in the exam room, using a variety of strategies depending on the patient and context. They consciously perform multiple, seemingly contradictory forms of medical authority, sometimes over the course of a single encounter. Because they are results-oriented, they shift from one strategy to the next with little cognitive dissonance. This means that while most providers describe their practice as patient-centered and criticize outdated “paternalistic” approaches to the provider-patient relationship, they also use paternalistic strategies (though never scare tactics) when they think it will suit the patient. And while they may enlist ideas from patients and involve them in their own treatment to a degree that would have been considered quite radical only a few decades ago, they may also use the continuing high status of biomedicine to medicalize lifestyle recommendations by writing prescriptions.

6.1.1.3 Grim Expectations

Perhaps what is most striking about American providers’ discussions of diabetes in interviews is their overwhelming pessimism. Even as they described patient-centered “empowerment” approaches to patient care, the health care providers interviewed voiced relatively low expectations of their patients. Even as they say their approach in
the exam room is to be unrelentingly positive, in private they are often profoundly pessimistic. While Japanese physicians expect a high degree of self-discipline from their patients, and become concerned when they do not exhibit the expected degree of discipline, American practitioners repeatedly voice low expectations for significant subsets of their patient populations. Health providers say they remind themselves that “people who go to [the free clinic are usually] people who don’t search for opportunity themselves,” that “people just can’t count,” and that it is best to just “commend them on whatever they are able to do.”

There is some evidence supporting this lack of confidence in patients’ willingness or ability to follow medical advice. U.S.-based studies have shown that even when patients are asked to self-report on their own adherence to the simplest instructions from their providers—to take one oral medication once or twice a day—more than 15% say they do not consistently take their diabetes medications (Cerimagic 2004). But providers almost never refer to such studies in interviews to justify their lack of confidence in patients’ ability and subsequent low expectations.

Providers connect low expectations to sympathy with the difficulties of their patients. A primary care physician whose practice encompasses patients from a variety of socioeconomic backgrounds described how he controls his own expectations of his patients:

I try to remember especially for my patients who, like I said, whose social environment is a mess so any progress they would make would have to
be them completely going against the grain of everything they’ve ever known and everything going on in their life, and so I do feel a little bit, you know, I do feel kind of sorry for those people because, like I said, those people who have very limited food options it’s hard to imagine what kind of effort that would take to make that level of change.

(Primary Care Physician)

This provider’s low expectations do not grow from disdain or even from the empirical literature, but from his assessment that the economic and cultural environments of his patients do not support successful diabetes management. By and large, physicians, nurse practitioners, and other professionals that have chosen to focus on treating diabetes say they empathize with patients and recognize that many of their type 2 diabetes patients face serious challenges.

Some of the providers interviewed felt that low expectations were probably detrimental to successful outcomes, but confessed to holding low expectations privately even while treating patients as if their expectations were high.

I always like to give them the benefit of the doubt. If they’re initially diagnosed with diabetes, and they want to do no medication and do diet and exercise and lifestyle changes first, I’m okay with that, but it’s hard for me to believe that they’re going to control their diabetes with just lifestyle and exercise.

(Nurse Practitioner)

Even when providers want to believe in their patients, their body of experience makes it hard to suspend their disbelief for each new patient. Part of this is pessimism about the disease itself; providers tend to be surprisingly fatalistic about the course of type 2 diabetes.
It is easier to believe that some patients will bring their blood glucose under control than others, of course. Educated, organized, “type A” patients were routinely identified as the kind of patients who could be counted on to manage their diabetes with lifestyle interventions. Practitioners’ lowest expectations were of patients with less education, those facing economic challenges, and those who present with comorbid psychiatric conditions like depression. Little is expected of “Type B,” easygoing personalities who are seen as lacking a sense of urgency or discipline.

Many of the providers interviewed said they simply do not want to set expectations from which their patients may derive a further sense of failure. Sometimes they explicitly cited a low estimation of patient ability, but more commonly providers argued that lifestyle change is challenging—and that even if a patient successfully implements change, that may only be half the battle.

If you can monitor your blood sugar the way your provider asks you to do it, if you can take your insulin or your oral agents the way you’re supposed to, and you can eat reasonably and do what you’re supposed to do and add exercise... But you know? Some days your blood sugars are just going to beat to their own drum, and that’s because only 50% of diabetes are things we can really do something about. The other 50% are counterregulatory hormones and physiological processes, but we have no access to that hormone switch. And it would be very hard to do all the right things all the time.

(Registered Nurse, Certified Diabetes Educator)

Even when patients do all the right things, the most sympathetic providers pointed out, they have limited control over their bodies’ physiological processes. No matter what type 2 diabetes patients do, there will be days where their blood sugar is too high. No
matter what they do, eventually the disease will progress. This sense of pessimism has been noted in the few other accounts of providers’ diabetes explanatory models as well (Loewe & Freeman 2000). In the interviews collected for this dissertation, providers characterized type 2 diabetes as “very, very difficult” and even unmanageable.

This perception of diabetes as essentially outside the control of provider and patient alike has consequences in the exam room. In order to protect patients in some measure from the inevitable emotional fatigue of a chronic, progressive condition like diabetes, health care providers try to set and communicate what they consider to be “realistic” expectations to their patients. These are goals that they judge their patients capable of achieving, and from which they hope that particularly defeatist patients may derive a greater sense of self-efficacy and control. The goals that providers judge their patients capable of achieving are more often than not painfully modest: common examples included cutting down their sweet tea or soda consumption by one glass per day, and walking as far as the mailbox once a day.

Notably, the professionals interviewed said they hoped to cultivate a sense of control over diabetes by setting realistic expectations and attainable goals rather than by encouraging, for example, disciplined documentation on the part of the patient. While health providers said that calorie and carbohydrate counting are “really, really helpful” for patients if they are willing to keep food diaries, most did not ask their patients to do so. Instead, providers overwhelmingly preferred simple approaches deemed more
realistic because they do not require numeracy or documentation. “The best diet is whatever diet you can stick with and do,” explained one doctor. “One of the reasons I like [low carbohydrate diets] is they tend to have few very simple guiding principles rather than complicated calorie or carb counting in them… I like diets that are a little bit simpler to talk to people about.”

But these “realistic expectations” are premised on providers’ surprisingly fatalistic, pessimistic orientation toward the progression of type 2 diabetes. Providers use language that suggests hopelessness when they describe type 2 diabetes. Blood sugars are liable to “beat to their own drum,” it is “hard to believe” it can be controlled with lifestyle and exercise, and patients facing lifestyle change will find it “very, very difficult.” Many patients’ lives are characterized as “a mess,” change goes “against the grain of everything they have every known,” and their Type B personalities mean they “don’t search for opportunity themselves.” When providers see diabetes as unmanageable and their patients as unreliable managers, they settle for low expectations.

The end result is that the goals and strategies health care providers set for their patients are on a relatively small scale. They focus on small lifestyle changes—reducing soda consumption from three or four cans a day to two cans, replacing one drink a day with a diet alternative, walking to the mailbox once a day—rather than grand ones. Reasoning that something is better than nothing, they encourage patients to make small,
changes with small returns. They try to make simple recommendations that do not require patient numeracy, or even much in the way of cooperation from either the patient or the patient’s metabolic system. Grander, systemic life changes would certainly bring about greater returns, but they carry with them greater risk of failure.

6.1.1.4 Summary and Conclusions

I have argued in this section that U.S.-based providers working with type 2 diabetes patients are pragmatic in their approach to the provider-patient relationship. Because they are results-oriented rather than dogmatic, most physicians embrace the ideal of “patient-centered” medicine in interviews when speaking in the abstract, but when asked about concrete experiences and situations report a great deal of variation in their actual practice. Thus, while providers are without exception committed in theory to the idea of patient-centered medicine, they are usually ecumenical in practice. The same doctor may change his or her style of addressing and treating patients dramatically from patient to patient, or from context to context. Similarly, physicians self-consciously medicalize the idea of lifestyle change when they think that lending lifestyle change the weight of their own medical authority will motivate the patient.

I have also argued that the U.S.-based providers have notably low expectations of their patients, and that providers cite sympathy for the socioeconomic and metabolic challenges faced by many type 2 diabetes patients in the U.S. to explain their low expectations. Providers’ low expectations and pessimism contribute to a preference for
small, simple lifestyle changes in combination with medication rather than bold lifestyle change. Interestingly, while decades of health locus of control research has been conducted on *patients* and associated with poor health outcomes, little work has been done on the health locus of control of *doctors* and other health care providers. The fatalistic attitudes towards the progression of type 2 diabetes evidenced in the interviews here suggest that these providers believe the course of the disease to be primarily determined by forces outside their (and possibly their patients’) control. More research must be done on *providers’* health locus of control, and on whether or not providers are transmitting these attitudes to patients.

### 6.2 The Japan Case

It was 8:40am, and Dr. Saito and Nurse Kurosawa were ahead of schedule. Outpatient hours did not begin for another 20 minutes, and we had already reviewed the schedule for the day and checked the electronic medical records for the first appointment of the morning. For Dr. Saito, the petite internist in charge of the hospital’s new specialized type 2 diabetes clinic, this was a rare opportunity to relax during her workday, usually packed with morning outpatient hours, afternoon inpatient rounds, and a new diabetes education program.

Dr. Saito was not interested in relaxing. She checked her watch and looked at her nurse, an experienced woman at least 15 years her senior. “I wonder if there is time to visit the dialysis center?” she asked. She had been worried about a particular dialysis
patient all week, ever since Nurse Kurosawa told her that she had heard from the nurses staffing the dialysis center that he had been having difficulties with “self-management” (jiko kanri).

The three of us left the outpatient clinic. As we walked to the elevator bank, Dr. Saito explained the situation. There was some question as to whether or not the patient, Ichiro, should be admitted as an inpatient. He was undergoing dialysis and had a home nurse every morning to help him administer his insulin, which he was otherwise unable to manage himself. Even with these aids, however, Ichiro was not controlling (konntororu) his blood sugar. Nurses reported that he was known to eat lunch in the hospital dining hall after each dialysis treatment, where he would fill his coffee mug three-quarters of the way with coffee, then pour in creamer and sugar to the top. Further, since he lived alone, there was no way to enlist the help of a wife or daughter to manage his eating, drinking, and insulin. The best thing, Dr. Saito explained, might be to admit him so that he can spend more time at the hospital learning how to “manage” himself.

Arriving at the dialysis center, we met Ichiro. I had expected someone old or infirm to explain the inability to manage described by the nurses, but Ichiro was only late middle-aged, perfectly lucid, and did not appear physically infirm beyond the usual way that dialysis patients’ bodies seem tired. The visiting nurse, dialysis center nurses, and doctors had been keeping a handwritten notebook for him in a style akin to
inpatient charts, which a nurse brought over for Dr. Saito as she consulted with the patient.

Dr. Saito returned to the nurse’s station after a short chat with the patient. There, one of the nurses told her that another, more senior physician had also expressed concern about Ichiro’s behavior. After all, Ichiro would wander into the same dining hall used by the medical staff in order to find creamer. Dr. Saito nodded her head. It was decided; Ichiro would be admitted.

Approaching Ichiro’s bed, Dr. Saito reproached him for the repeated creamer incidents, using a formal speech register. The patient laughed nervously and looked down at his hands. She frowned at him. In a moment, Dr. Saito was back to her usual, cheerful demeanor. “Well, let’s admit you,” she said decisively. (“Dewa, nyuuin shimashou.”)

As we left Dr. Saito explained that Ichiro would be admitted for the sake of controlling his blood sugar, in part through diet. He would be encouraged to attend the diabetes classroom and possibly learn to better “manage” his blood sugar and lifestyle. I asked if he was being admitted for bad behavior. “Yes, I suppose so,” she replied. “It’s best to admit him because his behavior is making him more sick.”

The preceding anecdote is excerpted from field notes from the spring of 2009. The patient I call Ichiro was admitted as an inpatient explicitly because he was judged incapable of successfully managing his disease on his own, despite being literate,
articulate, and not suffering from any known dementia or mental disorder. With advanced type 2 diabetes and renal failure, his careless consumption of calories was dangerous. If he was drinking his coffee with cream and sugar in front of doctors, what was he doing at home?

Some aspects of the creamer incident seem to illustrate a paternalistic model of the provider-patient relationship. But it is not quite the paternalism of generations past that led Japanese physicians to hide terminal diagnoses from patients, or speak to them in registers usually reserved for children and subordinates (Ohnuki-Tierney 1984). Dr. Saito, after all, spoke to Ichiro politely, and enlisted Ichiro’s cooperation in the decision by using “let’s” (shimashou). And Dr. Saito is a young woman, while her patient is an older man—a reversal that upsets the usual gender pattern of traditional medical practice in Japan, where until very recently nearly all internists were men.

