FOREWORD (by Professor H. A. Bern) ………………………………… i
INTRODUCTION ……………………………………………………… iii

Chapter I - UNSHADOWED YOUTH (1935-1952)

1 A Beginning .......................................................... 1
2 New Hampshire Idyll ................................................. 21
3 California Adolescence ............................................. 40
4 Undergraduate Years ............................................... 50

Chapter II - TRIAL (1953-1983)

1 Graduate School and Marriage .................................... 65
2 Professional Life - Science ........................................ 84
3 Turning Point in Amsterdam ....................................... 104
4 Professional Life - Music ......................................... 116

Chapter III - EMANCIPATION (1984-2000)

1 Publishing - First Solutions ...................................... 142
2 Coming Out ......................................................... 153
3 Professional Life - Information Systems .................... 164
4 Advocacy - Disability Wisdom .............................. 187

Chapter IV - CONTEMPLATION ................................. 220

ACKNOWLEDGEMENTS ................................................. 223
FOREWORD

by Professor Howard A. Bern

Jean Nandi is unequivocally a great woman, one of the finest and brightest people I have encountered in my rather long lifetime. She continues to amaze me with her creativity and her adaptability. Coping with enormous physical problems, she succeeds in providing inspired and inspiring leadership to her peers, to her juniors, and, at least in my case, to her seniors.

Jean began her long and diverse career as a student of science, an apt descriptor of an intellect that really studied science, as opposed just to using science to further a career. Her ability to select meaningful issues to investigate and her drive to resolve such issues, regardless of the difficulty involved, are hallmarks of a productive pursuit of knowledge that has left its imprint in the literature of comparative and evolutionary endocrinology and microscopic anatomy.

As an undergraduate in the then Department of Zoology at Berkeley, Jean Brandt-Erichsen was awarded the first Departmental Citation for her scholarship and her independent inquiry. This was followed by a significant piece of research in tumor endocrinology, which led to a nice paper in Cancer Research. Then came her important and extensive doctoral research and tenure of a research position, limited in status only because of her marriage to her professorial colleague and former fellow graduate student, Satyabrata (Ranu) Nandi, at a time when nepotism was feared as a near-criminal activity. Ranu Nandi was once formally rebuked for publishing a paper with his wife, an act that should have been praised for its professional propriety.

Jean Nandi was one of the few students I have encountered in my decades of university participation to whom I would not hesitate to apply the term "genius." All during her academic career and her intense research activity, she sustained broad cultural interests, particularly in regard to music. After retirement from the laboratory, Jean turned with great enthusiasm to the piano and then, as a consequence of waning manual strength, to the harpsichord. She not only played with consummate skill, but she also taught and wrote a textbook for the harpsichord student. Her friends were enthralled with her talent and her ability to induce deeper appreciation in a rather blasé intellectual community.

Music lost a prime exponent when physical deterioration again forced withdrawal from an arena which had meant great gratification. Then, Jean used her cerebral and residual manual skills to become computerwise and even to make her living in a financial institution with these skills and with her ability to relate realistically to people and their problems.
With the realization of the difficulties faced by her in her disabled condition and by others similarly confronted, Jean became a proponent of welfare measures to aid the physically handicapped. In this work, often political and always demanding, Jean demonstrated the same ingenuity and "burr-like tenacity" that had characterized her life as a scientist, as a musician, and as a computer expert. Again, despite a gentleness and loving kindness known to her family and her close friends, she made use of the same strength of character and purposefulness that had served her so well in the other facets of her rich life experience.

Jean Nandi is a virtuoso, not only in regard to her special contributions but also in showing us how to live constructively, not just how to survive. She knows how to build relationships and how to use these relationships as both the foundation and the cement for action.

---

Howard A. Bern, Professor (Emeritus) of Integrative Biology and Research Endocrinologist, Cancer Research Laboratory, University of California, Berkeley. He was honored with the Distinguished Teaching Award in 1972 and the Berkeley Citation in 1990 at the University of California, Berkeley. He has been elected on merit as a Member of the National Academy of Sciences, and as a Fellow of the California Academy of Sciences, of the American Academy of Arts and Sciences, and of the American Association for the Advancement of Sciences in addition to numerous other American and foreign associations and institutions. In 1988 the American Society of Zoologists held a special Symposium, "Evolving Concepts in Chemical Mediation," in honor of Professor Howard A. Bern, and in 1990 the California Legislature cited him in the Assembly Members Resolution No. 966 commending Professor Howard A. Bern. He is the author or co-author of around 600 scientific papers. With Aubrey Gorbman, Bern co-authored the definitive A Textbook on Comparative Endocrinology (Wiley), and he is co-editor of seven books from Progress in Comparative Endocrinology (with W.S. Hoar, Academic Press) to Applications of Endocrinology to Pacific Rim Aquaculture (with E. Chang and T Hirano, Elsevier) and Neurosecretion and the Biology of Neuropeptides (with H. Kobayashi and A. Urano, Japanese Scientific Societies Press). Teacher of over forty-five Ph.D. students and more than ninety postdoctoral fellows and visiting professors, Professor Bern has a national and international reputation beyond compare among biologists.
INTRODUCTION

I've titled my book *Unconventional Wisdom* because I hope when you read it, you will see the wonderful things that can happen when you defy "conventional wisdom;" the dour voice of practicality that tells you to give up your dreams and limit your expectations.

Had I listened to conventional wisdom, I would have lived a bleak life devoid of mental stimulation and emotional warmth. I might even be dead. The reason is that I suffered from health problems beginning in early childhood and at age twenty began to experience the symptoms of a progressive neuromuscular disorder.

My reaction was to progress faster than it. I went to Berkeley, where I was mentored by Howard Bern. He sent me to Columbia for my Ph.D. to work with Aubrey Gorbman. Bern and Gorbman would later co-author the definitive book on Comparative Endocrinology.

While in New York I had the thrill of attending the world premiere of my father's Third Symphony, conducted by Leopold Stokowsky, and of meeting such luminaries as Martha Graham and William Saroyan.

My father was Alan Hovhaness, who was but a shadow figure to me most of my life. He and my mother divorced when I was very young, and she had nothing good to say about him. We lived in extreme poverty. She never held me back from my improbable dreams, however, which allowed me the great honor of being contacted by John Kennedy's personal physician, Janet Travel, for my research papers on the physiology of the adrenal.

Science also brought me my husband Ranu, who was a fellow student at Berkeley and became director of the Cancer Research Laboratory there.

The love of music was born in me and I started a new career as a professional harpsichordist, despite the fact my disability made it extremely difficult to use my hands. My solution to that problem was certainly unusual. Unfortunately, it lasted too short a time.

In one sense my story is unique, because all of us have unique stories. But living with a disability is certainly not unique and, as I have discovered in my work on behalf of the disabled over the past twelve years, much closer to home for everyone than you might think.

As science and medicine give us increasingly longer life spans, we inevitably find ourselves less able bodied. Learning to live with disabilities is
something our senior citizens have never been properly prepared for. Much of my work has involved senior citizens, and this book certainly speaks to them and their families.

One of the most important things to a person with a disability is to be seen as a fellow human being; not as a "crip" or a wheelchair case. If the following quote from a medical chart stating:

"Unable to walk, unable to stand for one minute, unable to sit for more than a few minutes, difficulty chewing and swallowing, sporadic difficulties with speech, requires assistance eating, dressing and bathing."

sounds nothing like the person you envisioned while reading these pages, I have accomplished one of my goals. For it is from my own medical record.
Chapter I UNSHADOWED YOUTH (1935-1952)

1. A Beginning

I clearly remember his long, thin face with the small mustache, his dark hair, and his dark eyes. He was standing on the staircase of our Cambridge, Massachusetts house, looking straight at two-year-old me in my mother's arms. They had words, and the words were not amicable. I do not remember seeing him again until I was much older.

Possibly this memory was strong because the house was silent. Normally our home was filled with music, far into the night. Indeed, my very first memory was of Mozart's great G Minor Symphony, scratched out on a "Victrola" with a cactus needle. The scratchiness didn't bother me—never has—because the music became internal almost instantly, and it was this inner version of Mozart that I loved. And while my father still lived with us, his piano playing and composing at the piano continued to surround us with musical sound.

My father's name, at the time of my birth, was "Hovaness," pronounced with accent on the first syllable. His original name was "Chakmakjian," but in the 1930s he wanted to get rid of this Armenian connection and so changed his name to an Americanized version of his middle name. Some years later, deciding to reestablish his Armenian ties, he changed the spelling to "Hovhaness," accent on the second syllable; this was the name by which he later became quite famous. But I, not famous, carried the Hovaness surname. My first names were borrowings from yet another well known composer: Jean Christian Sibelius. Just before my birth in 1935 my parents traveled to Finland and were welcomed warmly by Sibelius, who kindly asked to be the godfather of the unborn child: Jean Christina.

Although Father dropped out of our lives by my third year, my strong but lonely Chakmakjian grandfather remained close to us. As a teenager in the 1890s he had barely escaped with his life during the Turkish massacres, and he and his brothers dispersed all over Europe. My grandfather landed in Paris, finally making his way to America posing as a Frenchman. With considerable fortitude he achieved an education and became a biochemist, eventually a professor at Tufts University in Boston. He had married an American of Scottish descent, who had died years before my birth. I vaguely recollect being taken once to a New Hampshire farm to visit my great-grandfather, a patriarch of two successive families of which my grandmother had been one of the many offspring of his first wife. Throughout my life I was to encounter distant cousins, great-aunts and -uncles from this large and scattered Scottish clan.

Grandpa was a veritable magician, taking me to his laboratory and entertaining me with chemical "tricks." He made elaborate displays of test tubes filled
with what looked like plain water, and then—"POOF!"—they all changed into multi-colored liquids when he waved his wand over them. (Years later I remember my delight when I discovered how to do this trick myself.) Visiting his home near Boston, there were the additional fascinations of an old reed organ pumped by the feet, of special Armenian yogurt ("madzoon"), of a high galvanized iron fence around the garden which I repeatedly tried—and failed—to climb.

This dear Grandpa was a kindly, much loved, but distinctly foreign personality. He and my mother's father, Charles Henry Davis, were practically the only males to whom I was exposed in early life, and they could scarcely have been more unlike. Charles Henry must once have been an extraordinarily flamboyant personality. A highway engineer at the very beginning of the twentieth century, he became enamored with the automobile and the creation of the network of highways that eventually and so distinctively altered our country's landscape. He took early cross-country tours in a brightly painted roadster covered with license plates from every state and sporting a police siren. When I was a toddler, the traffic circle in the center of our town on Cape Cod, Massachusetts, was pointed out to me as "Grandfather's invention"—for better or worse!

Only a little of the showy display that must have characterized my mother's upbringing remained by the time I appeared on the scene. Davis had been immensely wealthy, with five daughters (my mother being the second) and a huge Bass River home known throughout Cape Cod as "the House of the Seven Chimneys" (a New England take-off on Hawthorne's "Seven Gables"). There were servants, trips to Europe, eventually a high school year in Switzerland for my mother. This Quaker family had a dignified history as well, and included the intrepid abolitionist and early feminist Lucretia Mott among its ancestors.

My mother, Martha Mott Davis, did not fit easily into this high-class environment. She was a rebellious child, and continued to rebel against her rather stuffy family surroundings well into adulthood. Completing her year in Switzerland, she insisted upon remaining in Europe and going to Rome to study art. After returning to the States she continued her art studies, completing a certificate at the Museum of Fine Arts in Boston. Who could have believed that, of all the family, it was only this smart and inventive graphic artist who was able to contribute much to the support of her family during the Depression? Her father's wealth was totally wiped out in the 1929 Wall Street crash, after which the great family and its mansion were only a tattered remnant of their former eminence. A widower since long before my birth, Grandfather Davis remarried and lived in a modest cottage near the "Seven Chimneys," only part of which remained. Nearby, too, lived his spinster sister Lucy Davis, who never relinquished the distinctive earmarks of the "gentlewoman." Bearing a remarkable resemblance to Queen Victoria, "Aunt Lucy" introduced me at a tender age to the correct laying of silverware, the use of fingerbowls and napkin rings, and other oddities of proper New England upbringing.

Mother referred to herself as the "black sheep" of this dignified family. Physically active, with dark hair and brown eyes, her looks and behavior contrasted
Jean Nandi

I UNSHADOWED YOUTH

sharp with those of her elegant, blonde, blue-eyed sisters. Even her name, Martha, didn't seem to suit, and she was always called "Patt" or "Patty Mott." She was in constant trouble at home—she quoted her own mother's refrain: "Where's Patty, what's she doing, and tell her not to." Being a rather quiet, well-behaved child myself, I loved hearing stories about the mischievous "Patty Mott." In fact I took after her blonde, blue-eyed sisters in both appearance and decorum. One of these sisters, my Aunt Frances ("Frin"), lived in Boston and spent much time with us, particularly during our Cape Cod summers. Frin, the youngest of the five sisters, fun-loving and jolly, was one of my favorite childhood companions.

So, rather characteristic of American children, I suppose, my own childhood was untypical. I inherited an admixture of foreign and "blue" blood. Like so many in the Depression years, we were poor as church mice in spite of our lofty inheritance. In the 1930s, divorce and single parenthood were atypical and frowned upon. These attitudes would in fact scar my mother's life and my own childhood.

In the early fall of 1938 a wild hurricane battered the New England coast, washing away part of our Cape Cod property, and felling trees and houses in Boston and environs. Walking near our Cambridge home became quite a challenge for a three-year-old, clambering over the downed trees and sloshing along broken sidewalks. The unseen storm at home had come to a head as well, and my mother decided to travel with me to Reno to seek a divorce. My father had gone off with "some woman," I was told later, and this made the divorce possible if he did not contest it. Father, somewhat bewildered by legal maneuvers, could not imagine protesting anything, and so we clambered on to a cross-country train headed west.

Now my mother and I were truly alone together, as we would be for most of the next seven years. Indeed, I was almost exclusively in the presence of adults, soon growing to act and talk like one. As I grew older, Mother confided in me as though I were a sister or an adult friend, and our relationship became less one of mother/daughter
than of equals. I found it difficult to relate to kids of my own age, since my language was so much more mature, and I had very different interests from such peers as I did encounter. In Reno, I remember no other small children, although I suspect there were some in the rooming house where we stayed. I do have a vivid image of lighted jack-o-lanterns and of witnessing the carving up of a pumpkin on my first remembered Halloween.

I think my mother had married Alan Hovhaness because she had really wanted to be a musician. Her family had been totally unsympathetic to her artistic interests, but at least the graphic arts were quiet. Mother did play the piano a little, and all her life had an intense and really quite sophisticated knowledge of and interest in music, much of which she learned from my father. Our family life together revolved around music. We played musical games. We sang. We listened to concerts and operas over the radio. Later on we attended concerts, when money was available. After the divorce, for a number of years, we maintained a tenuous contact with my father, who advised Mother on musical training for me and on the selection of instruments. As I started to pick at the keys of a piano, he sent me charming child's pieces of his own composition for my delight and education.

Apart from music, my very well-educated mother was a tremendous literary resource, and we spent endless hours reading aloud together, and I was soon a hopeless bookworm. In modern terms, indeed, I would have been quickly classified as "nerdy." But while our life together revolved around music and books, of which I never tired and on which I thrived, I was much less companionable to Mother in the area of graphic arts. My eyes continued to turn inward, toward inner voices, thoughts, and ideas. I simply refused to see the world around me with the clarity and liveliness of her trained eyes, and took no interest at all in visual objects. On the train, or in a car, Mother would try to point out interesting sights to me, but I could never pull myself out of my reverie, book, or toy quickly enough to spot these before we had long passed them by. "Where, Mummy, where?" I would insist, to her utter frustration.

Apart from frustration, my mother became seriously depressed. Who knew what that was all about in 1939? As we started back toward Cambridge, a long Pullman ride of several days during which we shared a single bunk, I became seriously ill. Imagine her plight: alone with a three-year-old, facing ostracism by family and colleagues because of her divorce (she was now viewed as a "loose" woman), unsure of her job which paid insufficient wages to ensure adequate child care, and unable to sleep, with a feverish, fretful child churning around and around on the narrow Pullman bunk. This journey seemed endless, and yet she didn't want it to end, afraid of what she would face on the other side of the continent. . . .

Eventually we made it back to Cambridge, and she took her printer's job part-time. It was mid-winter, and a doctor diagnosed my ailment as pneumonia. "Keep her in bed," he ordered. Hard to do! How differently this might have turned out in the era of antibiotics, but the winter dragged on and on, and I became more and more fretful, bored, troublesome. Baby sitters came and went, and our money was running out. My
ears became seriously infected. At the hospital the doctors cruelly pierced my eardrums in an effort to drain the infection without operating on the mastoid bones. I continued to scream with pain. My ears! My hearing!

Mother was at wit's end. "Keep her in bed," shouted the doctor. "Thrash her if she won't stay there." One evening, curious about some conversation occurring in the next room, I lay down against the door of my room, peering through the crack under the door. Mother heard something, marched over to the door, and, pushing it open, pushed me along the floor. She grabbed me and whacked me hard across the bottom. "Now I won't be good." I yelled. She stopped, stupefied. She had never believed in corporal punishment, and seeing my reaction, she told me later that she simply agreed with me. Never again did she strike me. There are plenty of other ways to discipline a child, many of them far more effective than spanking, and she recognized that her inability to think of a way to solve this problem was due to her own weakness rather than my evil intent. This hard moment served to forge a closer bond between us, as we struggled together with poverty, illness, and social ostracism.

I was hospitalized once again before my fourth birthday, this time to remove adenoids which had swollen due to the constant infection in my respiratory tract. This did ease the situation, and during the following summer at Cape Cod I gradually recovered my health. This, my first encounter with illness and hospitals, left a profound impression. I determined that I would be a nurse when I grew up, and I lived with nightmares of ether cones and vivid dreams associated with anesthesia, pain, and the threat of disability. Not yet would that threat become a reality, and as I recovered, the shadow of disease faded and I resumed my childish, happy, still carefree existence.

Some of the Scottish clan came to my mother's rescue. An Uncle Rob Scott picked us up in Bass River that fall and drove us to Florida. I hated the trip itself. Uninterested in what passed by outside the windows, I tried to entertain myself inside the car. Gas fumes overcame me and I became violently sick at my stomach, regurgitating my last roadside meal all over our luggage and loose clothing. We stopped by the side of the road, removed everything from the car, and hung it all out to air in the fall sunshine. Where were we? Possibly in North Carolina. I was oblivious to geography as to all else save the discomforts of this lengthy trip, so reminiscent of the last one on which I had been so seriously ill. Aversive therapy for travel? Maybe so, but travel has never been high on my list of priorities, despite my appreciation later in life of its value.

Uncle Rob and his sister, Cousin Dorothy, lived in Winter Park (near Orlando). Mother must have corresponded with them, and her deep despair had become evident to these kindly folk, who decided to give her a hand and a break with her past. They helped us find an apartment near them, although the break with the past was incomplete when my childish voice piped up in the realtor's car with "Mummy, Mummy, this is just like the place where we stayed in Reno." Mother quickly decided that her attempt at "passing" as a young widow just wouldn't fly, much to her disgust.

This time it was my mother who fell ill. Nearly thirty-five, she came down with a virulent case of measles, which was truly dangerous at her age. I was hastily
removed from the apartment and housed at Cousin Dorothy's, given painful shots, and otherwise made much of by these kind people. But it was my first separation from Mother, and this family-away-from-family spoke in hushed tones about whether or not she would survive. Cousin Dorothy's husband teased me, and perpetually asked me incomprehensible questions such as "how does your physiognomy seem to sagaciate today?" Goodness me! I never did figure out whether that meant anything. But at my tender age and state of confusion, I didn't know whether to laugh or to cry.

Mother's youngest sister, Frin, was sent for. Since she had no family, Frin was available and came quickly to assist and act as nurse, but I was not allowed to go near the house, which was contaminated with the infection. It was a time that I found simultaneously frightening and boring. There were no children in Cousin Dorothy's household, no toys, no interesting books. I already read a good deal to myself, but at four was not quite up to an adult library.

At last Mother recovered enough for the doctors to allow me a visit. It was unimaginable, seeing my mother so thin and wasted, so obviously weak that she could barely talk. But having my beloved Frin there was a comfort, and soon I was brought home for good. Frin stayed on for many weeks, and I enjoyed the company of both women, relaxed and resting, soaking up the Florida sunshine. There was not enough of the latter, though. Somehow we had managed to hit the coldest winter Florida had seen in seventy-five years. Still, despite the relief at Mother's recovery, it was a lonely time for both of us, and before the year was up we were on our way back to Cambridge.

This was our final year in Cambridge. Mother got another job with a printer, but she was looking for something better since the pay was so low. At the same time she felt it imperative that I somehow get into school, to save the cost of childcare. Kindergartens were still rare, but she found a private school that would allow my first grade entry at five years of age—too young for the public school—in exchange for art lessons which she gave at the school. I was ready for school intellectually, already reading far above first grade level, but I had a hard time with numbers and penmanship, and did not enjoy my fellow students (all of whom were at least six). It was not an easy year, indeed, and at some point I found myself back in the hospital, this time to have my tonsils removed. I accepted this additional medical insult with the equanimity born of experience. In fact, however, the post-operative pain was worse than I had anticipated, and I looked back on the hospital experience with dislike and a further determination to help ease the pain of others by becoming a nurse.

Possibly with some prodding from my father, who had visited us after our return from Florida, it was decided to find a piano teacher for me. Mrs. Balon was highly recommended, but did not take children under the age of nine. "Never," she had announced. But in this case "such a talented child, daughter of a fine pianist, already starting to read music . . . well, perhaps an exception should be made." And so, finally, she accepted me into her studio. My tenure there was short-lived. Mrs. Balon may have been a fine pianist but she clearly had no understanding of five-year-olds, and would have been wise to stick with the older children. As we appeared on her doorstep after a
few sessions. I clearly remember her dark head peering out of her second story window announcing to my mother in no uncertain terms that piano lessons were over. "Jean put her feet on the piano keys," snorted Mrs. Balon. "She will never make a musician."

Mother giggled at the vision of her unruly daughter with feet on the keyboard, but said nothing and discreetly led me away. The prediction that I would never be a musician gnawed at me, however. Indeed, it almost came true. Perhaps it was something of a self-fulfilling prophesy. But at five I was not ready for prophesy, and glad to be out of what must have been a difficult situation. In any case I had learned enough to go on reading music a little. My mother played the piano to accompany our singing, as well, so my musical education proceeded without the ministrations of a professional.

We spent one last summer on Cape Cod. Again my father came to visit. Now I was six, and more fun for him. He spent hours playing music for me, some of his own compositions, much Beethoven and Schubert. Sometimes he read through a symphonic score at the piano, or we listened to symphonies cranked out on the old Victrola. I was fascinated by this man, and wondered what awful things he must have done to drive my mother away. Indeed, she had spoken of him on occasion as a "danger" to me, as if he were some kind of wild beast or ogre. Somehow the soft-spoken, gentle man who listened and explained with such patience and love about all the instruments that we heard in a symphony or concerto, or how a sonata was constructed, could not be reconciled in my mind with that other vision. This summer, too, Father brought with him Rajah, the "Magnifi-Cat," a handsome, yellow-eyed, completely black cat that looked like a panther. Rajah rode on Father's shoulders, or sat up on the beams that ran under the high peaked roof of our Cape Cod bungalow. Rajah was dark and handsome and a little frightening, but fascinating—just like Father himself.

But my father's stay was too short, and we had come to a crossroad. Mother was offered a job teaching art classes at a private school in Rochester, New York, far from home. The salary wasn't much, but certainly better than the print shop, and the school offered free tuition for me as well. We would again be away from all family and friends, and could hardly pay for our rent and food. Always enterprising, though, Mother thought she could supplement her meager income with summer camp counseling and possibly even portrait painting. Before leaving on our new adventure, in preparation for presenting herself as a painter of children's portraits, Mother did a pastel of me for "practice." Pastels would be quicker than oil, and watercolors were too uncertain and fragile. This was a good medium for the purpose. The scheme developed further, for I was such a good reader by now that I could entertain the children while they were sitting, keeping them interested and occupied, allowing her to complete a portrait in minimum time with the least amount of discomfort to the young models.

And so, thinking that we were prepared for any eventuality, we took the train from Boston to Rochester to begin a new life. It was September 1941, just three months before Pearl Harbor.
In Rochester Mother found a two-room apartment in a tall brick building fairly near the Columbia School, and we began our new life. The school was private, covering grades one through twelve, with boys allowed in the first grade only. Mother had no teaching credential, only her certificate from the Boston Museum, and was therefore never qualified to teach in a public school. Her knowledge and expertise went far beyond that required of a teacher of art classes in these grades, and she never ceased to cast scorn on a public education system that valued credentials above expertise. Fortunately, her skill as artist and teacher were evident to all at this school, and her classes were favorites among the pupils. As the months went by, Mother developed a marvelous history of art course for her older pupils at Columbia, and over the ensuing years I had a unique opportunity to learn this subject while she continued to develop her class design and content.

As we didn't know a soul in this city, the two of us were more than ever forced into our own exclusive company. Indeed, at this time of my life I preferred Mother's warm and stimulating companionship to any other. Both of us were fairly ostracized at Columbia School. Mother, already an outcast as a single parent and divorcee, had heretical ideas that were not appreciated among her fellow teachers. On the brink of war, both Germans and Jews were targets of discrimination in the Rochester of 1941, and Mother refused to condone such attitudes toward fellow humans who had lived in the United States for decades and were loyal citizens. Japanese were not an issue here, because none lived in this northeastern part of the country at the time, but had she known about their ill-treatment later in the war she would have been equally incensed. I remember only two teachers who became her friends, and that only slowly, as the years went by.

As for myself, I was awkward both physically and socially. No good at sports or outdoor games, I was always the "last chosen" on any team, and I hated any form of physical education because of my klutziness. I cannot say that this latter represented any kind of abnormality. I was simply at the low end of the normal curve when it came to physical prowess and coordination. Apart from that, the elegant, wealthy girls who were Columbia's clientele viewed me as coming from the wrong side of the railroad tracks. They invited me only occasionally to their homes, clearly because their parents told them they must invite every single class member or be thought rude. Their homes astonished me. They were vast museum-like houses with acres of lawn, servants, clothes, and toys beyond belief. Possibly this all seemed natural to my mother, but I had never before witnessed real wealth, having only heard about Mother's privileged childhood secondhand.

There were other issues at stake. Unlike the average girl at school, I had no father. I had no brothers or sisters. Above all else I longed for a father and a brother. If only my family were more "normal." And much as I loved my mother's companionship, I somehow felt I needed more scope, without really understanding what was missing. Unlike my contemporaries, I spent my after-school time largely with books
and music. A new piano teacher was found, a Mrs. Gitelman, who eventually became a close friend of my mother's as well. That may not have been helpful to Mother in other quarters, inasmuch as Mrs. Gitelman came from a well-to-do Jewish family. But she was a graphic artist as well as a musician, so they had much in common. However, the fact that Mother "consorted" with such a person was frowned upon by many of the Columbia School faculty. I got along well with Mrs. Gitelman, and enjoyed playing the piano. Especially I enjoyed playing my father's charming pieces, written "For Jean," which came irregularly in the mail, or at birthdays and Christmas. I am certain that both my mother and Mrs. Gitelman thought I would become a professional pianist, at least at the outset, although I myself was far too young to think in terms of a career.

Finally we became friends with the family of an organist at the nearby Presbyterian Church. It was a common musical interest, rather than religion, that brought my mother and Mr. Clark together, and the Clarks had two daughters at Columbia School. The younger of the two girls, Margaret (Maggie), was in my class (then second grade). Thrown together occasionally after school, we soon discovered that we both lived on the same side of the proverbial railroad tracks, sharing poverty in addition to a love of music. We quickly became a "gang of two" at school, facing up to and snubbing the "rich kids" together. Maggie's older sister, Louise, also had a friend at the school who was another outcast. This girl, Rosemary, was Jewish—even worse. The four of us hobnobbed at Rosemary's house and pretended that the world revolved around us.

Mother (nonpracticing Quaker that she was) encouraged me to go to Sunday School with Maggie, feeling that a little education in Christianity would do me no harm. Despite my increasing sisterhood with friend Maggie, I found Sunday School an impossible bore. Occasionally Mother came to Church on Sunday, and we sat through interminable sermons spoken in a "ministerial" voice that made me think the preacher was somehow possessed. So far, religion was a turn-off, and my mother was unable to inspire me inasmuch as I could readily see that she was no more enthusiastic than I was.

However, within a year or so I became part of the Presbyterian Church choir, a role I enjoyed considerably more than that of Sunday School pupil. Choir was fun, as it was my first chance to share music with people other than my mother or my teacher. Another source of interest was the fact that the choir director was a blind lady with a seeing eye dog. I marveled at her ability to navigate to and from church, as well as in and out of the choir loft, the practice room, finding her robes, conducting the music from memory. I questioned her closely: "How do you know who is talking to you?" I would ask. "Of course I know your voice," she answered, reasonably enough. In these days before much telephone usage, I was unaware of how distinctive voices really are. This first exposure to blindness was important. The ease with which she answered my questions, her unruffled demeanor under what might have been embarrassing or sometimes difficult situations (if she lost her way she simply and casually asked me to take her arm and get her back on track, for example) must surely have influenced my view of disability in later years.
The world was becoming disabled as well. Mother and I were avid radio fans, and I soon became as caught up as she with news of the attack on Pearl Harbor and the mobilization for war. War had been just outside our back door on Cape Cod the summer before, as German U-boats hovered near the New England Coast, and both Navy and Coast Guard patrolled just off our favorite beaches. We even then had experienced periods of "blackout," when we had to place black curtains tightly over the windows at night, not allowing even a small streak of light to show from the outside. After Pearl Harbor the blackouts were mandated every night. The precincts soon organized into Civil Defense Patrols (for the most part checking for those tell-tale cracks in the black curtains), and Mother began donating blood every three months for the war effort. We did other things—recycled tin cans, saved paper and old clothes and blankets, made afghans (even this klutzy child could manage to knit simple squares). We listened to Roosevelt's fireside chats, to Ed Morrow's "This is London" broadcasts, Churchill's speeches, and Hitler's rantings.

Radio listening could be fun, too. On Sundays Mother and I listened to the NBC Symphony of the Air with Toscanini, and every Saturday afternoon we sat through the Metropolitan Opera broadcasts. Mother knew all the mythology associated with opera plots, and weaved the story as we listened, and afterwards we sang some of the music with Mother stumbling along at the piano. But it was not only music that drew me to radio. Every afternoon after school I would settle down to listen to "Tom Mix," "The Lone Ranger," "The Shadow," "Fibber McGee and Molly," "Jack Benny," and other shows that seem in retrospect to have been far more entertaining than their visual counterparts on television. I became fascinated with sound effects and how they were created, trying to imagine what was really happening behind the scenes at the same time as I was caught up in the story that they depicted in my imagination.

And so our first year passed in Rochester. I was happy enough. Occasionally I rebelled at home, and once decided to run away. Still only six, I had been warned repeatedly never to cross the street. So, I ran, but dutifully did not cross the street, and within an extraordinarily short time found myself back at my front door, having merely gone around the block. Mother was scared, and she told me that she was scared because there were bad people out at night and I might have gotten hurt or been kidnapped or something (the famous Lindbergh kidnapping was still quite fresh in memory). I said, "Well, Mummy, why didn't you tell me all that? If I had known about the bad people I wouldn't have gone out." She laughed, gave me a hug, and I was never again motivated to run off.

When the school year ended, Mother took a summer job at a camp in New Hampshire. As usual, we were transported there by another counselor who lived near Rochester and owned a car. Having no automobile of our own, distance transportation was always with somebody else, known or unknown. During the war years there was gas rationing, and I remember that Mother received gas coupons in spite of the fact that we...
had no car. Friends or casual acquaintances were glad to give us transport outside the city in exchange for these precious coupons, and so it was arranged.

The camp was a disaster, with filthy cabins—worse yet, filthy toilets—uncared for children, unpleasant staff. I don't know how long we stayed there or how we extricated ourselves from the situation, but we could not have remained more than a couple of weeks. I was terrified of the place, and found myself entirely unable to go to the bathroom, becoming sick as a result. The fear of public toilets lingered on through my childhood, and I found it extraordinarily difficult to use one that I felt was unclean. I hated camp. I hated those people. And as usual, I did not get along at all with the other children, took no interest in the usual camp activities (mostly outdoor sports), and probably made my mother more miserable than she might otherwise have been by crying much of the time.

We did escape. But doing so must have been a financial disaster for Mother. She never mentioned this, but on our return to Rochester we found another, cheaper place to live. The rooms upstairs and at the back in a home belonging to a widow and her twenty-year-old son were probably arranged through our church friends, the Clarks. These two rooms, on the floor that we shared with son Johnny, became our home for the three remaining years we lived in Rochester. We had no kitchen, only an electric burner and the occasional use of the landlady's refrigerator in the first-floor kitchen. We washed dishes in the bathroom sink across the hall, shared with Johnny. In the winter we hung a cooler box to store milk outside the second-floor bedroom window. During Rochester winters the milk often froze, causing overflow and broken glass bottles. Indeed, the window was often blocked by a huge icicle that regularly formed a solid wall connecting the eaves and the roof of a porch below.

Our landlady, Mrs. Richmond, was kind enough but nonetheless I was scared of her. She seemed enormous, and if I startled her, which happened quite easily, she would let out a scream which almost literally bowled me over. Then she would chastise me roundly for having caused such trouble. I tiptoed around her, stamping my feet so that she could hear me tiptoe and not be startled, but tried to keep entirely out of her way as much as possible. It makes me laugh to read this paragraph, since years and years later, Mrs. Richmond came to visit us in our home in California. To my astonishment, she was a tiny little thing, and I was much bewildered to think that I could have been so terrorized by her. Possibly, like a small dog, her bark was much worse than her bite. But then, at seven, I was afraid of dogs too—large and small.

Back at school, I continued to find myself out of synch with my surroundings. Apart from the "poor kid from a broken home" syndrome, I was much too articulate and well-read for a child my age. I was a year ahead in school anyway, thus younger than my fellow third graders, and I continued to be a serious musician in my after-school hours. The schooling itself was fairly watered-down in this expensive and supposedly high-class place. Almost always bored with classes, I handled boredom by inserting a favorite novel (by now Fennimore Cooper or Charles Dickens or Jack London) between the pages of a schoolbook, trying not to be noticed.
One of my worst memories was of a teacher who assigned us a chapter to read in the Third Grade Reader, instructing us to fill out a corresponding chapter in the workbook during study hour. By the end of the hour I had read the entire book and filled out the workbook from beginning to end. The teacher was furious with me, and dressed me down in front of the whole class for not following directions. I was embarrassed and humiliated in front of those peers who took pleasure in making fun of me anyway, and I was utterly confused as to what was really wanted of me as a student. At the time, of course, it didn't occur to me that this might be the teacher's mistake, not mine, and that she was flustered at the prospect of figuring out what to do with me for the remainder of the term. Curiously, she was one of the two teachers who were friends of my mother, but I think neither of us ever brought this matter to Mother's attention.

In spite of my apparent brilliance in literary matters, I was a complete flop when it came to arithmetic. I seemed to have no ability to memorize by rote, a fact that became a stumbling block in the study of music and languages, among other things. But mathematics? Of course, third grade arithmetic involved the memorization of multiplication tables, and even in the small classes of this private school the teacher did not have enough imagination to think of any way to help a student discover the logic of numbers. What the teacher did do was send me out in the hall in tears, to huddle beside the classroom door until the school principal passed by and asked, "Whatever is the matter, Jean?" This made me feel even worse, especially since I was the daughter of one of her teachers, and rapidly becoming a school embarrassment. The result of this treatment was the one and only time I cheated on an exam. Taking much too long to complete an arithmetic quiz, I was told to remain in the classroom after everyone else had been released to go to recess, and to "sit there until I finished." I sat there, miserable, until I realized that the papers of the other students were stacked on the teacher's desk and that I was alone in the room. My logical mind solved my mathematical problem with ease—I simply walked up to the desk, copied the answers from another paper, and duly appeared on the playground before recess was over.

My memory problems began to impede my musical progress as well. This really hurt. My loving teacher, having herself no difficulty just remembering the music as she played it, could not imagine that there might be other ways to master this skill aside from simple absorption. She began to harp on my problem, telling me that if I could not "learn to memorize" I would never become a concert pianist. Had I not heard that prophesy once before? I knew that I could not play really well, certainly not in the same league as my illustrious father. For the first time I found practicing to be a chore, and I began to fear the comments of both teacher and Mother. I soon became embarrassed when others heard me play, and was well on the way to developing the troubling syndrome that affects so many young music students, whether or not they learn for fun or for more serious reasons. I withdrew into my own shell, no longer wanting to share my joy in music making with others. How many others I found in the same sad state when, later, I began to teach adults who had been damaged by misguided early music instruction.
Mother, sensing that I might well need to broaden my interests and reduce my intense focus on music with which I might only come to grief, tried to find other creative outlets that she thought would be "helpful." She gave me a year of ballet lessons, hoping that this might give me a little more physical grace. Oh dear! This was definitely not my forte. Clumsy, rather pudgy, uninterested in visual beauty, I was utterly unfit for this art form. Apart from that, it began to make me feel that something was "wrong" with my body, that my Mother was not satisfied with me as I was, but wanted me to be somehow different—different in ways that I found either impossible or distasteful to achieve. In short, my childhood self-confidence had begun to erode.

In the spring of this year a small fair appeared in a vacant lot at the end of our block. Among other enticements was a pony ride. In great excitement I waited patiently while a somewhat grumpy twelve-year-old girl led the single pony around and around, taking one child at a time for one circle of the lot. Finally it was my turn. I was lifted or hauled onto the pony's back, but the guide, by now bored with the whole affair, decided we needed some excitement. She whacked the pony's rump with a stick, and he leaped forward, leaving me on the ground in his wake. Ow! My arm hurt. What had I done? I was examined by parents who had been lounging around the edges of this scene. "Can you move your fingers?" I was asked. I could. "Well, it's not broken, then." And that was all. But my arm kept on hurting. Mother put it in a sling for a day or two, then decided I was malingering and told me to "get on with my life and stop fussing." Well, I did, sort of. But the pain (probably a strain or sprain of the deltoid and triceps) lingered all that summer.

As usual, Mother sought a job for the summer vacation. Mr. and Mrs. Wickes ran a camp on Lake Ontario, not far from Rochester, and she applied for a job as counselor to teach arts and crafts. These people were really nice, and the camp was clean and well-run. Many of the counselors were University of Rochester students, who were glad to give us rides back and forth in exchange for gas coupons, and became friendly with Mother. She soon found the Wickes's to be kindred spirits, and remained lifelong friends with them and their daughter Marcia.