There is another notable difference between this interaction and the patient-provider interactions described in the preceding section. Dr. Saito acts on the basic belief that, although her patient is experiencing acute renal failure and demonstrates little interest in “managing” his own health, it is nonetheless possible to bring his condition under control and perhaps even train him to control it himself. Concluding that her patient is unable to bring his condition under control with self-management, she resolves to manage his condition on his behalf. Rather than concluding that she can only
help those who help themselves, she concludes that it is her and the hospital’s responsibility to manage his condition, which includes managing his behavior.

6.2.1 Models of Authority in the Japanese Exam Room

In the next three sections, I will examine the mechanics of medical authority in provider-patient interactions through exam room observations and interviews with doctors and patients. Like the American providers, Japanese providers described their efforts to shift away from a paternalistic style of medical practice that they perceive to be outdated, taking instead a patient-centered approach that emphasizes respect and patient autonomy. But, again like the American respondents, Japanese providers approach their own medical authority pragmatically, relying on the high social status of biomedicine and play-acting at old fashioned paternalistic medical practice when they believe it will be therapeutically effective for a particular patient. Finally, and in sharp contrast to the attitudes evidenced by the American providers, Japanese physicians and nurses display remarkably high expectations of their type 2 diabetes patients and optimism about the course of the disease for most patients. While they acknowledge that the degree of self-discipline required to self-manage type 2 diabetes over the long term is extraordinarily high, they demand that discipline from most patients as a matter of course.

While the previous two chapters relied primarily on interview data, this section also relies on ethnographic observations made in Japanese exam rooms at several health
care institutions during 11 months of fieldwork from 2008 to 2009. The primary site considered here is a suburban private hospital with a successful and popular outpatient internal medicine department. I was permitted to shadow physicians and nurses during outpatient as well as inpatient exams at the hospital three 10-hour shifts per week, as well as to participate in the diabetes education curriculum, attend weekly all-hospital assemblies, attend weekly medical staff meetings, shadow dialysis center staff, and share a group office with the full-time medical doctors on staff.

There are notable differences in the context in which Japanese physicians, nurses, and nutritionists work compared to their American counterparts. As mentioned above, the professional mix of health care providers treating patients with type 2 diabetes varies. In Japan, physicians treat most patients themselves. Nurses have almost no autonomy, the professional category of nurse practitioner is absent, and while there are around 12,000 certified diabetes educators in the entire country (Kawaguchi 2007), no one at my primary field site was certified. (There are shortages of diabetes educators in both the U.S. and Japan; the United States, with a population more than twice that of Japan, has around 30,000 diabetes educators, only around half of whom are certified.\(^\text{15}\))

There are also significant differences across regions, prefectures, and hospitals within Japan. The private suburban hospital I mention in this chapter, for example, took

\(^{15}\) See the American Association of Diabetes Educators Face Sheet available online: http://www.diabeteseducator.org/DiabetesEducation/Fact_Sheets.html Accessed 1/11/2011.
many saishin patients. Saishin means simply “return visit,” but those referred to as saishin patients are those with a chronic condition who visit a particular doctor on a regular schedule—once every other month, once a month, or even once a week. They typically have a standing appointment with their physician on the same day and time, and so doctor and patient become a regular part of one another’s lives. Even if most of these appointments are cursory, 5-minute interactions in which the physician renews a prescription and chats briefly with the patient, they build trust and familiarity. One physician I shadowed at the suburban hospital estimated that he saw nearly 80 saishin patients in an average week, at least half of his total caseload.

At the urban welfare hospital less than 30 minutes away, on the other hand, set saishin visits were less common and spaced further apart. Physicians in the diabetes clinic there emphasized that they were simply too busy to see patients so frequently, though they agreed that the practice of “checking in” for a 5-minute appointment was probably helpful. Instead of having a regular saishin appointment every month, patients scheduled their next visit anew at the end of their appointment, usually for 4 to 8 weeks later. Even at the urban welfare hospital, patients successfully managing type 2 diabetes were seen by a provider approximately once in every two months.

6.2.1.1 From Ordering to Exhorting

Japanese bioethicists have long argued that the Japanese model of medical authority is qualitatively different from the American model (Hoshino 1997). But young
Japanese physicians, like their American counterparts, argue that the old medical culture has largely faded. Japanese providers described their efforts to shift away from a paternalistic style of medical practice that they perceive to be outdated, taking instead a patient-centered approach that emphasizes respect and patient autonomy. Dr. Saito, the same physician who admitted Ichiro, once commented between exams that the “style” of Japanese medicine was once rather authoritarian. “The style of medicine was ‘Do this’ (shi nasai),” she said in a gruff voice, imitating the tone of an older, male doctor. Patients were to respond, “‘yes sir’ (sou shimasu),” she said, her tone softening and rising as she imitated the imaginary patient of the past. Nowadays, she argued, a new generation of physicians had been able to change that culture for the most part.

The most obvious evidence for this change is in the language health care providers use during interactions with patients. The new language of the exam room exhorts rather than orders. Younger physicians make suggestions to their patients with varying degrees of vigor, and almost never use the ~shinasai form to tell patients what to do. Dr. Saito and her colleagues frequently praised patients for making progress by losing weight or controlling their blood sugar, or simply maintaining an acceptable status quo. This mirrors the best practices accepted in the United States for coaching patients with chronic disease. While the Japanese providers offer far more concrete recommendations and demand a greater degree of discipline from their patients, as will be discussed below, they also elicit ideas from patients in order to involve them in their
own treatment and tailor recommendations, just like the American providers. When a patient faltered or failed to meet the goals of a previous action plan, Dr. Saito would acknowledge the failure in concerned murmurs, then exhort the patient to help come up with a new plan: “Well, let’s all think together!” (Sa, minna de isshou ni kangaemashou.)

At the suburban hospital, respect for the patient is paramount—and the use of appropriately respectful and friendly language is considered central to expressing this respect. All hospital employees are issued a staff handbook covering topics ranging from patient rights and disaster level designations to acceptable lipstick shades and appropriate greetings. The handbook instructs all hospital staff, including physicians, to adopt the demeanor of staff at an upscale hotel or Tokyo department store in all interactions with patients. Medicine, it reminds hospital staff, is a service industry. And like other service industries, hospital staff must strive to use correct, formal, and respectful language in their encounters with patients. The 57-page handbook even classifies the most common types of interactions and offers guidelines as to what greetings and language should be used in each context.

An entire section is dedicated to polite interactions with visitors on elevators, for example. Hospital staff are expected to hold the elevator for patients and visitors, engage in polite conversation without speaking about themselves personally,¹-six announce each floor as the elevator stops, then hold the door open and offer directions to

¹-six Not speaking about oneself personally is a point of etiquette and not a security measure.
disembarking patients. When they reach their own floor, they are to verbally apologize for exiting before any remaining patients: “Excuse me for leaving ahead of you.” (“Osaki ni shitsurei shimasu.”) It is not surprising that clinic staff at the suburban hospital chose to use the stairs to travel between the outpatient exam rooms and the dialysis center, despite their being 5 floors apart.

All new staff must engage in role-plays and self-quizzes designed to insure that they speak to patients in the same formal, respectful register used to speak to superiors or honored clients. Basic handbook rules for patient interaction include:

目标にして道は会釈する。
When you meet [a patient], bow.
挨拶を欠かさない。
Don’t neglect appropriate greetings.
患者様のお顔とお名前は出来るだけ早く覚える。
Learn patients’ names and faces as quickly as you can.
言葉使いは“です”“ます”調で話す。
Use -desu and -masu form when you speak.\(^\text{17}\)
どんなに忙しくとも、柔らかい、女性らしい応対に心がける。
No matter how busy you are, make an effort to be gentle and womanly.
患者様の苦情にはまず、“申し訳ございません”と詫びしてから、具体的にお答えする。直接に反論は絶対にしないこと。
When a patient has a complaint, first formally apologize by saying “I’m so sorry; there is no excuse,” and then respond in a concrete manner. As a general rule, never argue with a patient.

\(^\text{17}\) This refers to a formal verb form used in polite speech.
More than half of the basic rules outlined in the handbook pertain to appropriate speech registers and verbal etiquette with patients.

Public daily behavior in and around the outpatient clinics of the hospital largely conforms to these written rules. Rules about politely greeting patients and colleagues in public areas are particularly strictly observed. Anyone who is not obviously a hospital employee is wished a good morning, afternoon, or evening. Fellow hospital staff—even total strangers—unfailingly exchange singsong set phrases thanking one another for their hard work. Hallway interactions with patients were kept friendly, but formal. The only handbook rules obviously violated on a regular basis are those pertaining to receiving traditional “thank-you” gifts from patients, the acceptance of which remained common among the older generation of physicians. The majority of the rules laid out in the handbook, though, have become workplace norms enforced by habit, peer pressure, and a never-ending series of staff meetings.\(^\text{18}\)

Of course, it is one thing for medical clerks and nurses to behave like service industry employees, and another for doctors, who have traditionally occupied one of the highest status professional categories in Japan (Long 1987, Jansen 2000). In the section of the handbook aimed at doctors, the importance of a service mindset is reiterated, as if to

\(^\text{18}\) These rules applied equally to the resident foreign researcher. On my first day of participant observation at the first floor reception desk I turned my back away from the patient counter for a moment to file something, only to be immediately reprimanded. A medical clerk modeled the proper way to file papers without ever showing my back to a patient. Gradually I learned to keep my hips angled toward the counter that a patient might approach while turning my torso eighty degrees toward the file cabinet. At lunch, the medical clerks joked that the practice would eventually make the muscles in one’s back uneven.
remind physicians that, unlike in previous eras, the general staff rules apply to them as well. The third article in the section on the hospital doctors’ basic responsibilities reads,

3. We humbly ask that you avoid a hierarchical atmosphere or behaving as if you are bestowing treatment upon patients in doctor-patient relationships. In particular, be careful in your attitude toward patients and in the way you speak to them. Please recognize that medicine is increasingly a service industry, and keep this in mind during examinations. Please familiarize yourself with this hospital’s patient bill of rights.

The handbook goes on to remind the medical doctors on staff that “the relationship between medical doctors and co-medicals is also changing” and that doctors must shift their attitude towards their own practice in order to effectively practice “team medicine.” The doctors on staff are asked to exercise “leadership” (riidashiipu) as the hospital works to shift to a team approach. At weekly all-hospital meetings and doctors’ meetings, the hospital president and founder—an oncologist—repeatedly emphasized the basic goal of creating an atmosphere in which patients could feel comfortable and in control, and in which co-medicals could contribute their expertise and professional opinions without intimidation.

All this emphasis on respectful language and the self-conscious rejection of the old fashioned power dynamic between patient and provider suggests that there is
continuing angst over the degree to which Japanese physicians have really been able to shift to patient-centered and team approaches. While Japanese providers were intensely critical of the organization and financial state of the U.S. health care system, they spoke admiringly of American leadership in developing patient-oriented and team-based practice models. In contrast, they portrayed Japan as working hard to adopt these approaches rather than fostering them independent of the American model.

Informally, Japanese providers pointed out that many patients do not want a “patient-centered” exam room experience. Being asked to participate in setting their own goals and recommendations—even being spoken to as if they are customers rather than supplicants—erodes patient trust in the medical authority of their physician. There is some evidence from interviews with patients that this is an accurate assessment.

Several lay respondents explained that they are unnerved by the style of younger physicians who ask patients what they want to do. Rather than feeling empowered, these respondents were simply left with the sense that their providers did not know what they were doing or that it did not matter what approach was chosen.19

Dr. Saito and others cautioned that the best approach depends on the patient, and often patients simply prefer the old paternal style:

19 See interview 090724 for example.
In Japan, there are still quite a lot of people who like their doctor to order them, “Do this.” I think the majority of older patients feel this way. And then fairly young people—people in their 20s, for example, and people who are fairly intelligent—have recently been looking up things on the internet and coming in wanting to take a particular treatment approach or with questions about the efficacy of a particular medication. And then there are plenty of others who are just the opposite and have absolutely no idea about anything, so they want their doctor to make the decision for them.

Endocrinologist, private hospital

Like the American providers, Japanese providers argue that “some patients want to be told what to do.” They evaluate which patients will respond to orders and which will respond to cheerleading, which patients want to be given strict instructions and which want to participate in discussions with their provider about the best course of action. In a single morning, the same physician may engage with one patient according to contemporary handbook protocols and the next with the gruffness stereotypical of the previous generation.

Finally, deviation from polite discourse and the handbook version of respect for patients does not always mean gruffness. Often, using informal language and speaking to patients in “short” registers is a way of establishing or acknowledging rapport. Long inpatient stays, for example, foster a very familiar relationship between nurse and
patient. One ward nurse explained during rounds that while they will start out using formal Japanese and family names with patients (and potentially their families as well), with time and necessity they will move to a first name, casual communication style. This means referring to patients as –chan (a suffix usually reserved for children and young subordinate, but indicating a friendly relationship,) speaking to them in simple short form, and often using Okayama dialect. The nurse explained that these help foster communication between nurse and patient, who sometimes only respond to simple, non-polite form Japanese. Keigo (respectful language) in particular may be hard for them to understand—or, as the nurse put it, “pretty Japanese might be hard to understand.” Using short form and Okayama dialect is easier for the patient to understand, more comfortable, and more natural feeling.20

Much like their American counterparts, Japanese physicians tell the story of a shift from paternal to patient-centered medical practice. But where American providers focus on the responsibility of patients, Japanese providers focus on respect for patients.

6.2.1.2 Medical Authority in the New Japan

Japanese providers approach their own medical authority pragmatically, relying on the high social status of biomedicine and play-acting at old-fashioned paternalistic medical practice when they believe it will be therapeutically effective for a particular patient. While they may believe in theory in building a Japanese medical community

20 Field journal, 12/03/2008.
that has moved beyond “hierarchical relationships” between providers and patients, like U.S.-based health care providers they are results-oriented when it comes to their actual practices in the exam room. If behaving like a service industry employee according to handbook rules gets results, they are satisfied—but when it does not, most shift to other approaches. Japanese providers are as ecumenical in their approaches to patient interactions as their American counterparts.

Also much like American health care providers, Japanese physicians use medicalization as a tool to help encourage positive patient behaviors. Physicians reported using the same “exercise prescription” strategy, for example, to make lifestyle recommendations seem more serious or concrete to their patients:

 Basically, I calculate based on the amount of physical exercise. I calculate their METs (metabolic equivalent) and give them an exercise prescription. What is an exercise prescription? It’s when you write a prescription for exercise. So having concretely calculated what is needed, I tell them specifically to do so much and to reduce calories so much. But really, even though I give it to the patient like that, the recommendations are extremely broad.
(Internist, private hospital)

This is precisely the same approach used by the American endocrinologist quoted earlier, if a bit more numerically demanding. Writing prescriptions for otherwise abstract lifestyle changes both makes them more concrete and lends an air of medical authority.
Treating lifestyle change like a medical intervention gives it gravity, and gives patients faith that it might actually work.

In general, Japanese physicians expressed tolerance for patients’ use of alternative medicines, including Chinese medicine, supplements purchased online, massage, moxibustion, and religious practices so long as they were able to check ingredients on any consumable medicines. Their greatest concerns revolved around the production of supplements and Chinese medicines in China, where the risk of contamination is perceived to be high.21

Japanese providers are less harsh on this point than their American counterparts, and in interviews almost universally regarded the growth of health information on the Internet as a positive development. A female internist with a large number of type 2 diabetes patients explained that in many ways the Internet improved public awareness of type 2 diabetes,

All of my patients [with diabetes] know a lot about it [by the time I explain it.] In particular, the Internet has raised consciousness of the disease. There are people on the Internet who know a lot about diabetes, and people who don’t know anything—that’s a trend everywhere, I think. But for doctors as well as regular people, researching on the Internet can help us understand a lot.

This physician recognizes that not all of the information available to patients on the Internet is accurate, but she seems to trust her patients to discern. More remarkably, she sees the Internet as a tool for medical professionals, most of whom do not have as much experience treating patients with type 2 diabetes as she does. Patients and professionals alike should “study” the diabetes epidemic in whatever way they can, she argues, and the Internet makes that easier:

A lot of people study privately. Anybody can do that on the Internet whenever they want. This is an era where people, especially young people, can do practically anything on their cell phones.

With 100 million users in a country of only 127 million people, the use of technologically advanced smartphones in Japan is widespread, and the devices, called keitai barely resemble American devices (Tabuchi 2009). Most are long, rectangular, clamshell-shaped devices with large screens that users, especially people under 40, use to access the Internet. Approximately 71% of Japanese Internet users report that they access the Internet with their cellular phone (Ministry of Public Management 2004, 2005).

Japanese physicians reserved most of their ire in interviews not for patients, but for government meddling in medical affairs. Some physicians complained that the
traditional doctor-patient relationship has been gradually undermined by the growth of
the nanny state:

These legal judgments. [Looking out window in disgust.] It’s the same for
medicine. So now medicine, more than wanting to protect human life, is
trying to protect itself from losing in the courts and thus produces all
sorts of warnings. But they’re completely meaningless.
(Anesthesiologist, private hospital)

Where once doctor and patient enjoyed a relationship with clear responsibilities to one
another, now that relationship is increasingly mediated by the state. Doctors’
responsibility becomes not to the preservation of life, but to the preservation of his own
career by following the letter of the law and offering useless warnings and platitudes to
patients.

In their use of medicalization as a motivation strategy, evaluation of internet
health information, and irritation with an increasingly legalistic and litigious health care
system, physicians vacillate between wanting medical knowledge to be more open and
wanting to maintain their traditional status and authority. In this sense, they are very
similar to their American counterparts, who expressed similar worries over the erosion
of their professional authority.
6.2.1.3 Great Expectations and the Meaning of Care

Moving away from paternalism has not meant that Japanese medical practice more closely resembles American practice. Notably, Japanese physicians still ask for a level of discipline from patients that is relatively unusual in the United States. In contrast to American practitioners’ low expectations of their type 2 diabetes patients, Japanese physicians typically embrace high expectations of all their patients.

The difference in expectations about patient ability and the very possibility of controlling type 2 diabetes can lead to very different advice in the exam room. While American endocrinologists report relying on the simplest possible diet advice and encouraging patients to make miniscule changes to their daily lives, Japanese physicians ask them to make bold, time-consuming changes. A well-regarded endocrinologist at one of the most prestigious medical centers in the region described his approach to working with newly diagnosed type 2 diabetes patients:

ええ。あの～まあ食事療法が、まあ、運動療法より食事療法の起用が高い。まあ、85％が食事療法によるということと、後はやっぱり、あの～、なかなかですね、あのこうしようと言ってもなかなか守ってくれないので、あの～、私良くやってるのは、体重を1日4回体重を計って見替えつつ、グラフにして見替え、それを見て、もう後は患者さんが、どう感じることか、自分で健康を、あの～管理して見ようという、いわゆるセルフコントロールっていう。まあ、そういうプログラムじゃないと難しいと思っていますので、私からは体重を付けて下さないとしか言わないんですけれどね。それを見て、どう判断して、どういう風に改善するかは、まあ、患者に任せます。

Ah, well. I promote the dietary approach to treatment more than the exercise approach. I’d say that it’s about 85% diet... but, of course, it’s hard. Even though we say, ‘Ok, let’s do this,” it’s hard for them to stick to it for me. Um, what I do a lot is tell people to weigh themselves 4 times
per day and record the result. Then graph the results and look at them. Then the patient can think about how it makes them feel. For your own health, self-management—self control—if you don’t have that kind of program then I think it’s hard. So I just ask them to please set themselves to a particular body weight. We look at their body weight, see how it measures up, and see how to improve it… Well, that I entrust to the patient.
(Endocrinologist, National Medical Center)

In many ways this is similar advice to what health care providers in the U.S. sample report. But this endocrinologist’s assumption that asking patients to weigh themselves four times a day and to actually graph the results is reasonable stands in sharp contrast to American practitioners’ ideas about the limitations of their patients.

Many physicians ask patients with type 2 diabetes to keep small notebooks for tracking nutritional intake and, if necessary, use of oral medications, blood glucose readings, and insulin use. Called jiko kanri noto (self-management notebook; self-discipline notebook), the booklets contain empty grids to guide patients in calculating their caloric intake and physical activity throughout the day. Patients bring the booklets to appointments, giving the physician a better sense of how well the patient manages his or her own lifestyle.

The reliance on patient discipline and general high expectations of patient participation—or at least cooperation—is common across the Japanese health care system. While physicians and other hospital staff complained in interviews that patients leave too much up to their physicians and thus use medical services for frivolous things,
the basic expectations of patients are high. The private hospital’s approach to medical records demonstrates this. All patient records are kept as electronic medical records, called an electronic carte, but individual patients are also issued a small, passport-sized booklet called a mini-carte. This booklet contains summaries of all their medical records and hospital visits, outpatient or inpatient. After each visit, an entry is pasted in by hand, and the patient brings the record home. If they visit another clinic or hospital or find themselves in an emergency medical situation, they can immediately present their health records to the new hospital.

According to the reception desk staff who check in all outpatients and check to make sure they have their necessary documents, patients take good care of their mini-carte, don’t lose them, and generally remember to bring them—patients treat the carte as “precious” (大切なものです). Indeed, over the course of three mornings, during which I observed more than 600 outpatients being processed, I only witnessed one patient who had forgotten her carte. In contrast, patients routinely forgot their insurance cards.

The mini-carte system is unusual in Japan, and was not used at most of the other institutions I visited. It is so time-consuming for the nurses who must help prepare the summaries that it is inconceivable that the system could have been used at the busier urban welfare hospital. But the fact that the suburban hospital successfully implemented the system and that the overwhelming majority of outpatients manage to bring their mini-carte to every visit is telling. Expectations of the general outpatient
population are high, and these expectations are more or less met by the majority of regular patients.

The population of patients that continually fall short of expectations is easy to identify: unmarried men living alone. Providers note privately that these patients’ “loose” personalities mean that they never settled down with a wife to take care of them, and that they probably enjoy alcohol too frequently. While physicians, social workers, and nurses treat them with the utmost respect in interactions, they acknowledge amongst themselves that these irresponsible personalities probably cannot be expected to properly manage a chronic condition like diabetes.

But without the rhetoric of ‘choosing to be healthy’ embraced by their American counterparts, Japanese physicians take a more active role in bringing their “loose” patients up to speed. Where the American providers emphasize patient responsibility, Japanese providers emphasize their own responsibility in managing the disease. Sometimes this active role leads them to take actions that would be nearly unthinkable in an American context, like admitting a patient not in immediate physiological danger to the hospital because he is considered too undisciplined to successfully manage his diabetes. In other cases, the differences are subtler. Patients judged less capable of discipline are scheduled for appointments more frequently, sent to meet with the clinical social worker, and even weighed more often. (Normally saishin patients at the suburban hospital are trusted to self-report their own body weight when they arrive for exams,
since they are expected to check for themselves frequently. This trust is not extended to those patients judged to have self-management problems.) Thus higher expectations of patients in general lead directly to more intensive attention to those patients who do not meet the expectations surrounding self-management.

The development of a capacity for discipline and self-management is considered more critical for long-term success than simply being prescribed oral or injectable medication. Thus in exam room interactions, physicians and nurses emphasized the “eating treatment” for type 2 diabetes above the use of oral medication or injected insulin. While they acknowledged in interviews and conversations that this approach demanded much more of the patient, they pointed out that it was also much easier on the patient’s body to enact difficult lifestyle changes than to simply treat to failure with medication. Nurse Kurosawa, a diabetes clinic nurse with 25 years of experience, explained,

> お薬だけ、あの、お薬を飲まれる方のみであればやはり、そのお薬に頼るのではなくって、えー、食事がまず基本だと、いう事を一番よく言っておかないと、結構飲み薬を飲むと「あ、これで私は大丈夫」という安心感がでちゃうんですよね。

> Medicine only... If you look at patients who are able to take oral medication, we tell them they can’t just rely on the medicine. Eating is first and fundamental. They take medicine and they think, “Ah, now I’m ok.” They feel relieved [and it is a bad thing.]

(Outpatient clinic nurse, private suburban hospital)
It is best, then, to hold off on any kind of medication as long as possible. This encourages patients to work on their eating habits, which are the real key to managing type 2 diabetes over the long term. Otherwise, they may let their guard down.

Still, Japanese providers point out in interviews that lifestyle change is not easy. Like the American providers interviewed, Japanese physicians say that the hardest thing to explain to patients is that they will have to work to control their blood sugar for the rest of their lives:

There are, of course, difficult cases where I need to keep explaining things. There are patients who have been admitted to the hospital and think that if they do their best for a short time they’re cured. But that’s not so. A disease is a disease, but this is a condition. So if the patient improves their eating and exercise habits, their blood glucose seems to drop easily. But it will rise just as easily as soon as they eat sweets. Telling them that [just because their blood sugar is under control] doesn’t mean that their disease is cured… I explain it, but I really wonder if it gets through to them.

(Diabetes specialist endocrinologist, National Medical Center/ University Medical Center)

Like the providers interviewed in the U.S., Japanese physicians recognize that type 2 diabetes is a particularly, peculiarly difficult diagnosis. Patients in both countries expect to be able to take a pill and be cured, or work hard at lifestyle change for a while and be
cured. But there is no diabetes cure, only diabetes management. And diabetes management requires permanent, radical lifestyle change for most patients in both countries—a prospect that it no easier for Japanese patients than it is for their counterparts in the United States.

However, Japanese providers use much more positive language to describe the possibility of controlling diabetes than American providers. Diabetes is characterized as “85% diet” and the parameters of managing the condition can be “calculated” for patients. Self-management is “entrusted” to patients and their families, who are praised when they “do their best” and characterized as capable. When they do not prove capable, physicians actively attempt to control the condition on their behalf, though in ways that would seem intrusive in an American context.