Happy as Mother was with camp life, I was not overjoyed. Once again, the main activities at camp were physical exercises of one sort or another. At least there was swimming in the Lake, although swimming in fresh water was a startlingly different experience from my accustomed buoyant Atlantic or the Bass River delta. Also, the swimming was competitive. I disliked that, not being fast or having appropriate form, just wanting to enjoy being in the water. I did have considerable stamina, and sometimes came out ahead in contests that involved long distance swimming, not that I really cared. The pain in my arm cramped my style, however, and was worse in activities such as tree-climbing, not one of my strong points at the best of times.

Horseback riding was an event that most children really looked forward to, and I thought I would too. But these horses were huge. As soon as I was lifted on top of one, so far from the ground, the horse lifted his hind leg and gave a vicious kick at a fly under his belly. I screamed. I thought for sure I would be thrown to the ground again. I began to bawl inconsolably, until I was lifted off the horse. One or two additional
attempts were made, during the summer, to set me atop a steed again, however gently. All to no avail. I was terrified of horses. I was pretty terrified of dogs. My knowledge of animal life ended there, apart from my early experience with Rajah the Magnifi-Cat, and had life not soon taken an utterly unexpected turn I might have forever remained a citified kid with no love for animals.

Landlady Richmond detested cats. Cats were the one animal toward which I felt some warmth, and someone gave Mother a tiny black kitten that she brought home hidden in a grocery bag. "Surely Mrs. Richmond could not fail to love this tiny little thing," Mother said. And so we kept the loveable little creature in our rooms secretly for a week or so. Inevitably, Mrs. Richmond pounced on our door one day about something—or-other, or just plain nosiness, and she caught sight of the tiny ball of black fur on our couch and let out one of her shrill screams. I might have equated this response to my undignified behavior atop a horse, but had not the wisdom to do so. Of course the kitty had to go, much to my sorrow. Once again, animal life was beyond my reach, and my experience of the outdoors, apart from the summer camps that were repeated each year for the next two years, consisted of finding treasures among the trash in back alleys that I explored in secret when I wanted to be alone.

The next two years slipped by with few changes in routine. Daily we both arose and trudged the few blocks to school, keeping the same hours and returning together for a snack and radio listening. Then, while I practiced, Mother cooked up some supper on her closet burner, often annoying me intensely by singing along with my playing. "Stop, Mother!" I would wail. I could never keep up with her, and as my playing fell further and further behind I would get utterly frustrated and simply give up. This playing was never good enough. I could not please myself, or Mother, or teacher.

But on my ninth birthday I received a miraculous present from Father. I learned later that it was not really from my father, but he did advise Mother on its purchase and so she let me believe that he had really given it to me. The present was a violin. What a beautiful thing it was. I wanted to take it to bed with me, and it was only with great difficulty that Mother persuaded me that this might be "bad for the violin." When could I start lessons? They began right away, at the Eastman School of Music, with Mrs. Garlick, a violist with the Rochester Symphony Orchestra. I was ecstatic. I believe Mother was in considerable pain as I scratched my way through early exercises on open strings, then tried to find the correct pitches in first position, then third. I forged ahead with great joy, oblivious to the actual sounds I was making, as indifferent to them as to the old Victrola. Rather surprisingly, I was also able to memorize this music easily. But after all, it was only a single line of notes to learn, and whatever inhibitions I had built up between myself and the piano were not there to impede progress on this beloved instrument. The marvel of being able to feel the musical vibrations under the chin, down into the chest, and spreading through the rest of one's body. Just holding and caressing the violin, while bringing the bow up from the floor with a single, unified gesture to produce a better and better tone. Ah! Here was my life! I even performed—though not
without a great deal of fear that I would drop the bow on the floor and ruin everything (of course that did not happen), and my musical life was again off to a pleasurable start with a promising future.

Only after my mother's death, did I hear from Mrs. Gitelman about her feelings about my early performance at the piano. So fraught with frustrations about my memory problems during my childhood, she never told me how wonderfully and musically she thought I played. She wrote in 1984 that "I never forgot the marvelous expressivity with which you played even at a very young age." Why hadn't she told me that at the time? I suppose teachers seldom realize the true effects of their actions or words, nor the need for that unspoken praise and acknowledgment of true delight. The result of her not speaking was that I never fully enjoyed the piano after that, deciding that I really was not even in love with its sound, only the extraordinary music that had been written for it. Because I did not persist in formal training, most of that musical literature forever remained far beyond my technical abilities, and I enjoyed it only as spectator and listener. Enjoyed with a passion, but also with a pang....

Meanwhile, the violin was a true thrill. I wrote my father that "I adore Saturdays because that is the day on which I have my violin lesson. On the other hand, I am always a little unhappy on Saturdays because I can't practice on that day." Apparently I had been told that on Saturdays I didn't "need" to practice because I played for my teacher that day, which gave me the notion that I was therefore "not allowed" to practice on Saturday—sad day indeed.

Despite the problems at school and at the piano, there were many other wonderful and fun occasions to round out those Rochester years. Mother and I were always "best friends." We continued to sing and play musical games, to go to concerts and museums, and to read together. We had a season ticket to the Rochester Philharmonic, then conducted by Jose Iturbi. Once we found a five-dollar bill in the snow at a bus stop on the way home from school. This was a fortune for us, and we blew it on an extra concert and dinner at a downtown cafeteria (I don't think I realized there were other kinds of restaurants in a big city like Rochester). Sometimes we brought Maggie Clark along with us on these adventures, and she became more and more like a sister to me. I still remained aloof from the other girls at school, and they continued to shun me. Occasionally I played with "public school" children who lived on our block, but I got into much trouble because of my clumsiness. Once I tried to lift a smaller child onto my shoulders, and managed to fall forward under her unexpected weight. She fell over my head onto the pavement and broke her collar bone. I was shunned even more, considered to be something of a menace, and no good anyway at ordinary games like hopscotch, jump rope, and roller skates.

So I spent most of my time with my favorite companion, my mother. During one winter period, for a school project, I extracted from her a number of marvelous stories about her naughtiness as a child, which had been legend in her own family. I kept quizzing her about the terrible things she had done, which included locking the principal of her school into her office. Mother, who must have been my own
age of nine at the time, had been sent to the principal's office for some infraction. Finding the key in the door, she had simply turned it and made off. The worthy dignitary, undoubtedly in a long dress and uncomfortable shoes, was obliged to climb out of the second story window in order to make her way home.

Mother readily obliged with these stories, thinking she was humoring and entertaining me. The payoff was my written school essay on the subject of "Naughty Things My Mother Did as a Child." Remember that Mother was a teacher in this school! I was invited to present my paper at a school assembly, which certainly created a stir. Afterwards, Mother asked the Columbia School principal whether she was to be fired. No," said our principal, "but I am going right up to my office to take the key out of the door."

When I wasn't embroiled in mischief, I was a helper and business partner with my mother. She was doing a flourishing business in children's portraits, and continued to "practice" on me, so there are a number of extant portraits of Jean between the ages of six and nine. Having learned to sit still and not wriggle while the painting was going on, I was most sympathetic to other children who I entertained while they were being compelled to sit. Afterwards, Mother kept putting this or that last minute "touch" on the paintings while I fussed at her. Since painting and eating and everything else all went on in the same room in our crowded little flat, she would leap up from the dinner table, pick up a piece of colored pastel chalk, and dab at the nose or chin of whoever was currently on the easel. This used to make me quite cross. "Mother, it really looks fine just as it is." I could not understand the dabs of color, which to me made the faces look weird or bruised, and only later came to understand how light is reflected from skin or fabric in different shades or tones, and that without these dabs and splatters the painting would be lifeless.

There were other times when Mother did find me tiresome. The worst, for her, were the occasional times when she attempted to entertain a male friend. I would instantly leap into the lap of any man who entered our small apartment with a "Mr. won't you please be my daddy?" Oh dear, any chance of that surely withered on the vine in that instant. To make matters worse, Johnny Richmond, the barely adult son of our landlady, was smitten with my mother, fifteen years his senior, and pestered her a good deal. I insistently aided and abetted Johnny's pesterings, much to Mother's fury. She couldn't seem to figure out how to tell me that this was all extremely inappropriate. I suppose I did know that, but I wanted so very much to have a father I just couldn't help myself. It didn't seem to enter my head that not just any man—old or young—would do.

In any case, this problem was finally resolved, soon after my tenth birthday, along with the end of the War in Europe and the entry of men into our lives.

For the summer that followed my tenth birthday, Mother decided we would not go camping, but rather return to Cape Cod to visit old friends and family, and
get a much-needed rest from the year-round routine. Observing that I spent too much time alone, she suggested that we bring my best friend Maggie Clark and give her a summer treat on the Atlantic beaches and in our rustic Bass River bungalow. I am not sure who gave us the ride from Rochester to Bass River, but I clearly remember my excitement when we crossed the Cape Cod Bridge and smelled the sea salt and the rough grass on the dunes.

Maggie and I quickly made ourselves at home, swimming, exploring the woods and dunes around Bass River together, going up to the small boat harbor and supply shop run by Mother's friend Ted Frothingham. Ted had been Mother's companion when both were children growing up in this neighborhood, and both had become expert sailors. Mother's great interest in this sport was due to her discomfiture on land, as she developed very severe hay fever during the summers. In her youth, of course, there were no remedies at all for the constant runny, swollen eyes and nose, and her only relief was to go out onto the water and stay there, day after day. Ted had continued to live on the Cape, and after a stint in the Coast Guard had come back to reopen his boating business, "Ship Shop." Although I never learned to sail, I loved spending time on the boats, rowing when there was nothing more adventurous afloat, and otherwise steaming or sailing around the Cape with Ted and his rough cohorts among Cape Cod fishermen, lighthouse operators, tour boat captains, and the like.

Another favorite activity, especially on rainy afternoons, was Jean's and Maggie's own summer stock theater. Mother had kept many costumes and other interesting articles of clothing acquired during her teens in Europe, and these resided in a treasured "costume box" in the bungalow. We loved to dig around among these items—long gowns, the fancy headdress of a Brittany farm girl, brocaded dresses and aprons, and a wonderful black velvet cloak that could be swirled around us to great effect. So we put on plays, which we invented on the spot and carried out spontaneously with no script (or even a plan, for that matter), inviting the neighbors and relatives and requiring their respectful attention for hours at a time. How lovely of them to indulge us so.

We had an exciting visit from my father, early in the summer. And he brought with him Rajah, the Magnifi-Cat, amazingly youthful at the ancient cat age of eighteen years. Rajah still loved to play, although he was too dignified to clamber on the beams, but he would race after us through the grass chasing after a wad of cellophane tied to a string. Father asked if we would keep him for the summer, as he was headed for Europe and had no place to put the dear old cat. Keep him? Of course. At last we had a delightful animal to play with, and Rajah loved to cavort with this younger set, having lived for so many years alone with Father.

My father, once again, spent his time making music for us and with us. He taught me to read an orchestral score, or at least to follow along the various instrumental lines as a symphony was played on the Victrola. We still had our old Victrola, "His Master's Voice," with the dog peering into a large bell-like speaker, but one of my Great-Aunt Lucy's neighbors had a more modern machine. Whenever possible, we would all go off to lunch at Aunt Lucy's (lace napkins in napkin rings,
fingerbowls, and all), and then retire to the neighbor's for an afternoon of symphonic listening. We had now graduated technologically to steel needles and seventy-eight rpm records. But a symphony was hard work—someone had to be the designated record turner, getting up every ten minutes or so to flip the record over, there being a momentary pause in the music while this was accomplished.

Soon my father was gone, but Mother's sister Frin appeared and stayed for an extended time, much to my delight. She was a wonderful audience for our made-up plays, and we loved sitting on the beach with her and Mother, singing rounds and part-songs and endless ballads. When a car could be borrowed or a visitor arrived with such an amenity, we would go off to Barnstable or Hyannis and eat interesting clam or lobster dishes unique to this region. At other times Maggie and I went with "Jimini Wedward" to try playing a little tennis, or to fish for soft-shelled crabs in a nearby stream. "Jimini Wedward" referred to two brothers, one my age and the other a little older. Apparently in my earlier sojourns on the Cape I had called "Jimmy" and "Edward" by this run-together name, and Mother always called them by it, I am sure to their utter disgust. Although, at ten, I found it a little exciting to be going places with boys, they really seemed no more interesting or compatible than the myriad of girls I had been exposed to at school. I believe this cool assessment was mutual, so for the most part Maggie and I kept to ourselves, holding endless excited, whispered conversations in our back-yard tent or other secret hideouts around the relatively uninhabited area where we lived.

But the biggest event of the summer was the visit by the Danish sculptor Viggo Brandt-Erichsen and his six-year-old son, Thor. Viggo knew Mother because his deceased wife, Joan (Thor's mother), had been one of Father's composition and piano students at a time when I was too small to have noticed. Joan had been paraplegic, and Viggo needed to accompany her to Boston for each monthly lesson. There must have been many hours during those lessons when Mother and Viggo discussed art—possibly even other matters. Joan had died about a year before our memorable summer, and now Viggo and Thor lived alone on their farm in Jaffrey, a small town in southern New Hampshire. Presumably there had been letters between Viggo and Mother during this year, and their correspondence might in fact have been the cause of our summer sojourn on the Cape to begin with.

At any rate, Maggie and I awaited this visit with breathless anticipation. It was rumored that Viggo had noble blood! They were to stay for a whole week, and during that time we would also have a younger brother to entertain. Secretly, Maggie and I already imagined a plot in which Mother (universally known as "Miss Par) and Viggo would elope, leaving the two of us in charge of Thor. This plot had endless variations, for which we had had plenty of practice during our summer theater adventures. At any rate, Viggo and Thor would be driving down from Jaffrey together in his car, but of course the time of arrival was a bit uncertain, thus adding more spice to the general excitement.
At last the small gray Plymouth appeared in our dusty driveway. Viggo came out from the far side of the auto, handsome, with courtly European manners, sweeping his blue beret off his head and bowing to the three of us. Thor opened his door and bounced out, cute as could be, with huge blue eyes and a shazam ring that, he later confided, proved that he was the "God of Thunder." Oh, better even than our wildest expectations! Maggie and I immediately hauled Thor off to see the sights, leaving Viggo and Mother alone for the duration, to their complete satisfaction.

Maggie and I giggled and whispered at night. "Wouldn't it be wonderful if Miss Patt and Viggo were to marry?" Although this seemed like a fairy tale and impossible dream, we continued to elaborate on the plot. If it were really to come true, I might acquire both a brother and a father in one fell swoop. Viggo continued to charm us, and in the meantime Thor evidently fell in love with the two of us. I suspect that he was as starved for family as I, and must have had little youthful companionship during the past year or two. One night when Mother tucked him into bed, he asked "Miss Patt, can I buy Jean and take her home with me?"

The week was over much too soon. After they left, Maggie and I chewed our nails and speculated, then pretended to go on as normal. Finally a letter arrived, and Mother broke the news to us: Viggo had proposed! What should she do? What should she do? Marry him instantly, of course. We danced around her with delight, shouting and singing and unable to contain ourselves, frightening Rajah the Magnifi-Cat right under the bed.

Well, this was not so simple. Mother still had a contract with Columbia school in Rochester. Could she wriggle out of that? Not right away. Indeed, not until Thanksgiving, as it turned out. But she enthusiastically, if not without considerable inner misgivings, said, "Yes." We all began making plans, writing letters back and forth, with Maggie looking on. In retrospect, I am amazed at Maggie's unselfish delight in all of these proceedings. As it turned out, once the deed was done, I was never again to see Maggie. She must have known that this was the end of our time together, although I was heedless of the loss we would face on being separated. Maggie was my first and only close childhood friend, and although I had moved before at a much younger age, it did not occur to me that geographic distance in those days could really mean a severing of relationships.

So we moved back to Rochester at the start of the school year, having seen my father one more time to return Rajah the Magnifi-Cat to his rightful owner. Although back in school, neither Mother nor I could think of anything at all beyond this impending marriage. It was arranged that the wedding would take place in Rochester, and that Thor and I would attend as ringbearer and flower girl. We were nearly oblivious to all external events, even the unwinding of World War II, and I was personally on pins and needles of anticipation during the nearly three months before that eventful Thanksgiving holiday.

Finally Viggo and Thor arrived at our tiny apartment in Rochester. But Thor had a hacking cough, and was sick enough so that the very next day he was rushed
off to the doctor. This was a big deal in those days, as one simply did not go to a doctor for minor ailments. But this one seemed to be serious, and, indeed, the doctor pronounced it to be whooping cough. Oh dear, oh dear! What about our wedding plans (as though it were "our" wedding)? "No," the doctor was firm and very stern. "Jean must have inoculations, and both children are to be quarantined for the entire duration of Thor's illness." This in fact turned out to be a matter of several months, and our participation or even witnessing of the wedding was canceled on the spot. When the great day itself arrived, then, Mother and Viggo dressed up in gorgeous clothes and vanished from sight, while Thor and I mournfully hung out in the apartment by ourselves.

We had only a few hours to feel sorry for ourselves. That very night, as soon as the festivities were over, we were bundled into warm clothes and blankets, stuffed into the back of Viggo's old gray coupe, and we started off for the New Hampshire farm with hardly a look back. It was bitterly cold on this weekend after Thanksgiving, and Thor was really uncomfortable with his hacking cough. Here we were, once again on a miserable journey. This time I was not ill myself; but I was shaking with cold and completely empathetic with my new little brother's discomfiture. At long last, in the wee hours of the morning we arrived at the farm, and our new life began.
2. New Hampshire Idyll

You cannot imagine the transformation my world underwent that particular night. Life suddenly went topsy-turvy, and I felt like Alice through the Looking Glass. What a thrill to wake the next morning to an utterly new scene. Snow covered the rolling, rural farmland and the roof and eaves of the white clapboard farmhouse in which I found myself. Coming downstairs to the huge and still icy cold farm kitchen, I found an attached passage to the barn, within which was a wooden "two-holer" outhouse. In the barn itself, this early November morning, was a huge fat man milking a cow. Incredible.

The farmhand introduced himself pleasantly between squirts of tobacco juice spat out into the trough behind the cow's rear legs. He was Mr. Stratton, and the cows (four of them) were his own. But he took care of our animals and did other chores in exchange for the use of our barn, so I would be seeing him twice a day when he came for the milking and feeding of livestock. Our inventory of animals, to which I was introduced as soon as milking was complete, turned out to be a castrated male goat named Michael, a gentle old white horse (Bobby), a mischievous brown pony with the Danish name of "Jørgen" (pronounced "Yern"), and Bonnie, the little black Cairn Terrier. There were also a number of assorted cats, some of whom stayed strictly outdoors or in the barn, and one or two who inhabited the house and considered themselves upper class and part of the human side of the family.

Thor and I were to be isolated here on this farm for about three months, with no school, no other kids, only Mr. Stratton and Mother and my new "Daddy." What a wonderful opportunity to learn about animals, and about a way of life completely foreign to all of my previous life experience. My only animal contacts, besides lovable Rajah the Magnifi-Cat and the terrifying horses, had been a large dog with a "bad tail," who had knocked me over at an early age. This left me very apprehensive of dogs as well. But Bonnie, the little Cairn, was so small that it was hard to be alarmed by her. She had a habit of "smiling" and sneezing at one when she wanted attention, which soon charmed me. And horses? Although I was even more apprehensive in this department, in the middle of the New Hampshire winter I needn't worry about anyone trying to lift me onto one of those high backs. In fact, the pony, Jørgen, didn't have a very high back and didn't seem very ominous, even though he was tough and strong and full of tricks. Bobby, the big white horse, was so gentle that he soon calmed me, and I quickly took over some of Mr. Stratton's work of feeding the horses and the goat, cleaning their stalls, brushing and currying their thick winter coats, and generally befriending these huge creatures, including the cows.

I learned other aspects of farm life, such as pumping well water at the sink, and bringing in wood for the stove. I also observed Mr. Stratton straining the warm milk, pouring it out into cans, watching the cream rise to the top. We did not drink this unpasteurized milk, but Mr. Stratton sold it to others in town. Later in the year when a calf was born, I took buckets of milk to the calf, and learned how to teach him to drink by
holding my fingers in the milk and allowing him to suck. Gradually I came to be more than just a nuisance, but a real helper to Mr. Stratton. I found myself truly absorbed by all there was to see and do.

Thor remained quite ill with his whooping cough, although he would periodically feel sufficiently better to accompany me around the farm buildings, clearly enjoying the fact that I was such a greenhorn that he could inform me of all manner of things about rural life. He also told me much about his father, whom I now joyfully called "Daddy," and I reciprocated with information about Miss Patt (now "Mother" on his side) and some of my own history. But Thor was really uninterested in the music that had previously been my passion, and claimed to be "tone deaf: I suppose somebody had told him that, and remembering that his own mother had been a musician, I think she must have been hypercritical of him when he didn't show an immediate ability to sing on pitch or find his way around a musical instrument. Oh, well, I was so overjoyed to have this new little brother who knew so much about our surroundings that I threw music to the winds, and spent little time picking up my violin and trying to progress a little with no teacher.

Thor was not the only one to discourage my music-making. Thor's mother had been an invalid from a broken back, and had quite selfishly insisted that Viggo care for her hand and foot, leaving little or no time for him to work on his beloved sculpture. This situation grew severe when she came down with the cancer that ultimately took her life, and it had been some years since Viggo had done any serious work of his own. This was a tragedy. As a young man, Viggo had come to Jaffrey from Denmark in order to bury his first wife (this was an early, brief marriage that had ended all too quickly). He had created a magnificent memorial to her, which had duly impressed the Jaffrey selectmen, who later hired this talented young sculptor to build a World War I Memorial for the town. Laying his creative career aside, just as he was having these successes, must have been truly painful. Viggo surely found my still-scratchy violin and unprofessional piano playing a great trial. He really did not want me to spend my time on music, and in fact did not want to hear any music at all around the house. Typically, he left my guidance to my mother, but in retrospect it is clear that his influence quieted our once effervescent music-making. For the first time in my life, I remember Mother calling out to me, "Stop, that is enough practicing for today."

Eventually Mother confronted me and insisted that I choose between this new life and the old. She firmly believed that it was wrong to continue to work at the violin without a teacher. "Worse than useless. You will just learn bad habits," she said. "Really, Jean, if you insist on going on with your music studies, we could take you to Boston for that." However she continued with, "It would be very hard for us to do that, as you can see, but we would be willing if you simply cannot get along without. Of course, if you do decide to study music so intensively, you would not have time for all the farm animals and the various small town activities you are just learning about and beginning to enjoy. Your choice."

Well, what was a ten-year-old to do? I laid aside the violin and turned to learning horseback riding and training of horses, to farming of all sorts, to scouts, and my
new school. The latter had been quite a shock, inasmuch as one would have expected my private Rochester school to have provided a superior education. Nothing could have been further from the truth. Jaffrey's public school was no-nonsense, the "three R's" and physical education, lots of homework, and no fancy new ideas about experimental teaching. I was very far behind the other students when I finally made it into the sixth grade, and had plenty of work after school to try to catch up. Although this unexpected challenge was a little frightening, in a way I enjoyed it. For the first time my schoolwork was a stretch, and so I happily stretched until I was up with my class.

So our new idyllic life was not an unmixed blessing. While I was blissfully happy about the new father and brother, I did have to leave things behind, much of it forever. Gone were most of the musical activities that had been of major interest hitherto, gone was any contact with my own father, who now failed to write me or send me pieces as had been his wont, gone was my dear friend Maggie, along with just about everything that I had known before. In my eagerness to completely embrace this new life I failed to notice that these losses hurt, though some of the wounds were not healed until many years later. Only my hankering for music kept popping up in various guises, and over the next few years I joined the church choir, took voice lessons at home from a second or third rate Russian diva who happened to have settled in our town, took clarinet lessons and joined the school band, and sneaked repeatedly into the living room when Daddy was outside and played my heart out on the piano.

My mother, too, must have had quite a few misgivings. Although she kept her feelings to herself, it was not easy for her to settle into life in a small New England town after the big city and all its amenities. Characteristic, too, was the slowness of New Englanders to accept strangers, even the wife of their beloved "Count Erichsen." The title was a figment of their imaginations, but Mother recalled answering the telephone one day to hear a voice asking repeatedly for "Connie Rickson." She politely explained that the person must have a wrong number and hung up, only to have the phone ring again with the same interchange. Finally the local operator, who must have listened in to absolutely every telephone conversation that ever occurred in this small town, broke in with 'Oh, Patt, you know, he wants Viggo!' As if these small gaffes were not enough, Mother felt really awkward with Thor, whose own mother had been gone only a little over a year. He was so young—only six—that she was terrified of doing something that he would misinterpret. Mother did not know, at this time, that Joan Brandt-Erichsen had spent rather little time with her son. What he needed more than anything was love, and she was afraid to show how much she did care for him, for fear of frightening him away.

But we muddled along anyway, convinced that our family was the best in the world. After all, had we not put it all together ourselves? I was relieved of the stigma of "only child" and "fatherless child." Indeed, within a few short months I was officially adopted by my stepfather, becoming in name as well as all else, "Jean Christina Brandt-Erichsen." Mother gradually overcame her divorce, once the townspeople decided that she wasn't just a golddigger. The gossipmongers may not have realized it, but there certainly wasn't any gold to be dug out of Viggo's slim pockets! Once we were over the
whooping cough quarantine, we began to see ourselves as leading a remarkably normal life indeed.

---

We did not remain on the farm for long. Memories there were too painful for Viggo, and in the summer of 1946 the family made a move closer to downtown, to a beautiful large dwelling known as the "Stone House." It had a barn and large fenced-in corral, but we only brought one of the horses—Jørgen, the little Iceland pony. Beloved white Bobby was considered too old, and so I had my first experience with a harsh reality of farm life, the "putting down" of animals no longer worth their keep. Jørgen was not exactly young, but he was tough and energetic, and quite a pet of Viggo's. He had never been trained for riding, but Daddy used him to pull a little cart or sleigh, and to do some plowing and harrowing of the family vegetable garden. To mollify me for the loss of Bobby, I was told I could learn to ride Jørgen, and at the same time teach him to be ridden. "No saddle," my new father admonished. "Too easy to get caught in the stirrups if he throws you." Of course I was very fearful of the idea at first, but Jørgen was already my good friend, and if I did fall off I didn't have far to go. Indeed, I did a fair amount of falling at first, and soon ceased to regard this as a catastrophe.

By summer I had learned to ride, after a fashion. At least Jørgen learned to submit to what he appeared to view as the considerable indignation of bearing my eleven-year-old weight. Eventually I even saddled him, although the extremely narrow shoulders of the Iceland pony made it easy for him to drop his head, kick up his heels, and have the saddle slide forward practically to his ears. Thus he promptly rid himself of anyone on his back, however skilled a rider. So my "training" of Jørgen really amounted to a kind of truce. He rather enjoyed the adventures on which I took him, appreciated the good care I gave him, and for the most part tolerated the rest of what he considered to be his part of the bargain. The following story is typical, and I do believe Jørgen enjoyed this outing with his somewhat puckish sense of humor.

Early one Saturday afternoon, I had finished chores and announced to my mother that I would be going on a long ride by myself. But New Hampshire weather is unsettled and unsettling, and when I spied dark clouds spreading over the immediate area I knew it would rain, and soon. Indeed, it was clear that it would be a good storm, wet and thunderous. My mother was still in the house. Had she seen the threatening weather signs? Expecting her to call out a "No, you cannot go now, it is going to rain," I did not wait to find out.

Dashing out of the house, skimpily clad in short-sleeved shirt, shorts, and tennis shoes, I raced to the barn and slipped the pony's bridle over his head. Without waiting to put on the saddle, I led him out of his stall and scrambled onto his bare back, kicking his sides with the heels of my sneakers and urging him into a gallop. Down the road we went, my blonde pigtails flying, his tail streaming behind, I in the guilty knowledge that I had just escaped what would have been Mother's perfectly reasonable refusal to let me undertake this adventure.
And it rained. It poured. It became dark and cold, and the thunder crashed around us. The little horse and I were soon soaked, but the pony did not appear at all perturbed by this turn of events. He trotted along peaceably as I jounced around on his bare wet back, shivering, and getting more and more uncomfortable. But I had determined to go to the farm of a friend on the other side of town, five miles away, and had no intention of turning back to hear that I had "decided to be sensible." I am not certain, now, whether or not I had told my mother of my intended destination. It did not matter—destination it was, and I grimly hung on to the pony, wiped the rain out of my eyes, and urged him forward through the muddy trail along the side of the macadam, my nostrils full of the smells of wet leaves and earth, and of the horsy smell of sweat and soaking hair.

After an hour we reached the farm, and as I clambered off Jørgen the lady of the house opened the door and greeted me with a "Well, look at you!" and probably other expressions of the obvious. The pony must be cared for first—rule of the road for horse lovers—so I found him a stall and some hay. Then into the house. Mrs. Grumman was already on the telephone, calling my mother and explaining to her and to the ubiquitous operator that I was safe but soaked and that she would "take care of things." I was soon wrapped in a blanket in front of her fireplace, the logs crackling and my steaming clothes hanging on the firescreen.

New Hampshire storms leave as quickly as they come. Within another hour the rain had stopped. Within this hour I could have made my trip without commentary from my parent. In front of Mrs. Grumman I felt sheepish indeed—I had caused her a certain amount of inconvenience, after all. I do not even remember why I had come here, except that the trip was along a trail I wanted to follow that day. My mother shrugged her shoulders on my return. What could she say that was not already apparent from the event itself?

This may have been an early expression of teenage rebellion, but my insistence on going on with whatever it was that I had in mind, in spite of conditions that might have deterred a more sensible person, seems to reflect my life-time dance to some atypical drummer. It is interesting that Mother did not chastise me on my return. I suppose I did not really expect that, although she concurred with my notion that she would have forbidden this ride had she realized that I was still determined to go in spite of the obvious change in the weather. My mother did not, in general, tell me what to do. She clearly expected me to behave in a sensible fashion, which was certainly not always a justifiable expectation, but within reason she concluded that I would learn more from my own mistakes than from her dictums. That was certainly justified and accurate, and in many ways I grew up faster than my contemporaries as a result of such teaching.

Certainly no berating on her behalf could have provided as vivid a memory of the absurdity of my behavior than Nature's outpouring of water and thunderous noise. Nothing could have humiliated me more than the self knowledge of my foolish, wet, and filthy appearance before the friend (my mother's age) at the other
end of the trail. On the other hand, no harm had come from this misadventure. Did not that justify my escape from the confines of decorum and the safety of shelter during a storm? I do, now, look back on this as a metaphor for much subsequent behavior which ignored convention and was increasingly risk-taking when something seemed to be gained by that. What was gained by this one? Possibly very little. Possibly a lot, if it opened the way to free myself from parental or other authoritative influence.

In the summer of 1946 no such thoughts interrupted the enjoyment of our new home. We acquired more animals—ducks, geese, chickens, and some female goats that I now was responsible for milking. I enjoyed the task, but hated the goat's milk, although I think we gave it away to someone who truly could make use of it. I continued to do foolish things in the rain. Thor remembers another silly occasion. Both of us had morning and evening chores, the care of the animals divided up between us. At the moment when he was getting ready to trek down to the barn (there was no covered walkway at the Stone House) we experienced a downpour similar to that described above. Thor sensibly dressed himself up in rubber boots, a Southwester, and a rainproof hat. Standing perfectly dry at the window, he and Mother spied me, in shorts and thin shirt, rushing out into the paddock to collect the geese. "Geese," she later snorted, "love the rain. Why were you even bringing them in?" But with my usual clumsiness, I simply skidded in a mudpuddle, ending up on the seat of my shorts, geese scattered about honking at this silly creature splashing about among them. Hardly dignified! But then, I loved the rain too, silly goose that I was.

Although Thor and I had our occasional spats, the difference in our ages was sufficient to avoid real competition or conflict. He did try desperately to emulate his admired big sister, but as time went on it was clear that our interests and talents lay in different directions. Thor did not really share my passion for animals, although he enjoyed having them around. When I finally outgrew Jørgen and acquired a large horse, Thor inherited the little brown pony. But Jørgen never agreed to this bargain, and really gave Thor a hard time with his tricks. Sometimes, as Thor was trying to catch up with the rest of us on our bigger horses, Jørgen would simply stand still, or worse yet, start backing up and refusing to obey the order to go forward. Thor would be furious and frustrated. Making up his mind that riding was no fun at all, he would go back to one of his building projects in Daddy's workshop.

Here Thor excelled, after his seven-year-old fashion, as did his father. Viggo proceeded to build a large kiln behind the shed, and started to produce some fine large pieces in ceramics. Thor was fascinated by the glazing process, and the roaring kiln with its high temperatures gauged by melting clay cones was dangerous and thrilling. Thor, visually oriented as were both Mother and Daddy, soon began to create things: paintings, clay models, wooden structures with or without use. He loved to work with Daddy building things, and acquired a tool belt that weighted down his pants but was a source of great pride.

Sometimes Thor and Mother connived to fool me. One day Mother purchased some Swedish rye bread, which came in huge cartwheels with a hole in the
It was crispy stuff somewhat like Rye Krisps, but thicker. Delighted with the sight of this, she hung several cartwheels on our dishtowel rack, which was one of those with hinged rods jutting out from the wall. This rack was installed high on the kitchen wall, so we had to reach up to retrieve the towels.

On this particular evening, Thor and Mother were washing dishes. I, late as usual from chores in the barn, rushed in, reached up, grabbed a towel without so much as a glance at the rods on which the towels hung, picked up a wet plate, and began mopping away. There was dead silence for a few moments, and then I noticed suppressed giggles emanating first from Mother, then Thor. Finally these became loud guffaws. "Didn't you notice anything when you came in?" "Well, no," I said, "what's there to notice?" Finally they gave in and had to point out the large wheels of bread dangling from the towel rack. "Well, why should I have noticed that?" I protested. "I don't need to look at the dishtowel rack in order to retrieve a towel and do my job." This story quickly became a family legend, perfectly illustrative of my inattention to my surroundings, surely incomprehensible to this family of visual artists.

Mother was pregnant! Thor and I were ecstatic, our parents worried. Mother had had a difficult time carrying me, and had suffered from lifelong problems with high blood pressure as a result of pregnancy toxemia. She was now forty. In the 1940s it was still relatively rare to bear children at this age, and such pregnancies were known to be fraught with dangers. Of course Thor and I were oblivious to potential problems, and simply busied ourselves with finding names for the baby (we were certain "it" would be twins, first dubbing the unborn child "David or Sonya," which quickly became "David and Sonya" in our fertile imaginations), and we teased Mother unmercifully for her close resemblance to a "Baby Blimp."

We had an early spring that year, 1947, and then a late snowfall in April. In the middle of an impossible blizzard our brother was suddenly ready to arrive. Daddy drove Mother in haste to the nearest hospital, in Peterboro, which seemed an interminable five miles away. When Thor and I arrived home from school we got a call from the old family physician, "Doc" Sweeney. He was a textbook country doctor, making house calls, diagnosed by hunch but with almost unerring accuracy, making one feel better just by being there. A little hard of hearing, he reported that I had a baby brother at the hospital. "Oh, boy!" I shouted. "Yes, yes," said the doctor, "it is a boy." Thor and I leaped about the house, dancing with joy. Later we were picked up by friends who fed us dinner and celebrated with us until Daddy arrived to take us home again.

What a little treasure Mother brought home a few days later! I had never seen anything as delicate as this newborn creature. Mother had been unable to nurse, and indeed breast feeding was rather frowned on at the time, so my first duty to the little one was to prepare baby formula. Not so different from animal husbandry at that. I was now twelve, old enough to be responsible, and I quickly learned all that was needed to care for little David. Wonderful for me, and tremendously useful later on when I was to make
part of my living caring for newborns. Wonderful for my mother, too, since at her age she had no overabundance of energy to care for our family, now numbering five. Aside from just lightening the load, my quick acceptance of babysitting duties also allowed Mother and Daddy the freedom to leave us alone for several hours at a stretch.

Life at home seemed to revolve around David. Our routine was simple and predictable. Mornings and evenings, Thor and I had animal chores. Thor took care of the chickens and brought in eggs. He soon, typically, had started a local business selling the surplus to neighbors. I, busier and less businesslike, took care now of three horses, three goats (two of which required milking), two geese, and some ducks and rabbits. By the time David was a year old, two baby goats were added to the menagerie, and David and the goat kids were penned together in a small yard where we presumed all three were safe. Unfortunately, in short order we would look out and see the goats cavorting charmingly, but David would have disappeared. It was just impossible to keep him locked up anywhere.

Apart from running after David, our chores included tilling and weeding the vegetable garden, taking turns mowing the front lawn or shoveling snow in the wintertime, doing dishes, and keeping our rooms clean. All this, surrounding the school day, served very well to keep us out of mischief. In fact, the country life was full of variety. In late summer we worked with neighbors to cut hay and store the harvest in each other's barns. In spring we tapped our maple trees and shared the sweet sap with our goats, who frequently were caught drinking eagerly from the buckets hanging on the trees. Whatever was left we boiled down for syrup and sugar.

Daddy seemed to know how to do absolutely anything. A farmer's son, he could kill and dress chickens, ducks, and rabbits. He knew the best care and training of horses, and how and when to plough, harrow, and plant the garden. He had rudimentary veterinary and medical knowledge, patching up most of our childish wounds as well as those of the livestock, but also knowing when it was wise to call a real doctor. He not only built his own kiln and a second story to the workshop behind the house, but was able to repair household or farm machinery, and often made things to order when something was unavailable or too expensive to buy.

Expenses? We waxed and waned financially. Periodically Daddy would get a substantial commission for a statue or other work of art. When payment was made, we would be flush for a while. But such work came intermittently at best, and the money flowed out faster than it came in. Daddy did not hold much with saving. Our horses and the big house were part of what he viewed as a necessary lifestyle, and to outsiders we must have appeared really well-to-do. Fortunately we were also to some degree self-sufficient, with eggs, goat's milk (if absolutely necessary), home-grown produce, chickens, and ducks produced by ourselves. Mother was adept at maximizing the use of left-overs, and most meals were hearty soups or hash or stew, unique each time because it depended on what the refrigerator contained at the moment. The one big expense that could not be escaped in this part of the world with its long cold winters was the cost of heating. Coal and oil were both used for heating and cooking, and we found ourselves burning our meager income.
Jaffrey was a typical small New England town, being half industrial (a shoe factory and a match factory constituted its claim to mercantile fame) and half tourist attraction. The town was nestled at the foot of Mt. Monadnock, a 3,000 foot hump rising out of a valley. In fact it was the original example of the geologic formation known as a "monadnock." Tourists came spring, summer, and fall to enjoy the hiking and swimming in the many small lakes that dotted the landscape. Autumn was the favored season owing to the magnificent display of fall colors characteristic of the region, and in winter some skiers came from around Boston because we were so close. Skiing was not yet the big-time sport it is today. In addition to all these pleasantries, the MacDowell Music Colony was located nearby in Peterboro, and associated concerts and festivals brought additional visitors with artistic interests.

Attempting to boost our own income, our parents started a small artist's shop in one corner of our house. This was not a financial success—Daddy displayed small ceramic pieces, and sold a few. Mother added some of her paintings. We all took turns "minding the store," but Thor and I found this dull and we were not knowledgeable salespeople. I know my mother enjoyed talking to visitors, and probably made some sales with her interesting and informative discussion about the various works and their origins.

Sometimes, in the summer or early fall, we would all have tea out on the front lawn. It was a pleasant place to sit, and offered the opportunity to attract passersby into our shop. The goats and geese enjoyed our tea, and would cavort and honk around us begging for treats. The two white geese—"Blondie and Dagwood"—would be given a little tea in a saucer, which they disdainfully spurned unless it had adequate sugar and lemon to suit their high-class tastes.

Blondie and Dagwood came to us as goslings. It was early in the spring, cold and rainy, and Daddy left them in a tipped-over cardboard box in a fenced-in portion of the yard. Stressed by the cold weather and a sense of abandonment by their parents, one gosling began pecking furiously at the other, finally almost entirely denuding it. Daddy-the-veterinarian came to the rescue—picked up the naked goose-to-be, and stuck it in the oven over a low flame. Then, Daddy-the-artist went off to his studio and forgot all about this. Later, Mother came into the kitchen and declared "I smell something cooking!" Following her nose, she discovered the half-baked gosling in the oven, yanked it out, and put it back outside to "cool off."

Amazingly, Blondie or Dagwood, whichever this was, recovered fully. As time went on, the goose that we had been calling "Dagwood" began laying the huge eggs characteristic of her species—a single Dagwood egg would provide all of us with breakfast. For a long time we enjoyed these provocative birds as pets, and also as watchdogs, as they competently and effectively chased off marauding little boys and strange dogs, streaking down our driveway with necks out straight and heads held low, beaks wide open, honking furiously. Eventually, however, their temperament turned to unadulterated ill-temper, and the honks preceded painful nips. How do you "train" a goose? We could not, and their final chapter was to become our Christmas dinner.
If it seems that we were all work and no play, we had plenty of recreational activities as well. Daddy, Thor, and I enjoyed horseback riding together (an activity Mother never warmed to), although I was the more fanatic enthusiast and refused to wait around if the other two seemed disinclined. We went for walks and picnics in the woods, usually all five of us, often combining these with landscape painting which Mother and Daddy and Thor would enthusiastically participate in, and I only with great reluctance. In the evenings we often gathered in the living room over a game of bridge or Oh, Hell! or even chess. I was a reluctant participant here too—I considered these games to be an insufferable waste of time, and would much rather settle down with a good book or listen to the radio. I continued to be the family loner, and was teased unmercifully for my "anti-social" behavior.

Sometimes we went swimming together at the home of friends who had a lakeside cottage. On one of these occasions, while Thor was still quite small, he suddenly slipped under the rope that marked the beginning of a deep area where the lake bottom precipitously dropped off to a depth well over our heads. Unfortunately, Thor had not yet learned to swim. I was some distance from him, saw him go down, rise again yelling and bubbling, and sink again. Strong swimmer though I was, I stood frozen, unable to move, torn between wanting desperately to rush to his aid, and fear of possible consequences. I had long been warned that amateurish attempts to rescue a drowning swimmer could easily result in the death of two, as the natural tendency of a drowning person is to grab and clutch at anyone coming near, dragging the prospective rescuer with him beneath the surface.

Before I had had much time to consider my options, out of the corner of my eye I saw Daddy racing from the beach. Had I actually screamed? I wondered. Or had he just seen the whole thing? In a flash, Daddy had grabbed Thor by the arm, hauled him clear out of the water, turned him upside down, and thwacked him on the back several times. A large quantity of water poured from Thor's mouth and nose as he coughed and sputtered. Soon he was quite himself again, though sticking close to land. I have frequently thought of this incident. We so often encounter a similar dilemma today, when we are counseled against acts of Good Samaritanism because they can so clearly endanger us either physically or through potential litigation. In that moment of hesitation, when these teachings intrude and suppress one's instinctive impulse to come to the aid of another human clearly in distress, we paralyze ourselves and render action impossible.

In any event Daddy came to the rescue in good time, as was his wont. He had the ability to instantly size up a situation and know just what to do, which he did without hesitation. This gave me a new kind of trust in a parent, and I soon looked up to Viggo with the same adoration as did Thor. His physical and moral strength seemed inexhaustible. On another occasion, I was playing with David when the baby picked up a small item from the floor and popped it in his mouth. Oh my God. An open safety pin. I was jarred into recognizing the hazard as I saw it disappear, and I gave a yell. As I now came to expect, Daddy was in the room in an instant. He grabbed David, suspended him
by his feet, and gave a whack that immediately dislodged the pin. To our great relief it dropped out of the shrieking kid's mouth blunt end first, and the incident was over.

Apart from his prowess as a one-man rescue team, Daddy was just good fun. He had a typically Danish sense of humor, playing practical jokes and teasing all of us relentlessly. He was a popular guest or host at a party, entertaining with his elegant service of the drinks, and then going on to balance a cocktail glass on his forehead and, without touching it, to lie down on his back on the floor and rise upright again, glass still full. Mother loved all the attention he attracted, and apparently did not mind that she received little or none herself at such gatherings. Thor emulated him, speaking and even walking just like his Dad, which indeed looked quite affected at age eight or nine. Mother was a willing target of the Danish-style jokes: On receiving a serving of hash for the hundredth time, Daddy would inspect the plate with great seriousness, then ask "Patt, is this to be eaten, or has it been eaten?" Or, in speaking of her family's pride in its ancestry, he would say "Any family that keeps talking about its ancestors like that just proves that they are better off dead than alive."

I was not totally enthusiastic. Growing into adolescence, I was sensitive to teasing and did not always want to join in the fun decided upon by others. And, meantime, at least a part of my life began to be focused outside my home.

Since starting out in the Jaffrey school system, I found myself buried in homework, but not feeling much more compatible with my peers than I had in Columbia School. Gradually, however, I began to notice that some of my schoolmates were boys. One, in particular, was sweet on me and pestered me a bit. I sat behind Johnny Fish, who was a good head shorter than I. The attached fixed arms of our small school desks had inkwells with real ink. Somehow Johnny got my blonde braid into the ink during a lull in classwork when our teacher (a tough young man who was the school principal) was out of the room. In retaliation, I pulled a ruler out of my desk and thumped Johnny on the top of his head. Foolish I. Teacher came back as I was in the middle of my assault, and pulling a screwdriver out of his pocket, he proceeded to bang me on the head with its handle.

I was stunned. Since that moment when my mother tried, and failed, to spank me when I was three, no one had struck me in anger. I sat paralyzed, ruler in my clenched fist. I realized that the teacher was yelling at me, but I couldn't understand what he was saying. The beating went on and on, until finally another little boy from across the aisle managed to get the message across to me that I was supposed to "put that ruler down!" Shakily, I did so, and the banging stopped.

Here was an introduction to a rough-and-tumble world that I knew nothing about. Indeed, on the playground I found myself occasionally attacked by some of the boys, who liked to tease and test one's fortitude in one way or another. Gradually, to my surprise, I began to stand up to them, to fight back and occasionally knock one down.
Over the next few years I did gain the respect of the schoolyard for my tricky wrestling techniques, entirely self-taught and devised to keep my opponents off guard until I made some utterly unconventional move that resulted in their suddenly sitting down hard on the cement. This was my only claim to fame in the world of physical culture—I remained a slow runner, failed to catch or bat any softballs, was unable to land a basket or run a puck down the field and come anywhere near the goal. But I kept this schoolyard tough image hidden from my parents, who could not understand my lack of interest or ability in sports. I certainly did not ever tell them about either my troubles at school or my solutions.

As time went on, I found most of my schoolwork unstimulating, but I did begin to make friends. These friends, girls and boys alike, introduced me to another layer of society probably not ever experienced by the rest of my family. Two of my close girlfriends were among the poorest of the poor. One, Betty, lived with her mother and a couple of brothers on a ramshackle farm a mile or two outside of town. When I had grown sufficiently to acquire a bicycle, I would ride out with Betty after school, sometimes having there a meal of soup that was considerably thinner than the pot pourri created by my own mother. Betty's mom was terribly crippled by arthritis; she dragged herself slowly about the small farmhouse on crutches, moaning, was a woman, once. This left me bug-eyed, both astonished that one could function at all with such a disability and terribly uncomfortable at her misery. Betty's adult responsibilities at home made me wonder at her ability to function so well at school, but she was bright and cheerful and seemed to consider her situation perfectly normal.

A second friend, Lucy, was the daughter of a widower. With her father and several older brothers, she lived in a tarpaper shack at the edge of town. Even more than with Betty, I could not imagine a life such as I knew Lucy must be leading—no woman at home to give her any information about her growing body, nobody with more than a grammar school education to support her in her early high school years. She did the cooking, washing, cleaning (insofar as the tar shack with its dirt floor could be cleaned) for the males in her family, and was truly grown up beyond her years and uncomplaining. The men in Lucy's family all worked in the local factories, and were representative of the population of poor French Canadian workers who had settled here from Quebec Province long ago.

Lucy and another French Canadian friend, Isabel, were Catholics. It was a bit of rebellion on my part to cultivate such friends. We lived directly across the street from the local Catholic church. My parents frequently called attention to their disapproval of Catholics, Catholicism, priests, and any of the rest of popery such as they imagined existed in our town. I have to confess that this only made these friends the more attractive, piquing my curiosity about their lifestyle and their religion.

Probably it was not only curiosity that attracted me to the Catholic church at this time of my life. Our new stone house in Jaffrey was also right next to the Congregational church and the home of its minister. He was new in town, young, and recently married. He and his wife made regular visits to our house, and my parents considered it only polite to attend their church every Sunday with all of us in tow. We sat through the regular Sunday services, for I do not believe that there were any Sunday
school classes, at least not for children my age. But I found myself hating these services, just as I had the Presbyterian experience in Rochester. The sermons were always long and drawn-out, presented in the same Presbyterian-like "ministerial" voice, telling us how much we had sinned and how God loves us. Who could believe that God loved us, if He was constantly exhorting us about our sins? The church itself was nothing but plain boards, undecorated. The pews were hard and uncomfortable, and it was a monumental effort to restrain an inclination to wriggle and scratch for the hour and a half of service.

Worse yet, my parents sent me to summer Congregational Bible School, held in the same schoolhouse in which our regular school met during the winter. This was utterly boring. True, the minister did speak to us in a normal voice, but he continued to talk about uninteresting people who lived so long ago that they couldn't possibly have anything to do with my life here in Jaffrey. I did recognize that I should "love" Jesus, who seemed like an incredible "goody-goody," the type who would have been teased unmercifully on our winter playground. Oh, well, I dutifully crayoned my way through the Bible Study Coloring Book. I was indifferent to the results, and memorized enough of the expected answers to what passed for catechism to be able to pass out of this school with a similarly indifferent grade, forgetting whatever I had learned as soon as I was free to go back to my horses, vegetable garden, and school friends.

So when Isabel and Lucy began to describe to me the wonders of their church, with its beautiful interior and handsome organ, which Isabel herself played, I perked up my ears and decided this sounded more interesting—maybe there was something to religion, after all. I had seen how the Catholic women prayed there every morning, heads covered, crossing themselves as they entered and exited, dipping their fingers into the holy font by the door. Isabel brought me brightly colored, slick brochures displaying the Virgin Mary and claiming that she could save me. I read these avidly under the covers at night, hiding them in some secret place in my room. I crept in to a few services, understanding nothing, but loving the music, the candles, the lights, the colored glass windows, the vaulted shape of the church interior.

Eventually, sadly, at the wise old age of twelve, I put Catholicism to one side. I realized that it would be "nice" to be able to give my life to the Church and to let the Holy Fathers tell me how to live and function in this world, but I could not, in all sincerity, make any pretense to believe that this would be sufficient for me. Quite apart from my parents' prejudices on the subject, I could see that an intelligent person of some independence would need to sort out for herself the issues of spirituality and goodness and how to reconcile Bible teachings with those of science. I could not honestly accept anybody else's verdict on these important subjects. And so I left the comforts of established religion behind me, and determined to discover philosophical truths on my own. This resulted in an early and lengthy exploration of philosophy in general, reading books that were way over my head, but that made me feel that I was getting my own tailor-made education.

So, on the one hand I was exploring the great questions of western philosophy (having not yet discovered anything east of Armenia), while on the other I
was an indifferent student at the real brick schoolhouse down the road. And, true to form, I was even less than indifferent in mathematics. Math continued to be taught as an exercise in memorization of rules or number series, and seemed quite incomprehensible to me. I would have done far better in history or English and other humanities, but I was inhibited by my companions, none of whom were brilliant intellectually and who were apt to make fun of those who were. So I kept my esoteric readings a secret from my school chums and brought home report cards with passing, but not in any way outstanding, grades. I continued to detest obligatory sports, and found something even more onerous in "home economics," similarly a state requirement (for girls, of course). I managed to knit one sock (not even a pair) during the semester when knitting was on the curriculum. And during the cooking class we threw rock-hard biscuits from the second story window down into the baskets of bicycles lined up below.

Thor was a bit more enterprising than I when it came to mischief-making at school, but I did make an occasional stab at this, too. Once, in a history class, friend Lucy and I began creating elaborate notes in the form of spiral messages. These were lengthy epistles of far greater form than content, that started in the middle of the page and gradually worked their way toward the edges after the manner of a chambered nautilus. Sitting across the room from each other, we deftly (or so we thought) tossed these letters to each other over the heads of other students and behind the back of our teacher, Miss Hurley. Uh oh. One of my tosses, typically inept, landed in an aisle, where the eagle-eyed Miss Hurley instantly spotted it. Unfortunately, this was the letter that contained the following immortal prose, embedded half way around the spiral: "Isn't Miss Hurley a Pill?"

Miss Hurley recognized the hand, and possibly even the sentiment, of my errant self "You—you stay after school!" she ordered. This was a formidable sentence, for it carried with it a necessary explanation to one's parents for tardiness. At the end of the day, all others were excused, and I was called up to Miss Hurley's desk. She had evidently worked her way entirely around the spiral, and had carefully circled the offending question with her ubiquitous red pencil. "Sit down over there and write this out one hundred times." she demanded.

Not exactly knowing what she meant, I sat down and happily copied out "Isn't Miss Hurley a Pill," covering the first of several large sheets of paper on the desk. Miss Hurley came and stood behind me, peering over my shoulder. "Not that," she screamed, "I meant that you should copy the whole thing one hundred times. The whole spiral thing," she yelled. "Do you even know what the word 'pill' means?" she went on. "Here." She flung a dictionary onto the desk, causing me to flinch, as I remembered the screwdriver incident of two years earlier. But I calmly opened the book, found the word "pill," and, looking down the number of definitions listed, was dumbfounded and secretly delighted to find a perfect definition of Miss Hurley. "A pill," I announced gravely, "is a person greatly disliked, but with whom one has to put up in spite of this."

"Get out of here!" hollered Miss Hurley. I got. Fast. And wasn't even noticeably late getting home.
Thor and I frequented the movie house on Saturday matinees, watching with bated breath as the heroine was just about to be thrown over a cliff when the serial ended for the week—the original and quite literal "cliff-hanger." I was supposed to be Thor's chaperone. I needed one myself, as Johnny Fish would follow me into the dark theater, settle down next to me, gradually and surreptitiously moving his arm up and over my shoulders, where it stayed until the lights came on. At this point Johnny would hastily unencumber me, following us out into the bright sunlight, hemming and hawing until we accepted his stammered "farewell" until Monday at school. I remained entirely indifferent to poor Johnny's blandishments, cruelly encouraging him by not turning him away, but having no intention of letting this somewhat embarrassing affair go any further.

Having deposited Thor safely at home, I would take off quickly on my new horse, Jerry. Jerry was an ugly old thing I had fallen in love with, partially because he had been cruelly treated and was shy and terrified of many things, particularly men. Once when Daddy reached up toward me with a riding crop in his hand, Jerry reared and then bolted, nearly dislodging me, but clearly indicating that some man had beaten him in the past. Jerry had a blue "watch eye" that rather fascinated me—it appeared to see normally, but didn't match its brown mate. We became inseparable, and the roan horse with the big white nose followed me around the barnyard like a dog. I learned how to train Jerry with rope tricks, using a western style saddle and entering him into competitions where he was required to weave his way among barrels and other impediments at top speed. I also started to teach him to jump, but lost my own enthusiasm for this sport when, building a jump out of some rocks with a stick across them, I lifted up a rock and—hssssssssssssss—a huge black snake reared its ugly head and hissed at us. I think I never ran so hard in my life, with Jerry trotting behind, peacefully oblivious to the cause of my sudden departure.

One cold November day I took off on Jerry's bare back for a gallop through the woods, choosing a new one of the many narrow dirt roads that were so prolific around northern New England. Soon we came to what appeared to be a very large puddle across the road, with two lakes on either side of us. Jerry plunged forward into the puddle and fell—it turned out that the "puddle" was in reality a spot where a bridge had washed away. And so, out into the cold lake we swam, with me clinging frantically to Jerry's mane so as not to slide off. After what seemed much too long a time, I finally succeeded in getting him turned around and pointed toward the shore from whence we came. But on reaching that shore, the horse was unable to scramble up the slippery rocks that had once been the foundation of the bridge. I finally slipped off his back, and, wet up to my neck, pulled and hauled at his reins until he managed, unencumbered by my weight, to get up onto the road.

By this time Jerry was shivering and dancing with cold, and I was nearly frozen solid. I tried and tried to clamber up on his high back, without any success. I pulled him over next to a stone wall and tried again, but he danced aside each time I tried to get across him. No use! I would just have to walk home, leading him by the bridle, the icy winter wind whistling right through my wet clothes. What a long, cold journey
that was. When we finally reached the main macadam road, cars passed us by with people smiling at us. I could just hear them saying to themselves "What a cute little girl with her horse." I only wished I wasn't cute and that one of them would offer to take me home. On reaching the barn, my fingers were so stiff I was unable to remove Jerry's bridle. "Serves him right," I thought, "for being so uncooperative." As though that thought had crossed the horse's mind. After all, he was as cold and miserable as I.

This swim had a somewhat salutary effect on Jerry's subsequent behavior, however. I had a riding companion—a girl a year or two older than myself who had a pretty mare named Paint. Paint was an "Indian pony," or pinto horse with big brown and white patches. My friend, Svea, loved to take Paint to beaches along the many lakes in the area during the summer, and to ride right into the water and go swimming. She and I had tried to do this together, but Jerry had always balked at the water. Apparently, after our November swim, he lost his fear of water, and by the next spring willingly took me swimming with Paint and Svea. The two of us, with our horses, had many wonderful adventures together, exploring the New Hampshire woodlands. Often we would come upon deer and other wildlife, apparently unafraid of us on our horses, but extremely elusive to those who wandered into the woods afoot.

We lived in Jaffrey three and a half years. Throughout this time I maintained an undercurrent of music-making that only occasionally was shared with my mother. Mother herself tried to continue my piano lessons, unsuccessfully, as she was really not much beyond my level of technique. She tried to interest me in music theory, which I found to be boring and rather mathematical, and simply refused to learn. She did provide me with a year or two of singing lessons, for which I have forever grateful. I did learn the essence of breath control in these lessons, and the ability to breathe abdominally as singers do has stood me in very good stead during all my later years of disabling muscle malfunctioning. I loved to sing, was slightly terrified of the Russian teacher, and I believe ultimately dismissed for lack of aptitude. However I joined the Congregational church choir, insisting on taking alto parts because they were "more interesting" than those to which my natural soprano voice was better suited. Becoming fascinated with the part-writing in hymns and chorales and other sacred music, I took the books home between choir rehearsals and experimented with playing two or three parts on the piano and singing a third or fourth voice against these, then changing to a different combination, until I had thoroughly learned how the harmony and counterpoint were constructed. This last activity was done in stealth—even my mother couldn't stand the sound of it. I suppose it reminded her a bit too much of her first husband's late-night composing sessions.

Finally I picked up a more socially acceptable form of music-making. My parents allowed me to rent a silver clarinet from the school, and to take lessons from the school bandmaster. The bandmaster turned out to be a good teacher, and I practiced endlessly upstairs in our attic, where the family could not hear my squeaks and squawks. By the end of the year I was pronounced ready to play in the band. But how very lost I was in those rehearsals. I had no notion at all about how the parts were constructed, nor what was meant by "going back to letter A" or "skipping to letter E." I was placed in the
very last chair in the small group, and my much more savvy companions nudged me and pointed fingers at my score to show me the place. I probably played one note out of ten, and possibly that one was wrong, but I was rapidly being dragged into a comprehension and love of group playing that changed and reshaped my subsequent musical experience.

By the spring of 1949, Mother and Daddy knew they could not maintain our home and lifestyle with their meager earnings as artists. Daddy had thought he would be asked to create another war memorial in Jaffrey, this time for World War II. He made a magnificent model for one, but the town meetings were indecisive and the commission never materialized. Likewise, a promised commission to do a statue of Winston Churchill, for which he provided a model at the behest of Mother's father, Charles Henry Davis, eventually fell through as did so many other hopeful leads. Gradually my parents began to look West for potential artistic work and development. One day Daddy read an article in the *Saturday Evening Post* that extolled the virtues of avocado ranching in Southern California. Typically, he immediately decided that this was just the thing for us to do—make money growing avocados while he made statuary for Hollywood stars. And, best of all, in the warm, sunny California climate we would at last be free of the horrendous heating bills that were the bane of our financial existence in cold New Hampshire.

With nothing more to go on than this, Daddy persuaded us to pull up stakes and travel west. Of course it was not done so fast—the great stone house and all our livestock must be sold, and our goods and chattels shipped, to where? We had no place to go "out west," so household furnishings were placed in storage to be shipped later at great expense. None of this had been taken into consideration when the cost/benefit ratio of this incredible gamble was calculated, of course. Daddy had not the slightest idea of West Coast land or property values relative to those here in the East—our entire fourteen acres of woodland, vegetable garden, and paddock, along with the huge stone house and barn, sold for a value that would barely purchase three acres of unimproved land in California. None of this did we know as yet, nor would we have even an inkling until we arrived on the West Coast. In this blissful ignorance we gleefully made plans, and did the deeds that would make it impossible to turn back.

In June of 1949, then, our house and property sold, with a few household goods and clothes in a small trailer towed by the family car (the Plymouth convertible that was the successor to our original gray coupe), we left Jaffrey forever. But before turning westward, we made another mistake. Deciding that the summer was too hot a season for such travel, we headed for a last three months on Cape Cod. Little did we know, of course, that as one travels west, September becomes the hottest month. Truly we were "Innocents Abroad."

Nevertheless, we did spend this summer at the bungalow in Bass River, and an almost blissful summer it was. I was now fourteen, Thor was ten, and David two years of age, and we had not been to the Cape since the eventful summer of our parents'
engagement. We loved introducing David to the sights and sounds and smells and activities that we had enjoyed four years before. I would take him down the long dusty driveway and across the street in Bass River to have a luncheon with Aunt Lucy, who looked as I had always remembered her, with her napkin rings and fingerbowls, a jar of hard candies, and the chain around her neck bearing a crystal ball. True to her word, that crystal ball came to me upon her death, quite a few years later, when she was well into her nineties. Barely talking, David called her "Ah Doo Hoo," which he chanted while putting his arms up to the sky and then down on the ground, as we processed our way along the dirt road to Doo Hoo's house.

Grandfather Davis was not well this summer, and toward the end of it was hospitalized with his final illness. I went with Mother to say our last good-byes to him before we started the long trek to California. How vivid was the sense of his impending death, his thin unshaven face so different from the sprightly, flamboyant old "Captain" with his fireman's hat and room full of license plates. Thor enjoyed the latter still, as we inspected the remains of his "office" hung with engineering paraphernalia and the memorabilia of his extensive travels. Thor and I explored secret passages in the remains of the House of the Seven Chimneys with some trepidation. He, of course, had not known my GrandDad, and so had little feelings of sadness at his passing.

With Daddy, we rowed across the river to our favorite ocean beach, just known as "Eastern Beach," on the side of the Cape facing Nantucket Island. Along the Eastern shores of Bass River as one approached this spit of land were many reeds and rushes, and Daddy delighted in showing off his prowess at spearing the eels that resided there. I remember bringing the eels home in a covered bucket, leaving them on our back porch, and finding them pushing up the lid of the bucket and oozing their way out onto the porch and into the yard. I suppose Mother cooked these, somehow, but I do not remember eating them.

Ted Frothingham, at Ship Shop, took us out on boat excursions. Once he took Thor with him on an overnight trip to Nantucket. Thor was ecstatic, and looked quite the fisherman with his southwester' and yellow waterproof hat. He returned the next day with sea tales worthy of a Conrad, and considered himself far and away my superior when it came to sea lore, truly befitting the namesake of the lofty God of Thunder.

In the middle of this peaceful moment, as though we had been resting on the crest of a wave before its final breaking, Mother became acutely ill. I don't know what ailed her. A doctor was called, and she was isolated on the sleeping porch. The three of us kids were not allowed to see her. I suppose it was "influenza," still frightening at the time. She was sick and alone for a long time—about three weeks, I think. I was suddenly called upon to take a more adult role than I ever had before, fixing meals and looking after the boys.
At last, Mother recovered and we took a final farewell of our beloved Cape Cod habitat. It was now time to turn our faces toward the setting sun and once again, begin life anew.
3. California Adolescence

The trip to California made transparent the naïveté of parents looking for gold at the end of the rainbow. At an adolescent fourteen, I was at once aware of their innocence and yet trusting that Mother and Daddy really did know what would be in store for us as we turned our backs permanently on our New England home. Dragging a small, tarp-covered open trailer from the back of our still-shiny Plymouth convertible, we set out, maps spread over our knees, down through New England, across onto the Pennsylvania turnpike and on through Kentucky and Indiana. We stopped each night, first in bed-and-breakfast homes, and as we moved further west, in motels. We also did some sight-seeing: the Mammoth caves in Kentucky, a glimpse of the Grand Canyon when we got beyond the Great Divide. We sighted some real live cowboys in between, much to the goggle-eyed delight of Thor.

But we knew so very little of the climactic and geographic characteristics of anything west of New York state. We dipped South and got onto Route 66, assuming that the "southern route" across the country would be most suitable during September. We did not know enough, even, to carry water with us. This was greatly to our detriment, as this turns out to be the very hottest time of year through Texas, New Mexico, Arizona. Little David nearly died, and one of our two parakeets sifting in the back window did expire. We buried him along the road, and were convinced that his unpaired fellow would die of loneliness, as we had been persuaded to buy two because "lovebirds" supposedly require lovebird companionship for survival. The unpaired one did not die—in contrast, he thrived in his lonely splendor and lived on to a ripe old age long after we were well settled in California. I continued to observe the shattering of small myths and parental pronouncements as we crossed the country. As I did so, I began the process of sprouting my own wings into adulthood.

If nothing else this memorable journey opened our eyes to the vastness of our country and all the variety of the land and its people. More regional differences were apparent in 1949 than are found now, more than fifty years later. Our relatively trivial sufferings made us appreciate a little of what our ancestors must have gone through on the overland trails during the nineteenth century. Of course Thor (age ten) thought the whole trip was a marvelous lark staged for our own delight and edification. I shared his excitement, but unlike Thor, I had been accustomed to the idea of picking up and moving on every few years. Mother surely had trepidations about the bold way in which we had left behind all possessions and simply headed out for the unknown, but—still somewhat insecure about her hold on her adventurous husband—she kept such thoughts to herself. So together we gazed out at the strange new sights passing by, and invented visions of the California we were slowly approaching.

One of Viggo's more colorful Jaffrey friends had been a wealthy businessman by the name of Paul D., who spent a week each year on a horseback trek from Santa Barbara through the mountains to the Santa Ynez Valley in California (the
group he rode with were called "Los Rancheros Visitadores"). Paul had once shown slides of this beautiful area at an evening gathering to which we children were not privy, and he had talked grandly of the opportunities available in California for farmers and artists, not to speak of farmer-artists. We scarcely knew our sole California contact, Mother's sister Priscilla ("Prill"), who was divorced and living in Los Angeles with her two children, Lucy (a year younger than I) and Charles (close to Thor's age). Although Prill had visited Mother and me in Rochester for a week or so during her completion of nurse's training, I had never met the children. She and Mother had not maintained close contact over the years.

Despite these potential sources of information, I don't think Viggo ever asked for hard facts. He was much too anxious to put his previous life behind him, and Mother, uncertain of his true feelings for her, simply supported his enthusiasm and hoped for the best. The result was that they knew nothing at all about California, the hazards of desert travel, the cost of living, the potential difficulties of raising oranges or avocados, the school system—nothing! Never mind, Aunt Prill lived in Los Angeles, and so we headed for that city, arriving at the end of September dusty, exhausted, and bewildered. The view of California as we came in through Barstow and Bakersfield was far from the lush land advertised in the Saturday Evening Post, or our imagined view of avocado and orange orchards spreading as far as the eye could see. But Prill and her little family greeted us warmly. We stayed a day or two tucked away into their little apartment, gradually recovering from the hot, dusty trip.

Although we had originally thought about Santa Barbara and the Santa Ynez Valley, on Prill's advice we started south instead, driving around and looking at "ranches" (areas that are now thriving cities, parts of greater Los Angeles or the San Diego suburbs). To our horror we discovered that a stretch of utterly barren land without water or buildings would cost far more than the spare change left in Viggo's pockets after the sale of our home and property in New Hampshire. Who wanted this ugly land anyway? We absolutely hated Southern California with its commercial, Hollywoodish culture and, where still undeveloped, its dry, barren landscape. At the end of September, of course, we were seeing this region at its worst, after its long, dry summer and before the winter rains would turn the hills and valleys green and cover them with wildflowers.

But what were we to do? Mother finally put her foot down. "These two school-age kids have no home yet, and it is now mid-October, long after the school year has started." Without finding a home, having no idea where in this huge state we might settle even temporarily, with no prospects of work for some time to come, what were we to do? "Well we must settle down somewhere just to get Jean and Thor in school, no ifs, ands, or buts," she declared firmly. "If we can't find a place to stay in California we will go to Colorado or some other place instead."

So, bypassing Prill and Los Angeles, we trekked north to Santa Barbara and up along the coast toward the Santa Ynez Valley. We had spied an advertisement in a local newspaper for a ranch house for rent in that Valley, but possibly Mother and Dad
had forgotten by now that this was in Paul D.'s "promised land." We headed toward the real estate office, in a town called "Solvang." Swinging off the highway we—

"Oh, my goodness," cried Viggo, "it's a Danish Church! I haven't seen the likes of that since I left Denmark more than twenty years ago." Even more surprising, when we parked on the main street near the realtor's office, we heard ordinary people on the sidewalk conversing in Danish! Viggo started talking to them—he hadn't spoken his native language in many years, and was a bit rusty—but how unexpectedly glorious and thrilling this was.

We had no idea that this little Danish village (population 700) existed, in spite of Paul's slide show of the Valley. In fact, Paul had been interested in the Spanish and Indian history of the Santa Ynez Valley, and hadn't mentioned that the Santa Ynez Mission to which the Rancheros Visitadores rode was located in Solvang (which, in Danish, means "Sunny Valley"). Danish settlers from the Midwest had come here around 1900 and established the community, and in 1949 it was still largely occupied by Danes. Solvang had a replica Danish windmill, and every fall it put on a "Danish Days" festival that was even then a large tourist attraction. (By the 1990s this town has changed into a glitzy, Disney-like Danish main street facade with dozens of gift shops with but few authentic Danish people remaining.)

Needless to say we never looked beyond the Santa Ynez Valley, which became the home of my California adolescence.

If I had once dreamed that I might meet a Hollywood movie star in California, Hollywood seemed very remote from this bustling agricultural valley. (However, as of this writing, quite a few movie moguls, actors, and other notables make their homes there.) We settled ourselves into a rented ranch house in the middle of acres and acres of oats. Our winding driveway dipped through a deep dry gully, and a few scattered live oak trees covered with Spanish Moss dotted the rolling fields and clustered along the sides of the dry streambed. We were several miles away from the town of Solvang, but well within the Santa Ynez Valley. About a mile down the dusty road was the tiny hamlet of Ballard, consisting of a small white church, a country store, and a one-room red schoolhouse. If this was not movieland, the scenery was at least familiar from tales of the Old West.

I was hastily shipped off via yellow school bus to the Santa Ynez Valley Union High School's tenth grade (all of seventy-five pupils), while Thor made his way down the gully and along the highway to the little red Ballard schoolhouse. That, after all, was the reason for settling here in the first place. But to our dismay, we found the California schools well below the standard we had enjoyed in New Hampshire. As usual, I settled down to a bored semi-attention, until I entered (six weeks late) the geometry classroom. Clear, concise Mr. Venske was putting formulae on the blackboard and talking about—the logic of math. Almost instantly my brain awoke, and I suddenly understood what math was all about—algebra made sense at last. In fact, geometry was fun. And so, bored with much of the rest of my California environment and fellow
pupils, I sailed on during the next three years through all the math and science (geometry, advanced algebra, chemistry, and physics) that was offered in our little consolidated school. Venske was a gifted teacher, taking us home with him to play pool and to learn thereby the principles of momentum, driving us to the California Polytechnic Institute in San Luis Obispo many miles to the north to observe its chemistry class, and spending hours talking to us of the philosophy of science.

So I became "hooked" on science. Nothing else in school had ever interested me as much. Too bad there were no role models in the little villages hereabouts—everybody was part of Future Farmers of America and 4-H, nobody was headed toward college, and there were no professional women of any sort in view. I thought about my old ambition of becoming a nurse. But no, my adult friends suggested that this might not be sufficient challenge. What about a doctor? Well, maybe—I had never seen a woman doctor, but did know of their existence. As it turned out, my parents were not going to allow me to go to college unless I had determined on a career that required a college degree. OK, I would become a doctor then. I convinced myself that I had a calling, at least until I had removed myself from this rather stultifying small-town atmosphere and "escaped" northward to Berkeley. But that was to come later.

Even within the school my interest in science was frowned upon by all but the science teacher himself. My counselor, or at least the faculty advisor who said yea or nay to one's choice of classes, asked me why I wanted to take physics. "Girls don't do physics," he stated categorically. "But I just wanted to know what physics is, and I thought this would be the way to find out" He stared at me. After a long silence, he said. "I guess I can't think of a better reason, at that."

This was a piece of luck. As it turned out, when I later went to college, had I not had the physics class I might well never have made it to Berkeley. I suppose, in that case, my life would have turned out quite differently.

My other joy in school was music. Mr. Rinne, the bandmaster, played the clarinet, and it was not long before I sat in the first chair in the clarinet section of the band. On occasion I also played solos and duets with Mr. Rinne for the entertainment of the entire school. I seemed to lack any shyness in making music with this woodwind instrument, and I was given wonderful opportunities to play in ensembles, soon becoming part of a dance band playing Dixieland jazz. Once I participated in a California-wide youth orchestra, for which young musicians of talent from all over the state were brought together for a week-long music festival. At home I continued to play the piano for recreation, entertaining little David when he and I were home alone.

A horse was found for me to replace my beloved Jerry. Of course all of our New Hampshire animals had been sold. This new one was a crazy black nag called Eclipse. We had been told that Eclipse had been in loco weed, but in our innocence we had never heard of this plant. We certainly had no notion that it indeed caused real insanity in the animals who ate it. Viggo, with his usual luck, won another horse in a lottery. This animal, Golden Boy, was a handsome quarter horse, and Daddy and I took
much pleasure riding together along the Valley roads and through fields after the grain had been harvested. A third, decrepit old creature, was purchased for a song, just so that Mother and Thor could occasionally accompany us. Neither really enjoyed either the riding or the horses, leaving that sphere of activity to Daddy and me. But Mother did love the collection of small animals—a dog and many prolific cats—that soon appeared inside the house, pets of one or another of us, but always ending up as her responsibility.

The horses were important to Viggo because his friend Paul invited him to join Los Ranchos Visitadores for the famous week-long ride from Mission Santa Barbara through the beautiful and wild Santa Ynez Mountains to the Mission Santa Ynez. This was a tremendous honor to Daddy, but also an important business connection, as the Visitadores were all wealthy businessmen, movie moguls, or big-time ranchers, and many were likely customers for future works of art. Daddy, so creative and skilled with his hands, made and embroidered a beautiful red leather vest to wear on these rides, and proudly wore a "ten gallon" hat. He surely looked handsome on his beautiful chestnut horse, and nobody was the wiser that he was as poor as a churchmouse and didn't really "belong" in that crowd at all. A painting Mother did of Viggo in his grand outfit hung in the living room of the Solvang home until her death.

Caring for the large animals was so very different in California. Horses were left loose in the enormous fields, coming in only once or twice a day to a confined paddock where I fed them hay and grain, curried their coats, made sure they had plenty of water. Other critters occupied those fields, too—once I started to pick my saddle up off the ground and discovered a very large, hairy tarantula occupying its seat. Forget about the saddle! That day I rode bareback. Even little David made some awesome discoveries, once coming to Mother with an announcement that there was a "spider" in his playhouse. The spider turned out to be a black widow—potentially dangerous to a child as small as David. When winter finally came, instead of being cold and snowy, it just poured with chilly rain and the fields became waterlogged and full of wet clay that clung in huge clumps to my boots. In this weather, rounding up the horses became a terrible chore of just picking up my feet, caked with heavy clay, trying to wade through the mud to reach the animals. They had plenty of water now, and one winter even the ever-dry creek bed filled up and overflowed with a roar. This kept us housebound for several weeks until our driveway dried out enough for us to take the car through the steep gully. Although the gully was part of our driveway, it had never been bridged because water was a significant problem only in occasional very wet years.

During the first winter we also experienced our first earthquake. Centered in Tehachapi, near the foot of the Sierras east of us, it was a major quake that hit a sparsely populated region and did virtually no damage for that reason alone. The shaking started in the middle of the night, scaring us out of our wits. All but two-year-old David, that is. David's crib, on wheels, sailed back and forth in the little pantry that was his "bedroom," and after the temblors slowed he yelled out, "Do it again, Mommy!" All-powerful Mother inspected all of us for possible bruises and then told him that "once was enough, go back to sleep." After that introduction, none of us ever feared the occasional temblors that are so common in this State. Until I experienced the Loma Prieta quake of
similar magnitude in 1989, earthquakes all seemed small and inconsequential after this very first one.

Viggo purchased a bit of land in Solvang, which at that time was an unincorporated village in Santa Barbara county. He cleverly divided up this land—six acres of vegetable garden—and sold off half of it at the price of the entire original lot. Lucky us! The land itself had cost far more than the large house with its fourteen acres that we had sold in New Hampshire. Our expenses had already started to climb, and we had no real home, just the rented ranch house near Ballard. Viggo would not be able to do his big ceramic sculptures there, as he needed a large studio and kiln. We would have to build our own house, using our own labor as much as possible. Hopefully we could extend our small savings while we constructed a suitable building, after which he could start creating things, selling things, and maybe making a living again.