Japanese patients are not intrinsically more disciplined than American patients. But their efforts to understand and manage their disease take place in a cultural and institutional context that may support lifestyle change more consistently. The level of discipline Japanese providers expect of their patients is easier to support and, in some cases, enforce than in the U.S. thanks to a much higher frequency of patient contact. For example, when asked how patients react to initial diagnoses of type 2 diabetes, Japanese physicians pointed out that most patients know that the diagnosis is coming for five years or more. Yearly, free physicals provided for in Japanese law and required of workers for most large companies mean that most patients know from an early point
that they are developing impaired glucose tolerance (IGT) that could eventually lead to type 2 diabetes. By the time most patients are diagnosed with type 2 diabetes, the word ‘diabetes’ is familiar. And once they are diagnosed, they can expect to be seen by a physician several times a year. In contrast, American providers estimate that the average type 2 diabetes patient in the U.S. lives with the condition for approximately 7 years before finally being diagnosed. According to Organization for Economic Co-operation and Development (OECD) data, Japanese see their doctor 13.4 times per year on average; Americans see a doctor fewer than 4 times a year.

Further, admitting patients for the sake of education or preparation like Dr. Saito did for Ichiro is not unusual in Japan. Usually, patients are admitted not because they have misbehaved in some way, but because it is thought to be the best way to train them to perform the tasks associated with managing their diabetes. At the urban welfare hospital, a small ward was set up just for patients learning to administer insulin or, less commonly, home dialysis. Patients are admitted and supervised for 5 days when they first begin using insulin. In contrast, most patients at American medical centers receive less than an hour of outpatient instruction from a nurse practitioner before they are sent home with insulin.

Frequency of patient contact and the occasional hospital stay are important for vulnerable populations because the severity of type 2 diabetes is not usually evident to patients until it is too late. Diabetes mellitus develops over months and years with no
pain or obvious symptoms before resulting in serious complications. As more than one nurse put it, diabetes simply “doesn’t hurt enough.” Patients require professional attention not only for an accurate diagnosis, but also for a reasonably accurate assessment of the disease’s progression.

### 6.2.1.4 Summary and Conclusions

I have argued in this section that Japanese physicians, like U.S.-based health care providers, are pragmatic in their approach to the provider-patient relationship. Because they are results-oriented rather than dogmatic, most physicians embrace the ideal of “patient-centered” medicine in interviews, hospital meetings, and formal encounters, but behave in very different ways in the exam room. The same doctor may change his or her style of addressing and treating patients dramatically from patient to patient, sometimes in the span of only a few minutes. Similarly, physicians self-consciously medicalize the idea of lifestyle change when they think that lending lifestyle change the weight of their own medical authority will motivate the patient.

I have also argued that Japanese physicians, in interviews as well as in their actual interactions with patients in exam rooms, evidence a greater degree of trust and higher expectations of their patients than American providers. They are more optimistic about the possibility of controlling diabetes over the long term and about patients chances at good health. This seemingly small difference leads to major differences in the exam room, from physicians’ preference for lifestyle-based treatments over medication
to the justification of what would otherwise seem to be patronizing treatment of “undisciplined” patients.

6.3 Professional Strategies Across Cultures

Despite differences, health care providers in the U.S. and Japan approach encounters with patients in a number of remarkably similar ways. Practitioners in both countries take a pragmatic approach to negotiating with patients. Practitioners in both countries recognize the power of medicalizing lifestyle recommendations when they explain treatment options to patients, self-consciously relying on medical authority to “sell” behavioral changes to some patients. This chapter, then, is partially about similarity—that despite major institutional differences and patient mixes, health care providers in the U.S. and Japan employ a similar spectrum of strategies.

But there is one difference between exam room strategies with important consequences for management of the type 2 diabetes epidemic in each country: expectations. While American providers are fatalistic and even pessimistic about the possibility of controlling diabetes, Japanese providers are relatively optimistic. While American health care providers in the sample report self-consciously monitoring and depressing their expectations of patients, Japanese providers embrace expectations of their patients that seem almost unreasonably high. One might think that Japanese physicians would give their patients a break, since unlike the majority of U.S.-based respondents, the majority of Japan-based physicians in this study reported that they
either had type 2 diabetes themselves, had impaired glucose tolerance, or were worried about getting type 2 diabetes. But Japanese physicians consistently evidenced higher expectations of their patients in interviews as well as in practice, with consequences for patient care.

An American teacher once commented that the first rule of teaching well was to maintain unreasonably high expectations of students. Otherwise, the first thing a new teacher teaches their students is that they cannot possibly learn. It is not hard to extend this lesson to the exam room. Japanese physicians may risk overestimating their patients, but they rarely risk underestimating them. American providers protect their patients from the psychological risks associated with attempting bold lifestyle changes, but they risk affirming patient assumptions that real change is impossible and that their condition is not within their control.
7. In the Home: Explanatory Models in Everyday Practice

This chapter examines private experiences of diabetes in Japan, relying on interview and ethnographic data collected in Okayama, Japan. In Chapter 5, I argued that the diabetes epidemic in Japan is cast as a morality tale about the nature of Japanese identity, mirroring a popular and intellectual trend that stretches back at least as far as Japan’s modernization period. This narrative emphasizes the particularity of diabetes risk to the Japanese body in contemporary, globalized Japan. Lay participants employing this narrative argue, in effect, that the Japanese body is uniquely hyperadapted to Japanese culture, and that it becomes imbalanced and polluted by foods and practices that are not “Japanese.” While non-Japanese foods are perceived as suitable for foreigners, they are described as unsuitable for Japanese. Physicians and diabetes educators participate in and reinforce this explanatory mechanism by emphasizing an evolutionary explanation for high diabetes risk in the Japanese population.

But this narrative emerges when respondents are asked about the diabetes epidemic, not their personal experience with type 2 diabetes. When asked instead about daily preventative practices, personal worries, and causal theories to explain their own illness or the illness of someone close to them, participants articulate explanatory models centered on the disruption of healthy, ordered rhythms. When the level is shifted from the population to the personal, explanations shift as well.
When discussing personal health philosophies and explanations of their own personal health and illness, Japanese interview participants first associated health with having an order or rhythm to one’s life. Observing regular, unchanging hours for core activities like waking, eating, and bathing were identified as key to a healthy life. Type 2 diabetes patients in the sample articulated a similar causal understanding of the relationship between living an ordered life and maintaining health as other respondents. Or, rather, patients pointed to a relationship between living or having lived an “unordered” life and the onset of their illness.

But the responsibility for this temporal maintenance falls largely on women: women work to organize loved ones’ time into a healthy, regular rhythm. And gender played an even clearer role in the illness experiences of type 2 diabetes patients and their families. Male patients described worry over their condition, but offered few causal narratives. The wives, daughters, and sisters of male patients, however, often offered explanatory models on behalf of their loved one.

Finally, the majority of Japanese physicians interviewed said that they personally worried about developing type 2 diabetes. This stands in sharp contrast to the sample of American health care providers, only one of whom expressed concern. Most physicians reported a sense of inadequacy at reducing their personal risk of diabetes and other types of illness by living an “ordered” life, which they felt was out of the question given their professional obligations.
7.1 Private Experiences of Health and Illness in Japan

The Japanese medical professionals discussed in Chapter 5 took a pragmatic, flexible approach to handling patients in the exam room. But their discussions of their philosophy of treating patients and their actual practices in the exam room also revealed a key difference from their U.S.-based counterparts: the Japan-based health care providers demonstrated higher expectations of their type 2 diabetes patients’ ability to enact dramatic lifestyle change and demanded a greater degree of discipline from those patients.

When asked to talk about the nature of health, laypeople and health care providers alike emphasized imposing order and regulation on the body as a general route to wellness. Patients with a type 2 diabetes diagnosis, lay people who worried about getting diabetes or some other lifestyle disease, and people who expressed no worry about facing chronic disease themselves mostly agreed on one thing: the ordered life can maintain health, while the disordered life leads to illness.

This section will first discuss the model of the “ordered life” that respondents associated with health, and then the narratives about disorder type 2 diabetes patients offered when asked why they thought they developed type 2 diabetes. Finally, the discussion will turn to the particular private experiences of Japanese physicians, who experience higher rates of type 2 diabetes than their American counterparts and are more likely to report personal worries about the disease.
7.1.1 The Ordered Life and Classification of Time

When asked, “In general, what is the best way to stay healthy?” most lay respondents described an “ordered” life, or a life according to rules. These respondents described the ordered life in one of two ways. The most common responses were “kisoku tadashii seikatsu” or “kisokutekina seikatsu,” phrases with only minor differences in meaning. The former, literally “rule – correct – lifestyle,” suggests “orderly” or “clocklike.” The latter, literally “rule-like lifestyle,” is closer to “regular” or “regulated.” For the purposes of this chapter, I will treat them as synonymous in meaning and translate them both to mean “orderly.” The remainder of respondents provided concrete descriptions or examples of healthy lifestyles that accorded with this emphasis on regulation, explicit rules, an organization of time, such as by emphasizing that activities like eating and sleeping must take place at “set” times.

The connection between the descriptor “orderly” and set times was made explicitly by several respondents, so I treat responses referring to the importance of set times for certain activities as belonging in the same category as those that explicitly identify an “orderly life” with health. For example, one 24-year-old office worker who considers herself a basically healthy person and is not worried about suffering from type 2 diabetes in the future defined a healthy life as an orderly life, and an orderly life as one in which daily activities take place at set times according to a “rhythm.”

1: 病気にならないために、一番いい生活習慣な何だと思いますか？
2: 規則正しい生活ですか。はい。
Interviewer: What sort of lifestyle do you think best prevents you from getting sick?
Mariko: An orderly life. Yes.
Interviewer: What does that mean concretely?
Mariko: Waking up every morning at a set time, eating breakfast at a set time, consuming food with balanced nutrition, and keeping an orderly rhythm to one's life.
(Office worker, urban Japan)

When respondents describe an orderly life, what they typically mean is a life where one is able to keep regular hours, and perform daily activities at set, unchanging times with few surprises. The ability to observe temporal boundaries is key to health maintenance for most respondents, and this is part of what is expressed in the phrases *kisokutadashii* and *kisokuteki na seikatsu*. The work of maintaining health is at least in part the work of maintaining appropriate boundaries.

Mary Douglas argued that the erection of such boundaries is a creative, ordering act engaged in through one form or another in all human societies (Douglas 1966). In Douglas’ reading, dirt and disorder are symbolically synonymous. “In chasing dirt,” she writes, “In papering, decorating, tidying, we are not governed by anxiety to escape disease, but are positively re-ordering our environment. There is nothing fearful or unreasoning in our dirt-avoidance: it is a creative moment, an attempt to relate form to function, to make unity of experience.” (Douglas 1966:3) The construction and
observation of symbolic boundaries is neither the result of pathology nor panic, but rather a creative expression of order.

A central premise of this dissertation project is that these creative expressions of order, in the form of explanatory models—sets of interrelated assumptions about the basic nature of health and illness—rely on underlying symbolic structures, which may vary across cultural context. Medical anthropologists of Japan, Japanese as well as non-Japanese, have devoted much work to theorizing about the underlying symbolic structure of Japanese health attitudes (see Ohnuki-Tierney 1984, Lock 1980, Lock 1995, Traphagan 2004, Yoro 1996, Namihira 2005). Ohnuki-Tierney’s work on the underlying symbolic structure of Japanese health behaviors and attitudes also emphasizes the centrality of boundary-making (1984). She argues that the underlying symbolic structure of health beliefs in Japan is characterized by attention to boundaries between inside and outside, insider and outsider, based on characteristically Japanese spatial classifications. The inside is by its nature “clean” in a spiritual sense, the outside dirty. In Ohnuki-Tierney’s usage, “outside” (soto) does not refer to natural, “unpeopled” spaces. Rather, the outside is peopled with outsiders, strangers, those who do not belong to the household (ie): “people-dirt.” (Ohnuki-Tierney 1984)

The spaces that delineate inside from outside require constant policing and care. In the traditional Japanese home, the genkan delineates this boundary; it is the space through which one passes to reach the inner spaces of the home, where one removes
shoes carrying the dirt and germs of the outside (Ohnuki-Tierney 1984: 27-27). In the body, the mouth, nose, and throat delineate this boundary (Ohnuki-Tierney 1984).

Boundary-making spaces are fraught with the uncertainty of being neither inside nor outside, neither completely dirty nor completely clean in a symbolic sense. They are vulnerable spaces, spaces that carry the risk of contamination and miscegenation (Ohnuki-Tierney 1984). This renders boundaries ontologically dangerous spaces. The boundary between inside and outside is the place where one is most vulnerable to contamination. Thus the **genkan** must be the site of symbolic cleansing and shedding, the mouth must be protected from breathing in dirty air by masks, and uncertain periods between seasons are considered the time when one is most vulnerable to illness (Ohnuki-Tierney 1984: 25-26).