This was not exactly the picture Viggo had imagined before we left New Hampshire, but he was game. Indeed, he never let on that he might not be up to any of this, even though he had never built an entire house before. He just went ahead and made architectural drawings as though he did know how, and after a while we were out there digging, putting things together, trying to pour a foundation. This, too, was not an immediate success. We were innocent of knowledge of the California climate, where it rains pretty steadily during the months of October through March, or of California soil (in this area, pure slippery clay), of legal permits and of rights of way, and of apparently most other data needed for successful construction. We made many, many mistakes. Our first foundation simply filled with water and remained that way for months, after which it had to be dug out again before pouring cement. Later, after the beams were up and before any flooring was laid, we found ourselves frantically weeding the living room which was being taken over by Bermuda grass and wildflowers. Three years later, a high school graduation skit depicted me at some future time, journeying back to Solvang from Los Angeles with my musical saw, to help my Dad finish the mysterious house. Local folks pointed out the "ancient ruin" to gullible tourists. But progress was being made slowly, and after I had already left for college, the family did at last move into "Elverhoy"—a beautiful Danish farmhouse with decorative brickwork and real pegged beams.

These pegged beams were somewhat of a sore point for me. The frame for each side of the house was pegged together on the ground, then raised up on pulleys, and finally hammered into place with a huge mallet. On one occasion I alone was helping Viggo at this task, and we had just hauled up one whole side of the house and I was dangling on the rope holding everything in place, when an acquaintance drove by and stopped to gawk. Viggo, sociable soul that he was, just dropped his end of the task and went off to greet the visitor, leaving me dangling, holding up one side of the house, afraid to let go because—"Darn! Daddy! Come back!" It took a while, but after what seemed like an eternity, the car drove away and I and Elverhoy were rescued.

This story is nothing short of miraculous in view of the terrible accident I had suffered during our first year in Ballard. Indeed, this was my first truly shattering experience, one resulting in immense growth and attainment of considerable adult
wisdom at my tender age of fourteen. On this day, out in the field, I had jumped bareback onto the back of our "loco" steed, Eclipse, heading him toward the small paddock where we groomed and fed the animals. The entrance to the paddock was at the end of a long barbed-wire fence. Just in front of the gate the rock-hard, gnarled branch of an old live oak tree reached across the path. Suddenly Eclipse started to run—fast—and that branch loomed up in front of me. I thought that we, together, would get under that low hanging branch if I were to lie flat on the horse's neck. I did so, but misjudged the lack of clearance, and struck the top of my head full force on the solid branch. I was wiped right off the back of the horse and landed in a tangle of barbed-wire fence next to the path, blood pouring from the head wound down my face, blinding me.

I awoke moments later torn by barbed wire, my head streaming blood. Dazed, in terrible pain, I felt my life ebbing away rapidly. I did know that in a few minutes I would be dead there, far enough from the drive and the road and the nearest house so that it would be many hours before I was found. I could feel the pain diminishing as my consciousness began to leave me. Death was easy. I knew that surely at this moment, and ever after. I was in shock, and had severe pain from fractures of several neck vertebrae. But quickly, quickly, I felt the lifeblood draining from me, and as it did I felt peace, quiet, ease—and I knew that this was Death. How easy it would be to let go, and let Death take me, let sleep overcome me forever. Already the pain was lessening and my body relaxed.

Suddenly, I thought of my mother and imagined her coming to this place in the field and finding my dead body. I could feel her terrible grief. I could not do that to her. This thought jerked me awake. I loved her too dearly to allow such a terrible thing happen to her—the loss of a child who was very close. I knew that Death would be easy. It is Life that is hard, but it was worth all of its struggle because of the love I felt for my family and friends. I could think of nothing else. I was too young to know or care about other things that life might bring, but my love for my family bound me to life and forced me to begin to save myself. I must not give up and allow my family to suffer such anguish.

Slowly I started to crawl. Through the paddock gate, across the filth of the small yard, over to a fence near the road. I suppose the distance was a few hundred yards. I somehow dragged my body upright, hanging on the wooden fence near the dirt road that separated this field from our neighbor's house. With blurred eyes I saw our neighbor—a doctor!—and his family walking toward their car. In a few minutes they would have been gone on vacation for several weeks. Somehow, with minutes to spare, I mustered up the strength to cry out loud enough for them to hear. They had seen me. The doctor came across to me, from somewhere finding yards of bandage to wrap around my head, and laid me down in a pile of hay to await an ambulance.

In this single moment, where my life hung by a thread, I felt that an energy from within was what saved me. By my own choice, and the extraordinary fortune of my timing, I was alive. Never again did I have a fear of Death. I had suffered compression fractures of five vertebrae in my neck and upper back. Miraculously I was
not paralyzed, and would recover almost completely. But for six months I lay on my back in bed with my neck in traction. A sobering experience at age fourteen. My first real experience of injury and disability. Now, all these years later, I can only imagine the effect this must have had on our little family. Mother now had to care for both me and two-year-old David. Thor was necessarily left much on his own to grow up with the Boy Scouts and his little school. Viggo, financially strapped, was valiantly trying to build his house and act responsibly as the head of this family. I have no idea—was never told—about medical costs that may have drained the family savings still further.

And Viggo, poor Viggo, was already dying of cancer. We didn't know it then, but he made some mysterious visits to doctors far away. Only after I left for college would we understand how much he had been suffering. We began to see his handsome physique waste away to practically nothing. The move to Elverhoy was only just in time to put him to bed, where he languished for two years as an invalid. Poor Daddy, he had built his wonderful studio and kiln, but never had an opportunity to use either. Poor Mother, she nursed him faithfully, while I was a constant care as well, and the boys were difficult to raise. How sad for her. Her happiness was broken, and she was left an early widow with a huge, beautiful house and thousands of dollars of debt, two boys in school, in a strange California landscape far from her own home, friends, relatives. California still seemed so alien to her. "How do you make anything grow here?" she wondered. But there was no turning back. She probably thought about running back to New England, but there was no home there for her any more. No, she would have to make the best of it here, and ultimately, she did this just splendidly.

These darker clouds were still on the horizon as I gradually relearned how to walk, went to school in my stiff neck brace, and eventually climbed up onto a new horse and rode again. I regained my adolescence for a couple of years in which I made myself unhappy after the manner of adolescents. We worked on the house. I picked up a boyfriend, of whom my parents thoroughly disapproved, from the nearby army base in Lompoc. My darling Grandpa, Alan Hovhaness's father, came to visit and presented me with his entire life's savings—$1,500 toward my college education. College? My parents disapproved of that, too. "Why don't you go work in one of those nice Danish bakeries, get married, and settle down?" my mother wailed at me. "And why don't you think about your clothes, your hair, wear makeup—you will never find a nice boy to marry, and if you don't marry and have children your life will never be fulfilled."

Oh, ugh! I didn't want to do any of the things my parents wanted for me. I just wanted to escape—to flee from this enclosed Valley and find my own way in the world. I did attract a little notice as valedictorian of my tiny class, winner of a Bank of America Award for science studies, and winner of a speech award from the Lyons Clubs. Around the house I moped and grumbled like any adolescent trying to sprout wings. But on regaining my health I began to work, for money, housecleaning on weekends and looking after kids during the week. I soon learned to combine homework and babysitting. Little did I know, but one of these kids was later to become my sister-in-law.
In contrast to my ungracious attitude, brother Thor loved Solvang and its
surrounds. He soon graduated from Ballard’s one-room schoolhouse, and began
bicycling his way the five miles or so into Solvang to go to school. He easily made
friends among his peers, and was soon sporting a Mohawk hairdo (he dared Daddy to do
that to him, but instantly regretted it when Viggo took him at his word), joined the scouts,
and worked himself almost up to Eagle level. He proudly received his cooking badge
after a field trip on which he prepared dinner for the troop. We asked him how that had
gone, and he cheerily said, "Fine—only we had our carrots for dessert." It hadn't fazed
him at all that he did not know that carrots would take a lot longer to cook than the rest of
the menu.

Outside of school, Thor was a very hard worker. He soon got a summer
job hoeing beans. We would drive past the farm where he worked and observe him hard
at it, in a cowboy hat, sunburned and sweaty, but proud of the job he had done and of the
good money he earned. Thor found school as dull as I did, but he tended to be
mischievous and something of a troublemaker to compensate for boredom. However,
when Thor really wanted to learn something, nothing could stop him. Early in his high
school years he became a "printer's devil" at the local newspaper. Soon he was running
the linotype and soaking up the lore of printing and publishing. In this he had found his
calling; he was a professional printer and printshop operator for many years.

Clearly the discipline instilled in us by our parents, particularly Mother,
stood both Thor and me in good stead. We had always been given chores to do at home,
and had learned to earn and then save money. We were not given extra money—there
wasn't any—but we were paid a steady small wage for the work that we did around the
house and farm. It was easy for both of us to expand that to holding down good jobs at
an early age. In my case, I managed to work for a "witch" of a woman who became quite
a friend. She had a reputation, among the high school girls, of being impossible to work
for, but I found it a challenge to figure out what it was she wanted and then do a good job
of providing that. Clearly Thor treated his jobs in the same way, so we were well on the
road to independence before we graduated from high school.

Indeed, it was my "witch" who gave me the means to escape my small
town drudgery. We talked at length about "my future," in which she took an intense
interest. It was she who first suggested the idea that I become a doctor, and encouraged
me to plant that idea firmly into my parent's heads so that they were unable, later, to
refuse to allow me to attend college. I had other help, of course. In those days, the
University of California did some active outreach to high school students, and a few of us
were encouraged by our teachers to apply to the University's Santa Barbara campus. I
did so, but to my intense surprise, I received a letter from the Berkeley campus inviting
me to enroll there, and even offering me a small scholarship. Then, as now, Berkeley
was the Queen of the U.C. system, and it had not once occurred to me to apply there
directly. At that time applications to all of the various campuses went first through
Berkeley, and the Berkeley administration simply lifted a few that they felt would make
good candidates for Berkeley itself.
So I had parental permission and acceptance by the University. But how was I to go to college? My parents were unwilling and unable to pay for higher education for me. Furthermore, they were of the old-fashioned persuasion that education funding should be reserved for the boys in the family, "who really needed an education." My mother was especially adamant about this. According to Mother, all of her sisters had gone to college, and none had made any use of this education in their subsequent lives. She herself had gone to art school, which she considered a sort of "practicum," and she was also extraordinarily well read and self-educated. She did not see that years spent traveling in Europe and classes under the stimulating artists and sculptors at the Boston Museum were an education that could only be emulated by college. Certainly if I had remained in Solvang, no matter how well read, I could never have attained her breadth of knowledge and understanding of the world at large.

I wrote to Berkeley and read everything they sent me, discovering the differences between dormitories, co-ops, and "off campus" cooperative living arrangements that were even less expensive. I settled on a small private women's co-op, where we would be expected to do our own housekeeping and to work about five additional hours a week at tasks that served the entire group. I figured I would have time for another ten hours or so of housecleaning and babysitting, counting on my experience (particularly with newborn babies) to ensure me enough jobs to keep me alive. My scholarship would pay for books and tuition, which at the time was only a nominal thirty-five dollars per semester. Of course I did have Grandpa's small nest egg, but I vowed not to touch it except in dire emergency. It would be my safety net, and so it remained until after my marriage.

"I am ready to go." I announced. Graciously, my parents drove me to Berkeley in the fall of my seventeenth year.
4. Undergraduate Years

"You must realize that you will be lost at Berkeley. Students like yourself, accustomed to being at the head of a small high school class, simply cannot imagine or even accept the fact that they are just ordinary, average students here at Berkeley."

I was quite prepared for this conventional wisdom, and really did not mind. I was free. Free of the mentality of "Girls can't or shouldn't take science classes," "Girls should get married and settle down," "Don't practice music so much, because it there no use in trying to earn a living with music." In spite of the excitement of the move to California, the fun of housebuilding, horseback riding, music-making on the clarinet, and the relief of my apparent complete recovery from my accident, my last years of high school were full of unhappiness. Like many, if not most, adolescents I felt terribly misunderstood and had no peers with whom to share these feelings.

What I was unprepared for was Berkeley itself—its riches and wonders, the ever-expanding opportunities for stretching the mind and imagination, the extraordinary knowledge and wisdom contained in the collective minds of its great faculty (only later would it come to disturb me that they were almost all male), and the willingness of these awe-inspiring people to stoop to explain things and discourse with the likes of me. Berkeley was incredible.

Another of the many gifts found in Berkeley was my great aunt Katherine Scott Bishop, a truly extraordinary personality, who was my real father's (Hovhaness's) aunt. I had never met her and knew next to nothing about her. A medical doctor who had received her degree from Johns Hopkins University in the early 1920s, when women doctors were truly a rarity, Katherine had married and come to California with her two young daughters. Her first position was as a research associate of the great Professor Herbert M. Evans, one of the early inventors of the field of endocrinology. A co-discoverer of vitamin E, she had been through much misery in the man's world of scientific research. After her husband's death she went back to the practice of medicine, and was actively practicing anesthesiology in Berkeley at the time of my arrival. Katherine was a large, abruptly outspoken woman with a hearty laugh and a well-hidden heart of gold.

Mother had given me her address and telephone number, so I shyly placed a call from the co-op, once I had settled in. We made a date to drive across the Bay to hear the San Francisco Opera (another wonderment), but on this particularly foggy, chill night she breezed in and without discussion plunked me into her open convertible and drove rapidly across the San Francisco Bay Bridge while I practically froze. I was speechless for the entire trip, and my eyes must have been the size of saucers. But this terrifying personality was my first real role model, the first woman physician I had ever
met. As it turned out Katherine was to be my saviour, as she had secretly been for many others.

During my first semester, I loaded up on English, German, chemistry, and philosophy. I was practically drunk with happiness at all these riches, and soaked them up almost by osmosis. I had no thought for grades, except once in a while my premedical fellows would jeer at me. "You come from a small town," they said, "and have no idea how tough Berkeley is. Look out, because if you don't get top grades here you will never get into medical school." Funny, I simply couldn't take that in, being far too caught up in the fascinating subject matter being covered in every course. I had never been so stimulated at school before, and I struggled to my fullest extent, swallowing my shyness and marching up to professors and asking questions. I got answers, too. In fact, to my astonishment the professors were clearly delighted to find a student who really wanted to talk and discuss the material beyond the level of the class.

Amazingly, I also found good friends among my peers at the co-op. For the first time I discovered that there were others my own age—or a little older, since I was a bit under the age of an average entering freshman—who shared my enthusiasms. There was the student of music, determined to become a music teacher. There was the young and very gifted mathematician, struggling to make her way in an all-male department. There was the girl from a small town near our state capital, fresh from a ranch where gladioli were raised, who wanted to become a chemist. Perhaps these friendships were the greatest gift of all. I was not unique or crazy, despite my mother's dire predictions. Now, at last, I had people my own age who understood my enthusiasms, relished them, and wanted to talk endlessly about what we were all learning.

Was this too good to be true? Unknowingly, I was headed for another fall.

Even as I was reveling in my new happiness, I became ill. It seemed trivial at first, but I was sent to the University hospital. The doctors looked very grave. Something was wrong with a kidney—could it have been the result of my accident three years before? Letters went back and forth between the Berkeley physicians and those who had treated me in Solvang. No, the Solvang doctors stated repeatedly, it definitely could not be related to the accident, but it was important to operate right away. Right away or you might not have a patient on which to operate. The doctors at the University were hesitant. They were used to treating mild disorders or infectious illnesses picked up by healthy students during their college life, not life-threatening illnesses and not major surgery.

I missed many classes, as I was in and out of the hospital for miserable, painful tests. But I hung in there, and only after finals did I go in for the operation and an extended stay. I did not know it, but Aunt Katherine lurked behind the scenes and supervised the whole thing, saw to it I got the right treatment at the right time, probably saving my life. Between semesters, at last, they did operate. It was cancer, and highly malignant. Almost nobody survived this kind of cancer, we were told (or only five
percent). I should go home right away and my parents should be prepared for the fact that I would die within the year.

My mother was there, sitting patiently by my bedside as I came out of anesthesia. The pain was terrible and I wanted to die, at least momentarily. She angered me, in a way, by reading the most humorous thing she could think of—Dickens's *Pickwick Papers*—and I laughed and screamed at the physical pain of my laughter.

Then when they told me I must leave my precious Berkeley, I screamed again: "NO, NO, NO! I won't go home!" This pain was emotional. I simply could not bear to leave Berkeley now that I had truly found happiness. I felt sorry, now, for my mother. How terribly hurtful to tell her that I did not want to go home, that I would not go home, no matter what.

But I was angry at God or Fate, not knowing what to call it, but angry at whom or whatever had dealt me this unfair blow. I won't go home. And I won't die either. I am too busy, too full of plans. You can't send me away! I pleaded with the doctors, then with the University administration. They were adamant—no dying kids on campus, period.

Once again, Aunt Katherine stepped in. She announced that she would keep me in her own home. She was a physician and would be responsible for me, so lay off. And she would see to it that I would be well-behaved and take a reduced course load in the spring.

So the University administration finally relented, and I remained in Berkeley, moving in with Katherine for a few weeks. My former co-op roommate brought me my grades. Grades! I had forgotten all about them. To my total astonishment they were straight A's. I could hardly believe it. But this did teach me from the start that the best way to get good grades was not to think about grades at all, but to simply concentrate on what I was learning.

The first postoperative weeks were very hard, and I remained terrified of Katherine, although I certainly appreciated her marvelous and very kindly assistance. I was in great physical pain, especially when I had to trudge down and up the steep Berkeley hills to get to classes. I was simply determined to keep going, to prove to all that both Katherine and I had made the right decision. And then, funny thing, I found myself a little bored with my "light load." Could I add another class, mid-semester? The all-powerful Administration bowed to the wishes of this shy kid who, after all, had gotten straight A's and appeared to know what she was capable of. So I added a math class. But it was still not enough. Katherine was taking piano lessons from a teacher with a new and unusual technique. Could I take a few lessons too?

And so my double life—interrupted frequently in future—of music and science had begun.
Someone asked me recently whether I thought of myself as unusually intelligent. Not at all. As a matter of fact when I was quite young, still at Columbia School in Rochester, I had been given an IQ test. Since my mother was on the faculty, she was told the result, and she told me. "135," she had said. I suppose it is unwise to provide children with this information. Now I knew, definitively. I was not a genius. I was also not stupid, or even average. But at an early age I had heard that people "use" only a small part of the actual potential of their minds. So, I reasoned, if I could just learn to use a bit more of this normally fallow brain capacity, I should be able to do anything I wanted or needed to do mentally. Growing up, I discovered that my intellectual success was a matter of figuring out how to do whatever was necessary, either learning things or solving problems.

Rote memorization remained difficult for me. I had to solve my need to memorize facts or vocabulary or music, which many students do learn easily by rote, in some other way. This difficulty was real, as proved by an experiment I participated in as part of a psychology course. The experiment involved first memorizing a series of nonsense syllables that were flashed before the eyes at set intervals of time, but the real experiment began only after the subject had memorized the syllables. I have no idea what the "real experiment" consisted of, inasmuch as I was quite unable to do the preliminary task of getting the syllables into my head in the first place. The student researcher finally excused me in some disgust, as being unqualified for this particular piece of research.

So, although I know my intelligence is quite adequate, I consider myself a practical problem-solver, rather than a person of special brilliance or other gifts.

It was not long into my second semester before I managed to move back to the co-op and resume my former life, up to the hilt with studies and work. I cruised through this semester, again with all A's, and then I spent the summer at Aunt Katherine's cabin high in the mountains above Lake Tahoe. It was a cushy job—babysitting for her three small grandchildren, with days off hiking in the wilderness area full of rocks and icy ponds above the treeline. On other days I managed to get blown down the length of Echo Lake in a canoe. At night we lay out under the stars and watched meteorites until we slept. This was indeed wonderful therapy for healing my operative wound, although its pain would last for many years.

In the fall I returned to Berkeley and another year in the student co-op. I made good friends with my mathematician roommate, who was generally acknowledged to be difficult and uncooperative. Once again, as with the old "witch" for whom I kept house in Santa Ynez, I discovered that I could in fact get along with such people quite easily, by finding out what made them tick and taking an interest in them. Once again I demonstrated to myself that these were people from whom I could learn a great deal. Eva was a mathematics major—a rarity among college women at the time—and already a senior. I began to feel the excitement that pure knowledge and the unraveling of puzzles
could bring. In fact, this nearness to a mathematical mind surely influenced my subsequent career.

I did join the Premedical Society on campus, but I was perturbed by the tone of their meetings. There was much propaganda against the local Health Maintenance Organization (the first of its kind): Kaiser Permanente. It was considered to represent "socialized medicine," and medicine as we knew and respected it was surely doomed to failure if Kaiser were allowed to survive. How fascinating, forty years later, to discover that these young folks may in fact have been right. However, their evident interest in raking in riches at the expense of their patients was surely a motive that was all wrong. Now, it appears that the profit motive has been transferred from the physician to the HMO administration. Where along this complex path did that change occur, and could it have been avoided? Above all, of course, is there any way to take the profit motive out of caring for the sick, the disabled, and the dying?

Even more distressing to me was the habit these premedical students had of downgrading everyone else in order to make themselves look good. They stooped to contaminating laboratory reagents in chemistry classes, once their own unknown test samples had been successfully analyzed. In class, they constantly asked questions such as "Do we really need to know this for the exam?" or "How many points will I get for doing that?" Never did I hear from my fellow premeds the excitement that I increasingly felt over the paragraphs which ended with "We don't yet know the answer to this," or "This is still an unsolved mystery." Soon I began to feel that I did not want to have these students as lifelong colleagues.

Adding to my growing lack of enthusiasm for the field of medicine was the fact that I continued to be subjected to horribly painful medical procedures. Good grief. Would I ever be able to do such things to other human beings? Worse yet, medical practice appeared to consist primarily of memorizing (the method of study much preferred by my premedical peers) "rules" about what symptoms went with which disorder, and what treatment then went with the named disorder. Patients were viewed, not as people, but as if they themselves were the disorders that afflicted them. Unnamed disorders were never mentioned in this connection, and if unnamed, were either imaginary or requiring of further (expensive) tests. If the profession consisted only of this clinical matching game, conducted all day long every day for the rest of my life, I began to think that it looked downright boring. And, regretfully, I had to admit that memorizing was not my strong point, had never been, and indeed constituted a flaw that had not changed much since my disgraceful days in third grade arithmetic.

In this sophomore year, I started biology. This was a real struggle for me because there were so many new terms to master. It seemed like a foreign language, and my weakness of memory made it extraordinarily difficult. But I worked very, very hard at it, and gradually grew more comfortable with the language. The second semester of this series, mammalian zoology, was deeply interesting to me, and the teacher was splendid. Short, stocky, with dark hair and a jaunty bow tie, still in his mid-thirties, his name was Howard Bern. His lectures were clear, precise, and truly illuminating. Toward
the end, he gave a sequence of lectures on endocrinology (the study of hormones) that were fascinating and truly inspirational. This was his own field of specialty, and his excitement radiated through every sentence. "Hey! This is exciting. I want more."

I went to see Professor Bern at the close of this semester, ostensibly to have a look at my final exam (I had in fact missed a few questions, and really did want to know the lowdown on those areas I had misunderstood). His exam had been illuminating in itself, constructed to be an opportunity to synthesize many aspects of the material covered during the course in new and creative ways. How my fellow premeds hated it—not their style at all. But I found it a thrill to make new discoveries throughout the three hours of this exam, and I did want to talk about it. Professor Bern greeted me very warmly, and to my total astonishment, said, "Oh, you are Miss Brandt-Erichsen. Well, it is a real shame that a professor does not even get to meet his best student in a class like this, with 300 students."

When I had recovered, I asked the professor what I would need to do to get into the field of endocrinology. He promptly said "Take my class in the fall."

"But ... butttt . . . " I spluttered, "I don't have the prerequisites for your class."

"Suppose you let me decide that," he said firmly. And, leaving no room for argument, "See you in September."

Wow! I will see him in September! I will be a junior, major in zoology, learn more about this fascinating field of hormone physiology. Maybe I could go into research. I had never really thought about that before, but that began to sound a lot more interesting than medicine, now that I did think about it. Let me go to summer school and pick up some of the chemistry that I should have as background.

I moved back in with Aunt Katherine for the summer and did start organic and physical chemistry. It was an ill-fated summer, though. I began by having several accidents in the organic chemistry laboratory. First I ran a mercury-containing glass thermometer through my hand, and then got splashed with sulphuric acid. Nothing serious, but I felt a total klutz in this class that went by like the wind during the first week. And the doddering old professor and I kept meeting in the hall, unable to pass by each other because we both kept stepping first to the right, then both to the left, then both to the right, seemingly endlessly. And—horror of horrors—it turned out that old Professor O. lived near my aunt, and I found myself performing the same dance on the hill going to and from class, morning and evening. Professor O. died during that summer, and I was convinced that I had personally brought on his demise.

Ill-fated summer indeed. Before another week had gone by I received a call from my mother. Viggo was very, very ill. Could I come home to Solvang for the summer and help her? So I did, without much regret for the lost chemistry classes, but with much sorrow concerning the family tragedy that was bringing me home. I spent
hours reading to Viggo, and to my joy, was able to really help make him comfortable, having learned firsthand how it feels to lie painfully in bed after an operation, and what tricks make one's survival somewhat tolerable. Come to think of it, this was my first experience with "peer training and counseling," and it made a profound impression on me.

Viggo lingered for another few months, until January of the following year (1955). David, just turning six, would be starting school in the fall, so I was able to return to Berkeley in September. Each year, it seemed, became more momentous than the last, and I was about to embark on another significant adventure.

I was coming up in the world. For some months before that fateful summer I had had a new job, as secretary for the Phi Beta Kappa Society on campus. My secretarial duties included making sense out of files that had been thrust higgledy piggledy into old wooden cabinets in the small, dark office located in a "T" building. (T stood for "Temporary," one of a large number of barracks-like structures that had been hastily erected during and just after World War II to accommodate the influx of students on the GI Bill. These began to be dismantled only many years after my own graduation.) In addition to files, I was to type letters and go through student listings from which individuals were selected for Society membership (this was done by grade point average alone). I did very much enjoy the work and the responsibility of managing all this by myself. Indeed, the Board of Directors—the faculty committee responsible for the Society—was happy to allow me freedom to use my creativity in organizing this whole mess of papers that had been left under piles of dust for years.

All but one member of this faculty committee, that is, was happy with my work. This one exception was a professor of business administration (scornfully referred to as "bizz-add" by undergrads) by the name of Carter. Lean and mean, looking like a veritable scrooge, he took it upon himself to "prove" that I was unworthy and much too young for the exalted post of secretary for the office of Phi Beta Kappa. He lurked around the corner and popped in to the office unannounced at odd times. He phoned me at 4:49:55 in the afternoon, hoping to catch me leaving five seconds early. He scanned my files looking for mistakes. Finally, he lied about me to the remaining group of professors.

I was dumfounded. I had never yet encountered such unadulterated unfairness in my eighteen years of life. I couldn't imagine what possessed the man. I was terrified that his lies would be believed by the other high-ranking professors. After all, they didn't know me any better than did Professor Carter, so why should they take my word over his? And I really needed the money. Besides, I would have loved the job if it hadn't been for this harassment. But I did protest. In fact, I rather foxy recruited another member of the committee to stand up for me, having convinced him (by some fast talk. I suppose) of my complete innocence.
To my astonishment and immense relief, the Board of Directors, all full professors of high rank in musty departments such as Spanish literature and English, all ganged up on Professor Carter and ousted him from the committee. I remained on this job through the end of my Junior year, organizing files, answering the phone, and becoming an honored junior PhiBate myself at the end of that time.

Needless to say, this experience taught me to stand up for my own rights, not to let myself be pushed around by my "betters." And the job itself taught me a good many organizational skills that were to be most useful in later political life.

Another very significant event occurred near the end of my Freshman year: I received a letter from my real father, now known as Alan Hovhaness. There had been complete silence from him since I had left Rochester as a ten-year-old, and only very much later did I learn that my mother and Viggo made him sign a piece of paper relinquishing his right ever to communicate with me. Despite this legal edict, he had kept some track of my adventures through his father, my dear beloved Grandpa, and not long after my major surgery in 1953, he broke his long silence with a letter.

Now it must be told that my mother had painted a truly dark picture of this man, Alan Hovhaness. I am sure she felt the need, consciously or otherwise, to justify her divorce, at least to me. I did grow up thinking of my father as something of an ogre, even though my brief encounters with him early in life had done nothing to confirm such a view of the tall, thin, soft-spoken man with the liquid, far-away eyes. He had talked almost entirely of music, and of metaphysical and spiritual matters, delightedly showing me the inner souls of composers such as Franz Schubert or Beethoven or Rimsky-Korsakov. But I did believe my mother—after our years alone together, of course I believed my mother. Alan surely was a terrifying, possibly violent man, ready to hurt me because he hated the noise I made at night, my baby cries interrupting his composing or practicing.

So this letter from Alan was a complete surprise. It was such a gentle, loving letter, telling me how truly sorry he was to learn about my recent cancer operation. He hoped I was recovering; he was in fact terribly grateful that it appeared that I would recover completely. He told me how very much he cared for me. Although he realized I might well not want to hear from him, he had only written because his love for me was so strong it overpowered him and he simply had to tell me how he felt. If I wished, I could destroy the letter and not bother to answer.

I was thunderstruck. Was this the terrifying man my mother had run from? He was a fascinating man, a genius, and he was, after all, my father. And he loved me. Not answer? Impossible. But I did suppose that my mother and Viggo would not be pleased if I began a correspondence with him. I did not wish to hurt them, so I began the correspondence in secret, telling my mother about it only after Viggo's death.
The following year the director of the San Francisco Symphony, Enrique Jorda, was to conduct a world premiere of one of Alan's symphonies. This engagement had been discreetly arranged through the auspices of an Armenian woman physician, Dr. Aghavni Sheboygan, and her husband, Carlos Vominii. These very kind people lived in Menlo Park, near Stanford University, and had been long-time admirers of my father's music. Presumably through my father, they also seemed to have learned of my existence, and were eager to arrange a "reconciliation." So they came to visit me at the co-op in Berkeley, and invited me to spend a weekend at their home in Menlo Park with my father, with all of us attending the San Francisco concert together.

And so my father and I met and had a wonderful, weekend-long, catch-up conversation at the Vominii home. I had the excitement of attending the premiere with the composer himself, and meeting Maestro Jorda and other grand musicians in the process. I made life-long friends in the Vominis, with whom my husband and I visited often in the years to come. And most important, I did establish a permanent connection with my father. This would come to have a profound influence on my subsequent choices of paths, as my life continued to unfold with so many strangely unexpected twists and turns.

During the first semester of my junior year, I found myself in Professor Howard Bern's classroom, as he had earlier demanded. This was his course in comparative endocrinology, a rather newly recognized field, although research relating to this had been done since the turn of the century. There was a curious connection in my choice of upper division study, in that endocrinology was the research field in which my Aunt Katherine had worked many years before. At this time, however, we had not discussed her earlier research, and I had no notion or understanding of her own scientific contributions.

Most exciting, to me, was the fact that Professor Bern's course would include training in research techniques themselves. The laboratory part of the class involved the performance of small animal surgery, with observations on the classic effects of removal and subsequent replacement of various endocrine organs. Early in the semester we each paired up with another student and each team developed a special experimental project. We were given keys to the laboratory, and were expected to come in every day (including weekends and holidays) to tend to our animals and work on the experiments. What a joy this was. We were given free reign to think. Professor Bern's lectures were no disappointment after the wonderful introduction to his teaching that I had had the year before.

This class was small, so we came to know all the students during the course of the semester. Among these was a slim young graduate student who had just arrived from India on a boat. He and I found ourselves in the laboratory alone together a few times, on quiet days such as Thanksgiving or other holidays, or during long evenings when others were mostly home with their families. He was extremely shy. So was I, but too curious to contain myself. I began to probe a little. Where did he come from?
Whatever was India like? My only acquaintance with India was through the writings of Rudyard Kipling, and to my knowledge this was the first person from that great country that I had ever actually laid eyes on. Where had he studied? How had he happened to pick this particular school? My queries went on and on. He answered patiently, in his soft, gentle voice, and I was increasingly drawn into his world and experience, so vastly different from my own. But I could also see that this young man was lonely, and I felt a sudden urge to introduce him to American life and ways, to help him see the wonderful world of Berkeley that I had come to love so much.

Junior year seemed to be the beginning of adulthood. I had moved out of the co-op that fall and back into the basement apartment my great aunt Katherine shared with me. She owned a large house in the Berkeley hills, but had carved out a little living space in one corner of the beautiful back garden for herself, renting out the rest of the house. The space was a bit cramped, but we each had our own sleeping room, and the shared living room was practically out-of-doors. We enjoyed music making, both of us still taking piano lessons and practicing on her old upright piano. We loved taking her enormous Newfoundland dog, Gypsy, out for walks. On hot days Gypsy suffered greatly, and sought out those long sprinkler hoses with holes all along their length, straddling the hose to soak her shaggy underside along with the lawn. By spring, Gypsy had produced six pups—perfectly square little black furballs that squeaked and squirmed in a fenced-in area of the little living room. Unfortunately when I practiced the piano, the six little snubby noses pointed toward the ceiling, and these squeaks changed to rather respectable howls. Although I was still terrified of Aunt K., I loved her dearly nonetheless, and managed to join in her hearty laughs over the foibles of neighbors, dogs, the medical community, and local politics.

In any case, I was terrifically busy, what with Howard Bern's comparative endocrinology class, plus comparative anatomy, embryology, physics, and the like. Interestingly, I found zoology and related subjects quite easy for me now, having worked so very hard to master the basic language earlier on, and I was able to spend extra time and energy on the research project in Bern's laboratory. And, of course, I was working several hours a week at my Phi Beta Kappa secretarial job as well.

Before the close of this first semester, a call came from my mother, telling me that Viggo had finally slipped away in his sleep. A final, blessed rest for both of them, but Mother faced many challenges. Although the new house, Elverhoy, had been more or less finished (at least it was livable), Mother only now discovered the enormous debts Viggo had incurred, both for building costs and for his medical care. Thor was still in high school, but working many hours a week as a printer's "devil" at the local (Santa Ynez Valley) newspaper.
Here I was, the week before finals, wondering what I should do. This was my first really difficult decision—should I just drop all my classwork at this critical stage and go home for the funeral and help my Mother, or should I beg off in the interest of maintaining my hitherto impeccable grades (not to speak of ongoing animal experiments, etc.)? I did have a partner for the experiments, but I worried a lot about final exams. Finally I telephoned Professor Bern—could he give me any advice? What should I do in this situation? He responded with, "But what exactly can you do at home? Your stepfather is already dead. Your business is here, completing your courses."

Oh, dear—that was not what I had hoped to hear. But I knew my mind was already made up—Mother needed me, and I would go to her now. Whatever damage that might do to my "career" track could be patched later, I guessed. And so I left, joining my family for the funeral and a few days of mourning, trying to show my support for Mother and the boys at this rather desperate time. It was the only thing to do, and in fact the family agreed that I should return to Berkeley in time to take my exams and begin the next semester. This was an important lesson—doing what I knew was right had certainly not hurt my "career" at all, and it had brought me closer to my family and given them the reassurance that I was, after all, an adult on whom they could count.

As I completed this mid-year, I approached Professor Bern with a different dilemma. "I am really going to miss all this," I said, referring to the research project in his class and the challenges and freedom associated with working in the laboratory. "I was hoping you would say that," he twinkled. He explained to me that there was a type of course called "199," for special study, supervised by individual professors. I should sign up for that, and he would give me space in his graduate student laboratory if I would present to him a project for independent research. I was to discover that I was one of many undergraduates so privileged in Howard Bern's little empire, but, as usual, I was the youngest.

So I began to spend all of my spare time in the fourth floor room of the Life Sciences Building, where all of Bern's research students shared space (two of us per table). Graduate students and undergraduates together, we washed our laboratory glassware in the same sink, shared equipment, animal facilities, and talked excitedly about our research projects. Once again, since I was taking classes and working at my secretarial job during the day, I found myself in this lab in the evening or even late at night, and often my lone fellow-conspirator was my Indian friend from the fall, Satyabrata Nandi.

His fellow students called him "Satch," being unable to pronounce that unwieldy first name. (Bengali uses an alphabet entirely different from English, and Bengali words and names were poorly transliterated by the British. "Satyabrata" is pronounced more like "Shot-ta-Brot-ta.") One day we caught "Satch" in a loquacious mood and asked him what informal name his family and friends in India used. He told us they sometimes just called him "Nandi," but we objected, saying that this usage was rather impolite in America. Finally he confessed that Indians had "house names," used by family or very close friends. His "house name" was "Ranu," pronounced "Ronnu."
We laughed delightedly at "Ranu of the jungle" and teased him unmercifully, but most of us were instantly converted to the use of "Ranu" rather than the ugly "Satch." And to this day, Ranu has had to be satisfied with the entire scientific world knowing him by his "house name," which would have been a true embarrassment in India.

But within a few weeks Ranu had become very quiet and unresponsive to our jibes. Finally Howard (as Professor Bern insisted on our calling him, much to my discomfiture) took the rest of us aside and explained that Ranu's father had died, and he had just received this news weeks after the fact via airletter from India. Poor Ranu—my heart went out to him instantly. He had not had the option, as had I, of returning home and attending the funeral and to his family's needs. He had not even known about it when it happened. And so, through our mutual sorrow, we drew a little closer yet.

Toward the end of the spring semester the very dignified chairman of the Zoology Department suddenly appeared in our laboratory. Would any of us like an extra teaching assistantship in the microtechnique class during the summer session? I had successfully tutored a couple of his embryology students, and he looked pointedly at me. But teaching assistantships were meant for the training and support of graduate students. "Can an undergrad do this job?" I asked.

"I don't see why not," replied the chairman, "if she knows what she is doing."

And so, I had a new job for the summer! I could, at last, relinquish my secretarial position, and move into a job that would use my training as a zoologist.

That teaching job was fun, and I did learn through it how much I loved teaching. But there was a strangeness to it—most of the summer students were themselves biology teachers from other colleges, coming to the University for summer refresher courses. Here was I, standing up in front of the class as instructor, only twenty years old and completely wet behind the ears. Awkward under most circumstances, I swallowed the lump in my throat and proceeded coolly (at least on the outside) to describe the tools and techniques used for preparing microscope slides of biological tissues. To my utmost surprise, all these older students, and even the undergrads (all of these were also older than I), gave me the respect and courtesy given to any University instructor. They did seem to enjoy the class. How wonderful. There were certainly aspects of teaching that I loved even better than the research I was still pursuing in Howard's lab. But the experience also taught me how stultifying a purely teaching job could be. Most of my students who were themselves teachers had long ago lost the joy of discovery, inasmuch as they were denied any prospects of doing independent investigation themselves in their overloaded teaching jobs at state or junior colleges. How could they convey the joy and excitement of discovery to their students, then? Look at the difference between their dried-up minds and the creative, excited and fertile brain of a Howard Bern! No, from this experience I determined that I would not accept a full-time teaching job on any permanent basis, and this, too, influenced my career markedly.
During my junior year I made another friend in Howard's laboratory: one of Bern's graduate students, Pat Tomlin. Pat had been a teaching assistant in the comparative endocrinology course that had gotten me into my present heady situation, and I was extremely flattered by her attentions. To my surprise and delight, she asked me if I would consider being her roommate. Of course I accepted, and at the close of the spring semester, I moved out of Aunt K's apartment and into one across town with Pat. I spent a wonderful year with her, and she taught me to manage a household, manage shopping, budgeting and other skills of living from which I had so far been protected. She was, indeed, another important building block in my achieving adulthood.

Aunt Katherine, meantime, took a rather dim view of my activities. She remembered with much pain her experiences as a young woman in a research laboratory, where the professor had stolen her work, published it under his own name, and given her a small salary and virtually no credit for her discoveries. She urged me to rethink my change of direction, to apply for medical school again (I had applied once during my Junior year and been rejected, probably for health reasons as much as any other), and to follow in her footsteps.

No way, Katherine. I am very sorry to disappoint you, but I don't even like doctors. My interviews at the medical school had made me even more scornful of the attitudes of medical professionals. Furthermore, Howard's lab was full of premedical students, who tended to exacerbate my negative feelings about the types of people who become doctors. Typically, Howard Bern wanted to instruct them in appropriate research skills, so that when they ended up doing clinical research they would have some notion of good scientific methods. Howard himself had encouraged me to apply to medical school, so that in the end I would have a real choice between practice and research. Only years later would I recognize the merits of Katherine's arguments, but by that time my life had been redirected entirely by other forces.

Once again I approached Howard, but this time for a job. I had the teaching assistantship for the summer, but what about fall? Was there any way I could use my laboratory skills to earn a living? Of course there was. There were a number of laboratory technician and bottlewashing jobs available for hungry students, and I believe I took a couple of these in order to make ends meet. I was still on a small scholarship, but this was nowhere near enough to live on. So while Pat Tomlin helped me learn to conserve money and live as well as possible on a very little, my earning power did increase a bit as my positions became more technical and brought in more than a minimum wage. However, making ends meet, keeping my heavy course schedule going, actively doing research, and increasing my social activities (more of this shortly) began to take a toll on my health.

Shortly after my twentieth birthday I began to experience severe pains in my neck. These were so severe, in fact, that the only relief I could get was to lie flat on the floor on my back for some time until the pain subsided. What was this? I visited a
Doctor, had X-rays, was told my neck looked "awful" (I had traumatic arthritis as a result of my earlier accident), and was given traction and exercises. So I hung myself in a doorway (home traction), tried to "watch my posture" (shades of my mother's constant harping), and did the exercises dutifully. But the pain persisted—worsened, even. I guessed it was not serious and not treatable, so I ignored it when I could, and lay on the floor when I couldn't. I was still suffering from considerable postoperative pain from the kidney operation, and the specter of cancer continued to lurk in the background. I was required to keep returning to the hospital for various X-rays once or twice a year. Indeed I was really beginning to drag around from fatigue, just a little.

However, none of this was going to spoil my fun. Roommate Pat enthusiastically joined me in the "Americanization of Ranu" campaign. We began to plan all sorts of fun excursions that might include him, and now we had our own apartment together we could invite him to meals as well. Ranu and I began to go out late at night when we had finished our lab work, to have apple pie a la mode at Mel's drive-in close to the campus. We went to movies often, in these pre-TV times, and on weekends went swimming at Lake Anza. In the fall we went with other friends to Solvang, during "Danish Days." I remember trying to cajole Ranu into joining us dancing in the streets, and Ranu begging off claiming that he had a "sprained ankle." He got no sympathy from us, assuredly.

In the fall, those of us (including Ranu and myself) in Howard's laboratory who were working on mammalian projects related to cancer research were moved to the brand-new Public Health building. My own project was an analysis of the effects of cortisone on tumor growth—I had found a qualitative difference that depended on the dose, such that at some doses this hormone stimulated growth, and at others it inhibited the tumors. New discovery! Ranu was working hard on his analysis of mouse mammary (breast) development and its natural control by hormones. We made a number of friends in the new laboratory, and several have remained close for life. The group we had joined was then known as the Cancer Research Genetics Laboratory (CRGL, later shortened to CRL). It was headed by a marvelous gentleman who had started life as an itinerant preacher, Professor Kenneth DeOme. His specialty was animal pathology, and from him we learned much about this subject. Ranu also learned much from Ken about running the large research laboratory he was himself to head years later. Ken also became a close friend. Both Howard and Ken were very informal with their students, and frequently invited us individually or in groups to their homes. Ken had a vacation cottage in Inverness, further up the California Coast, where we had many wonderful weekends over the years.

As my senior year wore on, Pat and I acquired a third roommate, Lillian, who was a technician at CRGL. Since I was working there in the evenings as a technician as well as carrying out my research project, Lillian and I came to know each other well. But the three of us needed more room. The woman who ran the microtechnique laboratory for the Zoology Department lived in an old North Berkeley Victorian owned by a couple, both botanists. They had purchased the house as a place to park the husband's mother, and they rented the rooms on the lower floor to friends.
These rooms had been passed along from one group of biologists to another, and we were part of the series. The house was on Henry Street in Berkeley and was dubbed the Henry Street Settlement." It was spacious, the rent was low, and it was near enough to campus to enable us to travel via shank's mare. However, since Pat and I were clearly coming up in the world, we did buy an old car for the excursions that were beginning to take us further and further afield. Late in the spring, for example, we took Ranu to Yosemite National Park for his first experience in snow. Really we were quite mean, throwing snowballs at him and suggesting he walk through a big snowdrift without telling him that he would sink in over his shoes.

Inevitably my grades slipped a little, and I got two or three B's my senior year. Recently Ranu was asked whether or not he thought I was "smart." He said, "Yes, really smart. In fact she never even got a B in college until she met me." Goodness, I never even noticed that, and to think that he had been carrying that little guilty thought around all these years. So I gave up a chance at the University Medal (although I did win the newly established Zoology Department Citation), mostly because I was completely engrossed and happy in all the other things I was doing. Quite probably the research was as responsible as Ranu for my lack of attention to biochemistry. One of the B's seemed to have come about as a result of a professor's maxim never to give anything lower than an A to the graduate students in his class, nor anything higher than a B to an undergraduate. It concerned me not a whit, in any event, and graduation day came and went with hardly a notice.
Chapter II TRIAL (1953-1983)

1. Graduate School and Marriage

Needless to say, Ranu and I were beginning to get serious about each other. For nearly two years we had been pretty constant companions. I was graduating, and did not know what my life would turn to next, but it seemed inevitable that I would go to graduate school somewhere. Ranu would be at Berkeley at least one more year, but possibly not much longer. He came to the U.S. on an Exchange Visitor's Visa, with every intention of returning to India, having officially sworn that he would not try to change his status while in the United States. We had begun to talk about how sad it was that we would have to part company in the near future. But over the course of this year, the talk turned slowly to ways in which we might circumvent the various forces that would keep us apart.

Neither of us had a father to turn to for advice. Although I was seeing Alan occasionally and corresponding with him, I never really learned to think of this rather strange man as "father." His head was clearly in the clouds, he had married (or at least moved in with) at least six different women since he left my mother, and he had never taken any responsibility for me other than occasional advice about music lessons. This was not a man from whom I could seek counsel regarding a serious love affair. Inevitably, it was to Howard Bern, strong father-figure that he had become, that we went with our little problem. We really did love each other.

"How old are you?" Howard asked in his deep, growly voice.

"Just turning twenty-one this minute," I squeaked.

"You are too young to make a truly momentous decision about the rest of your life. You will only be able to decide sensibly if you separate yourselves from each other for a period of time. And in any case, I have other plans for you for this coming year."

Somewhat taken aback, I inquired about the "other plans." It seemed that Howard did want me as a graduate student, but that the University of California had a policy that did not permit an undergraduate to go directly on toward a Ph.D. in the same department. It was a sensible idea, since that practice would result in rather ingrown researchers, who never would be exposed to new teachings from scientists trained by and practicing at other institutions. There was a similar rule (not always followed) that discouraged people from applying for a teaching position in the same department where they received their Ph.D. This latter would come into play a little later on in our lives.
In any event, the result of these policies was that Howard would not be able to take me immediately as his graduate student, but that I must go away for a year and get at least the equivalent of a Master's degree at a different school. That was Howard's advice as my professor. As our father figure, he had similar advice: "Separate for a year. If you still feel that you want to marry, you will have a better basis for the decision." Indeed, even the idea of marriage had crept up on us and burst out rather unexpectedly. Ranu had fully intended to return to India to bring his new knowledge back to his own country. I, in fact, had decided somewhere along the line that I didn't want to get married at all. I didn't really like what marriage seemed to do to the female partner. My own mother certainly realized her potentials much more fully when she had been single (even then, as a widow). And I could simply not figure out how superwomen managed a family and career. For the present, at least, I was bent on a career. Marriage would certainly get in the way, and so I agreed to leave and see what happened next.

Well, the first thing that happened was that I got very sick. It seemed that I had contracted mononucleosis during that last, hectic year of college. I found myself humiliatingly back at the student hospital with a bad case of jaundice. One of the complications of mono is a form of hepatitis, and naturally I had to get a debilitating, long drawn-out version that kept me dragging around for months, until the next bug caught me. Of course, during that summer I was working at the lab (for money), and I believe the doctors really had no idea how poor I was. It never occurred to me not to work, and I guess it never occurred to them that I would try. So I continued to work, to drag myself around, and to make preparations to leave Berkeley to go to Columbia University in New York to study with a Professor Aubrey Gorbman, eminent in the field of comparative endocrinology.

In fact, it appeared that part of Howard's "plan" was to get me trained in this burgeoning new field, so that I could come back and help him establish a laboratory in which students could come and study the endocrine mechanisms and hormone chemistry of lower vertebrates and even invertebrate organisms. Howard and Aubrey were good friends, and ultimately coauthored the definitive textbook in this field. But Howard's research had hitherto been strictly mammalian. It was quite exciting to me to be his "ambassador" to this new laboratory, with a responsibility to bring back new knowledge and techniques with which to refertilize Berkeley's endocrinological research arena.

The "plan" seemed wonderful to me. Additionally, Ranu and I had decided that we did not want to be a "husband and wife team," working together year after year in the same laboratory doing the same type of research. We had talked about how much healthier our marriage would be if we worked at different things and developed our own circles of friends and professional associates. This would make our time at home together all the richer, ensuring that we would not get tired of each other through constant companionship. So I was happy to begin work in another field, as Ranu was already well established in cancer research.
Beyond the plan, however, was the idea that while I might come back to Ranu, I might in fact just remain at Columbia. I was leaving my options open. None of these ideas suited my mother, however. Still a bit shy of Howard, I was utterly humiliated one day when Mother stormed into his office and asked, "Is it really necessary for Jean to get a Ph.D.?" I wanted to sink through the floor, but Howard sweetly responded that "the Ph.D. is really just the union card of our profession, and if Jean wants to practice university-level research she will need that card." Goodness. What did my mother even know or care about unions? Oh dear... And she was not really altogether pleased that I was so heavily involved with this East Indian man, either. Not that she was exactly prejudiced, but she was worried. What if we had children and they were discriminated against? What if we were discriminated against? What about possible impassable cultural differences leading, if not to the dreaded divorce, just unhappiness for her precious daughter?

There were, of course, other objections internationally. Ranu's mother (who had married at an extremely early age and had very little in the way of formal education) was also not pleased at the notion that her son, whom she had released to go so very far away to America, was even thinking about marrying an American girl. Horrors! In 1956, in India, one almost never married outside of one's own caste, let alone an American. And of course, Aunt Katherine was still muttering in the background that I would come to no good end pursuing this research course—all the male professors would just take advantage of me. As I recall, she had much less to say about the subject of Ranu.

Nevertheless, I boarded a plane (a four-engine propeller variety, back in 1956) to make my way to New York City. I was to live at the International House (known locally as "I-House") on Riverside Drive and work at Gorbman's lab, which was housed about three blocks away at Barnard College. Suddenly I was intensely lonely, and my mood was not improved by the fact that my first cabby cheated me by running me all over Manhattan before depositing me and all my belongings in front of the International House building, which turned out to be under construction. The makeshift entrance was a block away. I had to locate it and then haul all my bags around to it in my enfeebled state. But eventually I was properly ensconced, and made my way to the Barnard laboratory to meet my new professor and his students.

The year was very mixed. There was really no room for me in Gorbman's crowded lab, so it was necessary for me to work at night, picking up all of my mess before leaving so that another student could occupy the same bench during the day. As usual, this offbeat schedule resulted in my making a new friend, a professor of physiology named Ingrith Deyrup. Single, and in her midthirties at the time, she was a devoted teacher and researcher, with a passion for the subject of mammalian kidney function. I must have learned at least as much from her as I did from Gorbman. In fact I did not work directly in Gorbman's own field of thyroid physiology. Instead I chose the subject of adrenal function and structure in lower vertebrates, having learned a good bit about the adrenal gland in my undergraduate research.
Apart from science, I did learn some other very significant things from Ingrith. We spent many hours over lab instant coffee at night talking shop and more personal things, and became very good friends. And I realized that Ingrith represented everything that I would hope to be should I become a scientist. In fact such professional success would probably be achievable only if, like her, I never married. Ingrith spent almost all of her time in this lab or with her own students. It would never be possible to do that if one had responsibilities at home. She seemed utterly content with this life, and was surely accomplishing much in her chosen field. I was truly torn. I missed Ranu very, very much. We wrote to each other often (I more than he, but then he has never been any good about writing letters). I even got some letters from his family in India—brothers who were intensely curious about me, but who also wished to welcome me into their family. Ranu's mother, after her initial shock, was persuaded that Ranu, smart as he was, would and could only choose a first-rate girl of whatever variety, and she decided to accept me fully and with open arms. And yet . . . and yet . . . Ingrith's example was compelling. Could I really turn my back on this opportunity to contribute something important to science, and to spend a lifetime exploring the intricacies of animal physiology?

I loved New York. I know there are two kinds of folks in the world, the I Hate NYC and the I Love NYC types. Somewhat to my surprise I fell into the latter group easily. I always have enjoyed wandering around a great city like this by myself, getting into nooks and crannies and observing people's ways of life, settling into a small restaurant with a book and an eye on the clientele, enjoying the parks, the museums, the libraries. New York City did hold so much with which to feast the eyes and ears and imagination. Then, too, I had not realized how much I missed the back-east weather changes. One November Saturday I had come early into the lab and holed up in a darkroom for whatever nefarious purpose I no longer remember. But I didn't come up for air or light until about 4 P.M., near dusk. When I looked out the window the city had been utterly transformed! A light snow was falling, and had been all day. Everything was covered with a beautiful, clean white layer three or four inches thick. I nearly wept with pleasure and nostalgia. Only my loneliness intruded as, on that day, I had no one to share this with.

Another pleasure I derived from being in New York was the fact that my father was then living in Queens, so that I was able to see him from time to time. He took me to his house twice to meet his new "family." Alan had married more than once since leaving my mother, but the wife I had thought was current, Serafina, had stuck with him for seven or eight years. Back in Berkeley, I had rather looked forward to meeting this young lady—not much older than myself—who was a modern dancer and sounded exotic and fascinating. Fortunately, and just in time, a mutual friend (pianist Maro Ajemian) dropped by to wish me well and to warn me that the present Mrs. Hovhaness was no longer Serafina, but a lady named Phyllis. So by the time I arrived in New York I was expecting to meet Phyllis and her daughter. In this case the daughter was approximately...
my age, and apparently Phyllis was someone my mother had known back in their Boston years.

I did many things with my father that year, including attending a world premier of his Third Symphony conducted by Leopold Stokowsky; I met Martha Graham, William Saroyan, and the elusive Serafina. I never did feel comfortable with Phyllis and the Queens household, however, and indeed after a few months was no longer invited there. Before I left at the end of this year of graduate study I asked Alan whether or not I shouldn't pay a visit to his home to say good bye to Phyllis. "Well . . . uh . . . uh . . . Phyllis and I are no longer together," was the embarrassed reply. Not too surprising! And, indeed, I have never been surprised at whatever my father does, including his accumulation of wives and/or girlfriends.

One thing was clarified to my satisfaction, at least at the time. Alan clearly was uncertain how to behave toward me, and made some clumsy attempts to be fatherly. I would have none of it, and made it clear that I was now an adult, that I had not ever known him as a father, and I wanted to keep him for a marvelous, exciting friend close to me because of the accident of my birth. I felt much loyalty to Viggo's memory, and at this time knew nothing of the legal arrangements forced upon Alan by Mother and Viggo. So this is the way we re-established our relationship. It was loving, and we each admired and cared about the other, but it was an unobtrusive relationship for all that. I remember the fun I had telling Alan about my new work, and how deeply interested he seemed to be in it. And how proud I felt the day he said, "You may not be a musician, but for all that you could easily have been a musician." I was later to remember this as a reason, perhaps, to try again to do just that.

There were still other excursions. Kindly Professor Gorbman and his lovely wife invited me to their home in Yonkers, and I became acquainted with their four children. My mother had a sister (Anna) living in the Bronx with her husband, Gordon; they invited me fairly often to their little apartment, where she raised and trained toy French poodles and Gordon painted abstract pictures. I spent a very chilly Thanksgiving weekend in Boston with another of Mother's sisters, Frances (Frin), with whom I had been so close as a young child, and with other close friends of the family still living in the Boston environs, including my dear Grandpa. I also began to go on field trips to collect the various fishes that constituted my research material. At this time the latter consisted of brackish-water minnows of the genus *Fundulus*, and my experiments involved slowly changing the salinity of their environment and observing the reactions of their adrenal tissue.

The first year of graduate school at Columbia University (or U.C. Berkeley, for that matter) consisted largely of coursework, intended to fill out the knowledge required of a truly Renaissance biologist. These days students in the biological sciences are nudged into specialization rather early, but in the 1950s the zoologist was expected to know the field very broadly while carrying out research in a narrow specialty. So I was taking genetics, Gorbman's advanced endocrinology seminar,
I had continued health problems. My inflamed liver was gradually improving but I was unable to eat certain foods, and I continued to feel weakness and fatigue. And my neck pain had never cleared up. Of course I had no doctor, so I just muddled along slightly miserable, expecting that, with time, these symptoms would clear up. Unfortunately, this was not to be. Just before Christmas I received an anxious phone call from a friend of the family's in Solvang. My mother was gravely ill with pneumonia; in fact she was hospitalized. Should I go to her? The friend did not know—she refused to say one way or the other whether I was really needed. In fact, she clearly wanted no responsibility in the matter. Where were my brothers? Thor was in his first year of college at U.C. Santa Barbara, so I knew he was all right. What of David? David had been parked out with someone.

It was Christmas. This family was going to need me now, if they were going to have any kind of celebration. David was only nine, and Mother would need help at home. So, once again, shortly before a semester's end, I headed back to California. It was an arduous trip in midwinter. The plane (still no jet aircraft in commercial service) was downed by a snowstorm in Wichita, Kansas. This was an overnight adventure that I normally would have relished, but not this time. I was anxious, worried, and in a hurry. I arrived in San Francisco and was put somewhat at ease by Ranu, who took me back to my old roommate's apartment overnight before the ten-hour trek south to Solvang via a slow Greyhound bus.

At last I reached Mother's bedside at the hospital twenty miles from Solvang—the same little hospital where I had lain for some weeks following my accident. I had been wise to come. She was terribly ill, although it seemed that the worst was behind her. Thor, in his adolescent innocence, kept dropping in on her with girlfriends, which hardly aided her rest. And David was being his usual handful in a neighbor's house across the street. I quickly brought them all home, tucked Mother in bed, and fixed meals for her, much to her astonishment. ("I didn't know you knew how to cook—least of all for an invalid!") Fact was, I didn't really know how, but I quickly invented whatever was needed for Christmas dinner and all the rest. In three or four weeks Mother was back on her feet, and I was able to go back to New York, just barely in time for finals.

I didn't get to take the finals after all. I did try over the weekend to study for them, but this was an almost impossible task, since I had missed a week or two of classes prior to Christmas. In any event I, too, fell ill. Some of my fellow graduate students gathered me up and took me, shaking with fever, to the University Hospital at St. Luke's. I was to remain there for ten days, sick with pneumonia myself and with whatever was left over from last year's illness. My progress was slow in the extreme, and at the end of ten days I was literally kicked out of the hospital ward designated for
short-term "student-type" illnesses only. Back in International House, I lay in bed for days on end, visited by kindly fellow I-housers, graduate students from Barnard, and by Professor Deyrup herself, all bringing food, water, news, and, most important, a lot of love.

New York haters, take note of this outpouring of neighborliness. As I gradually got back on my shaky feet, I crept along the three blocks from I-House to Barnard, sat in the lab or in a class for an hour, and crept back home. A large number of rough street urchins had been observing my slow progress over the days. They never spoke to me, but observed me, and apparently considered me to be a part of their neighborhood. One day, as I crossed the street slowly and painfully, a car careened around the corner. I was frozen with fear, and quite unable to move either an inch further or a millisecond faster to escape the onrushing vehicle, which screeched horribly and spun out of my path on two wheels. As it gathered speed, the driver screamed out the window at me, snarling "DA—YOU.....Caaaaannn't ya look where yore going, laaaaedddddyyyy?"

Instantly, from out of doorways and around corners came the boys of the neighborhood, ranging in age from about six to twelve or so. They took off after the offending car, yelling in chorus, "Why don't you look out where you are going, you jerk?" I was one of theirs, all right. As I plodded on, the urchins vanished from sight, but I knew I need fear nothing as there were such guardian angels all around me.

Before I leave New York, let me speak more about my true mentor from this year, Professor Deyrup. As I lay in bed in my cell-like, narrow room at International House, I had felt so alone, here in this city, far from home, fiancé, loved ones, helpers. I am not sure, now, how I was getting fed—I suppose some of the girls on my floor brought things from the cafeteria, but I no longer remember, having had no interest in food or even survival at this moment. I remember the soft tap, and the unlocked door was gently pushed open. In walked Ingrith, to my astonishment and joy! She sat by my bed for a time, and we talked softly about nothing much, my brain still fuzzy from the effects of fever. How caring she was. How remarkable to be having a murmured, confidential conversation with this distinguished physiologist, who chose to be my friend. I had never, until that moment, realized that I was so chosen or that she cared so much to make this effort to come to my dingy room to offer succor.

I did so admire this small woman, and couldn't help but see in her an image of myself in fifteen years, should I remain single and devoted to my career. At this moment I was at a crossroads. Deeply in love with Ranu, I had come away from Berkeley in part to make a decision about marrying this man. In the mid-1950s it was clear that it would be extremely difficult, if not impossible, to have a full-blown academic career as a married woman. If I married Ranu, I might even end up in India. Although I was willing to do this, I saw before me, in Professor Deyrup, the alternative to the wife-mother role I would presumably take on with my marriage.
Ingrith delighted me with her personality, her wisdom, her profound knowledge of her subject, her wit and sense of humor—even her Danish background, which brought us close because of my Danish stepfather and my life in Solvang. I was fascinated by her research on kidney physiology, and by the techniques she taught me as I observed her in the laboratory. These were much more sophisticated, technically, than the relatively crude methods then used in studying the lower vertebrates with which I was working at the time under Gorbman’s tutelage. The contrast impressed me deeply, and I carried much of her approach to research into later phases of my own work.

But above all, I loved this soft-spoken, warm human being who treated all around her with loving respect and who was truly beloved by all who knew her. In the end, this was the aspect of her teaching that I carried away with me, for in the end I did decide to marry my Indian suitor and throw away the chance to emulate other aspects of Professor Deyrup’s life and career. But her kindness extended even to the loan of money when I needed to return hastily to California to care for my ailing mother. And she came, on the occasion about which I speak, to warm my heart and give me a reason for regaining health and continuing my work. Even more, she personally interceded when the National Science Foundation threatened to cut off my graduate fellowship—my sole source of support during this year—owing to my failure to complete classwork on time.

Shortly before I left New York, I said to Ingrith, "I do so much wish that I could give you something, in some small way to repay you for your generosity and love and for all the things you have done for me this year." Her reply has remained with me throughout my life: "Jean," she said, "life doesn't work that way. You will go out and do these things for others, and by doing so, you will have repaid me. And in that way, each thing that we do is multiplied and continues in the world." In reality, things did unfold as she predicted, and I have indeed helped others in like fashion. Like Professor Deyrup, I had no need or desire for reciprocation, but only the desire that my students and friends continue the process of spreading love and caring throughout the world.

Eventually I did finish my classes, but my small research project for Professor Gorbman was never completed. Gorbman and I have remained friends, but I did not wish to stay longer alone in this big city. I wanted to go home, to Berkeley, to Ranu. And so I did, embarking on my next adventure, a melding of cultures.

There is a curious postscript to this story. Shortly after my marriage to Ranu, Ingrith Deyrup herself married a Danish oceanographer. She left her fine academic post at Columbia and traveled west to another university, where she held lesser positions in deference to her husband’s appointment. I have seen her only twice since that time, but I know that neither of us has regretted the paths we chose.

In sunny Solvang on a beautiful July 5, 1957, friends from Berkeley and from Solvang gathered at Elverhoy to celebrate our marriage. The Danish Lutheran
minister presided with a lovely service blending cross-cultural currents. Nervous and shaking, I was led down the aisle by brother Thor. I suddenly looked up at him, realizing with a start that he was considerably taller than I, and heard him say in a deep, reassuring voice, "Just curl your toes, and you will be all right." Ranu was staring out a window and would not meet my eyes. Somehow we got through the ceremony without obvious gaffes and were served spiked punch by ten-year-old David, who was liberally helping himself to the spike and feeling very jolly! For a wedding present, Thor had sold us cheap an old heap of a car with twin pipes and a horrendous racket. This gift-horse was hidden in a nearby canyon, and Thor drove us through town in his decorated convertible, David yelling, "Just married, these two guys" at the top of his lungs. Among the just-married impedimenta dragging behind was a shoe picked up off the street but evidently not ownerless, judging from the small neighbor boy running behind us as fast as his fat little legs would carry him wailing, "That's my shoe! That's my shoe!"

And so we were off for our honeymoon, with Mother's loving blessing. She, as much as Ranu's mother, did try to make the best of this and had made her particular peace with our unconventional linkage. Sadly, the cultural differences did ultimately make a greater impact on her relationship with Ranu than it did for me, and I forever found myself caught between these two people whom I most loved. But today that was all in the future, and we happily made our way northward to Oregon's beautiful Crater Lake, and eventually down through the center of Northern California through Chico and Sacramento and thence back again to Berkeley. Vroommmming all the way in our old jalopy! Hard to believe it, but I was now Mrs. Nandi! I did love that change from the unwieldy and always misspelled Jean Brandt-Erichsen. Not least was my satisfaction in knowing that my new name was just as unique as either of my former monikers.

After my departure for New York, Ranu had himself moved into the "Henry Street Settlement," across the hall from my former roommates. He brought with him three other young male students—one a Bengali, one of the very few then in Berkeley (Nantu Mazumdar), the second a graduate student in the Zoology Department by the name of Frank Child, and the last one of Howard Bern's current premedical mentees in his Life Sciences laboratory, Richard Smith. These four and my old roommates did have a happy year there. I think my special favorite among the boys was Frank Child, who was an amateur pianist at somewhat better than my level. When I was in Berkeley, both before and after marriage, Frank and I entertained ourselves for hours with Mozart and Schubert four-hand piano music. I can't hear that music now without remembering those sessions with affection and nostalgia.

During that year, too, Ranu had passed his oral qualifying examination for the Ph.D. degree, and proceeded apace with his monumental thesis on the hormonal control of breast development, using mice as experimental material. He had learned the difficult operation of hypophysectomy—removal of the pituitary gland—and also learned to keep his animals alive and flourishing even when pituitary, ovaries, and adrenal glands had been surgically removed. He patiently performed hundreds of these operations and then replaced the missing endocrine functions one by one and in various combinations,
demonstrating each step of the growth and development of the mammary tissue and showing which hormones were required for each. The thesis that resulted would be finished within a very few months, and was truly a classic type of study that formed the foundation for much of the subsequent work done in the field of normal breast development and the origin of breast cancer.

During that year while I was away, my own first publication had been wending its slow passage through the editorial board of the journal Cancer Research. I had written the article the previous spring, at the end of my senior year, summarizing the experiments that I had performed on mouse tumor growth under the influence of the adrenal hormone, cortisol. Often scientists are poor writers, but Howard Bern was meticulous in his use of language and an exceedingly fussy editor. When I handed him the first draft, he kept it for a long time. Eventually he came to me with a strange expression, and asked to see me in his office. "Oh, dear, now what have I done?" was my immediate unspoken reaction.

"Something must be wrong with me," Howard began. "This has never happened before."

"What?" I asked nervously.

"I have never, never in my life failed to find mistakes in a draft of a paper from any student, grad or undergrad or postdoctoral, for that matter. I must be sick or something. I simply don't see any mistakes in yours. You had better let me keep it a while longer."

Eventually he brought the paper back, with its authorship "Jean Brandt-Erichsen and Howard Bern," and sighed, "I still didn't find anything wrong with it. I do believe that it must be all right." And so we submitted it together. How delighted I was that it was accepted in due course, but that the course was lengthy enough so that I was able to change the attribution to "Jean Nandi and Howard Bern." This meant I did not have to go through the unwieldy process of changing my scientific identity. In subsequent years, Professor Bern informed me that this was one of my most widely quoted papers, even almost forty years after its publication.

On our return from our honeymoon, the Henry Street house underwent another reshuffle. Ranu's roommates left for other parts, and Pat and Lillian also moved out (Pat left Berkeley for a job in Michigan). So Ranu and I moved in, and across the hall now lived the young sister-in-law, Norma, of one of the zoology professors, who quickly became a good friend. We still had very little money. Ranu had a research associateship, and I had a National Science Foundation fellowship, and—believe it or not—I still had my $1,500 legacy from Grandpa. We felt ourselves very well off, but ate a lot of fish cakes and horsemeat during these first married years. Our furniture was all second- (or third- or fourth-) hand from Good Will and St. Vincent de Paul's. We had frequent mishaps when it fell apart under us. In particular, our bed kept collapsing on
one side (mine) and dumping me out on the floor. Worse yet, the springs of the worn-out mattress popped up through the sheet and stabbed me during the night.

I was ensconced once more in Howard Bern's laboratory, this time back in the Life Sciences Building with new graduate students working in his new area of comparative endocrinology. Particularly close to me, scientifically, was Roger deRoos, who was studying the adrenal functions of birds. I was doing something similar with fishes, so we learned many of the biochemical techniques together that enabled us to analyze hormone production and to characterize the nature of the steroid hormones existing in these so-called lower animals. The idea of a fish or a bird being less evolved than any mammals we had studied was something I quickly disabused myself of, however. Clearly every organism that exists has evolved and become well suited to whatever environment in which it now resides, and complexity is certainly not confined to the so-called higher species. So, while we learned much about the structure and function of the glands that performed functions similar to those of mammalian adrenals, we did not see an "evolution" of this gland as we had first supposed might have occurred.

Just before Christmas, Ranu finally had completed his monumental opus, and it was gradually getting approved by the two co-chairs of his thesis committee, Howard Bern and Ken DeOme. This became a rather frustrating exercise in diplomacy. Ranu would write and I would type chapter after chapter (no computers then, and Ranu never did learn to type himself). These would go to Howard, who would correct extensively. The corrected pages would then go to Ken, who would correct them back to their original form, and so it would go. Each instance and each argument meant retyping the whole thing, and the entire manuscript ran to 250 pages or so. Eventually time ran out on all of us, and the two good professors had to agree on a draft. This, however, needed to be approved by still another committee member, the "external" member, who was a professor at U.C. in San Francisco. This worthy was now on vacation in Florida, traipsing around the state in a trailer, stopping in one trailer camp after another. This thing had to be completed and signed by everyone by early January, or the Ph.D. would not be conferred for another semester. We couldn't even phone Professor Lyons, since he was on the road.

Well, we finally contacted Lyons, and he promised to remain in one place for forty-eight hours if we could ship him a copy within that time. What to do now—we only had a single copy of this manuscript in its final version, and we could hardly trust that to the post office and the trailer camp. So I spent twenty-four solid hours retyping the entire book, with Ranu peering over my shoulder, pouring coffee into me, and being a one-man rooting section. I guess love spurred me on—we made it, the official title page with its signatures came back by the deadline, and Ranu was now, officially, Dr. Satyabrata Nandi. Pretty impressive!

Our first problems as a newly married couple were bureaucratic. The University of California, in 1957, still had archaic "nepotism" rules which prevented
employment of husband and wife within the same department. Since Ranu and I both worked within the aegis of the Department of Zoology, Howard Bern schemed to work around this restriction. Ranu was thus hired as an acting research associate in the Cancer Research Genetics Laboratory, while I was able to take on a teaching assistantship and later associateship within the Department of Zoology.

The other bureaucratic snag was a bigger hurdle: The U.S. Immigration Department was absolutely inflexible on the subject of Exchange Visitors visas—Ranu would not be able to remain in the United States for more than one additional year, and that only because he was still receiving training (now as postdoctoral research associate) and was making a contribution to biological research here. What were we to do? A friend recommended a lawyer in San Francisco who had some knowledge of immigration policy, although as it developed this gentleman had never had this particular kind of case. Nonetheless we put ourselves (and our money) into his hands. As soon as the case was officially filed, Ranu's visa was cancelled entirely. Soooo . . . this had better work, or else Ranu would be deported. We had no way of knowing when that might happen—when the case would be settled, or in whose favor. In fact, we lived under this cloud for well over a year.

Ranu had fully intended to go back to India. He loved his own country and his family, and it was only a twist of fate that had created this permanent link with the United States (not to speak of my link with his far-off and still strange country). But at present he was not permitted to leave the U.S., since he had no visa for return. We talked about various possibilities. Maybe he could go to Central or South America, reapply for a U.S. visa, and come back within a few months. Visas for Indian nationals from India itself were harder to come by. Alternatively, maybe we could both leave the U.S. and settle in India. Strangely enough, having made my decision to marry Ranu, I felt that my life was totally intertwined with his. I no longer had a burning ambition to obtain a doctorate and do research, and I would be more than willing to go to India and become a laboratory technician there. "No—that is definitely out," said Ranu firmly. "If you do any such thing you would blame me forever for getting in the way of the realization of your potential." How wise he was.

And so we waited, and I pursued my graduate studies, though with somewhat less drive and verve than before. For one thing, I did not feel physically well. Somehow I had never recovered from the serious illnesses that had struck me over the past years, and I continued to have pain in my neck—indeed the pain was somewhat more widespread, down my back, and I did from time to time need to lie flat or to sit in a very supportive chair with high backrest, or lean against a wall. I had returned to my doctors at the Berkeley student hospital for a final five-year cancer check-up, and my surgeon embraced me with tears in his eyes. "Wish all my patients would turn out like this," he murmured. So all was well, apparently, and I guessed I just needed rest. In fact, the doctors were perturbed to learn that I had never taken any vacation after the bout of mononucleosis. Was I supposed to do that? Why hadn't they mentioned it? Anyway, surely things would improve with time, and there were no overtly identifiable symptoms. So we both waited, and worked, and waited. . . .
As part of the training requirements of the well-rounded zoologist, I was required to take a marine biology course at an approved marine station. It developed that my Columbia professor, Aubrey Gorbman, would be at the University of Washington's Friday Harbor Marine Laboratory during the summer of 1958. There I would be able to combine a six-week course in Marine Biology with another six weeks of research activity, collecting various fishes and working on the *in vitro* techniques I had been developing for the extraction and identification of steroid hormones. And so, at the end of the spring term I left for Friday Harbor, a gloriously beautiful place on an island at the north end of Puget Sound near the Canadian border. Ranu's status was still in limbo, and I literally did not know whether or not he would still be in Berkeley on my return. But we hoped that he would have a permanent resident visa by summer's end, and he planned to drive up to Friday Harbor and bring me home at the end of my scheduled activities. I did want to travel to Vancouver in British Columbia, to pay a visit to an eminent fish physiologist there, and we hoped to go together.

That trip never materialized. Ranu did drive up to meet me, but his visa situation remained unresolved, and we could not leave the country together. So instead, we hired a small sea-plane and flew over Vancouver Island and the pretty little town of Victoria, to get just a taste of Canada before returning to Berkeley. We stopped in Seattle on the way home, and decided that this would be a city we would consider seriously as a future home. It was our assumption, as per University of California "regulations," that we would not be able to remain in Berkeley, having done all of our graduate training there. To my surprise, Professor Gorbman was giving up his position at Columbia University and moving to Seattle to work at the University of Washington's main campus. Even more surprising, Professor Deyrup was doing likewise, since her new husband was a fisheries biologist and had obtained a position at the U. of Washington also. Yes, we would like it in Seattle, we were sure. It was a beautiful, scenic area that in many cultural aspects resembled Berkeley.

The visa situation was becoming critical. In fact, we had learned through our lawyer that there was almost no chance of a favorable outcome through the State Department. Desperate, we called my mother and told her we probably would have to leave the country—or, at least Ranu would and then I would undoubtedly follow him when I completed my degree. I was still a long way from that (in fact it took me until 1961). This was enough for Mother. She called a friend of hers, politically active in Santa Barbara (Republican) politics, and asked for help that was swift in coming. Their local congressman stormed into the State Department, demanded action, and within a month Ranu had his permanent resident's visa (green card). Wow! Another lesson stashed away for future use in the political arena.

We were at last free to decide on our own terms what to do about our future. Ranu needed to return to India to see for himself what prospects there might be for him and for the two of us, in terms of getting jobs, supporting ourselves, supporting his family (we had been sending funds back to them all this time to help out with the education of Ranu's younger brothers). Most of all, would we be able to find our future happiness there? He was now free to go, and so he went . . . his first time home since
departing by ship three years earlier. How changed he was! Now wise in the ways of the world, in eastern and western culture, married, his education "complete" (as much as it ever is for one pursuing the intellectual life). How would he react to India? How would his return affect his attitudes toward America? Toward me?

Ranu stayed in India for about six weeks, writing occasionally and stating later that the corner mailbox had been flooded out so he couldn't reach it. Only much later did I realize that this story was probably completely accurate. On his return, we had long discussions about our options. If we returned to India, he said, he would have to accept a really inferior kind of job, and I might not be able to work at all. The only university jobs were totally controlled by "old boy" (in this case, really nineteenth century) politics, and one was rewarded for cozying up to the chair of the department, not for good research or teaching. What a stultifying atmosphere! On the other hand, Ranu's large family needed financial assistance. There were the two youngest brothers (Chandan and Shamal) still to be put through medical school. If we were to go there we would be more of a drain on the family than otherwise. Were we to stay in the U.S., we could contribute money to the younger members of the family and help make Ranu's mother (Ma) more comfortable in her older years. All these factors resulted in our decision to remain in America. The next step was for Ranu to find a job.