Symbolic boundary-making may be rooted in Japanese spatial classification, but as the final example suggests, such boundaries could easily extend to temporal classification. Ohnuki-Tierney’s treatment of the classification of time is extremely limited (see Ohnuki-Tierney 1984: 27), briefly mentioning the transition from night to day. The in-depth interviews collected here, though, suggest that the classification of time is central to basic health beliefs. This may be because the extraordinary rise of lifestyle diseases in Japan’s aging population has shifted importance from spatial classifications that could be directly transferred to daily hygiene practices related to
infectious disease to temporal classifications that can be more directly transferred to
daily hygiene practices related to chronic, non-communicable disease.

Work on the experience of chronic disease in North America points to the role of
temporal classifications for patients. Charmaz (1991) observes that patients’
classification of time affects whether or not their experience of chronic illness is
integrated into their sense of self or experienced as merely an “interruption,” a way-
station between previous health and future health (Charmaz 1991: 23, 30). How
individuals and communities define and experience time can have profound
consequences for patient identities, determining among other things whether or not the
self is put on “hold” by illness experience or is altered and grown by illness.

The shift from spatial to temporal boundary-making is significant, but the
underlying symbolic structure as theorized by Ohnuki-Tierney remains largely intact.
Most importantly, the relationship between appropriate, ordered organization of time
and health does not exist only in general or abstract discussions of health, illness, and
prevention. The role of time boundaries also emerged in discussions of prevention of
and specific risk factors for type 2 diabetes, demonstrating that the temporal
classification and its underlying symbolic structure directly influence the ways that
respondents imagine and actually address risk for type 2 diabetes.

For example, respondents identified “night eating” as a risk factor for type 2
diabetes. Eating at night, later than a reasonable dinnertime, is thought to be more
dangerous to one’s health than eating at other times. The head nurse at the suburban hospital frequently worried informally about the tendency toward night-eating she saw among hospital physicians, and warned me several times not to lapse into the doctors’ bad habits just because I shared an office with them. In an interview several months after we began working together, she explained that night eating was part the larger problem of an unordered lifestyle.

That and not living an ordered life [is the reason for rising rates of diabetes.]22 You can’t be unregulated, can you? Do you understand what fukisoku (unordered/ unregulated) means? In a word, it’s… um… It’s like not eating in proper fashion in the morning, noon, and night, but just eating in the morning and at night. Hmm, how to put it? It’s not eating at set times. Or letting it get really late, and eating late at night. I think there is a connection between that sort of chaotic eating [and diabetes.] Yes. [Nods head emphatically.]

(Head nurse, suburban private hospital)

The nurse applies the concept of temporal disorganization directly to risk for type 2 diabetes. What is “chaotic” about the type of eating she singles out is not high calorie content or poor nutrition, but rather eating out of order. The risk of the eating originates in its inappropriate timing, not its content. Thus the policing of time boundaries is a

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22 “That” refers to westernization—the adoption of western food and habits and the supposed rejection of traditional Japanese food. The earlier part of this conversation is referred to in Chapter 4, “In the Nation.”
central theme in the management of the body, both in abstract conceptions and in the specific case of diabetes.

Eating is hardly the only daily activity that must take place at set, appropriate times. A 63-year-old housewife in the rural sample, for example, defined a properly ordered life as being most obviously about regulated eating, but cautioned that going to bed early and waking up earlier were also an important component. She felt that restraining oneself from the temptation to nap during daytime hours and waking up at a set, preferably early time each morning were critical. The “ordered life” necessarily includes set times not only for eating, but also for sleeping and bathing. It is the adherence to a rhythmic, regular organization of one’s time that renders a lifestyle “ordered” rather than its content.

Of course, saying that the “ordered” life protects from disaster and actually living according to the sort of temporal organization respondents identify as ideal are two different things entirely. The difference between articulating an ideal pattern of behavior and applying it to one’s own life creates tension, especially for respondents who have lived with chronic illness. Life is inherently arrhythmic. Unexpected stressors appear at work, a cold snap makes physical activity suddenly less appealing, a child or grandchild gets sick. Or one is merely tired from the long work hours and long commutes that are commonplace in Japan, and forcing oneself to keep a “clock-like” schedule gradually becomes exhausting, until the effort is abandoned altogether.
The difference between normative assessments of healthy behavior and actual practice is never more evident than in conversations between family members. Families live together, eat together, and care about one another enough to notice when loved ones are not keeping to the rules they believe can keep them healthy. Women especially commented that they worried for fathers or husbands, who knew that they ought to eat or sleep better but did not. Family members are close enough, both socially and physically, to call one another out when words and behavior do not match.

Family members in the rural sample frequently called one another out in the middle of actual interviews. In Hosekijima, the town from which rural respondents were drawn, interviews typically took place in homes with traditional open floor plans. Family members passed in and out occasionally commenting on the conversation, and in some cases married couples asked to be interviewed together (something that never happened in the urban sample.) When family members were interviewed together or simply present in the house during an interview, they often chided one another about the difference between words and practice.

One such interview with a 62-year old security guard called Daisuke took place in an old, but beautifully kept farmhouse near the family’s rice paddies in Hosekijima. The house had several wide rooms with tatami flooring, divided only by thin sliding wood panels, all of which were thrown open or taken off their tracks to allow air to circulate on a sultry July day. Daisuke’s sister-in-law, an active woman in her late 60’s
passed in and out bringing chilled noodles and tea for us to drink. Each time she would linger to comment, ask questions, encourage her brother-in-law to show off his prized collection of *daruma* figures or sing me a traditional song, fuss with the fan, or simply tease one or both of us.\

When Daisuke mentioned that he never got colds or other minor illnesses, I wanted to know his secret. I asked “Since you said you never get colds, what do you think is the best way to protect one’s health?” He paused a moment to think, then responded,

2: 規則だしい生活、睡眠、休養、栄養。
1: 広告みたいですね。
3: 言っても守りません。
2: あと睡眠十分とって、栄養摂って。
3: 言う事と実行はイコールじゃないね。まあみんなそうだと思いますけど。

Daisuke: An orderly lifestyle, sleep, relaxation, and nutrition.  
Interviewer: You sound like a public notice.  
Akiko: Even though he says that, he doesn’t keep to it!  
Daisuke: They say, “Sleep well and eat nutritiously.”  
Akiko: What he says and what he does are not equal. But I suppose everyone is like that.  
(Parking lot guard, rural Japan)

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23 I had recently participated in a Shinto religious pilgrimage with the family to ensure the prosperity of their agricultural endeavors. The trip required the five of us to spend hours driving overnight to a mountain of religious significance, then don pilgrims’ robes and begin climbing the mountain in the rain at 2am so as to reach the shrine that marked the gateway to the holy part of the mountain by 5am. We then took sips of ceremonial sake and climbed another 3 hours in the rain to reach the shrine at the peak, be blessed, and eat some rice, pickles and miso soup before descending. I was teased for being an enthusiastic climber but slow at descending because I had not conserved energy, so that Akiko and Daisuke, both in their 60s, nearly beat me. “She goes up like an energetic kid, but goes down like a grandmother!” they repeated to every curious pilgrim we passed on the way down, and then to half the town of Hosekiima after we returned home.
Daisuke may live in an idyllic-seeming farmhouse in a rural area, but there are few jobs in *Hosekijima* and the family’s rice cultivation is too small-scale to support everyone. He commutes nearly an hour to his job as a parking lot security guard in the city, where he works irregular hours and sometimes takes night shifts. His sister-in-law, Akiko, worries over him and his irregular schedule constantly. “He never married,” she tells me on another occasion. “So I worry about him.”

Typically it is women who engage in talking, teasing, or wheedling family members into a more “ordered” life. In Japan, where women have a much lower rate of participation in the formal labor force, particularly during peak childbearing years (Ogasawara 1998: 18), women shoulder most of the responsibility for domestic work. This means that women—as wives, mothers, sisters, or daughters caring for aging parents—often feel that they bear the responsibility for enforcing the correct temporal organization on their families in the name of health and well-being.

I don’t think I really told [my children and husband] with words, but I woke them up at the same time every day, made sure they got protein in proper fashion in the morning, gave them vitamins, things like that. I told
them they had to eat carbohydrates and tried to make them eat properly. And at night after dinner is over we don’t eat anything. … I told them to go to bed early. I guess that’s about all I was careful about. Other than that, there wasn’t really anything. It’s because I’m sort of loose. I brought them up in a loose way.

(Homemaker, rural Japan)

It is notable that this 72-year-old mother, now a grandmother, considers the way she raised her children to be “loose,” a word with negative connotations in Japan suggesting a kind of irresponsible leniency. Enforcing regular hours in the day and an appropriate eating pattern of protein in the morning and carbohydrates during the day seems to her to be the least she can do for her family.

The idea that enforcing a kisoku tashii rhythm is a feminine task is widespread. In the previous chapter, I observed that physicians and co-medicals focused on men with a “loose” lifestyle as being at the highest risk for uncontrolled diabetes. What put these men as risk was not so much their love of sake and “stand-up” ramen—food products beloved by most stereotypical salarymen—but the lack of women in their lives to help regulate their time and behavior. When Dr. Saito hospitalized Ichiro, she took into consideration the fact that he had no wife or daughter to guide his behavior. If Ichiro had had a wife, the wife almost certainly would have been enlisted to help and Dr. Saito would have been less likely to admit him herself. Without women regulating their lives, the ordered life is much harder for men like Ichiro to attain.
7.1.2 The Experience of Illness

In this section I examine the relationship between the conceptualization of well-being and temporal classification through the narratives of three patients with type 2 diabetes: Kimiko, Tomiko, and Rei. Kimiko has lived with a diabetes diagnosis for more than 10 years. Tomiko was first diagnosed with type 2 diabetes in the time between our first and second interviews. Rei identifies as having “borderline” type 2 diabetes, and says she lives in expectation of crossing the imaginary line into what she calls “exact diabetes.”

7.1.2.1 Kimiko: A Decade with Diabetes

When Kimoko, a 57-year-old graduate of the hospital’s diabetes education program and regular visitor to the outpatient clinic was asked why thought she of all people got type two diabetes, she responded decisively: “An unordered life. Unregulated eating.” Pressed for more details, she explained,

I was irregular in my habits. [I worked at the] barber shop. It was always, “Please just wait 5 minutes.” When a customer came in I would go immediately. I would just slurp up my miso at meals because I might have to rush to my job at any time. If you say 5 minutes and the customer waits 7 minutes, they are just hideous... So I would just postpone adjusting [my lifestyle.] I couldn’t rest like I ought to have because I was busy. Now I have more free time, though.
Kimiko echoes other laypeople’s evaluation of diabetes risk and general risk for illness, not just in her evaluation of her previous lifestyle as unordered (fukisoku), but also in her particular emphasis on the issue of time. Her job did not allow her to observe boundaries around periods of time. She could not have a time designated for eating and a time designated for working that could be kept day after day. The lines between different categories of time were muddied, and she did (or could do) nothing to make them clear. She locates the source of her own condition not just in failing to control her calorie consumption, but in her inability to control the temporal conditions under which she consumed.

When Kimiko describes postponing adjusting her lifestyle to something healthier, she says “zuruzuru,” a mimetic word that connotes both the sound made when slurping noodles and the act of postponing or procrastinating. The mindless slurping of noodles and the thoughtless postponing of a more regular, ordered life are parallel acts in her description. When she describes the factors that contributed to her diabetes, she emphasizes the lack of intentionality in her former lifestyle. Her lifestyle with a diabetes diagnosis, though, is radically different. She has retired from full-time work cutting hair, is seen by Dr. Saito once or twice a month, and attends diabetes education classes at the suburban hospital at least once a week. Her life is ordered by a schedule of meals chosen intentionally for their nutritional content, frequent visits to the hospital for
appointments or classes, daily walks, and other activities that express her new commitment to herself and her own health.

In Kimiko’s narrative, chronic illness occasioned self-discovery. In her old life, her time was organized by the whims of other people for the benefit of other people. Diabetes not only gave Kimiko occasion to examine the temporal organization of her life, but also the justification for focusing more on herself and her own well-being. In Kimiko’s telling, her life with type 2 diabetes is more rhythmic and more fulfilling than the life that she feels caused her type 2 diabetes.

Experiencing a type 2 diabetes diagnosis as a blessing has been documented in other studies of American diabetes patients’ experiences. Malek (2006) contains an extensive analysis of a small number of patients, one of whom describes her diabetes diagnosis as a “blessing.” A diabetes diagnosis can inspire “positive change” that might otherwise have been put off indefinitely (Malek 2006: 79).

7.1.2.2 Tomiko: Two Weeks Down, A Lifetime to Go

Tomiko is a tall, slim woman in her mid-50’s. She lives in a rural area, but is well traveled and cosmopolitan in her tastes. The café she owns serves largely Italian fare, and she brightens when she describes her adventurous youth, when she traveled around the world and fell in love with a Tibetan cowboy. While we speak entirely in Japanese, I know that she has a gift for languages and speaks English well. She says that she finds Japan stifling after too much time spent at home; it is only when she travels abroad that
she feels able to breathe and really look at people. And her every-other-year trips are more than just spiritually restorative—she explains forcefully that when she sees the doctor after being abroad for several weeks he tells her that her blood pressure has dropped and her cholesterol has improved.