At this point I was in my third year of graduate school (second year at Berkeley), and deep into the research project that would become my Ph.D. thesis. The subject was the comparative anatomy and physiology of the interrenal gland (corresponding to the mammalian adrenal) in teleost (bony) fishes. My work consisted of collecting a large variety of fish species, dissecting the kidney tissue that lay embedded in the connective tissue along the spinal chord and up into the head area, and examining these kidneys on microscopic slides. The interrenal tissue consisted of diffusely scattered groups of cells, some of which functioned like the adrenal cortex of a mammal (producing steroid hormones such as cortisone) and others which functioned in the manner of the adrenal medulla (producing and releasing adrenaline). Apart from describing the location and comparative micro-anatomy of this organ among many teleosts, I also had developed a method of incubating the tissue and collecting steroids in vitro (isolated from the body) and determining the biochemical structure of the steroids produced. In spite of large individual variations in structure, the biochemistry of this endocrine gland was remarkably similar to that of mammals.

Naturally I did not want to leave Bern's laboratory at this juncture (it would be another couple of years before I would complete the thesis), and we began the uncomfortable process of planning how we would deal with a potential separation when Ranu got a university job. For the moment, he was an associate research biologist in the Cancer Research Genetics Laboratory, but this was just a postdoctoral grant and not a permanent position. It was important now for him to get onto a faculty somewhere in a tenure-track position. We had looked to Seattle (University of Washington) as a possible and attractive location, and Ranu began to go around to various places to give lectures.
and introduce himself to key people in his field. Howard Bern was, as always, extraordinarily helpful in this venture, but Ranu was soon to distinguish himself among young scientists working in the field of experimental mammary (breast) cancer. Indeed, his work had now turned from investigating the normal development of breast tissue in mice to exploring the factors that result in the development of tumors in this tissue. Soon he was working in the area of virology, identifying the manner in which a virus (MMTV, Mouse Mammary Tumor Virus) associated with tumor development was passed on from mother to babies through the milk. Within another short period he hypothesized a second virus, which he called Nodule Inducing Virus (NIV), associated with the formation of precancerous nodules in the mouse breast tissue. Some, but not all, of these precancerous growths would later become frank tumors.

And to think that we had worried, earlier on, whether Ranu would be able to do anything useful after he cut loose from the close supervision of the Ph.D. thesis work. He was rapidly becoming a leader in his field. Amazingly, this never went to his head at all. He has remained, all his life, singularly modest about his achievements and without any interest in exploiting the high respect with which his colleagues regard him.

Nonetheless, his expertise did result in the greatest good fortune for us. At this juncture, Professor DeOme, director of the Cancer Research Laboratory, was searching for a new staff member who would become a Professor of Zoology but who would also be competent to assist him in the laboratory with developing the research program and directing postdoctoral and doctoral students. Typically, the Zoology Department began a worldwide search for a suitable person. Over and over again letters came in to the department mentioning one young man who had the capabilities and the background to fill this job, and the talent to bring money and prestige into the department and the Cancer Research Laboratory which the University of California expects of its faculty. In fact, this person stood well above everyone else, and in spite of university rules and regulations, DeOme and colleagues were urged to hire this individual. His name: Satyabrata Nandi.

And so it happened. After our long search for another place, we ended the search here at home. Berkeley would be our home for the rest of our lives. Apart from the richness of the University environment at Berkeley and neighboring San Francisco, we were here at the academic crossroads of the world. Sooner or later every scientist and major figure in the humanities and the arts comes to visit Berkeley, and many have visited us and stayed at our own home. We were soon to have friends in every corner of the world, which made our own travels very special, inasmuch as every place we went we were able to connect with, and often stay with, friends of all nationalities. With his unassuming manner and his intense interest in other cultures, Ranu readily made foreign guests comfortable. Especially among Asians—the normally reserved Japanese, for example—his Indian background made him much more approachable than other American academics. He had learned from Howard Bern the informal and caring manner with students that put them quickly at ease with him and with others sharing the close quarters of his laboratory. The new assistant professor of zoology was well on his way to distinguishing himself as a scientist, teacher, and friend among his brilliant colleagues.
Of course this was not an unmixed blessing. I needed to avoid teaching in the Zoology Department myself, as the nepotism rules were still in place. And, as I came close to the end of my own studies, I began to see that obtaining an equivalent job for myself would be out of the question in this environment. None of the colleges and other academic institutions in the San Francisco Bay Area would have been as well suited to my particular academic interests as the U.C. Zoology Department. My research was zoologically oriented, making the medical school an inappropriate option. Many schools, such as the nearby women's college (Mills), did not have the facilities for much research and required very heavy teaching duties. I had already decided I did not wish to spend all of my time teaching, but I did long to do some. I began to see that there were many women "trapped" in this situation, and that the local academic community exploited them as a kind of upscale slave labor, forcing them to work long hours at teaching for very little pay.

The other prospect was a long-term postdoctoral position on the research staff of the University. These jobs were completely insecure, depending entirely upon the grants a particular professor or group of professors were able to obtain. In 1960 there were many such jobs and many such grants, but the professor himself (almost always a man) had complete control of these funds, and in subsequent years much of the federal money on which this system was based dried up or went into different priorities. Many associate research staff members found themselves, in middle age, without a job and with no prospects of getting one. Too old to be considered for tenure-track University positions, and fighting with younger and more recently trained research people for other grants and/or industrial research positions, they were often in danger of being forced out of the profession altogether.

But I still had a year to go before making a decision about my own future. I received a special fellowship to go to Hawaii for a month. Howard Bern was then on his sabbatical leave at the University of Hawaii and its Marine Laboratory, and we found ourselves working side by side at the Marine facility on "Coconut Island" off Oahu and also at the Hawaii Aquarium at one end of Waikiki Beach. The terms of the grant required that I travel by a cheap charter flight, and I remember being terrified of the sight of Pacific waves seemingly just beneath the belly of this little plane. We did make it (ten hours from San Francisco to Honolulu), but the air company went belly-up during the month I remained on the Island. Luckily, an equivalent low-fare ride back was found just in time, and I got back home to complete my final thesis work and await my professor's return to help me finish up the lengthy document and the several papers it spawned.

In those days a thesis for the Ph.D. in Zoology was a bulky affair—a scholarly work expected to cover a great deal of territory, including an historical survey of the literature and projections for the future of the field. We were required to learn two scientific languages other than English (like most of my colleagues, I had a small and not very useful smattering of French and German), and additionally I found myself learning Italian on the side owing to the fact that much of the early work on fish interrenal structure had been done by an Italian biologist (Giacomini).
Before this I had taken my oral qualifying exams. This procedure also reflected the philosophy of the "Renaissance biologist." We were required to take this examination in five different areas: two were "internal," meaning that they covered subjects taught within the Zoology Department, whereas an additional two must be "external" subjects from areas outside of the strict field of Zoology. On top of these came "general zoology," capturing everything that was not covered by the first four. Needless to say, students preparing for this ordeal studied frantically, and probably knew more about the world of biology at that moment of truth than they ever would again. It was hard to do well in this hurdle, which resembled nothing more than an extremely sophisticated form of hazing. Most of us, myself included, did passably and felt forever uncomfortable about the results, but this was all that was expected. I remember having on my committee a person who had been a fellow graduate student at Columbia and a recent hire within our Zoology Department. Another examiner was our friend Ken DeOme, who thought he was putting me at ease by the question he casually tossed out at the very beginning of the event. Unfortunately this turned out to be a subject about which I knew absolutely nothing. I was consequently completely off balance for the entire three-hour ordeal.

Well, I passed that awful test anyway, and now devoted almost all of my time to completing my thesis. By the spring of 1961 we were thinking seriously about purchasing a home. It was surely much easier at that time to find a reasonably affordable single-family dwelling in the Bay Area than it is now, although the incredibly low price tag (can anybody believe $18,000?) seemed an enormous sum to us. It must be remembered that our salaries were extremely low by today's standards as well. Lucky for us all, my mother had come into an inheritance and was looking for a good way to invest some extra money. We had the greatest idea for that—if she would give us a mortgage we would pay her more than she could get through most available mutual funds and yet less than we would have had to pay a bank.

Having hunted for a while, we found that only the "old Berkeley" houses pleased us. After all, our apartment was in a house soon to be pronounced an "historic landmark." Fortunately we stumbled upon a lovely old house in North Berkeley owned by a widow, who informed us that she would deal with us only if we promised not to go through a realtor. It seemed that her husband had been a realtor, and she would have none of their wheeling and dealing. She was getting married again, and she and her new husband were happy to sell us not only the house but also much of her furniture very cheaply. It surely was a good thing, as it would have taken us a very long time to fill all those rooms with our sparse and half-broken furnishings.

I had already handed my thesis in to Howard for his review when we were ready to move that summer. We had enlisted quite a few friends to help us haul our personal effects and most of our sparse apartment furniture over to the new house. The phone (now sitting on the floor) suddenly rang, and it was Howard announcing that he
wanted to come over to discuss my thesis. "Howard," I wailed, "can't it wait until tomorrow? We are right in the middle of moving." Apparently it couldn't wait. . . . The next thing I remember is sitting on the bedroom floor in our apartment with Howard, deep in discussion about the details of my writing. All the while closets were being emptied and armloads of clothing carried over our heads by friends, who were loading the closet contents, as is, into a car. By the end of the day, our belongings had been hung in the closets of the new house.

Thus we settled down in our new/old (1912) house, sitting slightly askew half way up the hill on Los Angeles Avenue. The house looked out over the San Francisco Bay, but the front section facing the view was actually a porch that had been enclosed with small-paned windows and a corner post was directly in line with the Golden Gate Bridge. This porch sloped downward from the main part of the house, but with a step up it opened directly into our living room. The front door opened from the porch, and street level was a large number of winding steps down from there. Houses on the opposite side of the street were a full story below us.

This was all very quaint, but the hillside was crumbling away in this earthquake-prone region. We had an old, cracked retaining wall down below, and a big gap between the enclosed front porch and the living room. The front door settled sideways every rainy season. We had to keep sawing off the top of the door so it would close, and to put stuffing under the bottom to keep the rain out. In addition, the house was covered with ivy—it looked lovely, but the ivy crept in under the shingles and pried them off. One day I discovered ivy growing up into our living room right through the floor! I had mental visions of a loud explosion and our house flying apart at every seam.

It took us many years to solve these problems—if indeed they were ever completely solved—but we did need to begin with the ivy. Slowly we peeled it off the house, leaving large white scars over the brown shingles. Inside, we repainted most of the rooms, starting with the living room that had been an ugly dark brown color (to keep the sun out?). We still needed more furniture, so we began hunting out sales—traveling all over the Bay Area to find a bed, dishwasher, washing machine, etc., mostly from private parties advertising in the flea market papers. Many a Sunday we tied some large appliance to the top or the trunk of our car, trundled our way home via freeway, and threw a party for friends to help us "fixit." Although I was fairly handy with tools after my experience at Elverhoy, Ranu knew nothing whatever about working around a house. He explained that in India a whole class of people spent all their time doing nothing but small repairs, while all the rest of the Indians simply hired one of those people to do whatever needed doing. Gradually his Americanization progressed, and he is now (forty years later) pretty good at changing light bulbs and even hammering in a few nails now and again.

So, in the fall of 1961, I finally received that precious Ph.D. degree. To "celebrate," I went out and bought an old grand piano of unknown make, and called up
Virginia Romain. Virginia was the piano teacher with whom I and Aunt Katherine Bishop had studied in my undergraduate days. "Will you take me back as a student," I asked hesitantly. "Of course," she replied with genuine enthusiasm.

My double life was about to begin. I took a half-time job as an assistant research zoologist in Howard's lab, having settled my quandary about research vs. teaching in this direction for the time being. And I came home every afternoon and practiced the piano for a couple of hours before beginning housework and meal preparation. An idyllic life, perhaps, for this moment, before any dark clouds could be seen on the horizon.
2. Professional Life — Science

In 1962 Ranu had been invited to attend an International Cancer Congress in Moscow, of all places, so in June we embarked on our first and most extensive trip around the world. We had planned an elaborate itinerary, and we were off to circumnavigate the globe in something less than eighty days. Thank goodness, I thought, that Ranu had had so much experience traveling, as he made arrangements with ease and was unperturbed by the difficulties of dealing in foreign currencies, finding hotel rooms, and making sure all of our plane reservations were confirmed.

Our first stop had been Stockholm, where Ranu met scientists at the Karolinska Institute. During all these scientific meetings I made myself scarce and tramped about town, discovering that in Northern Europe at least I could blend into the background and not be noticed as a foreigner (provided, of course, that I kept my mouth shut). We visited Uppsala, the ancient University town in Sweden, and from there traveled south to Copenhagen, where we were entertained for a day by a sea-captain relative of Viggo's. I had met this kindly gentleman earlier, while still in Jaffrey, and so began our travel style in which we found friends, relatives, and scientific or other kinds of buddies in every corner of the world and nearly every city or town we visited. It's wonderful to be able to see foreign lands this way, through the eyes of natives.

We stopped briefly in Amsterdam, but our next real goal was England. Here Ranu's brother Chandan (pronounced "Chon-Don") had been working for a few years as a "House Physician." This position is like a residency for doctors in the United States. He had gone to England to try to better his position, since in India doctors could get the best jobs if they had a British degree (M.R.C.P.). At that time the U.S. education system was scarcely recognized in India, and vice versa. However, Chandan found that there was intense discrimination within the British medical establishment, and although he spent a number of years in various parts of England he failed to get the M.R.C.P. and remained a low-paid, overworked resident physician with no prospects of bettering his condition either in England or in India.

But there was no thought of that this summer. This would be my very first encounter with any of Ranu's family, and I was extremely nervous about it. And there would be two brothers in London on our arrival. Ranu's oldest brother, whom we call Barda (pronounced "Bor-Dah," meaning "oldest brother"), worked for a British pharmaceutical company in India. Occasionally he was required to go to the head office in London, and he had managed to arrange one of these trips to coincide with ours. These two lovely young men were as nervous meeting me as I was, and our conversations were a bit stilted and noncommittal. But I warmed to them gradually over the week or so we were together there, and apparently I met with their approval as well, as I was to discover much later. We saw the sights together—the Tower of London, Westminster, St. Paul's, Trafalgar, London Bridge, Kew Gardens, Hyde Park, Buckingham Palace. This was truly exciting for me, as I had read so much about the history of these places in
my childhood. We also traveled out of the city to a dairy research institute near Leeds, where Ranu had some colleagues to visit.

Next we headed for Moscow. I had kept an open mind about Russia. At that time we were being bombarded with anti-Communist, anti-Russian propaganda in the United States and I had steadfastly refused to believe a word of it. Somewhat to my disappointment, we found Russia and the Communist bureaucracy to be even worse than it had been depicted. First, a rainstorm prevented our British plane from landing in Moscow. We had not been cleared to land anywhere else within the Soviet Union, and after having come within a hundred miles of our destination, we were forced to go back and land in Sweden for an overnight stay. (We spent a very pleasant evening as guests of British European Airways in Uppsala, in a hotel we had enjoyed on our earlier Swedish stopover.) Landing in Moscow the next day, we were required to hike half a mile across the tarmac in the path of taxiing planes, and were herded into the airport lounge, where all our passports had been stacked high on a table in front of officials. They were picking up the passports one at a time, shouting out a name (mistranslated from the Cyrillic alphabet, and mispronounced in heavily accented Russian), and tossing the document back onto the pile when nobody leaped up in answer. After many hours, we finally managed to discover that our names had already been called. So we gathered our documents and headed in to the gray, drab city of Moscow.

Moscow had been essentially cordoned off for this international cancer conference. No tourists were allowed in to the city for the duration of the proceedings, and none of us were allowed to go anywhere else in Russia without the close attendance of the Intourist guides. We stayed at the huge, perfectly symmetrical Moscow University—a city within a city, but difficult to navigate since every entrance and exit looked exactly like every other one. This building was only ten or twelve years old, but already showed the fragility of Soviet engineering. Exterior stones were flaking and crumbling, the interior parquet floors (made of softwood) were shredded, and everything had an atmosphere of decay. We were to see this all over Moscow, and later elsewhere in Eastern Europe as well. To our surprise, practically no one at the University or anywhere else spoke any language other than Russian. (But why should they? What did I think any Russian would find coming to the U.S.?) For a few days we hungrily fed on nothing but free bread that we stole from restaurant tables and ice cream purchased from pushcarts on the street. We learned to ask for "tea with milk"—I have now forgotten the exact phrase—which we were served, but always with a laugh. Finally finding a young lady who did speak English, we asked what was so funny about requesting this Indian form of the beverage. "Oh," she laughed brightly, "only ladies drink that." They had been laughing at Ranu sipping his lady's drink over breakfast.

While Ranu attended sessions of the Congress, I learned to ride the famous Moskva subway, and wandered off the main thoroughfares to discover a number of small, functional churches half-forgotten in this secular society (and attended only by elderly women), and one day I went to the zoo. I began to work my way through the Cyrillic alphabet, and discovered, to my amazement, that much of Russian is based on French. Of course. Remembering Tolstoy, I realized that French had indeed been an official language a century earlier. When Ranu was free we wandered together, into the
Tretyaokov and Pushkin galleries, Gorky Park, and other places of interest. And at the Congress, we were royally entertained with ballets and concerts, and a huge banquet overflowing with Russian wines and vodka. Between official meetings there were underground meetings, always held outdoors (safe from electronic bugs), with geneticists who begged us to smuggle in books from the West. There was the distinguished Russian lady scientist who took her windshield wipers out of the locked glove compartment when it began to rain, because everything moveable would have been stolen off her little car.

And we befriended a young medical student from Baghdad who thought Moscow was the most "wonderful city in the world." We worried about this student later, when our letters failed to reach him; if he did receive them, his replies never reached us. We had penetrated his university dormitory, and of course had been required to give up our passports at the door. We did fear that he may have come to some harm from his association with us.

Everywhere we observed people standing in lines, people doing make-work such as guarding public toilets and the entrances of every building, public or private, or sweeping street crossings with small besoms that required their bending double. Most of these workers were women, and although we realized that everyone had some kind of a job, in contrast to our American way, these jobs were dull, repetitive, and demeaning. It seemed that everything was done with the greatest possible inefficiency. To go to a cafeteria meant, first, standing in line in front of a kiosk that looked like a movie theatre ticket booth. On reaching the front of the line you could read the menu tacked up at the window (provided, of course, that you could read Russian), tell the ticket lady what you wanted to eat, and pay for a bunch of tickets. Only after all this did you go to the steam-tables, present your tickets to the staff, and explain what you were purchasing with these tickets. Then there was a long wait while the food was prepared. This was Moscow's version of fast food, mind you. Needless to say we were incapable of feeding ourselves in this manner because of the language skills required, never mind the patience of Job uncharacteristic of either Americans or East Indians.

Ranu had become a naturalized U.S. citizen shortly before we went on this trip, and when he heard that the American Embassy was giving a rather private party only for the most distinguished of the American scientists at the congress he became incensed. "They should invite all of us!" (meaning all 2,000 Americans) he exclaimed. "Especially me, since I am now a citizen. We are going anyway." And so we did, crashing the party at the very small building that housed the American Embassy in Moscow. Crashing, that is, with Ranu pushing me ahead of him through the outer phalanx of armed Russian soldiers, the inner phalanx of armed American soldiers, and into a small reception room, where a gentleman asked, "Are you here to see Mr. X?" In bewilderment, not knowing to whom he was referring (Mr. X turned out to be the Ambassador), I just guessed and said, "Yes." Lucky guess, for at this point we were ushered into the appropriate party. Our good fortune held as Ranu's older and more distinguished colleagues appeared delighted to cover for him, and nobody else discovered that we had not been invited. Not my style of doing things, exactly, but we got many a laugh out of this adventure.
Some aspects of travel in Moscow were scary. Once we entered Red Square, in a long line of tourists (mostly Russian), to view Lenin's tomb. The square itself was entirely empty, except for the line that stretched around many corners for endless blocks. We looked like a line of ants approaching the tomb, within which lay the embalmed body of Lenin himself. I wanted to take a picture (Ranu had insisted that we bring a heavy, complicated camera and that I carry it). I stepped out of the line in order to get a view of the crowd, when I suddenly found myself surrounded by police. "Help, Ranu!" I tried to call out, but he evidently didn't see or wasn't himself about to make the same mistake and step out of the designated pathway into the forbidden square. Fortunately I was wearing the badge given to participants in the International Congress and their accompanying family members. When the police saw the badge, they smiled, waved me back into the line, and let me go. I did not get a picture, but did have a bit of a fright.

On leaving Moscow, the Intourist Department demanded our passports once again and informed us that our flight was unconfirmed. Ranu flew into a rage—at this point we were definitely ready to get out of this place. He stormed around and said he was going to call the American Embassy, and was told that for 100 rubles our flight would be confirmed. "No way," yelled Ranu, while I cowered in a chair rather far from him and pretended not to be associated with this man. But he did win, and we got our tickets for a Dutch airliner headed for Athens, with a stopover in Sophia, Bulgaria.

When I was small I thought that people in China walked with their heads downward underneath the earth. There is nothing like travel to fully enlighten one as to the true nature of humanity.

Our Dutch plane hit the runway in Sophia, and taxied past... oh, dear! These were military installations. Missiles pointed at a forty-five degree angle toward the sky—soldiers were running hither and yon, waving their arms at us. We were not supposed to be here, wherever "here" was. It turned out that some miscommunication between the tower and the Dutch pilot resulted in our landing on the wrong side of the airport. We were in trouble.

The stewardesses ran up and down the aisle telling people to hide their cameras. Don't tell anybody you have a camera, conceal it under your coat, and leave the coat on board. Soon the Bulgarian police were on the plane, our passports now in their hands, and we were herded into a little fenced-in yard at the side of the tarmac. There was a small shop, which sold soft drinks and tea, and some benches around tables within this confined outdoor space. We were left there in the hot sun for an indefinite time. Apparently the pilot was being grilled, asked why had he tried to spy on the military base. Eventually we were allowed to leave, but by this time we were many hours late with no way to notify our friends in Athens. And it was a scare—we did begin to realize how the other half lived, and how easily one's freedom could be curtailed or lost on an error, a whim, or for no reason at all.
Our native Athenian friends, whom we had known in Berkeley, had managed to determine when our plane was about to arrive, and it was a most welcome sight to see them waving across a fence at the Athens airport. Although by now it was the middle of the night, Athens was hopping with activity, brightly lit, with people crowding the sidewalks and the streets and eating their late night dinner in the relatively cool night air. What a contrast in gray and white! Nothing could be more different from the drab, disciplined air of Moscow than this chaotic, noisy bustle. Likewise the climate was diametrically opposed to that of cold, rainy Moscow (in July). Athens was hot and brightly sunny during the day, barely cooler in the evening. People laughed, sang, and enjoyed themselves freely in this place. We had not seen anything like that for days on end.

Our Greek friends took us everywhere, escorting us through the Acropolis, driving us to nearby towns with other ancient Greek ruins, taking us swimming in the warm, blue, clear Mediterranean. How lucky we were to get this private tour. But all too soon we said good-bye to our friends and were winging our way toward Cairo. Here we had no acquaintances, and we stopped over for only forty-eight hours. Just time enough to get the flavor of this city under Nasser's reign. People did have the Mediterranean personality—boisterous, noisy, jolly, wildly gesturing—but clammed up instantly when we asked a question that might have political overtones.

Cairo was my first view of third-world poverty. Shocked, I could not stop staring at the poor beggars in the street, the cruelty of people to each other—adults beating kids and throwing them out of a house or shop on their ear, literally. Ranu kept murmuring, "When people are really poor, they grapple over everything. They don't have enough to eat, and cannot worry about being polite to each other." Cairo was hot—unbelievably hot. We went to visit the Great Pyramids, and clambered through the tight passages inside these tombs. We saw other tombs underground, and marveled at the preserved colors of the Egyptian murals inside. We saw camels, but declined a proffered ride on one. We finally found ourselves walking across a bridge over the Nile, on the way back to our hotel, and I began to feel my steps slowing more and more. I could hardly put one foot in front of the other—my feet were badly swollen owing to the heat, but this difficulty walking . . . Ranu kept urging me to hurry, to keep up with him, and I could not. I certainly could not have known at the time, but this inability to lift my legs and put one foot in front of the other presaged my troubles to come.

We climbed onto a plane and headed for India, landing first in Bombay. My legs were massively swollen by this time, and I could barely walk. We caught yet another plane for Delhi, where we were to remain a few days and meet Ranu's brother Benu (next younger to Ranu), who arrived the next morning from Jaipur. I staggered off the plane. We got into a taxi and drove to the small Indian-style hotel reserved for us by Benu. I spent the next several days lying on a bed with my feet elevated, trying with only limited success to get my legs down to normal size. "Gosh," said Ranu, "I can't show you to my mother like that. Indians like nice legs, too, you know!" Benu was understanding, and escorted us around old Delhi to see the main sights, and then on to
Agra to view the Taj Mahal. This last was a surprise! I had seen many pictures of it in my mother's history of art books, and had always thought it to be pure white. I was astonished to discover the amount of color in it, resulting from the thousands of inlaid semiprecious stones. Few sights have so far surpassed my prior imagining.

Finally we were off to Calcutta, and to Ranu's home. Even though I had already met three of Ranu's brothers, I was still scared stiff to be viewed (with my fat legs) by his mother and two sisters. The elder sister Sati (pronounced "Sho-Tee"), called "Didi" ("Dee-Dee," signifying eldest sister), was waiting with her husband and two sons, along with the youngest of the family, Ranu's sister Rama, who was still in college. There were also three remaining brothers, Mejda ("Mezh-Dah"), Khuku ("Cuckoo") and Shamal ("Shah-mahl"), and Barda's lovely wife Anu ("Oh-noo"), then pregnant. This entire family was living, mind you, in two rooms with a little alcove for the "kitchen," which consisted chiefly of a charcoal brazier. The bathroom was "Indian style," a drain in the floor with a brick on either side, on which one squatted. And bathing, which was done very frequently, was performed in a semipublic, closet-like affair outside, where one poured water over oneself without fully undressing. Would I be able to cope?

The family was marvelous. And evidently I put them at ease fairly quickly by doing all I could their way. In fact I stated vehemently that I would have nothing to do with special American gadgets obtained in my honor because they thought I could not manage without them. Eating with the hand was a problem—I just couldn't seem to catch on to scooping semi-liquid gravy up in my hand while sitting cross-legged on the floor. My mother-in-law wrapped me up in a big towel at meals; I felt like a three-year-old just learning to feed myself. The two young boys, Didi's children, were fascinated by me and worked hard to teach me Bengali and the game of "carom," in which one flicked a checker-like tile across a board on the floor with a snap of one's finger.

But I was ill when I arrived at this jovial household. I had picked up a common form of dysentery and found myself feverish and losing fluids from diarrhea by the time I reached the house. No matter. Youngest son Shamal was a medical student, and was able to provide common remedies. When I did not recover quickly, he brought a doctor, who administered some large pills. Ma, my mother-in-law, washed my head in cold water and sat by my bed for hours fanning the flies off me with a large fan, keeping me as cool as could be accomplished in the oppressive Calcutta heat. Ma and I were unable to speak with each other but, in a sense, my illness carried us beyond the language barrier and we were able to fully communicate our love and trust. I was grateful for the opportunity to spend time with her alone, which might not have been possible had I been well and rushing around to see the sights. Eventually I recovered sufficiently to see some of the sights anyway, before we had to tear ourselves away and head toward Hong Kong and Japan.

A typhoon hit Hong Kong before we did. We had to land in Tokyo, and then double back to approach Hong Kong once more when the weather cleared a little. Hong Kong was fun, even though we did not know anybody there. We did all the
touristy things, like taking a little tour bus up to the border of mysterious Red China, visiting the fishing villages, shopping in Kowloon. It was nice to have Ranu to myself again, and I knew that I had learned much of value about his heritage, which helped me understand him and his ways. But both of us were travel weary, and we wanted nothing more than a good old-fashioned American hamburger. We took the cable car up to the highest peak to get a view of the city. At this outlook there was a small cafe that advertised hamburgers. We took a big bite and . . . oh, dear! What was this? Surely nothing we had eaten in our lives, and probably dog meat. Later, by way of solace, Ranu bought me a $4 watch that lasted me for years. He was very proud of himself, having gotten such a bargain, but when the watch finally stopped, a Berkeley jeweler told me there was absolutely "nothing" inside it, anyway nothing to fix.

Our last stop was Tokyo. Here we were able to stay with a Japanese family, an unusual honor we owed to Ranu's wonderful East-West diplomacy. The Yasumasus were a family of four, well-to-do by average Japanese standards, but having plenty of the cultural attributes of their nationality. What a contrast from India! This was especially evident in the formality of the Japanese family, with the children bowing to their parents, not speaking unless spoken to, and generally being seen but not heard. As the female guest, everyone bowed to me and expected me to do everything first. This was ok except in the morning when we were seated around the breakfast table and a very soft, runny, sunny-side-up fried egg was placed before me on a plate, with a side bowl of steamed rice. Chopsticks were available, but nothing else. What to do now? How in the world would one attack a fried egg of this variety with chopsticks? I looked around, hoping someone would begin and show me how. Everyone waited, their eyes on my plate, not daring to pick up a utensil until I had taken my first bite. Finally, I sighed and said, "Please, I haven't the least idea how to eat this. Please someone show me how." At that, they seemed as relieved as I. Everyone relaxed, laughed, and showed me how to scoop the egg quickly up and over the rice with a single motion, after which it was simple to get rice and egg together from bowl to mouth with the chopsticks. Over easy, Eastern style!

Once again we were able to take some special tours through the generosity of our hosts. Best of all they took us to Hakone, the lake partway up beautiful Mount Fuji, although Fuji hid itself almost entirely in fog on that day. The trip up the mountain revealed the beautiful evergreen forests I had seen in some Japanese picture books I had owned as a child. In the low fog, the trail looked like a scene from The Tale of Genii.

At long last, however, we were on the plane headed for home, exhausted, exhilarated, and feeling that Berkeley was indeed the best spot on earth to call home. Ranu had learned a great deal from the scientific conferences with people around the world, and I had even collected some fishes while in Calcutta. Later I was to publish a paper that was frequently read in India, on the structure of the interrenal of these tropical freshwater fish. We were back to reality, but a new reality now, with an incredibly deep understanding of other cultures.
Ranu was working hard at the University. During the 1962-63 academic year I took a part-time teaching job at Mills College for Women in Oakland, in addition to my half-time nonacademic research position at U.C. Berkeley. I had done quite a bit of teaching at U.C. as a graduate student, even sharing a large lecture class with one of the professors after I obtained my Ph.D. But Mills was a very different experience. I was hired to teach a general biology (zoology and botany) course for students majoring in the arts or humanities. I had to scramble to learn everything I needed to teach—although I had had one course in botany I was definitely no expert on the biology of plants. But I loved these students. At U.C., when I taught this type of introductory course for nonmajors (one of the "breadth requirements" for graduation), the students typically tried to do as little as possible to achieve a passing grade, clearly showing no interest in the subject matter and treating it as a necessary evil. In contrast, the Mills students had the attitude that, since they were required to sit through this class, they would make the best of it and learn as much as might be offered.

Evidently I offered a lot, with enthusiasm. Once during the class a student raised her hand and said, "Dr. Nandi, do you like horseback riding?" Goodness, I hadn't done that for quite a long time. When I said I did, although I was very rusty, the response was, "Well we thought you liked horses, because you often use them as illustrations of the things you are talking about. We want to take you riding on the beach in San Francisco." And so they did. We had a wonderful time indeed.

I tried to teach these girls the principles of scientific thinking, and insisted they use logical thought in writing their examination papers. They grumbled a bit, but later came back to tell me that they had learned things that carried over into all their other courses. They were delighted, and two years after I left Mills they invited Ranu and me to come for dinner with them as a special honor. I cherish this experience, and will have to acknowledge that the teacher learned as much as her students in this case, as in most others.

I rather half-heartedly continued my half-time job as a Research Associate in Howard's lab. By now I had acquired a technician for my work, along with some additional things she did for Howard's other research. This lady, Julie, was very bright, and she taught me many things while I taught her a few. Not the least of her contributions was the technique of utilizing an assistant. Having been accustomed to doing all my experiments by myself, including washing the glassware, pipetting solutions, and taking care of experimental animals, I found it difficult at first to relinquish any of these tasks to another. Finally, exasperated, Julie sat me down one day and announced that she was leaving unless I would turn over a large part of the research effort to her. "No fun, this job, if you are going to do all of it," she snorted. All right, I did learn with her prodding, and got used to sitting at my desk or my microscope, leaving a good deal of running about to this excellent person. In the course of our work together, we also became good friends, which was to be increasingly important to me as time went on.
My greatest pleasure, however, occurred when I got home each day and could sit down at the piano and practice for a couple of hours before it was time to fix dinner or do other household chores. I never did come to enjoy keeping house very much, although it was fun to cook occasionally for a gathering. But I was beginning to "catch up" with my musical needs, beginning to satisfy a thirst and hunger that had been gnawing at me for many years—indeed since I had begun my new life on the farm in Jaffrey and had left a musical career behind me.

Then—curses—this blissful pleasure became tainted with pain. Even with the relatively small amount of playing I did each day, the tendons in my wrists became badly inflamed. Tendonitis? Tensynovitis? How come? It didn't make much sense to the doctors, but there it was, unquestionably. This was unendurable, not only because it was excruciatingly painful but also because it hurt me in the worst of all possible places—my hands. The doctors tried treating this problem conservatively, by injecting corticosteroids into the tendon sheaths of my wrists and then immobilizing my hands in plaster or wrapped gauze bandages. Could I play with one hand alone? My teacher was thoughtful, and suggested that I learn the Bach solo cello suites, sitting down at the low end of the piano and playing with my right hand when the left was out of order, or using the left when the right was decommissioned. Extraordinary music—and an education that few keyboardists have ever received.

Meanwhile I was acquiring a modicum of recognition in my research field. Early in this period I received a letter with the return address "The White House," which at first I took to be an advertisement from the San Francisco department store of that name. As I was chucking this into the wastebasket my eye caught the postmark: "Washington, D.C." It turned out to be a letter from Dr. Janet Travell, President Kennedy's personal physician, asking for a reprint of an esoteric article I had published in the journal Science. Only later, after Kennedy's tragic death, would we understand the reasons for her interest in the physiology of the adrenal (Kennedy suffered from an adrenal cortical insufficiency known as Addison's disease). Howard arranged for me to go to the First International Congress on Comparative Endocrinology in Honolulu, returning me to my old haunts there for a couple of weeks. Later Howard and I wrote a major review of the structures and functions of the adrenal in lower vertebrates, and I went to an American Society of Zoologists meeting at the University of Maryland to present a paper on the subject. I knew that without Howard these opportunities would be much harder to come by, but with his help I was beginning to get a reputation of my own in this small field. Professor Gorbman, with whom I had worked at Columbia University, had begun a new journal in Comparative Endocrinology, and I became one of its reviewers.

All this was interesting, occasionally gratifying, but I was still unsatisfied with my second-class citizenship in the academic world. I joined a new organization of nonacademic researchers at the University, and we agitated for better working conditions and more recognition for the research staff, to very little effect. But I realized I was
unsatisfied for other reasons. Apart from the problems, now very evident and uncompromising, that I was having with my hands, the difficulty and severe pain that I had continued to experience with holding my head up and sitting up unsupported were continuing to plague me. I found a comfortable, supportive chair at home and made a beeline for it as soon as I got into the house, finding it hard to leave this chair for ordinary household tasks and courtesies. I began to get a reputation of "standoffishness," because I ducked normal social engagements a bit too often. Ranu and I were having problems adjusting to our married life. He wanted constant companionship of friends, and I wanted less "bother."

There were other family difficulties. My mother constantly harped at me to start raising a family. Why didn't I? She assured me my life would never be fulfilled without children. I did see that Ranu would make a wonderful father and it would have made him very happy to be one, but I could also see that the burden of child care would land right in my own lap. I couldn't even take care of myself, for goodness' sake. I couldn't hold a child with my painful hands or run around after a toddler when I could hardly sit upright. But nobody really quite believed that I was having so much difficulty physically. I began to get depressed, simply confirming people's preconceived notion that this was all "in my head." Ranu and Mother didn't get along, although I must confess that I never really understood what it was that Ranu didn't get along about—he seemed to think she had it in for him in some way. Mother was shocked and made miserable by his attitude, and was forever deeply hurt by things he said to her that she viewed as entirely unprovoked. I am convinced that it was due to a culture gap or linguistic misperception on both sides. But of course I was caught in the middle—loving them both and powerless to mend the breach.

Mother did come to visit during major holidays, and as long as David remained at home (until 1964) we often went to Solvang for Christmas or Thanksgiving. Gradually we began to realize that Mother had become alcoholic. David had been a very troublesome child, but was growing into an interesting and endearing young man. He himself had no idea what was amiss with his mother, with whom he lived alone during his high school years. It helped him immensely to have us identify the problem although we were powerless to do anything in the way of solution for David or for Mother.

David was interested in science, and eagerly looked forward to coming to Berkeley to follow in our footsteps. In the fateful year of 1964 he did come, riding all the way from Solvang (300 miles) on his bicycle, right into the arms of the Free Speech Movement. Although eventually he did become a biologist, our footsteps were not the ones he chose to follow, but undoubtedly his political activism began with this Berkeley turmoil. David was ready for this, however. While still in high school he wrote a series of Letters to the Editor in the local Santa Ynez Valley newspaper entitled "Religion Is a Disease." The editor finally had to put a stop to the mass of protesting counter-editorials these letters unleashed from the political and religious right wing endemic to that valley.

Meanwhile Mother had seemingly created a good life for herself. With some clever land sales she managed to pay off the enormous debt Viggo had left her, and
she had turned his studio—never used for sculpture—into a private art school. She also taught art at a private grammar school in the Santa Ynez Valley (one of her pupils was the son of Pierre Salinger), and seemed to be making a success of her work. Thor had married a local girl (Nancy, for whom I had been a babysitter in former years), and then gotten a job in the print shop of the Anchorage Daily News in Alaska. With many adventures they had gone off to that still frontier town, built a house, and started raising a very satisfactory family of two wonderful boys (Svend and Scott). Thor said that one reason for the move was that "California is about to fall into the ocean," a myth that started with expectations of a Great California Earthquake soon to come. Instead, the major devastation happened in Anchorage in 1963, after their move. Despite their inability to escape their fate, Thor and his little family came through the experience unscathed. With all this—and Mother did make trips to Alaska, spent much time in Berkeley, and adored her home at Elverhoy which she was rapidly beautifying both within and without—what was the source of her unhappiness? Was it me?

How we do manage to make ourselves unhappy with the miseries that we can't solve among our loved ones! At this point, I succeeded in adding a deep sense of guilt to my other ills. My dear Armenian grandfather, who had lived alone for as long as I had known him, fell down his inside staircase, ending on the landing with a broken hip. He lay there for several days before rescue came.