The first time I interviewed Tomiko was at her café in Hosekiijima. She flitted back and forth between her customers, considering my odd questions as she cooked pasta and toasted bread with cheese to order. At this first meeting, Tomiko was not worried about type 2 diabetes. She told me she had high cholesterol, which she attributed to her love of Italian food and cheese, but said, “But there isn’t any real relationship between diabetes and cholesterol, right?” When I told her that high cholesterol is considered to be a risk factor for type 2 diabetes (see American Diabetes Association 2007), she was surprised. At that first meeting, she told me that the healthiest life is just a “regular, well-ordered lifestyle,” and that “not eating too much delicious food” probably helps as well.24

Our second meeting was nearly a year later. After chatting over the course of a leisurely walk on her day off, we found a shop specializing in fresh tofu that could serve a calorie-controlled meal. She had been diagnosed with type 2 diabetes two weeks

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24 Original Japanese: "ただ規則正しい生活が多分いいと思いますね。で、あまりいっぱいおいしいものを食べないほうがいいかな。" (55 year old female restaurant owner)
before, and scrutinized the two set meals available at the shop trying to determine which
would be better for her. “I’m learning now,” she explained.

At this second meeting, when I asked her how she discovered she has type 2
diabetes, she began with the cholesterol. “From the beginning,” she explained, “I had
high cholesterol.” She has known about her cholesterol for more than 5 years, and
describes how she was diagnosed, even recounting her conversation with the doctor. At
our first meeting Tomiko did not believe there was any connection between cholesterol
and diabetes, but now the story of her diabetes begins with cholesterol.

In the beginning, there was the cholesterol. Then, one day in the year between
our two interviews, Tomiko went to donate blood with a mutual friend. When they
took her blood they told her that she should have blood work done to check for type 2
diabetes. She was surprised, and put off going to her physician for the test for months.
She even went to the clinic for her cholesterol medication without mentioning that she
had heard she should be tested for diabetes.

But then, one day, she cut her foot. When she went to the doctor, she finally
mentioned the blood test. Her physician tested her immediately and told her she had
type 2 diabetes. “I had never thought of diabetes before that,” she says.25 After her
initial shock came fear:

25 Original Japanese: “でも、糖尿病の考えは全然なかった。”
By the time I first heard, the doctor said it was already not so good. For me, my diabetes didn’t have a start. It was already pretty bad [by the time I first heard]. So I thought, “Ahh!” I thought about horrible things like losing my vision or not being able to walk on my trips abroad.

Tomiko, still reeling from her initial diagnosis, experiences her illness as acute, rather than chronic. Since she was diagnosed with full-blown type 2 diabetes, rather than easing into her illness with a progression from “at-risk” to “pre-diabetes” to “diabetes,” she says her diabetes had no beginning. And rather than enabling her to further develop her sense of self as Kimiko says her diabetes allows her to do, Tomiko’s diabetes threatens the aspects of her identity she holds most dear: her ability to work independently and her ability to go on adventures abroad.

When directly asked why she thought she developed type 2 diabetes, Tomiko responded,

もちろん、1番は私のDNA?と思う。DNAプラス何？私の食べることとストレスと。もちろん、ず〜っと前から、私のライフスタイルが良くないのは自分で1番良く知っていたから。

Of course, I think the number one reason is my DNA. DNA plus… what else? My eating and stress. For a long time, my lifestyle has not been very good. That’s what I’ve been thinking about the most.

Like many respondents, Tomiko first lists a genetic predisposition (which she ties to Japanese identity in other parts of the interview) as an explanation for her illness. But
she quickly adds other factors that she dwells on more than the genetic explanation: her unhealthy lifestyle. When pressed about what aspects of her lifestyle were not good, Tomiko returned again to the stress brought on by living in Japanese society, her unordered work and eating schedule, and her disordered sleep schedule. After having suffered from insomnia for years, she believes that an irregular and unsatisfying sleep schedule must have contributed to her illness. And her disordered eating, the result of both a hectic work schedule at the restaurant and personal struggles with eating and body image, is probably another reason for her current condition.

When describing the etiology of her illness, Tomiko does not focus on a specific event as many populations in the U.S. do (Poss & Jezewski 2002, Schoenberg et al. 2005). Rather, she depicts her illness as the result of a combination of genetic risk, stress, and chronic disorder in her schedule.

7.1.2.3 Rei: Life On the Borderline

Rei is 66 and lives in the city, where she takes classes at a downtown library in her free time. She approached me after I presented my research at one of the library’s free classes, introducing herself as a “borderline diabetic.” Rei rattled off her statistics as soon as we sat down to chat in the library’s international exchange center. “My hemoglobin is 6.0 or 6.1 right now, but I want to lower it to around 5.8,” she said, almost before we had exchanged greetings. “I was diagnosed 5 years ago, but the lowest I’ve gotten it is 5.9.”
Rei approaches her pre-diabetes like a baseball player, keeping track of her record highs and lows, calculating her personal best and average HbA1c (glycosylated hemoglobin) levels. Results of the HbA1c test indicate average blood glucose over two to three months; they are a simple measure of overall diabetes control.

Yes, well I can’t exactly say that I have diabetes right now, but if I’m not careful I’ll become diabetic. So I’m careful about food and exercise. I was told to be. And since I didn’t want to end up diabetic I really applied myself. And right now I am completely diabetes-free. I’ve been told that for my age, restraining my hemoglobin to 6.0 or under is pretty good. I was young, but I’m already turning 66.

Rei seems to actually take pleasure in monitoring her lab test results. She thinks of them as scores, and uses them to monitor the grace of her aging process. She even compares her results to friends, family and neighbors to assess how well she is doing compared to those around her.

Rei thinks of diabetes as a threat, to which she is responding with the same level of care and competence with which she ran her household and shepherded her overachieving children through school. Her constant self-
monitoring revolves around one overarching goal: Do not pass over the HbA1c hash mark that denotes “diabetic.”

Being told I have diabetes—that would be awful. When you’re told that, there are severe restrictions on your food. Just that alone would be really hard, and so I don’t want to be told I have diabetes. I don’t want to be told I have diabetes, and so I am controlling myself.

Even though her quest to avoid full-blown diabetes has led her to place restrictions on her diet, she does not imagine these to be restrictions in the same way they would be if she crossed the line into diabetic territory. Rei sees her current nutritional planning and caloric restriction as “controlling myself.” If she were to cross the line into type 2 diabetes, however, the diet restrictions would control her.

These three women offer different illness narratives and personal explanatory models for their illness, but they rely on similar symbolic structures and all emphasize the relationship between temporal organization and well-being. Kimiko’s causal narrative connects her inability to organize her own time according to a regular, healthy rhythm to the onset of diabetes. Tomiko locates the source of her diabetes in her irregular, stressful life as the owner of a small restaurant. Rei is barely interested in the cause of her diabetes at all, but uses her pre-diabetes to organize her self identity and as a lens through which to understand natural, healthy aging.
7.1.2.4 Gender and Illness Experience

Something else stands out about the patients mentioned above: they are all women. While many female type 2 diabetes patients articulated illness narratives, men were more reticent and more likely to offer stock responses. It is possible—even likely—that the fact that their interviewer was a woman contributed to their reticence. But in other interactions, male colleagues, even those who became friends, spoke little of their own experience of chronic illness. Despite the fact that a significant proportion of the physicians at the private hospital said in interviews that they had either been diagnosed with type 2 diabetes or thought that they were on the road to diabetes, physicians never brought illness up with one another in social interactions.

Silences can be as important as rich narratives. That the men with type 2 diabetes or pre-diabetes did not seem as eager to talk about their experience of diabetes does not necessarily mean that they had not considered it as actively as the women, but it does suggest that their illness occupies a different place in their sense of self.

The fact that the primary method of prevention and management that laypeople and patients bring up in interviews is the organization of time and the exercise of intentionality in domestic activities cannot be overlooked. The preparation of food, the timing of meals, and even making time for exercise and recreation are clearly gendered. This is evidenced not only by physicians’ worry over men with diabetes who lack a wife or daughter to take care of them, but by men’s reactions to diabetes diagnoses. One
physician pointed out that he knew he should eat better and exercise more, but his stay-at-home wife was in charge of meals and he did not have time for exercise. “Playing tennis is the sort of thing my wife does during the day,” he said. Not only cooking, but recreational sports and exercise may seem like feminine activities to older Japanese men.

The division of household labor places women in charge of health and well-being for their families. As such, many female respondents expressed illness narratives on behalf of men in their lives. In other words, the women who performed both the domestic labor (in the form of cooking and organizing time) and the emotional labor (in the form of worrying and ascribing meaning) on behalf of men in their life were more eager to narrativize the illness than men in the sample. Thus, just as women organized time and meals on behalf of the men in their lives, they also articulated illness narratives on behalf of those men.

While men are usually at higher risk for type 2 diabetes than women (American Diabetes Association 2007), worry over the illness in Japan is feminized. Indeed, fear of type 2 diabetes and its complications is surprisingly widespread among middle aged and older women. Of 53 women surveyed at a women-only gym in Hosekijima, 68% (N=36) said they were actively worried about type 2 diabetes. The women who said they were afraid of getting diabetes were asked to write down their personal reason for worrying. They were not given pre-formed categories. Of those who were worried, 11 cited a family connection to diabetes in their written response. 10 said they like to eat or
liked to eat sweet things, and that they worried this would put them at risk. 7 described the disease and its complications, calling it “scary” or “incurable.” One in this category simply wrote, “Because at my workplace I see many people who have diabetes.”

Another wrote, “Because it is a sickness that is with you until death.”

In categories of their own, one woman said that she had heard that soon one in every 3 or 4 people could have diabetes, and another said that she was worried about diabetes because it was something that happened alongside growing old, and she would soon grow old. The remaining 6 provided no answer.

The women were also asked for their thoughts on the best way to avoid diabetes. The phrasing of the question, “In order to try to avoid diabetes, what do you think is good to do?” could be interpreted as a leading question; respondents were never asked whether or not it was possible to avoid diabetes. However, the phrasing in Japanese is open enough to allow for the common set phrase “There is nothing to be done.” (Shikata ga nai.) Still, no one responded that there was nothing to be done. Responses ran the familiar spectrum of “balanced” eating habits, exercise, an “ordered” lifestyle, and a correct, upright life.

Perhaps more interesting were the responses of those who said they were not worried about type 2 diabetes. More than half of the respondents in this group did not

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26 Original Japanese: “仕事上、かかっている人をよくみるから。”
27 Original Japanese: “死にいたる病気なので。”
28 The phrasing in Japanese: “糖尿病にならないように、どうすればいいと思いますか?”
write a response to the question about their personal reasons for not being worried, but the ones who did emphasized their own management. One respondent wrote, “[I am not worried] because I am managing myself and getting physicals (kenshin).”29 Another wrote, “Because I’m making an effort not to eat too many sweet things.”30 Five of the eight respondents in this category said that they monitored themselves through frequent doctor visits, so there was no need to worry. “I have blood work done once a month. I think there is nothing abnormal about my blood glucose.”31 Only one cited a lack of family history as a reason for their lack of worry. Rather, they pointed to their own monitoring or the monitoring of their doctor.

7.1.3 The Doctor with Diabetes

In sharp contrast the health care providers interviewed in the United States, the majority of physicians interviewed in Japan reported that they themselves had type 2 diabetes, pre-diabetes, or thought they themselves were at high risk for developing type 2 diabetes. Approximately half of the Japanese physicians interviewed cited a personal connection to type 2 diabetes. In contrast, only one of the twenty diabetes health care providers interviewed in the United States said they ever felt concerned about getting type 2 diabetes themselves.

29 Original Japanese: “自己管理・（検診）している”
30 Original Japanese: “甘いものを食べ過ぎないようにしています。”
31 Original Japanese: “毎月1回血液検査。血糖値に異事はないと思う。”
In the United States, nearly half of all physicians are Caucasian (Bureau of Labor Statistics 2010). All other things being equal, those of European descent are thought to be at lower risk for type 2 diabetes than those of African, Asian, or American indigenous descent (Glumer et al. 2006). Further, U.S.-based primary care physicians enjoy high socio-economic status and a median income of $189,044 (Bureau of Labor Statistics 2010). (And physicians in medical specialties have an annual median income of more than $330,000.) The Bureau of Labor Statistics does not collect income data for nurse practitioners, but CNN reports that the median annual income for nurse practitioners is around $85,000 (CNN 2009). In the United States, high socioeconomic position across the life-course is negatively correlated with type 2 diabetes risk; individuals in higher income categories are less likely to suffer from type 2 diabetes (Maty et al. 2010). The overrepresentation of people of European descent among practicing physicians and their high average income both place U.S.-based physicians at lower social risk for type 2 diabetes than most of their patients.

In Japan, however, physicians may actually be at a slightly higher risk for type 2 diabetes than the rest of the population. There is no reason to believe that the distribution of genetic risk for type 2 diabetes varies between doctors and patients in Japan, but doctors are more likely to work long, irregular hours. Patients and providers’ models of diabetes in both the U.S. and Japan closely associate stress with the development of insulin resistance, and it would not be surprising if Japanese physicians
actually suffer from type 2 diabetes at a higher rate than the rest of the population. Regardless, these physicians themselves self-identify as a population at higher than average risk.