Ranu and I had visited Grandpa a year or two before this accident, and had been driven to the well-remembered house in Arlington Heights, Massachusetts, by an elderly gentleman who was Grandfather's only remaining close friend. Grandpa, now in his late eighties, was already nearly blind, but self-sufficient, doing his own cooking and getting a modicum of help with housecleaning and shopping. A proud Armenian refugee from the Turkish massacre of the 1890s, Grandpa could not imagine moving in with someone else, let alone a nursing home or group setting, however sensible that might have been at the time. The result was the awful fall and the days of agony not knowing whether or not help would come.

After Grandpa left the hospital, his friend arranged for him to be moved to a nursing home. The friend sent me sad pictures of a skeletal old man I could not recognize, lying blind and helpless in a bed in a ward with other equally helpless and hopeless souls. I could not bear it, and my pain at the sight caused me to turn away, to push Grandpa out of my mind, to ignore him and to think only of my developing career and our own new home. The good friend wrote occasionally, describing his visits to Grandpa, begging me to write. "Just a word from you—anything—would be so valued by your dear Grandfather."

I remained silent. I could not, would not write. Whatever could I say—cheerily describe my research, travels, home life? Just thinking about Grandpa made me miserable. He had been the wonderful, charming, sweet, and gentle older relative who had entertained me as a small child with his scientific tricks in his biochemistry laboratory at Tufts University. I had loved visiting the Arlington Heights home, staying
over a weekend with my mother, playing in the garden with the high galvanized iron fence around it, and playing the old reed organ with the foot pedals that operated its wheezy bellows. When my mother remarried, it was Grandpa who remained a thin link to his son, my father, and was ultimately responsible for bringing my father back into my life in a rather roundabout way. And it was Grandpa who had made the long trek out to California to present me with his life's savings for my schooling, apologizing for the small size of the sum. It was all he had, and it was to be mine.

And this lovely man I was unable to succor. Not even a card, a letter. Why? I couldn't understand myself. I would try to pick up a pen and compose a line, and nothing came. My guilt steadily grew, and grew, and eventually, of course, his kindly friend wrote that Grandpa had died. Now it was too late indeed. Whatever was the matter with me? Why had I denied this gentle old man even a word?

I carried this guilt in my heart for many a year. Of course, it has not left me yet, and I weep to think how easily I might have brought him just a little joy in his last years. I see, now, that I did not understand how a bit of news of my research, my travels, my life with my new husband, would have delighted him—literally bringing the only kind of light available to him in his lonely blindness. Only later did I begin to see the value of these seemingly small things, these communications from loved ones. Only later did I understand that his small gift of money reflected the fact that he cherished me above all others, that he wanted to assure himself that I would acquire an education as he had himself, and that by letting him know the use to which this legacy had been put he could have died content.

What of redemption? Can there be any here? Only in the painful lesson that this experience taught me. Never again did I so treat anybody who cared about me. When my great aunt Katherine was later forced into a nursing home following a stroke, I visited her two or three times a week and sat with her for hours at each visit. I was the only member of her family to do so, but I reaped a harvest of wonderful memories of this once abrupt, rather terrifying woman who became so soft and philosophical toward her end. Again, when my mother lay dying I spent every possible minute that I could steal from my life many miles away to travel to her bedside and care for her—even during the long period when she was unable to communicate with others.

Never again would I make this terrible mistake. And each time, when confronted with the hard reality of the death of a friend or family member, I remember Grandpa. And each time, when I move myself to share with the dying, to care enough to reach out even a little to give that part of myself that they most desire, I have been rewarded in some unexpected way. With my great aunt, it was the discovery of her inner self that I had never known. With my mother, it was to be the reuniting of myself with my siblings. And so, from my dear and giving Grandpa, I selfishly took a last measure of his legacy. But indeed, as he would have wished, this too has gone toward completion of my education.
I can add that I have been treated similarly by others, after I became so visibly physically disabled. They, as I once was, are appalled. What can they possibly say or do to help? And so they stay away, and the connections that are so vitally needed by all, and particularly when one begins to be isolated by the circumstance of one's inability to move freely about in society, are severed. I am eternally grateful to those who managed to reach out and retain or even strengthen these connections despite their inner misgivings, but those that could not do this have my deepest understanding.

During this period of inner turmoil I began to be aware of something new in the air: the feminist movement. Always an omnivorous reader, I began reading every article and book I could find on the subject. Oh—there really were other women in the world who did not "accept" motherhood and housework as primary goals in life, who even felt they could happily rebel against these things and make a life for themselves as professionals in a wide variety of areas. Having an urge to do likewise didn't mean I was "sick" after all, although I certainly never succeeded in making my mother believe that. Ranu did believe it, though, and was supportive of my struggle to find my true self in all this muddle of old belief and societal propaganda with which I had grown up. I was certainly confused, undecided, and miserable. He couldn't really help me—didn't really understand all my problems, but he truly loved me and tried to give me freedom to decide how I wanted to live my life. Still, it was hard on him, and he began to clam up and not discuss things that troubled him, driving a further rift between us and adding to the dark clouds surrounding our home life. As it happened, the decisions were not mine to make. Health problems were becoming more and more severe, and my life took some unexpected turns as a result.

Toward the end of 1964 I went for one more treatment of my painful, and by now much overtreated, hands. The doctor said, "Are you getting tired of this?" What a question! "Surgery is called for." My response was, "Ok, anything at all if only this pain can be relieved and I can regain the function of my hands. Start with the left one—it is really not functional any more and I can no longer do my beloved music."

And so began the time of operations. This first one seemed straightforward enough: "Happens all the time, nothing to be concerned about, and of course it will fix your problem . . . Do you want to see a good hand dissection?" asked the surgeon as he snipped away on my outstretched paw. No.o.o . . . Thanks, anyway. We went on discussing biology, music, and other areas of mutual interest. When I arrived home my hand and arm had swollen to three times their normal size and I was in agony. I ripped off the wrapping and loosened the cast in desperation. Did any of this injure me? Maybe, but we will not ever know for sure.
This first operation was not successful after all. Something was still in there, the doctor decided. How about a second operation on the same hand? Well, all right, whatever you think will work. I need it to work! So back I went to the same surgeon. Ah, yes! He found a small lump pressing . . . on the nerve? . . . or the tendon? We'll just get rid of that.

This time I did feel better, began to move my hand around a bit, even to play a tiny bit with great caution. Meanwhile, my piano teacher had taken me to a series of lectures, master classes and recitals given by the eminent harpsichordist and music historian Ralph Kirkpatrick. I had recalled hearing him years before, while I was still an undergraduate, and remembered vividly how he had brought Scarlatti and the harpsichord to life for me. I had really pricked up my ears then and taken "early music" seriously for the first time. Now Kirkpatrick talked eloquently about the harpsichord, how it functions, how it is played, how to be expressive, and—most of all—the wealth of ideas and emotions and musical marvels contained in Bach's *Well Tempered Clavier*. I had begun playing a few preludes and fugues on the piano, bad hands and all, but this music was so much clearer on the harpsichord that I became drawn to the instrument immediately. Even more, I learned a good deal about harpsichord technique—enough, in fact, to think that I might just be able to play this instrument even if the piano were to be permanently off limits.

Off limits it was. Even before my left wrist had fully healed, the surgeon was on to my right hand, having determined that progress was finally being made. So we thought, at any rate. I remember my one and only opportunity to be on a municipal jury occurring at this time. My hand was in a cast, my right arm in a sling, and I was subject immediately to a peremptory challenge. Was it my university background? My evident disability and discomfort? Of course no one would tell, but never again was I to be invited to sit on a jury panel. I was disappointed, hoping to be exposed to some real life drama in which I could participate. But soon enough I was to have plenty of drama in my own life.

This time, as soon as the cast came off I searched around town until I found a small harpsichord for sale in a local music shop. I had so much yet to learn about this instrument. The one I purchased was a one-manual (single keyboard) Neupert with a rather unhappy, tinny sound and very little volume, with nylon plectra and a soggy touch. But I was in heaven when I discovered that I could actually play this thing. It took only the slightest pressure, and the keys were closer together than piano keys, so that I didn't need much strength or a big handstretch to work my way through a prelude or fugue. I fell in love with the sound, too, tinny as it was. And the touch: it reminded me for all the world of my beloved violin, abandoned so many long years before. I realized then (in fact had known this for many years) that I had never truly adored the piano. What I had adored was the music written for piano, and the fact that I could make music all by myself, without having to get together with other players. But this, this was an instrument I could love for itself. It vibrated under my fingers, responded to my most delicate touch. Let me work at this for a few months, I decided, and see whether or not I can continue to play without damage.
So it was that a few months later I sought out Laurette Goldberg and applied for harpsichord lessons. Laurette had been the star pupil in the Kirkpatrick master classes, a most interesting performer who grasped readily the ideas Kirkpatrick discussed and was immediately able to bring them to life herself. She was enormously obese, and yet one quickly forgot that as she talked vivaciously and played with considerable skill. She also laughed a great deal, was clearly an interesting person off stage as well as on (later I was to decide there was no real "off-stage" for Laurette), and knew a great deal about music in general as well as about Bach. The only other potential teacher in Berkeley at the time was a young kid with a crew cut from Chicago by the name of Alan Curtis (subsequently to become a very distinguished professor, musicologist, harpsichordist, and director of Baroque opera). Between the two, I chose Laurette, and our lives became uniquely interrelated from that time forward. It was a good choice—I learned a great deal from Laurette, and she from me. Without her I doubt that I could have moved into a successful new career.

Laurette was indeed a very fine musician. There was so very much that I had not learned as a child, and certainly not later in my hit-or-miss musical education, about structure and form in music. She was an excellent teacher, and I began quickly making up huge gaps in my musical knowledge, soon acquiring a professional level of understanding of Bach's harmonies, counterpoint, and forms. I learned much about the eighteenth century part of the Baroque period, and played a smattering of Scarlatti as well as Bach during the four years I worked with Laurette. Even better, I did really learn to perform music. This had been a sticking point years before, when I suppose that I had been subconsciously competing with my illustrious father, managing to freeze, forget my music, and generally tie myself into a knot whenever other people were listening to me. Laurette began to bring me out of myself, to develop in me a desire to share my own deep love of music with others. I began to concentrate on bringing music, rather than my all too conspicuous self, to my audience. Bless Laurette! She was indeed good at this, and my debt to her is very great indeed.

But about the harpsichord, Laurette and I could not seem to agree at all. Laurette had originally been trained by Madame Alice Ehlers, who herself had been a student of the great Wanda Landowska. One of my first lessons had been to distinguish the two major "schools" of harpsichord playing. The Landowska school used a twentieth century instrument derived from the piano (originally designed by the French piano builder Pleyel, with much consultation with Landowska herself). Such players used foot pedals to change registrations—and thereby tone colors—at the drop of a hat. They raised their fingers high above the keys in a technique that defied physiology, connected all the notes within phrases in long lines, and used plenty of rubato similar to modern pianistic notions of expression. Contrasted to this was a second school of thought, begun by Kirkpatrick and carried to a much further extreme in Europe by a younger group of musicians headed by Nicholas Harnoncourt and Gustav Leonhardt. These players looked to historical evidence for the manner in which Baroque instruments were constructed and played. They had determined that the foot pedals and heavy construction of the modern harpsichords were anachronistic, and that most early instruments were plain, simple,
often with only a single tone color available, but were highly resonant because of their light, guitar-like construction. The finger technique developed by Landowska also was unconfirmed by historical descriptions of players, not to speak of iconography from the period. These performers also had much to say about the "long, connected, expressive lines" so cherished by modern string and piano players, and determined that early musicians preferred a crisp articulation of each clearly shaped figuration.

Interestingly, Kirkpatrick (originally a Landowska student) spoke about harpsichord playing as though he played in this historically informed manner, although his performances in fact suffered from a bad blend of the two schools which only seemed to leave him with the worst features of both. Somehow, though, I had heard clearly what he said, without worrying too much about what he did. Laurette, on the other hand, was struggling at this time to divest herself of the Ehlers-Landowska habits of performance, and she still had a huge Sperrhaake two-manual instrument with foot pedals and four registers (independent sets of strings) including a sixteen-foot (octave below normal pitch), four-foot (octave above normal pitch), and two eight-foot (normal pitch) registers, all controlled by the two keyboards and the foot pedals. This was a strictly modern instrument, heavy as a piano with metal bracing and a feeble tone despite its large size.

The result of this conflict in my new teacher, contrasted with my clearer recognition of the historical approach to performance, was that I somehow "knew" more about good harpsichord playing than she did. We argued all the time, and although I did not clearly understand why we constantly had these differences, I meekly tried things her way, but was never satisfied with the result. So we would argue some more, she would insist that I was wrong, and I would slip unconsciously back into an historically informed approach without—at the time—being historically informed at all. This was highly uncomfortable for us both, and later led to a temporary but extremely bitter rift between us.

The doctors were not finished with me yet. Although my specific symptoms of tendonitis were relieved by the operations, my hands still hurt terribly. And so did my arms, not to speak of the constant pain in my neck and back. Also the operations had left some functional damage, so that I was unable to extend my thumb normally. Fortunate indeed was the fact that my fingers are unusually long and my hand is large. On the harpsichord's narrow keys, at least, I could manage a pretty normal reach of the fingers despite this new defect.

The pain became worse, and—horrors—my fingers and then entire hand from the wrists forward became discolored. The mottled purplish color and cold skin scared me—what was happening? Back to the doctors, who were equally concerned. They decided to do an "experiment," and sent me to the anesthesiology department to try a series of sympathetic nerve blocks to see if this would result in any change. These treatments were themselves terrifying—the doctor took a five-inch long needle and thrust it into my neck from the front to the back of my spine where the sympathetic ganglia are
located, injecting an anesthetic on to the nerve ganglia to paralyze their function. When the pupils of my eyes became fixedly dilated the treatment was successful, and then we looked at my hands.

Well, there was a difference in their color, which was a relief I guess. But nothing had changed the pain. However, doctors could see the effect on the color, while the pain was considered to be just "subjective." In any event, I was convinced by them that I might well be in imminent danger of losing my fingers—which seemed truly a fate worse than death to a serious musician.

After four or five of the horrible nerve block "experiments," I was shipped off to a neurosurgeon. I should really have known better. How in the world did I let myself get led down this garden path anyway? A biologist yet! This was surely a measure of my true desperation.

If I was not entirely happy as a biologist, I was indeed beginning to find real happiness in my music. I adored the harpsichord, I was learning much about music that vastly increased my pleasure as a listener as well as a player. I was beginning to make new friends in the musical world, and just starting to fill that aching void that had been with me since childhood. I spent more and more of my time at the keyboard, leaving a good deal of the laboratory work to my excellent assistant Julie, working at home on papers and reading technical journals, and editing the work of others. Lose my fingers? Unbearable thought.

The neurosurgeon was brisk and came immediately to the point. I had Raynaud's Syndrome and without a major operation I would indeed likely lose at least the tips of my fingers, and the pain would never leave me. What was he talking about? Now, thirty years later, I know that he was entirely wrong about all of this. The symptoms of Raynaud's Syndrome are not at all like what was ailing me—the fingers turn white, not deep purple. Raynaud's disorder is due to spasms in the arterioles within the fingers, and is often of unknown cause, but sometimes associated with heavy smoking (I had put my habit away some years before). Normally it does no harm in temperate climes, and fingers are lost from it only in extreme cold. With the wisdom of hindsight and new research, I can guess that my ailment was probably Reflex Sympathetic Dystrophy, which can produce the type of symptoms seen in my case (both the circulatory derangement and also the pain) after a relatively minor operation or accident to an extremity. Although this cannot realistically account for all my subsequent medical history—certainly not explaining the constant, nagging back and neck problems which had preceded it—it is clear that the diagnosis provided at the time was a mistaken one.

All this is water under the bridge now. It is in fact probable that the extremely drastic treatment given in this case was the right thing to do, if for the wrong reason. However, there may have been other means to this end. Indeed, having so little experience at the time, when I was offered some drug treatment by a different doctor, it sounded a whole lot worse than the "hole in my back" proposed by the neurosurgeon. I was desperate. I was unafraid of anything if it would only restore my hands. I could not
see that surgery was an irreversible thing—it meant starting on a drastic pathway from which there was no return.

So the surgeries began. The "hole in the back," sounding relatively benign from the surgeon's point of view, was in reality two holes that had to be made in two separate major operations. In each of these, chunks would be cut out of three or four ribs near the spine, the lung on the operated side was to be fully collapsed, and through that gaping crevasse the surgeon would reach up to my neck and cut the sympathetic nerve coming from the ganglion on the side of the cervical spine. This would prevent any sympathetic nerve impulses from reaching my arms and hands, accomplishing permanently what had been done earlier in the sympathetic block exercises. The effect would be to prevent any constriction of blood vessels leading to the hands, increasing the blood flow, but also preventing perspiration or any other means of the temperature regulation that normally occurs through this system. My hands would be warm and dry (in fact so dry that they behaved as though lubricated with graphite, and my fingers forever slipped off the sharps on any keyboard unless they were balanced directly over the center of each key). I would also have much trouble keeping warm, since my peripheral blood vessels were permanently dilated, and I have needed to wear long-sleeved sweaters ever since to prevent chill.

Summer of 1966 was chosen for these operations. Ranu was scheduled to be in Japan, at the University of Kyoto, for the summer. I really did not want him around during this time. He cannot stand the sight of blood—his own or anyone else's—and is apt to faint dead away. This was not going to be any help to me, as I had enough to concentrate on to keep myself on track without having to worry about supporting him at the same time. When I awoke from the first operation, we ended up having a rip-roaring fight in my hospital room, in which I was yelling (feebly, I suppose) that he should go on his planned venture, which was truly important for his career. At the same time, he was shouting back at me that he really felt it was inappropriate for him to go, given that I looked as though I were at death's door. The doctors and nurses were standing outside, sniggering, but I won the point and off he went.

My good assistant and friend Julie came and stayed with me during this difficult summer. The pain of these operations was unimaginable, and for many, many weeks I was unable to sit up or lie down, and spent all my time semi-reclining in a deck chair in our living room. Julie was a real heroine, having to change dressings and provide nursing care that was certainly over and above anyone's job description, even a good friend's. The first operation did not heal well, and the second was postponed for an extra month as a result. After this dreadful experience, I do think the hardest thing I ever did in my life was to go back for that second surgery.

What success? Well, my hands did return to their normal color, with the added features described above. The pain? For many weeks it was even worse than before, since I experienced an effect similar to "waking up" from frostbite. As the blood surged into my extremities, I felt much more pain than I had previously. Eventually that subsided, but the pain in my arms, hands, back, shoulders was not improved. Indeed, the
loss of some structural support in my back probably did me a great deal of harm, inasmuch as the muscles continued to sag and there was less in the rib cage to hold me upright than before. A success, in that I never lost any fingers. An abysmal failure, in that the underlying, undiagnosed disorder that had been progressing for so many years was continuing apace.

Gradually I returned to work. My eagerness for the laboratory life was not improved by the new pain and increasing disability. Indeed, I never did recover from these operations; the cut ribs are still highly visible on X-ray and always excite much discussion among radiologists whenever a routine film is taken. The long scars through skin and muscle did not improve functionality, to say the least, and there are places where rough rib edges and scar tissue still cause pain when I am on my back or side.

I went back to music lessons with Laurette. She was a wonderful teacher, but also a very demanding one, and she was also trying to make a living as a harpsichordist at a time when this was still a very new thing. I could not keep up with weekly lessons. I could not sit at the instrument to practice for more than a few minutes at a time. I certainly was not able to progress at the rate I had done previously or fully make use of lesson materials from one week to the next. I called Laurette and said, regrettfully, that I must take lessons less often. She was furious. She stormed over to my house and told me that if I didn't take lessons properly she would drop me as a student. I dissolved in tears. It didn't make a whit of difference. I could not move or work or sit or stand any better for all her anger. And so we parted.

Of course I continued playing—no way to stop now, and certainly I had paid a heavy price for the capacity to play. And I couldn't leave it alone. And after a few months I got another call from Laurette, bubbling over with excitement. "You have to come back," she said. "I don't care what kind of a schedule you want, but you have to come back. I have been in Europe, studying with Gustav Leonhardt, and finally I know what it was that you wanted to learn. I have to teach it to you now." Wonderful Laurette. How graciously she admitted that when it came to harpsichord technique I had been right all along, and how ready she was to give me herself despite all that had gone between us. Again, I am forever grateful to her for caring so much, and for persisting in bringing me along on the path that we both knew I wanted to travel.

So I did return, and indeed, the differences that had so irritated me earlier in the approach to our beloved instrument had vanished. Laurette excitedly told me the theories Leonhardt had developed about how expressive the harpsichord must have been. "This instrument could not have persisted for 300 years if its music were boring," he maintained. So he had worked toward finding methods by which this rather crude bunch of strings and wooden pluckers could be made to sound expressive, and find them he did! How bold this new approach, and how utterly musical in its dependence on listening to what really emanated from the instrument, rather than on any preconceived notion of what one was hearing or expected to hear or once had heard on the piano. This was
indeed heady stuff, and I became totally absorbed by it, finding myself dragging my aching body over to my teacher's house with increasing frequency until I was in fact up to my old weekly schedule.

Now came a stroke of the Nandi good luck. Ranu had been at the University for seven years. He had become a naturalized American citizen, and he had also been promoted to the tenured position of associate professor. It was time for him to take a sabbatical leave to study and work elsewhere for a year. He had received several offers from laboratories and institutions that would love to have him come and spend that time as a visiting scientist. One of these offers came from the distinguished Otto Mülböck of the Amsterdam Cancer Institute. We began to daydream. Amsterdam was also the home of Gustav Leonhardt. Did Laurette think that I might be able to study with this great harpsichordist, the source of the nirvana that she had been dispensing over the past months? She would inquire. Indeed, Leonhardt was visiting Berkeley soon and she would arrange an audition.

Events moved rapidly. I was introduced to Leonhardt and he heard me play. I was terrified of him, and found myself confronted with Alan Curtis's very fine instrument and seated on a low bench that accommodated Alan's very tall shape, such that my eyes were approximately level with the keyboard. A telephone book was obtained, which didn't entirely repair the problem of reaching upward to find the keys, but I did play a bit of a Bach French Suite for the great man. He told me that he "only took professionals as students, and if you come I will not teach you anything about technique." I certainly had never felt less professional, but I think Leonhardt was unable to say no to Laurette—few people have ever been able to say no to Laurette—and so he said yes to me.

Meanwhile, back at the lab, Howard succeeded in finding an Indian postdoctoral fellow who could take my place for a year. In fact, Krishnamurthy was my find, in that his professor had sent me his thesis for external review. My name was known in India owing to my small paper on Indian fishes, and Krishnamurthy had been very interested in my research all along. What a piece of good fortune! And when the young man arrived, it developed that he was also a musician, and the son of a famous veena player in Madras (the veena is a plucked stringed instrument indigenous to South India). As often happens with Indian music lovers, Krishnamurthy immediately fell in love with the harpsichord, and he was doubly happy to work on my research projects in order to enable me to go to Holland to study this beautiful instrument. I left him in Julie's capable hands, promising to make myself available while in Amsterdam to review papers and research proposals.

Although I did make good on this promise, I truly intended to spend full-time on music. "What will happen if I do this?" I wondered. All my life I have felt deprived of music, never able to get enough of it. If I really spend all of my time on music, allowing myself to do that, maybe it will not interest me as much as I thought it would, and maybe I will be eager to get back to science and other interests. Now, at last, we would see.
3. Turning Point in Amsterdam

We arrived in Amsterdam in July of 1967, having rented our Los Angeles Avenue home to a family by the name of "Handy," which caused much confusion with the phone company and mailpersons. At the airport we picked up our shiny new Volvo, purchased ahead of time from the U.S., and drove to our new home on Jan Van Eijk Straat near Beethoven Straat. We rented the upper two floors of a three-story house whose owner, a Mrs. Van der Hoop, lived on the first floor. We also had kitchen privileges on that first floor, so we found ourselves constantly climbing up and down the three flights of ladder-like stairs so typical in Dutch houses. I had much difficulty with these stairs—I mostly found myself climbing on all fours as though they were ladders, much to the amusement of the amazingly agile Dutch! Vrouw Van der Hoop was a most interesting woman. She made a living selling jewelry that she purchased in other parts of Europe, so she was away much of the time. When she was in town she delighted in taking me off to concerts and showing off her acquaintance with the "best people" among European artists and musicians.

I was not to meet Leonhardt for another three months, and I was extremely uncomfortable about this. Although I had heard the word "yes" from his own lips, I had not really believed him, and I did have misgivings that he would turn me away after all. However, at this juncture I did plenty of namedropping, introducing myself as his "student" and getting doors opened to museums where I could play on their original instruments, and the like. I even managed to get my foot in the door at the Amsterdam Conservatory, where they occasionally allowed me to come in and practice, and I also rented a crummy little one-manual Sperrhaake harpsichord to keep in our second-floor living room. My intention was to study a lot of the seventeenth century Baroque harpsichord literature about which Laurette had known nothing at the time, and this would be my opportunity. So I put Bach and Scarlatti aside temporarily, and started practicing Froberger, Frescobaldi, and Sweelinck. Leonhardt himself, meanwhile, was off in Germany filming an awful little movie titled *The Anna Magdelena Notebook*, in which he dressed up as Bach and looked ridiculous in a monstrous wig, under which he played the organ and harpsichord magnificently. Apparently there had been a Dutch television show devoted to this movie starring Amsterdam's hometown musical hero, so during this period before I could meet the man himself I kept hearing "Ohhhh . . . ya, you are studying with Leonhardt. He is the man who made that Mooovie . . ." Ugh!

One incident from this early period will suffice to illustrate the results of namedropping. I called up the Amsterdam Rijksmuseum to find out whether or not they still had any early harpsichords on display. All of the harpsichord collection had been moved to The Hague a year or two before, so I didn't know whether the museum had retained any or not. "Ohh. Ya. We haf a harpsichord. Come and play on it." So I met the curator at the door, and was escorted by himself and a small group of lesser mortals through the back of the museum behind the exhibition halls. This was a fascinating tour...
in itself, within the museum's storage area, where many marvelous paintings and other icons were lying about, having been taken off or awaiting being put on displays. As we wended our way through this maze, we picked up more interested staff at every turn, until I had quite a large entourage when we reached our destination, which was a beautifully decorated turn of the century (ca. 1801) Napoleonic bedroom display, with an instrument standing prominently in the center. This was the Empress Josephine's instrument, I was told—but I was certain at that moment that it was not a harpsichord. Sure enough, when it was opened, it turned out to be an original fortepiano, purportedly owned by Josephine herself. Uh oh! What now? I hadn't played a piano for years, and never one like this. I no longer had adequate control over loud/soft dynamics. But all these people were looking at me expectantly. This was the great American student of Leonhardt (oh, dear, I regretted that intensely at this moment). No escape. I had to sit down and brazen it out in the best Laurette Goldberg fashion. It seemed as though I had learned my lesson well. Everyone clapped, said it was "Vunderfull," and I escaped out a back door at the earliest opportunity.

Amsterdam and Holland were lovely and fascinating. While Ranu worked, I spent much time poking about. In our new red Volvo Ranu and I went for trips into the countryside, and his new friends at the Cancer Laboratory escorted us around to many scenic sights. But the Dutch were very hard to get to know well. Mühlböck himself was not Dutch, but an expatriate German. His mistress (a perfectly normal arrangement in Europe) was a lovely Polish lady, and the two of them took us everywhere and entertained us most royally. We were also fortunate to develop a close friendship with the Zeilmaker family in Haarlem, not far from Amsterdam, where we celebrated St. Nicholas Day and many other Dutch holidays, which were strictly family gatherings. These were usually off limits to visitors, but the Zeilmakers had visited us in Berkeley, so they felt an American variety of friendship toward us and reciprocated in kind. Another family, the Props from Utrecht, became and remained steadfast friends. We shared both scientific and musical interests with both these families, which made visits with them a pleasure for us both. But few other Dutch acquaintances ever invited us to their homes, so we did experience a good deal of loneliness during our year in Holland.

Apart from the laboratory acquaintances, I myself made a good friend later on of one of Leonhardt's students, who happened to be blind. Lia lived close to our house, and since I was experiencing considerable disability (more on this later), she helped me with things like typing for my scientific work, and I helped her with some of her music. We played for each other and enjoyed this very much. Lia and I remained friends for a number of years, and I visited her on a return trip much later. Ranu had some Bengali friends in Holland, in Leiden and Utrecht, and for the first six months of our stay we also enjoyed the presence of the Paul Lichths, friends from U.C. Berkeley, since Paul was taking his first half sabbatical in Utrecht as well. Two or three times Ranu's brother Chandan came over from London and stayed for his holidays, and we traveled through Holland and Belgium with him. Once we took a trip to Paris to visit friends there, and Ranu went on a number of additional trips, leaving me behind with Mrs. Van der Hoop. I was finding travel very difficult, and preferred to stay put rather
than run about the countryside, whereas Ranu loved the travel and felt it his greatest benefit from our residence in Europe. One of these trips included Israel, where he had scientific and personal friends.

A friend from home had given us the name of a kindly doctor in Amsterdam who had some experience with Raynaud's Syndrome. He was a wonderful old gentleman, who had ghastly war stories behind him—he had been part of the Dutch underground getting Jews out of the country during the occupation. He had been caught and tortured, fortunately surviving, but with difficulty. Indeed, in 1967 we still found World War II to be a major topic of conversation, of thought, of bitter memories. Everyone we met had been touched in some horrible way by the War. Dr. B. (I no longer remember his name) was typical in this respect, but his experiences had certainly added depth to his character and wisdom. He confirmed my early suspicions that I did not have Raynaud's at all, and when he examined my scarred body he shook his head sadly and murmured, "What cruel treatment." This good man was a wonderful support to me, and he immediately ordered more tests and some physical therapy, and did everything possible to assist me. Most of all, he believed me, and gave me moral support, nearly starting an international incident to get me a painkiller that had been helpful to me in the past. He even came to our home with the pills once he had gotten them through customs, saying simply, "Well, she needs them." I had now begun to have real difficulty walking at times, and I was confused and frightened by this. Again, this doctor was supportive, and immediately sent me to a neurologist. They examined neck X-rays and thought, as so many doctors had already done and were to do in the future, that the accident to my neck had injured my spine in some way. Nothing to be done, but this gentle person at least did no harm and did give me the psychological support I so badly needed when confronted with this unknown devil.

Finally came the day when Leonhardt returned from Germany and invited me to his home over a grocery shop in the old part of Amsterdam (and, as we were amused to discover, nestled next to the famous Red Light District). I brought a piece by Sweelink and one by Frescobaldi—simple variations which I had been practicing on my tinny Sperrhaake and thought I could play. I started with the Sweelink—Leonhardt sat with his head buried in his hands, listening intently. Suddenly he looked up and said, "No, it's F# in the tenor voice." I fell apart completely, made about a hundred mistakes in the next few bars of music, and finally stopped. He didn't move. "Should I go on?" I asked, tentatively. He didn't answer. To fill the void I did go on, shaking, finally reaching the end of what now seemed like an endless piece.

Leonhardt came over and spoke kindly, saying that I did understand how to articulate nicely, but gradually as he spoke I realized that nothing that I had done was right, or to the point, or had made any sense of the music at all. He sat down at the keyboard and played a few bars. It was as though I had never before heard music in my life! The sound, the rhythm, the expressive beauty of this tiny little fragment was breathtaking. What had he done to it? I struggled to capture all in my ear. He played the
little Frescobaldi piece to the same effect. As I listened to this exquisite yet very simple little piece, I realized then that Leonhardt was truly a musical genius. Indeed, as I came to know later, he exemplified the kind of playing that Bach himself must have done, improvisation and all.

But at this juncture he looked at me and said, "Wouldn't it be better if you studied with Mrs. X., my student, who could teach you technique?" My heart sank. It was as I had feared. He really did not want me here and was trying to palm me off on his student. I knew that I was not at the professional level he expected of his students, but I was nearly his age and I decided I needed to persuade him right now or I never would study with this extraordinary musician. After all, I had come a long way expecting to learn from him, and so I would not be put off. "Please," I said, "give me another chance. Let me come back for at least one more lesson and then let's decide." He shrugged his shoulders and took out his notebook, jotting down a date two weeks from this day.

By great good fortune, Leonhardt was giving a series of lectures (in Dutch, of course) at the Amsterdam conservatory on the subject of Bach's *Well Tempered Clavier, Book II*. These were discussions at the keyboard, and they provided ample opportunity to hear him perform this wonderful music. Good! I thought. This is my chance to determine whether or not the fascinating, flowing, but carefully shaped rhythm that he had used with the seventeenth century composers also should apply to the performance of Bach's music. Indeed it did, and so I had considerable reinforcement of my Lesson No. 1 during these two weeks before I must return to either redeem myself or be thrust on Mrs. X.

Apart from the Conservatory series, Leonhardt and I had discussed organ playing a little. I realized that I would never physically be able to play a pedal organ, but I did mention to him that I hated the organ and couldn't understand why anyone would spend time on that loud, intolerable instrument. He jumped slightly as I said that, and I came to know only later that in Europe, Leonhardt was more famous as an organist than as a harpsichordist. He readily agreed that I knew nothing at all about the good European organs, constructed according to seventeenth and eighteenth century principles. Again, this situation was similar to the "modern" vs. "historically informed" harpsichord building and performance practice with which I was already familiar.

So Leonhardt kindly invited me to come with him to his church on the following Sunday, allowing me to sit in the organ loft with him, just to observe and listen. His church was the Walsa Kirk, a small Walloon church in old Amsterdam with a Christian Mueller organ built in 1685 or thereabouts, lovingly restored by Leonhardt himself. I had a chance to hear the beautiful dulcet tones of such an instrument, which bore no resemblance whatever to the huge, overbearing American horrors of the concert theater. A small three-by-five card with the order of the service was all he had in front of him, and he improvised the entire service except for the postlude. For this he pulled out a Bach organ prelude and fugue, but as he drew near the end he looked up in his mirror and saw that there were still people in the church, so he seamlessly appended an improvised extension to the fugue—the listener would never know.
I returned home with my head in the clouds. I had truly been exposed to a first-rate musical genius—first-rate, indeed, when measured over all time. Would I be able to continue learning from him? I leaned over my little instrument, sticking my head inside over the jackrail and just willing the music to come out in some semblance of a flowing, expressive piece with each note lovingly caressed. Hard to accomplish on a sticky little Sperrhaake with uneven touch and mushy plectra. But something caught fire in my mind and fingers, and suddenly it didn't matter any more whether or not Leonhardt would think I was worthwhile... 

It was like climbing up out of a well, clumping up the steep staircase beside the grocery store to get to Leonhardt's flat. Looking up I saw his face peering over the edge of the well at the top. He remarked approvingly about my new Amsterdammer boots, which were keeping my feet reasonably warm and semi-supporting my weak legs. Always polite, even regal, he helped me out of my coat and seated me at the Dulcken-type harpsichord (a twin of the one I had played for him at Alan Curtis's house in Berkeley). I looked around the room—full of harpsichords, some lying underneath others. Because of the painful problems with my hands I was unable to bend my wrist normally, and I needed to sit unusually far back from the instrument. I pushed backwards in my chair. Oh, no! Leonhardt's hand came up, startled—don't do that. I looked behind me, and thought, "Oh, my God, I am shoving back into this valuable virginal behind here." No, it turned out that he was worried about the chair—some kind of antique, evidently. I felt like a small child chastised by my Dad about tilting back in chairs.

With this inauspicious beginning I started to play a suite by Dietrich Buxtehude. The instrument was very fine, vibrating warmly under my fingers, and I lost myself in the music. At its conclusion Leonhardt was on his feet, his arms upraised. "Wonderful!" he exclaimed with a broad grin. "In fact, maybe a little too free—try it just like this." He began to sing the intricate melody, his voice gliding up and down the full register of the harpsichord from a countertenor's soprano to a low baritone. That was breathtaking in itself. And we went on, to Froberger, to Frescobaldi. I was totally enthralled.

Suddenly Mrs. Leonhardt appeared with two small cups of coffee and biscuits on a tray. "Eleven o'clock, time for coffee," she chirped in her clipped British accent. Marie Leonhardt was a well-known Baroque violinist in her own right, but here she was bringing us coffee. I didn't want coffee—I wanted the lesson to go on without cessation, but in Holland... coffee is universally served at 11 A.M. and tea at 3 P.M. Nobody ever dreams of refusing or doing without. Anyway, I used the coffee hour to ask many musical questions, we played another piece, and this marvelous Lesson No. 2 was over. But nothing had been said—or was ever again said—about lessons with Mrs. X.
Lessons with Leonhardt were infrequent, however, as he was often out of the country on tour. I worked very hard by myself, and he approved of much of the work that I did. My playing had been transformed, and I was rapidly learning the history and works of the earlier composers who had preceded Bach. When, later, I worked on Bach as well, I understood his music in an entirely new light, much closer to what his own contemporaries would have heard. Later I went on to French composers—Louis Couperin, Francois Couperin, Jean-Phillipe Rameau. These had been totally foreign to me when I had attempted to play a few pieces under Laurette's tutelage. By now, however, I could see how they fit into the marvelous framework of the European Baroque, where, even as in modern times, musicians from these geographically close countries visited each other, learned from each other, and imitated each other's styles.

Leonhardt was a master teacher, as he was master of performance and musicianship. With a few words, with a snatch of vocalization, he could make me passionately love all of this music and push out from me a beautiful, expressive performance. He revealed the humor in music as well, and illustrated ways of bringing this out. He hummed the inner voices of fugues and ricercari, daring me not to hear them all and to pay close attention to each line. Certainly he stretched me to the limits, but he also made me want to stretch just a little further to reach for the stars.

He was also kind. One day, although he had warned me—twice—never to ask for help with technique, I did turn to him and say, "You are my only teacher. I need to know how to do this, and I have nobody else to ask." He looked a little shocked, then puzzled, and murmured, "I don't understand why you are having any difficulty." "Well, can you play this?" I asked, having just about given up on a fast passage in a Froberger Toccata, which seemed not to lie at all comfortably under the hand. He shrugged. "I don't know," he said. "Well, try it then," I demanded. And try he did, with excellent results indeed, splashing the notes out at top speed but yet with his ever-careful, expressive attention to detail. But I was watching his hands, and noticed how he used them with extraordinary efficiency, with no wasted motion, no uncomfortable turning, twisting or reaching of the fingers. In fact, I saw that he was moving his entire body sideways along the keyboard, simply placing his fingers and hands comfortably over the keys wherever they needed to go. I remarked on this. "I did?" he asked, genuinely curious. Then he became interested in what he did so naturally, and we worked out the best method for the passage together. This was extremely important to me, given my physical limitations, as his beautiful, efficient approach saved my hands, making many things possible that the average player might have been able to accomplish by sheer force.