Thus, even those medical professionals who do not think they are at risk because of genetic predisposition worry that their hectic, stressful lifestyle puts them at elevated risk of developing diabetes. Long shifts with unpredictable work make it difficult to live an “ordered” life or maintain control over their own time. Like the patient who worked at a barbershop and had to abandon plans to serve customers, physicians in Japan live at the mercy of their pagers and mobile phones. Even relatively senior physicians spend uncomfortably long periods “on call” and are required to do service to the hospital with occasional night shifts. At the suburban private hospital even the vice-president, a cardiologist, was on call every weekend.

Physicians treated the prospect of their own chronic illness with a touch of dark humor and a sense of inevitability. When asked if he ever worried about getting type 2 diabetes himself, a young, visibly fit diabetologist at the prestigious national medical center paused for a moment, then answered,

ああ、そうですね。私は、あの〜、ファミリーヒストリーと言いますかね。あの、多いので、おそらくなると思います。（笑い声）

Ah, well. I have a family history [of diabetes.] A lot of them have diabetes, so I think I probably will get it. [Laughter.]

(Diabetologist, National Medical Center)
Dr. Hatasa refrains from musing about how his work affects his expectation of growing ill himself, but rather mused about how his expectation of becoming ill eventually affects the way he interacts with patients. He explained that knowing he would someday be a type 2 diabetes patient himself made him a more engaged, energetic health care provider.

Other physicians who work closely with type 2 diabetes patients describe it as a consciousness-raising experience. Another diabetologist at the national medical center said that she worried about type 2 diabetes even though she didn’t think she necessarily faced a genetic risk.

If I am not self-conscious about my own daily life habits, the amount of fat or oil in my diet, for example, then it gradually grows [out of control.] The amount of sugar I consume too. The fact that a regular Pocari Sweat drink, for example—sports drinks or stuff you drink from PET bottles—is loaded with sugar is something I didn’t even know until I became a doctor myself. So I guess nobody really realizes it. Since I’m conscious of this now, as much as possible… in the old days I really liked snacking, but now I try as much as possible not to eat snacks. I’ve tried to reduce oily foods as much as possible too. I just don’t like exercise very much and can’t keep it up, but at work I try to use the stairs [rather than the elevator] as much as possible. But even keeping that up all the time can
be difficult. Every once in a while I resolve again to make a real effort to be careful. “Let’s be careful,” I remind myself.
(Diabetologist, National Medical Center)

This physician’s sense of her own risk grows directly from her experience educating and counseling type 2 diabetes patients. Patient interaction inspires self reflection.

American providers, in contrast, say that their experiences treating diabetes do not precipitate concerns about their own personal health or the health of their families.

Most of the time, when physicians were asked whether or not they themselves worried about diabetes, they interpreted the question as one about prevention and the daily rhythm of their own lives. Even physicians not worried about diabetes expressed a sense of the inadequacy of their own preventative measures, of their inability to enact the lifestyle they believe could ensure health for themselves and their families. While they daily ask for discipline and control from their type 2 diabetes patients, the physicians who did not worry about the condition for themselves were aware that they do not practice the same discipline and control in their own lives.

1: 自分の家族のために、糖尿病について、心配しますか？
2: 家は、別に、ま、あの、規則正しい食事と、バランスの良い食事とならば、心掛けていますが、特別...ま、糖尿病ってことに限っては、全体的な健康、を考えています。ですけど、そんなに完璧では無いので、心掛けていますけど、完璧では無いです。気持ちは。

Interviewer: Are you worried about diabetes for your own family?
Dr. Furukawa: Not so much for my family. We make an effort to have well-regulated (kisoku tadashii) food, balanced meals, but nothing in particular... Well, it's not limited to diabetes. We think of whole body health. But it's not perfect. Even though we make an effort, it's not perfect. That's my sense of it.
In fact, this type of response was very similar to the attitude evinced by most American providers. A generic emphasis on regulation, moderation, and balance guided provider responses to questions about their own personal or family health in both countries.

7.1.4 Conclusions

Lay respondents with no personal history of diabetes articulated an understanding of health maintenance that revolves around the idea of an “ordered” life. In particular, order comes from careful adherence to a classification of time that associates certain times with certain activities and erects boundaries between them. Having a “rhythm” to one’s life, and observing regular, unchanging hours for core activities like waking, eating, and bathing were identified as key to a healthy life. But the responsibility for this temporal maintenance falls largely on women: women work to organize the time of their loved ones into a healthy, regular rhythm. Men without mothers, wives, sisters, or daughter to take care of them are thus thought to be particularly at risk of illness.

Type 2 diabetes patients articulated a similar model. Most patients offered causal stories related to an “unordered” lifestyle. But diabetes patients’ relationship to time was more complex than that of laypeople. Some even looked to their illness as a source of (or excuse for) healthy order in their present lives. The gendering of the domestic and emotional labor surrounding illness was even more evident in interviews
with patients than with laypeople. Female patients were more talkative about their illness in interviews, and more likely to tell their illness as a story, complete with narrative arc. Male patients described worry over their condition, but offered few causal narratives. The wives, daughters, and sisters of male patients, however, sometimes offered explanatory models and illness narratives on behalf of their loved one.

Finally, the majority of physicians interviewed said that they personally worried about developing type 2 diabetes. This stands in contrast to the sample of American health care providers, only one of whom expressed concern.

When asked to talk about the nature of health, Japanese laypeople and health care providers alike emphasized imposing order and regulation on the body as a general route to wellness. Patients with a type 2 diabetes diagnosis, lay people who worried about getting diabetes or some other lifestyle disease, and people who expressed no worry about facing chronic disease all demonstrated a similar basic health belief model whether prompted by questions about type 2 diabetes, basic healthy lifestyles, or cold prevention: the ordered life can maintain health, while the disordered life leads to illness.

Further, while the Japanese lay participants cited above seem to share a basic belief that the body can be disciplined and managed, this belief may be less prevalent in the United States. Many American populations approach the body as unruly; their body merely happens to them (Abrums 2000). And American health care providers may
unconsciously support this belief with type 2 diabetes patients, given the pessimism and low expectations discussed in the previous chapter.
8. Conclusions, Problems, and Implications

The preceding chapters connected differences between lay and provider narratives about the origins of the type 2 diabetes epidemic, and explanatory models about the disease, to differences in biomedical practices surrounding diabetes in two countries, the U.S. and Japan. I argued that, while both countries rely primarily on an evidence-based biomedical model, the character of each biomedicine is profoundly influenced by differences in the broad cultural narratives about the origins of diabetes, and by the personal explanatory models of diabetes rooted in those narratives.

Chapters 4 and 5 argued that the American and Japanese narratives on the origins of the type 2 diabetes epidemic draw on similar, quasi-scientific language to make different claims about the origins and nature of diabetes in the world and their communities. The American narrative emphasizes the universality of risk to all modern humans in wealthy countries and is bound up in the perception that illness arises when one treats the body in ways that are “unnatural.” The Japanese narrative, on the other hand, emphasizes the particularity of risk to the Japanese body, and suggests that illness arises from a disharmony between Japanese bodies and non-Japanese food culture.

These different ways of framing and understanding what brought illness (in this case diabetes) into the nation come with different ideas about how to prevent its spread. In the U.S., modernity is a necessary evil, and so the road to health for the community is imagined to be one of personal responsibility in the face of temptation and moderation
of the modern diet. But in Japan the framing of diabetes risk as associated with the encroachment of foreign cultural influences, and so the road to health is imagined to be the reaffirmation of traditional Japanese cultural practices and values. These different understandings of the origins of “lifestyle” illness contribute directly to the ways in which biomedical professionals suggest lifestyle changes: American recommendations lean towards low-carbohydrate diets that more closely resemble a “pre-modern” diet, while Japanese recommendations lean towards a “traditional” Japanese diet built around rice, a carbohydrate.

In Chapter 6, I argued that while biomedical professionals in both countries take a pragmatic approach to negotiating with patients in order to elicit cooperation, switching between different models of the provider-patient relationship as they see fit, significant differences remain in provider explanatory models of diabetes. While American health care providers talk privately about diabetes and patients with diabetes in fatalistic, even pessimistic terms, Japanese providers maintain high expectations and hopes for type 2 diabetes outcomes both inside and outside the exam room. The role of provider expectations of patients and the likely course of their condition is an important direction for potential future research.

Finally, in Chapter 7, I addressed personal explanatory models surrounding type 2 diabetes in Japan. Japanese respondents articulated a model of health that revolves around the idea of an “ordered” home life, with careful adherence to classification of
time and a clear division of domestic labor. Those with a personal history of diabetes locate the etiology of their illness in chronic exposure to disordered time. Responsibility for the maintenance of healthy, correct temporal boundaries falls largely on women: women work to organize the time of loved ones into a healthy, regular rhythm. Men without mothers, wives, sisters, or daughters to take care of them are thus thought to be particularly at risk of illness.

At each of these levels—in the nation, the exam room, and the home—enduring differences in understandings of health and illness along the dimensions of body, authority, and responsibility emerge between the U.S. and Japan. As we see in Chapter 4, in the U.S. case, healthy uses of the body are those identified by respondents as “natural,” which are treated as universal to all people. The reverse of natural, healthy uses are those identified with stress and modernity, like troubles with debt, “scary chemicals” in food, and high carbohydrate diets.

In Japan, on the other hand, alignment of Japanese bodies and Japanese culture is considered most healthy and appropriate, a claim respondents treat as particular to members of the Japanese racial-cultural community rather than universal to all people. “Japanese” ways of treating the body include consuming traditional foods such as rice and fish and traveling on foot. In interviews and popular literature, Japanese commenters emphasize the particularity of Japanese practices to Japan, arguing that Japanese bodies and Japanese culture are unique, and uniquely intertwined.
Differences between the two cases are also evident along the authority dimension. While medical authority is demonstrated through membership in a privileged professional community in both countries, it is imprinted by overlap with racial, gendered, and generational hierarchies that vary across the two cases. In Chapter 6, I observe that status differences between provider and patient in the U.S. can be profound and providers voice a combination of frustration and sympathy over the foreign social universe of non-middle class patients. In Japan, expectations about the gender (masculine) and generation (greying) of the most trusted practitioner frame medical encounters. But most importantly, the character and extent of medical authority in the two countries can be quite different—Japanese physicians are able to make demands of their patients that might surprise American health care providers and even seem paternalistic, such as admitting diabetes patients to enforce behavior modification.

The dimension of responsibility also shows variation, and this difference weaves through all the empirical chapters in this dissertation. Most U.S.-based providers in this study and many patients in other studies construct the individual as the unit of analysis at which health and illness occur, as well as the unit that is responsible for maintaining health. This is evident in the ways providers talk about “choosing to be healthy” and their approach to patient-centered medicine (Chapter 6,) as well as in their candid reflections on the role of personal responsibility in the growth of type 2 diabetes in the United States (Chapter 4.) Even as they offer biomedical genetic explanations for why
some people develop diabetes and others do not, providers repeatedly associate a particular kind of “Type B” personality with type 2 diabetes and differentiate between patients who they see as having played no role in the onset of diabetes and those who they see as having partially brought the disease on themselves.

In Japan, on the other hand, providers, patients, and other lay people assert not only the individual but also the family, the health care system, and the nation itself as the key sites of health and illness. The broad cultural narrative on the origins of the type 2 epidemic does not emphasize an ethic of personal responsibility as the American one does, but rather emphasizes the shared genetic risk of Japanese as a people under assault from a foreign lifestyle (Chapter 5.) This narrative characterizes the Japanese nation as a homogenous community with a distinct, traditional way of life built into the very bodies of its citizens. The encounter with diabetes is framed as a shared challenge facing the nation.

Responsibility for the health and well-being of the body is also placed more firmly in the hands of physicians and the health care system in Japan than in the U.S. case. As Chapter 6 shows, Japanese physicians explain their active role in monitoring and guiding patient behavior in terms of responsibility to their patients. Type 2 diabetes is perceived as controllable, and if the patient and his family are unable to control the condition then it falls to the doctor and the hospital to do so. American providers, in
contrast, constantly emphasize that they cannot control and cannot take responsibility for their patients’ choices.

Finally, responsibility for the health and well-being of the body also falls to the family, and especially to female family members. As Chapter 7 shows, female family members actively take responsibility for enforcing the temporal organization that is associated with a healthy, ordered life for their families. And as the examples in Chapter 6 show, men without these female family members to help guide their behavior are considered by providers to be most at risk for type 2 diabetes and its associated complications. Not only the individual patient but also the patient’s family and health care provider are responsible for health maintenance and, in the case of most of the patients in this study, the management of chronic illness.

Differences along the dimensions of body, authority, and responsibility outlined in the theoretical framework (Chapter 3) have proved durable in the face of the globalization of medical technologies, biomedicalization, and standards for best practices as disseminated by English-language international journals. Thus I argue that local medical cultures prove durable even in the face of increasing interaction with one another and attempts at standardization. Rather than theorizing about biomedicine as a monolithic institution and biomedicalization as a totalizing process, it is more useful to theorize about a plurality of biomedicines. Nothing about the so-called biomedical model erases the accumulated effects of culture; biomedicine is not seamless, its
practitioners are not standardized across context, and the lay people that interact with it use it for their own purposes and according to their own narratives about the nature of the body, the legitimate limits of authority, and the sites of responsibility.

8.1 Problems, Limitations, and Future Directions


In retrospect, this study would have benefitted from firsthand collection of American patient explanatory models. Much of the literature on patient explanatory models is focused on particular, marginalized populations, and few studies present the diverse perspectives of American patients in enough detail to truly compare them to the
narratives and explanatory models offered by the Japanese participants in this study.

More work on American explanatory models remains to be done.

Another important future direction is a more rigorous examination of the relationship between provider explanatory models of diabetes and the health outcomes for their patients. The fatalistic attitudes towards the progression of type 2 diabetes evidenced in the interviews here suggest that American providers believe the course of the disease to be primarily determined by forces outside their (and possibly their patients’) control. While decades of health locus of control research has been conducted on patients and associated with poor health outcomes, little work has been done on the health locus of control of doctors and other health care providers. More research must be done on providers’ health locus of control, and on whether or not providers are transmitting these attitudes to patients. Generations of researchers have asked the question, “Are patient beliefs good for their health?” But this dissertation suggests that an important future question should be, “Are provider beliefs good for their patients?”

8.2 Conclusions

Type 2 diabetes is a fertile prompt for the interview researcher interested in eliciting narratives about the nature of health and its social and moral underpinnings. In this sense, the empirical work here illustrates the enduring diversity of impressions and ideas about what puts humans at risk of disease. Conversations with respondents about diabetes are about much more than diabetes—they are conversations about the dangers
of modernity, the nature of moral risk, and even national identity. The fact that the content of these conversations differs from site to site reminds us that even diseases of globalization are local in their meanings not only to patients, but also to the biomedical health professionals that treat them.
Appendix A: Interview Instrument

This appendix contains a bilingual version of my original interview instrument. While this dissertation primarily analyzes data collected regarding type 2 diabetes, other sections of the interview instrument probed respondents about their attitudes toward other health issues, namely immunizations and common infections like influenza and the common cold.

Sample Interview Questions

What do you think about diabetes?
糖尿病についてどう思いますか？

Do you worry about getting diabetes?
糖尿病を心配していますか？

How do you think people get diabetes?
人々はどうしてに糖尿病になると思いますか？

How do you explain DM to patients? (doctors)
患者さんにどうやって糖尿病を説明なさいますか？

Why do you think you got diabetes?
どうして糖尿病になったと思いますか？

Do you know anyone with diabetes?
糖尿病になった友達が知り合いかがいるんですか？

How do you think they got diabetes?
どういう風に糖尿病になったと思いますか？

Do you think diabetes is increasing in Japan?
糖尿病は日本で増えていると思いますか？

Why do you think diabetes is increasing in Japan?
それはどうしてですか？
What are the best things to do to prevent diabetes?
糖尿病にならないようにどうすればいいですか？

What is the best kind of life for not getting sick (in general)?
病気にならないように、どういう生活は一番いいだと思いますか？

What foods are best for the body?
体にやさしい食べ物は何でしょうか？

Do you try to protect yourself from the flu? What do you do?
インフルエンザ予防はしますか？インフルエンザにならないようにどうすればいいですか？

When you get the flu what do you do?
インフルエンザになってしまった時、どうしますか？

What do you think of masks? How do they work?
マスクを使いますか？マスクはどのように守りますか？

Do you gargle? How does gargling protect you from the flu?
うがいしますか？うがいはどのようにインフルエンザの予防しますか？

Do you think it is important to vaccinate yourself or your children? Why or why not?
ワクチンの接種をするのは重要だと思いますか？どうしてでしょうか？自分の子供は？

Do you think vaccination should be compulsory?
強制接種の方がいいと思いますか？

How would you explain vaccination to your small child?
子供にワクチンを説明してあげたかったら、どう説明するでしょうか？

Do vaccinations ever make you feel uncomfortable?
ワクチンのせいで不快に感じさせられたことがありますか？どうしてでしょうか？

Do you know anyone who avoids vaccinations? Or who has decided not to vaccinate themselves or their children?
予防接種を受けたくない人がいると思いますか？
Why do you think other people sometimes avoid or distrust vaccinations?
どうしてある人はワクチンされたくないと思いますか？

What are the reasons for low coverage in certain populations? What kinds of patient populations have lower rates of immunization? (doctors)
日本でもワクチンされない患者がいるんですが、どんな患者だと思いますか？つまり、どんなことによってワクチン比率が違うと思いますか？どうしてですか？

Questions specific to doctors and nurses

1. 日本文化は医療制度を影響すると思いますか？どのように影響するでしょうか？
2. 強制（きょうせい）予防接種はいいと思いますか？
3. 先生はどうやって患者さんにワクチンの重要性を説明してあげますか？
4. 日本ならワクチンプログラムが直面する最大のチャレンジは何だろうと思いますか？
5. ワクチンされたくない人がご存知ですか？そんな患者さんはどうしてワクチンされたくないと思いますか？
6. 日本でもワクチンされない患者がいるんですが、どんな患者だと思いますか？つまり、どんなことによってワクチン比率が違うと思いますか？どうしてですか？
7. 患者さんにどうやって糖尿病を説明なさいますか？
8. インフルエンザ予防やりますか？インフルエンザにならないようにどうすればいいですか？
9. 先生はインフルエンザか風邪になってしまいました時、どうしますか？
10. 先生はマスクを使いますか？どうして？（？？？）
Appendix B: Research Ethics

This appendix contains some comments on the consent process, as well as copies of the oral consent process used for different populations of participants and the written consent process used for U.S.-based participants.

Interview Oral Consent Script (Japan)

(おはようございます。／こんにちは。) 私はデューク大学の社会学部のアームストロング＝ホフと申します。今私は岡山大学の外国人研究員として、岡山県で予防薬についての意見や感じを研究しております。よろしくお願いいたします。これから（名前）様をインタビューさせていただきたいんですが、よろしいでしょうか？

（名前）様のプライバシのために、私は論文を書く時、偽名を使って差し上げます。それに、（名前）様の町を言わないんです。

インタビューしている間に（名前）様がやめたければ、教えてください。その場合、もちろんすぐインタビューを終えます。また、答えたくない質問か出版されたくない情報があれば、教えてください。私は（名前）様の願いを尊重おります。

今、インタビューを始めませんか？よろしくお願いします。それでは、記録を始めましょう。

(Good morning, / Good afternoon.) My name is Mari Armstrong-Hough, and I’m a doctoral student in the Sociology Department of Duke University in the United States. I am a visiting researcher at Okayama University, and I’m studying attitudes towards preventative medicine here in Okayama. I humbly ask that your treat me well. Right now I would like to interview (INFORMANT’S FAMILY NAME). Is this alright?

To protect your privacy, when I write my dissertation I will use a pseudonym for you.
[If interview does not live in Okayama City: “Further, I will not name your town.”]

If you would like stop at any time during the interview, please tell me. In that case, we will of course stop immediately. Also, if there is any question you don’t want to answer, or anything you don’t want me to publish, please tell me and I will follow your wishes.

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32 This is a formulaic, formal way of thanking in advance.

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May we begin the interview now? (Wait for response.) Ok, let’s begin the recording now.
Thank you.

**Participant Observation Consent Script (Japan)**

私はデューク大学の社会学部のアームストロング＝ホフと申します。今私は岡山大学の
外国人研究員として、岡山県でワクチンや予防薬についての意見や感じを研究しており
ます。現在日本の医療や予防薬の文化について分かるように、私は岡村一心堂病院で
（名前）のお仕事先のままで観察したいのです。

（名前）様のプライバシーのために、私はノートでも論文でもいつも偽名を使って差し上
げます。

私がいない方がよければ、教えてください。その場合、もちろん私はすぐに出ます。それ
に、答えたくない質問が出版されたくない情報があれば、教えてください。私はいつも
（名前）様 の願いを尊重おります。

私の調査にご協力いただけないでしょうか？

My name is Mari Armstrong-Hough, and I’m a doctoral student in the Sociology
Department of Duke University in the United States. I am a visiting researcher at
Okayama University, and I’m studying attitudes towards vaccinations and preventative
medicine here in Okayama. I would like to observe (PARTICIPANT’S NAME)’s job at
Okamura Isshindow hospital to learn more about preventative medicine in Japan.

To protect your privacy, I will use a pseudonym in my notes and in my dissertation.

If you would like me to leave the room at any time, please tell me. I don’t want to get in
anyone’s way. (formal) Also, if there is any question you don’t want to answer, or
anything you don’t want me to publish, please tell me and I will always follow your
wishes.

Do you agree to participate in my research?

**Consent Script When Introduced to Patients (Japan)**

医師：ところで、こちらはメアリー（さん）という岡山大学の外国人研究員です。現在
メアリーさんは日本の医療制度や予防薬の文化を勉強しているんですが、本日の診察を
見学してもよろしいですか？

患者さん：（御答え）
Doctor: This is Mari, a visiting researcher at Okayama University. She is studying the Japanese medical system and cultural practice of preventative medicine. Is it alright if she observes (lit.: learns by observation) today's exam?
Patient: (affirmative or negative reply)
Me: I humbly ask your favor. (formulaic saying)

**Card To Be Made Available to Patients**
Mari Armstrong-Hough
アームストロング＝ホフ・メアリー

岡山大学
外国人研究員
デューク大学
博士コースの大学院生

電子メール: mja11@duke.edu
携帯メール: meari@softbank.ne.jp

The card available to patients gives my full name in English and Japanese, my affiliation with Okayama University, my affiliation with Duke University, my email address, and my mobile phone address. Sending messages by mobile phone is a very common way to communicate in Japan, particularly with acquaintances one might be otherwise uncomfortable contacting. The card is issued by the hospital and contains the name, main telephone number, and fax number of the hospital.
Appendix C: Glossary of Common Japanese Terms

- **Fukisoku**: Unordered, chaotic.

- **Genkan**: A kind of foyer, symbolically situated between outside and inside in Japanese homes. The genkan is behind the front door, technically inside the house, but is below the level of the rest of the house. After removing one’s shoes in the genkan, one steps up into the actual house.

- **Inaka**: Countryside, rural area

- **Kisoku tadashii seikatsu**: An ordered life. A lifestyle that keeps regular hours, has a regular rhythm, and in which daily activities are carried out at appropriate times.

- **Kisokuteki na seikatsu**: An ordered, regular life. A regulated lifestyle.

- **Metabo**: A slang shortening of “metabolic syndrome.”

- **Nihonjinron**: A body of literature comprised of discussions of Japanese uniqueness. Literally, “arguments on the topic of the Japanese people.”

- **Soto**: Outside (literally and symbolically.)
Appendix D: Pre-Interview Instrument

The following is the pre-interview instrument distributed to female members of a gym in Hosekijima, as mentioned in Chapters 1 and 6. The pre-interview instrument was distributed with the same information card contained in Appendix B, “Research Ethics.”

アンケート

私は岡山大学の社会学部のメアリー・アームストロングホフと申します。卒論のために、私は日本に留学しております。よろしくお願いいたします。

1. 年齢：
2. 職種：
3. 子供がいますか？  はい  いいえ
4. 糖尿病はどの程度ぐらい知っていますか？
   よく知っている  少し知っている  あまり知らない
5. 糖尿病について心配しますか？  はい  いいえ
6. どうしてですか？
7. 糖尿病にならないように、どうすればいいと思いますか？

8. 糖尿病が増えていると言われているのですが、どうしてだと思いますか？

9. 強制予防接種はいいと思いますか？ はい いいえ

10. どうしてでしょうか？

11. 風邪やインフルエンザからならないために、どうすればいいと思いますか？

うがい 手荒い マスク 睡眠 ビタミン

いい食べ物 他の：__________________________
協力していただいて、どうもありがとうございました！よろしけったら、連絡してください。メールは mja11@duke.edu です。

書ききれなかったら、うらへどうぞ⇒⇒⇒
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Biography

Mari Armstrong-Hough was born in Evanston, Illinois on April 25, 1981. She received her B.A. with Comprehensive Honors and majors in Sociology, History, and Political Science from the University of Wisconsin-Madison in May 2003. She will receive her M.A. in East Asian Studies from Duke University alongside her Ph.D. in May 2011. She has been the recipient of the University Scholars Fellowship, the James B. Duke Fellowship, the Foreign Language and Area Studies (FLAS) Fellowship, and the International Dissertation Research Fellowship during her graduate work at Duke University. She also received the University Scholars Program Graduate Mentor Award and the Asian Pacific Studies Institute Summer Research Award.