On another occasion he picked up my hand during the lesson and tried to turn it in a manner that was awkward and painful for me. I drew back, and started to shake. He was stunned. "You are trembling," he said unbelievingly, but in the kindest possible way. At last I decided I needed to tell him about the physical problems I was having, that I could not let him force my hands to do something that they could not do. He listened gravely, and with great sincerity told me how very sorry he was. He had not suspected, and I was relieved, because I had not wanted him to have me there because he felt sorry for me, but only because I merited his attention musically.
Once I asked him some questions about accompaniment—continuo playing, as the Baroque style of keyboard accompaniment was called. I told him that I had been disappointed in a concert he was involved in, with a group called the Quadro Amsterdam (Frans Brüggen, recorder, Jaap Shroeder, Baroque violin, Anner Bylsma, Baroque cello, and Leonhardt). Leonhardt jumped a little, always surprised when I came out with a critical remark. I supposed he never heard critical remarks, except possibly from Mrs. Leonhardt. Certainly no students felt comfortable being anything but obsequious. At any rate, to my surprise, he agreed with me, and explained that the group was on the verge of breaking up owing to differences in musical approach. Later he offered to take me with him to a castle in Eastern Holland to sit with him and "pretend" to turn pages at a recording session, in order to learn how to improvise on the figured bass line, thickening and thinning the accompaniment to appropriately underscore the expression of the whole ensemble. We even arranged for him to borrow our Volvo for the trip, but sadly, this event was never to happen.

Just after Christmas of this year, Laurette came to visit us, having arranged to take some lessons from Leonhardt herself. We had a fascinating time together on our mutual musical journey. I was still ahead of Laurette in my understanding of Leonhardt's teaching. After her lesson, she would come back to our house and I would give her another lesson, explaining what Leonhardt's remarks were all about. His words were always sparing, suggestive only, leaving the student to realize that these significant words applied to the entire piece, not just the passage he had selected for illustration. And he never asked to hear anything again, just assumed that you had learned what there was to know from him the first time around. Occasionally I did take something back just to find out whether I had indeed understood his cryptic messages. It was only with time that I realized that his lack of comment did not imply praise, but that he was simply and economically providing the tools with which to build an intelligent, understanding interpretation of the music. In a sense, I believe that praise or criticism were not the point at all. I rarely heard him comment on the virtues or lack of same among other performers. As a teacher, he was not interested in discussing the student as a person. He simply earned his fee by providing the guidance a student had requested by playing any particular piece at a lesson.

After a couple of weeks of hard work together, Ranu, Laurette and I headed for Italy by train for an after-Christmas vacation. This was a grueling trip for me, given my constant pain and the cold weather and sometimes difficult conditions in the train (either sitting up or lying down), in the inexpensive hostels where we stayed, or in tramping about in the snow or otherwise freezing January cold of northern Italy. Nevertheless it was a fine adventure. We went to Milan, and saw friends there, and then proceeded on to Venice and Bologna. In Bologna Laurette and I played organ duos across the nave of the large church housing an organ that the great Frescobaldi himself had played. This was my one and only attempt at organ playing. In Florence I stopped at the conservatory and did some practicing. I was always in a state of panic that if I failed to play for a few days my hands would no longer work at all. So I worked the stiffness, if not the soreness, out of them on a horrible Wittmeyer harpsichord of the modern heavy
construction school. Indeed, when we finally reached Rome we tried to find Italy's harpsichord collection in the museum that purportedly owned it, only to discover that all the fine old harpsichords were in Holland (of all places) being restored. The Baroque revival had not yet reached this southern clime, and there was not a single beautiful Italian instrument in all of Italy.

After our return to Amsterdam, and Laurette had left us, I went to hear Leonhardt play an organ concert in the south of Holland. By this time I was an aficionado of Baroque organs. This one was in the French style, and special music is played on it with specific registrations. After the concert's end I made my way back to the train station and found Leonhardt also waiting to purchase his ticket home. He graciously bought a first class ticket for me, too, so that we could sit together for the trip back to Amsterdam. I told him of our Italian sojourn, and of the horrible harpsichord in Bologna. He held up his hand in a characteristic gesture—I could understand that he was feeling that instrument under his fingers, and he said, "Ah, yes. I remember. I gave a concert on that instrument once." How ashamed I felt, since I had created such a fuss about a practice session, and he had been obliged to attempt to make beautiful music on this awkward instrument for a live audience. At the same time I felt close to him, as I understood how his hands could seem to feel the instrument that was only in his memory. On another occasion I came across him at the Amsterdam Conservatory, lovingly repairing and tuning one of the practice instruments, and instantly I felt again this kinship. How few of us are blessed with such love and true knowledge of these beautiful, expressive instruments.

My musical adventures were truly astonishing in this year. The rest of my activities in Amsterdam were difficult indeed, as my pain and disability continued to increase. But then, worst of all, came a call from Marie Leonhardt on the day before our planned trip to East Holland for the recording session cum continuo lesson. "My husband has had a small heart seizure," she said. "He is all right, but the doctors have told him that he must stop all work at this time." And so my lessons came to an abrupt end, as apparently did my growing friendship with the remarkable man who had become my teacher. I was stunned, and horrified that this great man, still in his thirties, might become permanently ill and unable to share his musical gifts with either me or the rest of the world.

What to do here in Holland now? We still had two or three months to go to make up Ranu's sabbatical year, and we couldn't go home in any case since our Berkeley house was leased for the full year. I decided to try to pull myself together—after all, this was Leonhardt's tragedy, but it need not be mine. I determined to see if I could work out musically all the ideas that he had given me about music. I found the hardest part was contrapuntal music. I struggled enormously to hear and project three or four separate lines as though I were as many separate players. Only then could I bring them to life, I understood. Indeed, Leonhardt had been astonished that I had evidently ignored one or two of these lines, failing to shape them properly as I performed a seventeenth century Ricercar. He complained that this was such wonderful music I should not spoil it so.
In fact, by the end of this year I felt wonderful. I did manage to incorporate just about everything that Leonhardt had said to me into my thinking and musical being. It was enough to make me into a musician. One of the happiest moments in my time there came when my blind friend Lia was typing some scientific letters for me. Suddenly she laughed gaily, and said, "Jean, I simply cannot imagine you being anything but a musician." I felt that surely I had arrived!

It was most satisfying, before I left, to be able to visit Leonhardt and tell him how I felt. "I truly didn't need any more lessons," I offered. He beamed. "Yes, the best students don't need very many," he said. "And the rest—they just keep coming back and back and back, and nothing really changes in them." Perhaps that is what had done him in. He had a very hard time denying us anything, and gave so much of himself to each. With all the harpsichordists of the world beating a path to his door, it must indeed have been a strain. Happily, Leonhardt did recover from this heart attack, and as of this writing is happily performing. This was not, in fact, the end of our friendship.

But it now truly was time to leave Amsterdam. Ranu's brother Chandan came over from London to help us pack and see us off—we were going home via the other side of the world. During this year in Amsterdam, we had read about the deaths of Martin Luther King, Jr. and Robert Kennedy, and would be returning to a chaotic United States just before the presidential election that would bring Nixon to the White House. We had felt grieved by these events, but distant from them. It was with mixed feelings that we were to say good-bye to our Amsterdam friends and to Vrowe Van der Hoop and this Dutch house that had been home for almost a year.

Before we could travel to India and on around the world, we first needed to purchase a suitcase to carry extra stuff (mostly music) acquired during this year abroad. Off went the three of us—Chandan, Ranu and myself—first toward the open marketplace in Amstel Square, and thence wending our way throughout the city of Amsterdam, stopping at each small shop where luggage might be had. In fact, the very first place we entered, near our home, had a suitcase of what I considered to be the precise specifications to which we had agreed before beginning this excursion. But Ranu never shops in this fashion. "No," he said firmly, "we must look around." So we looked around—and around—and around. Finally, in the early part of the afternoon my legs gave way and I could no longer go around any further, so I parted company with the two brothers, took the tram (cramped into it by pushing, shoving Dutchmen and women who were for the most part twice my size) and made it home, collapsing as I got in the door.

Four hours later, as dusk fell over the city, the two men returned with . . . the original suitcase from the original, first shop, Ranu crowing happily, "but now I know for sure that this was the best buy in the city."
And so, with the "best buy" we climbed into a plane headed for Bombay. We had a few hours in the airport at Teheran, but otherwise the plane went nonstop to India. Ranu's eldest brother, Barda, now made his home in Bombay, with his wife Anu and son Gautham ("Go-tahm"), now six years old. (Anu had been pregnant with Gautham on our first visit.) We had helped Barda purchase this flat a few years before, sending part of our savings to him. Ranu had felt very grateful to this elder brother, who had given up a potential medical career to go to work, earning money so that Ranu himself could be sent abroad for graduate study. Barda was now a successful administrator in the pharmaceutical firm of May & Baker. He had a car at his disposal with a driver, and was able to escort us around to see the sights. Little Gautham lived like a young prince, going to an English school nearby, and lording it over a little servant girl of about his own age who had been hired to keep the house clean. Oh, dear! My liberal democratic mind could hardly bear this arrangement. The little girl herself was as cute and appealing as Gautham, but would never have his opportunities for education or a good life at all. I bit my tongue and kept silent. Not my place, here, to criticize a mode of life that had been theirs for centuries.

Ranu's next eldest brother, Mejda, also lived here in Bombay with this family. He had a room of his own that he kept immaculately clean and filled with his own treasures, allowing people to come and "visit" him there only if he decided they would be sufficiently well behaved. Mejda had a tough reputation with the younger members of the family, but he was really a soft touch, and it was sad that he never had a home and family of his own. Only many years later did he acquire his own flat in Calcutta, which he again kept neat and clean and decorated with his special belongings.

Excursions included going with Barda to the local fish market to select a fish for the day, then through the long market street where vegetables could be obtained, back home in the still early morning which by now was almost unendurably hot. We went to see the "Gateway to India" of British fame, the beach, the princely gardens. Bombay is a fascinating city, and, like so many in India, contains both the modern and the decayed. Palaces, rich hotels, and the modern business district contrast sharply with miles and miles of tiny hovels. Natives of Bombay and many from surrounding cities and states have settled along roads leading outside of the city as if in an extended trailer park, but more closely resembling a refugee camp without walls. All-pervasive is the smell, which I came to associate with India and which strikes the nostrils instantly on disembarking from the airplane. This pungent, never-to-be-forgotten odor consists of charcoal smoke—smog, really—and cow dung (itself used as a fuel, so one smelled it on the ground and in the air) plus heat and just plain dirt. At night one sees thousands of little fires all around the city, as the charcoal braziers outside each tiny hovel are lit and people begin to prepare their evening meals.

Ranu's mother had come to Bombay to greet us, and later we headed for Calcutta by plane, taking Ma with us. This was her very first airplane flight, but typically, she took it entirely in stride, as though she had been doing it for years. Landing in Calcutta we were met by younger brothers Khuku and Benu. Later Shamal appeared,
having taken a holiday from his new medical position in South India to come and spend a little time with us.

I was in poor health, as all could readily see. My neck and back problems were worse, and I had been undergoing physical therapy in Amsterdam. As often happens, the traction treatments resulted in a kind of "rebound" effect when they ceased, so that my neck seemed terribly painful and inflamed. Considerable time was spent in Bombay going to a physical therapist who gave me two or three treatments to help relieve this severe pain. After reaching Calcutta, Shamal again arranged for me to visit a private physical therapist who was a friend of his. However, before I could go for treatment, the monsoon rains began. It rained and rained and rained, twenty or thirty inches per day (in each day, more than a whole year's worth of California rain). We started out in a taxi one morning for therapy, but were only able to get to a couple of blocks from our destination. The road was impassible, and finally Shamal got out, rolled up his trousers, and waded through nearly waist-high water to the therapist's house. He made it, picked up the traction equipment, waded back to the taxi, and we sloshed our way back home with some difficulty. The result of this excursion was that Shamal himself strung me up in a doorway between the two main rooms of the family flat for twenty minutes per day. Ma looked anxiously at me on one side, then moved around to the back, then back to the front, and volubly criticized Shamal for his incompetence every time I winced. This became yet another conversation piece between Ma and myself, in our language of looks and smiles and few words in one or the other language.

Too much of our time was spent in these medically futile activities, although given the weather, we could not have traveled about much. However, again I had a wonderful view of Indian family life. On these wet days we spent much time all lying on one bed in a small room, telling stories and laughing a great deal among ourselves. Again I fell in love with the human side of Indian life, realizing how many resources humans have within themselves when they have fewer external accoutrements with which to receive passive entertainment. On days when the weather cleared we did visit friends, some of whom I had known already in Berkeley, and others who had been classmates of Ranu's during his college days in Calcutta. It was a very special occasion when one of these classmates, Biggun, arranged a special sitar concert for me. The musician carefully explained the structure of the musical ragas and the methods by which he improvised upon these basic melodic scales. After my year working on, among other things, the nature of Baroque ornamental improvisation, this was suddenly completely comprehensible and quite a thrill. I understood, too, why people from India love the harpsichord once they have heard it. The harpsichord has the sound and texture of a stringed instrument, not dissimilar to the sitar, and the esthetics of the seventeenth century Baroque improvisation was not unlike the sitarists' creative modification of the line of a raga.

Shamal gave me some knock-out pills to assist me on the long flight home to San Francisco. I was certain that the customs officials in Japan and again in San Francisco would arrest me as a drug trafficker, and indeed, they did ask quite a few
questions. I slept the entire time we were in Japan (a matter of a couple of days) and managed to get through the difficult, long plane trip back to our home in Berkeley.
4. Professional Life — Music

Now I must decide who I really was. During the entire trip from Holland through India and around the other way I had carried with me a silent keyboard on which I exercised my precious fingers without sound. Precious fingers indeed! They were still exceedingly painful, and my Dutch doctor had likened my passion for performance under these agonizing circumstances to Hans Andersen's "Little Mermaid," who was given the means to dance but was required to dance on feet that felt as though pierced with knives. During my last visit with Leonhardt, we had talked about my becoming a "real" harpsichordist. He had said, "But of course you must perform," which left me full of wonderment and disbelief. It had never really occurred to me to perform, at least not in the professional sense. I only wanted to teach and share my enthusiasm for my instrument and its music. However, I was ill prepared to teach music, beyond my newly acquired skills in performance. I spent the next few years developing skills in this new area of pedagogy, using my own rather unconventional methods as will be seen.

Before we left Berkeley I had already had one harpsichord student, but she had found another teacher by the time of our return. At first I just began to play for some of my fellow students in Laurette's circle, and a few of them became very excited about the things I had brought home from Holland. Laurette herself was both excited and panic-stricken by a potential rival—really her first since she began teaching in Berkeley. She came to see me, treated me coldly, and confessed later that as she climbed the steps to my front door she suddenly decided that she hated me, that I was her enemy, and that she knew not what to do. At the same time she graciously had said, if I chose to leave science, that "now it is our turn" to have me join her as one of the new harpsichord professionals.

I never did go back to the laboratory, but apparently I did cause quite a stir among my fellow scientists. Howard Bern was shocked and hurt. He had certainly invested an enormous amount of time and effort and love in developing my scientific skills and launching my scientific career. How could I so cavalierly turn my back on all that he had given me? I tried to reassure him. My new profession involved much study and analysis of historical documents, using considerable insight and skill in reconstructing what might have been a correct manner of performance. Surely it did and would make excellent use of my scientific reasoning capabilities, learned at his side, and the teaching skills learned from his wonderful example. This mollified him a little, and his growing realization of the second-class citizenship bestowed on most women scientists, including myself, also made him feel it only fair that he should let me go. I received a long and passionate letter from my earlier professor, Aubrey Gorbman, speculating that I was, in my mid-thirties, coming upon one of those crossroads of uncertainty that afflict so many, and pleading with me to reconsider. Others chimed in: the young field of comparative endocrinology could ill afford to lose a young champion such as myself, and so on. I asked them, "What do you think would happen were I to die? Surely science would not fail!"
It was flattering, I suppose, to hear this clamor. But also, in the late 1960s, it was unthinkable to give up a promising career to go into the arts. Many thought I was really crazy to take such a step. Most of all, however, I wanted to know how Ranu felt. "What will you think or do, should I suddenly cease to be a scientist and become a musician instead? This is not the person you married, after all." Ranu smiled, and said, "Well, do you really think I married you because you were a scientist?" I suppose I had thought that, at least in part, and I was truly surprised by his answer. But on further thought, I realized that our love and caring for each other ran much deeper than this.

And so it was decided. Julie continued to work in Howard's lab, with other postdoctoral students and Howard himself. I felt at least physically more comfortable and less stressed working at home, but I still had great limitations on the amount of time I could spend sitting in front of my instrument. During such times I at first went again over all the music I had played during my memorable lessons with the master, and I could hear Leonhardt's voice behind me, singing and explicating. Gradually I began on other music . . . still I heard Leonhardt exhorting me to hear it this way, and be sure to listen for that, and bring out these other aspects of each piece. I had thought that I should absolutely never be able to play a Sarabande without having him sing the rhythm at my side, urging me to give it just the right twist and torque, moving the slow dance inexorably forward. Would I, in fact, be able to function alone as a professional?

Suddenly, as I was listening in my mind to this intelligent voice, moving me ahead, analyzing the music and propelling it out of my mind through my fingers and out of the instrument, I said to myself, "Well, Jean, who do you think is really talking to you now? Of course it is no one but yourself." And at that moment I became free— independent, never again to need an external voice to tell me what I needed to do, to know. I was on my way, at least, to a new career.

My first student wanted to be a professional harpsichordist, and she was already well on her way. This student was practically at my own level, in fact having considerably greater facility than I. How was I to help her? She loved my understanding of the music, and was prepared to sit and learn whatever I had to teach her, but she needed much more. How could I help a professional to become a performer if I were not one myself? Well, this would force my hand—the only way that I could really do this was in fact to become one myself. I thought about Leonhardt's remark, "of course you must perform," and realized that I could not be an effective teacher without also being a "doer."

And so this first post-Leonhardt student, Lynne Alexander, and I embarked on a most strange and unusual relationship for teacher and student. She had already started to perform with a small group, that consisted of the wonderful Baroque recorder and oboe player Bruce Haynes and various hangers-on. Bruce and his hangers-
Jean Nandi Unconventional Wisdom

on had also studied in Holland, with Leonhardt's musical companion and current Dutch "matinee idol," the recorder virtuoso Frans Brüggen. I now proposed that we add a second harpsichord to Bruce's mélange, and create concert programs that utilized a variety of works for two harpsichords, for solo harpsichord, and for the ensemble. We could mix and match pieces and performers in such a way that Lynne and I would never come into competition, but would offer different aspects of the harpsichord's role in chamber music, or we would play duos together in which we shared the limelight equally.

We did quite a few of these concerts, which were well received to the extent that Baroque chamber concerts were ever received by the public in the early 1970s. After our concerts, Lynne and I would confer in detail about how we felt about our performances and indeed about the act of performance itself. How did you handle that mistake that cropped up? How did I manage to get past a passage that my hand simply couldn't accomplish at the moment of truth? Could we do a better job getting beyond our nervousness and really living the music itself? And so we learned together, Lynne and I, both becoming successful public performers in this mutual crucible. And of course I did need to take the lead, to always be reassuring, to make Lynne feel that I knew what I was doing (whether true or not), and so by creating a performance within a performance, I remained her teacher as well as my own.

This was the offbeat beginning of my own performing career. I continued to perform "on my own," with various ensembles and as a soloist. But I always viewed my musical performances as extensions of my teaching. Sometimes this was overt, as I did a fair number of lecture recitals, where I discussed the music to be played. At other times, I just viewed it as a way to bring to audiences all that I knew about the beauties of the music from the seventeenth and eighteenth centuries, simply by enabling them to hear it for themselves.

Let me illustrate one of the very best aspects of my musical life as it developed during this time. I had been exposed to Bruce Haynes through the work I did with Lynne Alexander, as described above. I had met Bruce earlier, when he was a young recorder player just home from studying at the Amsterdam School of Early Music. Now he was settled in the East Bay, making recorders and Baroque oboes, performing in the catch-as-can way we "Early Musicians" did in those days. Bruce's recorder playing was truly exceptional—he had the fluid, flowing rhythm and clear understanding of the beauty of the seventeenth century's short phrases, shaping each into musical moments of great charm or passion or deep sadness.

But it was his oboe that I loved the best. He had called me and asked if I would provide his accompaniment in one or more small concert gigs, and on the first day he brought this lovely, tooled, light-wooded instrument—so simple and yet so elegant. The Baroque oboe is quirky and very difficult to play. Bruce's face would turn red with effort and he would soon find himself out of breath. Phrases had to be short! And from time to time the instrument would squawk loudly, protesting a wrong move on his part,
and eliciting much laughter from us both. When Bruce left the house, I found small ringlets of dental floss about the floor. The dental floss made perfect windings around the oboe's reeds, and Bruce wound and unwound them to get the exact pitch while the instrument warmed and cooled as we worked.

But when the oboe was warm, and I was in tune, our music was welded together and flowed exquisitely, breathing, rushing slightly, pausing, moving the phrase forward or holding back just a little... always together. Without speaking we understood each other. Yet I had never heard a voice that spoke with the special beauty of Bruce's oboe. The tone itself glowed, and waxed and waned in loudness just perfectly to gain a surprising and artful musical effect. Little snippets of sound, resembling the coils of floss, would curl out of the instrument and magically create a musical understanding within the listener. My throat would catch—it was impossible, what his oboe was saying, and yet, there he stood before me, red-faced and huffing, his eyes laughing, and yet making me weep with the beauty of his sound.

I had never heard another play like this, nor have I later. It was in my head, though, those alternately joyful and sad sound-curls that made listening to a musical composition like reading a fine book, where one lingers over each word, each beautifully crafted sentence, hating to move forward through the plot that inevitably reaches a conclusion.

Bruce moved away from the Bay Area, and I hadn't seen or heard from him for many years. But once, now in a fully reclining wheelchair and no longer a part of the musical scene, I went with a friend to a small concert linked to the Berkeley Music Festival. Suddenly I heard that same sound in a room at the back of the tiny chapel. I held my breath. Could it be Bruce? It surely sounded like Bruce's never-forgotten oboe! A wisp of liquid sound, a curl, a twist—just practicing, but the beauty of that sound was as poignant as at the concert itself. And then the performers entered, and there he was. Bruce... with lovely, turned little stick of an oboe in hand. And a warm handshake from Bruce after the beautiful concert, and an aural memory I shall cherish forever.

During my life as a professional musician, I was careful not to drop the name of my illustrious father. I wanted to ensure, once again, that any success I might have would not be a result of my using this connection to get ahead. However, I did continue to keep in touch with Alan Hovhaness, and he came several times to Berkeley to stay with us, first with one wife (pianist "Naru") and then another (singer "Hinako"). One of these visits immediately followed a trip he had made to Madras, India, and we were privileged to hear hours of tape recordings of the fine Madrasi musicians who had hitherto not allowed their music to be recorded for Western consumption.

Alan and I talked a great deal about the differences between the piano and the harpsichord. He had sent me some music he had written for me, but this was too pianistic, and I pointed out that the harpsichord required a different esthetic. He had
written some good contrapuntal pieces, and I showed him a piano work of his that was quite wonderful on the harpsichord. But these new ones had used thick chords, so that the melodies could not be clearly heard on my instrument.

On one occasion, Alan was invited to be the composer-in-residence at the Cabrillo Music Festival in Aptos, not far from San Francisco. He and Hinako were staying at the home of his close friend and fellow composer, Lou Harrison. Lou had a small cottage on his property, and I traveled down to visit my father and to attend concerts at the festival. Harrison, who had a fine collection of musical instruments from all over the world, as well as some he and his associates constructed, owned a small harpsichord that happened to reside in the very cottage where my father was staying. During his two-week visit there, Alan played the harpsichord a lot. I believe he really got a good feeling for this instrument as a result. At any rate, he produced a wonderful piece for me that summer. He told me that the cottage had been full of "Daddy Long Legs" spiders, and he had fallen in love with the gentle nature of these silent creatures. So this piece was called the *Daddy Long Legs Sonata*. It became a favorite in my concert repertoire. The opening movement is in toccata-like form, and the page is filled with long arpeggios up and then down, which really do resemble the long legs of these spiders.

Once we gave a joint concert. Alan wrote a harpsichord sonata for the occasion that I performed along with some additional Baroque pieces, and he performed new piano works and accompanied his wife Hinako in his songs. The Berkeley audience filled the hall on this delightful occasion, and I basked for once in his reflected glory and the warm satisfaction that these collaborations brought me as Alan Hovhaness' daughter.

Gradually I built up a substantial music studio, and was to have over a hundred students during the more than fifteen years that I taught actively. At first I was reluctant to take children. Even with adult beginners I was having a hard time remembering how I had learned to read music and develop basic keyboard skills, since that was very much buried in my own early childhood memories. I also looked with some suspicion on parents who brought their children for harpsichord lessons. After all, on what basis were the children selecting this rather esoteric instrument? Wasn't it really the parent who was choosing? I did try teaching one or two kids, and did not have notable success. It was clear that I just didn't know how.

Typically, I decided to find a solution to this and a few other problems I had as a teacher. My own musical training was definitely nonstandard, and I still had some gaps in basic musicianship, understanding of harmony, and other fundamentals that I missed out on by not majoring in music in college. To fill in some of these gaps, I enrolled in the lower division music classes at U.C. Berkeley, getting credit through U.C. Extension. I slurped up everything that was being taught, finding an immediate use for new information in my own teaching or performance. I was amused to see my fellow students (who looked as though they should be still in high school to my older eyes) fidgeting in class and wondering whether any of this would "be on the next test." Clearly
they still had no use for much of what they were learning, and would simply have to take for granted that this might be valuable some time in the future.

Somewhere along this period, since I was enjoying my classes so much, I also enrolled in a perfectly wonderful class in Indian music. I had never quite gotten to the point of really enjoying the Indian music I heard at home, or at concerts we sometimes went to as a family. But the teacher, Bonnie Wade, was a marvel of enthusiasm, and within the first week I fell in love with Indian music. I also enjoyed Professor Wade herself, and later we talked about my father, who, she thought, was a "saint." This was largely because he had been so instrumental in introducing many Indian musicians and their music to this country. Later I discovered that my father had a good many books on Indian music that were not in U.C.'s collection, and he graciously donated these to the Music Library at Berkeley.

Still, none of this solved my problem of teaching children. I therefore went to the San Francisco Conservatory of Music and persuaded them to allow me to enroll in a piano pedagogy class taught by an experienced Palo Alto piano teacher named Janet Smith. Here I was introduced to the kinds of materials used in teaching keyboard beginners, and Janet herself brought children to the class and taught them lessons while we students observed. Additionally, we were all expected to take at least one student for a practical teaching experience at the Conservatory itself. The class members advertised in the local newspaper, providing free lessons for anyone in the community interested in participating.

It became immediately apparent that existing keyboard teaching materials were simply inappropriate for harpsichordists. When I persuaded Janet to allow me to advertise for a harpsichord student, I got a charming Mexican-American lady as an adult beginner I wanted Janet to observe me, so she could see directly what was wrong with piano "methods" when one tried to apply them to the harpsichord. Carefully worded instructions had to be blanked out and replaced with different instructions appropriate to the plucked stringed instrument that could not play loud and soft, but which could speak with such clarity if carefully articulated. The method of touch on the keyboard was also quite different.

I learned a great deal from this year-long class, and was very grateful for Janet's expert teaching. She also became fascinated by the problems I had raised, and began to appreciate the harpsichord as an instrument and to understand just how different it was from a piano keyboard. At the end of my time at the Conservatory, Janet urged me to write a method of my own that would be suitable for my instrument. Later I was to do just this, as described in Chapter III.

In the meantime, I no longer turned away children who applied to become a part of my studio. I had already had my two nieces and nephew as students, and by this time recognized that in fact the harpsichord was an ideal instrument for children. Its keys are smaller and lighter, and closer together than those of the piano. This keyboard is well suited to a child's small hands, and its compass is compatible with the reach of short
arms. On the piano, the upper and lower reaches of the instrument are frequently never touched in several years worth of study by young players. The piano also takes considerable physical strength. Children love the simplicity of the harpsichord's action, which they can readily understand, and they enjoy the sound over which they can soon gain considerable control.

These children in my life gave me every bit as much joy as did the older students, some of whom were beginners, with others up to professional level. Most of the children were exceptionally bright, one a budding young composer. I learned as much from them as they learned from me, I am sure. One story that stays in my mind illustrates the relationship I had with these kids.

I had a clock on the living room wall which was the shape of an ice cream cone. The clock worked just fine, but the hands went around through their various twelve-hour positions without the benefit of numbers painted on the clock face. Of course my adult students had no trouble telling the time, but most of the kids could not understand what time it was from just looking at the position of the clock's hands. It was a great mystery to them that I could suddenly say, "Time to stop. Your Mom should be here any minute." One seven-year-old boy did figure out how it worked, however. Knowing his fondness for ice cream, I told him that he must be really into ice cream, just as I was, if he could tell time by the ice cream clock! He loved being in this inner circle of ice cream lovers and ice cream clock readers.

One day, after I had been to a Chinese herbalist in one of my many vain attempts to halt the development of my increasingly disabling muscle disorder, I informed this kid that my doctor had told me I could eat no ice cream (anything cold was supposed to be bad for me). My student looked at me in horror. He could imagine no worse fate than not being able to eat ice cream. How could I stand it? I told him I was trying very hard to obey instructions and to be patient, but there was no doubt that this was very difficult...

The little boy remained deep in thought. Suddenly he looked up, wide-eyed, and said, "Oh, Mrs. Nandi, does this mean that you won't be able to read your clock any more?"

I reassured him on this score, but also pointed out that should I fail to do so, he could read the time for me and so we would make it through all of our lessons just fine. And I privately thanked Janet Smith for giving me the tools I had needed to teach these marvelous children.

While I was developing my new career, Ranu was continuing to gain stature in his. On our return from Holland he had achieved full professorship, and two years later he became Chair of the Department of Zoology. The Zoology chairmanship was a rotating one, but Ranu was relatively unknown still, and pretty young, so this was a
considerable honor. Although he had served as Vice Chair a few years earlier, many members of the Department still tended to think of him as "Howard's boy," and not really an integral part of the group. Not only had Ranu been a student in this very department, but he also worked in the separate building that housed the Cancer Research Laboratory (formerly CRGL, but the word "Genetics" had since been dropped from the title), so the majority of Zoology professors saw little of him.

Now he was in charge of this somewhat alien group, full of independent-minded older men. Ranu rather relished this challenge, and he proved himself a superb administrator. Having watched former chairmen get hopelessly bogged down in the details of running the department, he determined to delegate a great deal of the work and then spend as little time as possible on the rest. He did not want this task to interrupt his research program, which was flourishing and important. He succeeded in meeting these goals magnificently, not dropping any of his research but also gaining the friendship and respect of the members of his department. It was an important experience for him, and I learned a great deal about organization and leadership from watching him do this over a two-year period.

This paved the way, too, for Ranu's subsequent appointment as the Director of the Cancer Research Laboratory, a position he was to hold for ten years. These positions certainly enhanced his stature in the eyes of the scientific community, and he continued to be viewed as a world expert and one of the most productive basic scientists in the field of mammary development and breast cancer research. He began to reap awards and honors. Among the most satisfying of these were several bestowed by the East Indian community abroad, honoring Ranu as one of the most distinguished Indian nationals in science.

During the 1970s we were also able to bring two of Ranu's brothers to California. First to arrive was Chandan, who had spent eight years or so in England without achieving any satisfactory degree or other status, and we urged him to come here and try again. Poor man, now a doctor with much experience, he was obliged to begin his training all over again. After passing the medical boards for foreign doctors, he then had to start with an internship at Toledo, Ohio, followed by a medical residency in Portland, Oregon. Finally he came to San Francisco for a final two years of residency in internal medicine. On his way from Portland to San Francisco, however, he went back to India for an arranged marriage to our delightful new sister-in-law, Aparna (pronounced "oh-POR-nah").

These first years were tough for Chandan and Aparna, no doubt. Eventually Chandan found a position at Kaiser Permanente in Richmond, and they moved to the East Bay. Two wonderful children were added to the extended family here, both girls. Rhea and Rini were like daughters to me, too. They called me Sonama (pronounced "SHO-nah-mah"), which means "Golden Auntie," and these two young pals plus nephew Amitava ("oh-mee-TAH-vah"), who arrived from India with his family
Later Chandan and his family moved to Southern California, and the girls (especially young Rini), were chiefly brought up there. However I taught all three of these kids to play the harpsichord when they were young, and I know at least as much about what makes them tick as their parents do. So when they are in trouble—or elated about something—they still come and tell their old "Sonama" about it. Sometimes "Gold Auntie" can help them get out of trouble and can always celebrate with them when the occasion arises.

Ranu's brother Shamal, with his wife Pranati (pronounced "pro-NOT-tee"), four-year-old Amitava and Ranu's mother all came here in 1975, and for a couple of years they lived with us on our house-on-the-hill. Pranati was also trained as a physician in India, and she immediately helped care for me during this period when I had become very sick. Once again, these foreign doctors had to begin by taking examinations, and then find residencies in fields that were not necessarily related to their original training. Shamal finally landed a residency in emergency medicine (he had been trained as a surgeon) in Los Angeles, and so after Ma went back to India, this little family moved to Los Angeles for the two years required to complete this training. On their return, Shamal became an emergency physician at Kaiser Permanente in Hayward, and they bought a Berkeley home near us. Pranati, meanwhile, struggled with exams and then finally obtained a residency first in pediatrics and later in neurology. She worked for a number of years as a neurologist in the Veterans Administration, and later took a three-year residency in psychiatry. She is now working in a mental health clinic in Concord, CA.

During Ma's stay in our American home I again marveled at her ability to adjust to any and every situation. On the very first day she calmly made her way to the bath, took a shower, and came downstairs to cook her own vegetarian dishes on our gas stove. She had never seen any of these fixtures before, but she wordlessly figured out how to use them and make herself comfortable, with no disturbance whatever. She and I still communicated largely by gestures and a few words of "Englali" (my word for the admixture of the few words of English and Bengali we shared). She settled down in front of the TV, minded the kids, found things in our garden to include in her vegetable mixtures (which we all ate with much relish).

Only a few years after returning to India, this remarkable woman died from a heart attack. Her death was without fuss or preliminary illness. True to her style of life, she simply went to her room to lie down after a meal in Barda's Bombay flat, and was found a short time later, having died apparently quite peacefully. Older people here marvel at the extraordinary changes that have occurred during their lifetimes, but few have moved from the kind of semi-feudal peasant conditions under which Ma grew up to the sophisticated and fast-paced Bay Area, seeing a number of her children become movers and shakers in India and abroad. Her quiet determination was in large part responsible for their success. How we honor this great lady!
I had been sent back to my primary care physician, Dr. H., for a general checkup. At age thirty-five or so, my painful muscle condition had been slowly and inexorably worsening. No explanation had been forthcoming from the medical establishment for the progressive pain and weakness, and I had been subjected to dozens of painful tests and more painful treatments, all to no avail. Hovering in the background, unstated but clear enough to me, was the attitude among most doctors that "this woman is just plain crazy."

On this occasion, Dr. H. took me into his office first—an unusual sequence—before examining me physically. He went over my chart, muttering that "treatment with Elavil (an antidepressant prescribed by the orthopedic consultant) seems like a good idea." Elavil had been prescribed to contain the ever spreading and increasing pain, but had had little effect, in fact. Dr. H. made a comment to me: "All women your age have these weird problems, and they are nothing." Then, to himself "But you love your work, don't you." Not a question, an acknowledgment that I was struggling to continue. Again to me: "People keep on working with all sorts of conditions, much worse than yours—terrible disabilities." I did not know what to reply. I knew all of this. I was struggling, more than he knew or recognized. If he thought I was crazy why didn't he send me to a psychologist? For some reason that had never been suggested by these doctors who were so convinced that this dreadful problem was "all in my head.'

Now Dr. H. sent me to the examining room, coming in a cold twenty minutes later. I was able to overhear him dictating notes about me—hardly complimentary—into his tape recorder. Without a word to me he proceeded to do a standard physical exam. Sitting me up on the table, a position which was always painful and difficult for me without a back support, he asked me to lift my leg upward against the downward pressure of his hand. "I can't," I began...

Suddenly, startlingly, he struck me on the leg with his fist, roaring, "There is nothing wrong with your muscles!" I was speechless—stunned, shocked by the blow, by his anger, by the fact that a doctor could or would ever do such a thing to a patient, whatever he might think of me. Dr. H. was Chief of Internal Medicine at this large HMO, a respected physician. Surely he did not behave like this under ordinary circumstances. Why was he so angry?

He had stormed out of the room. Suddenly, terrifyingly, he was back again. He flung his stethoscope on the table, and I flinched, imagining another blow. He fairly screamed at me, "You have high blood pressure!" Good grief, was that another crime? Another psychotic symptom, maybe? I shrank back into a corner.

Later I called the orthopedic doctor who had asked that I see Dr. H. She was soothing, and explained his final explosion: Dr. H. was too good a doctor to ignore the high blood pressure, or to throw me out of his office without attending to what might be a life-threatening condition. But, she said, sometimes it is necessary for a patient and doctor to "get a divorce." This was surely one of those times. She sent me elsewhere,
and the high blood pressure was eventually traced back to the cause: the treatment with the drug Elavil. Once again, symptoms upon symptoms had been laid on me by the doctors themselves, a condition known as iatrogenesis.

And so I came to hate doctors and all they represented. I had a problem; it was very real to me at least, even though it never did show up in the hundreds of tests they did. They kept implying that it was all in my head. They did surgeries and fed me drugs that gave me other symptoms on top of my original problem, whatever that was. They often abandoned me after discovering that they did not have the answer. It was years before any of them decided to try to treat my "psychological problem" with psychiatry. That failed also, and no psychiatric diagnosis was forthcoming either.

Only years later did I discover that this behavior of doctors toward the permanently disabled, the "incurable," was extremely common. Their anger and frustration, misdirected toward their patients, reflected their inability to cure, their impotency, their humbling before these patients who so infuriatingly challenged their godlike status. What a relief to know that I was not alone in eliciting such fury. But what a horror to discover that the physicians to whom we turn for healing and solace can express their weakness in this sinister and damaging way. And, at the time, my anguish reflected not only that horror but also the pain of being unbelieved and the constant, nagging question, "Are they right?"

In 1971 one of my former students who had suffered a back injury called me to say that she had been to a new orthopedic doctor at Richmond Kaiser who was unusually good. Furthermore, she went on, "I talked to this doctor about your problems and she seemed really interested. Would you please make an appointment with just this one more doctor, if only to please me?" (I had sworn that I would see no more doctors about this problem, it was getting me worse than nowhere.)

To make a long story short, I did make the appointment, and met Dr. Léonie Jenkins a month later. She was friendly, and immediately began asking rather detailed questions about the problems I was having playing the harpsichord. I was startled, and asked her how she came to know so much about the instrument. She told me then that she was a student of a harpsichordist friend of mine, who was soon to be leaving Berkeley, and this teacher had suggested that she come to me for lessons. So she had known all about me professionally, and was keenly interested in my medical problem. She startled me a second time by asking me if she could come to my home the following evening to fit me with a brace.

A Kaiser doctor coming to my house? That was unheard of. What I did not know was that Dr. Jenkins lived only a block away, up our hill. She turned up at my door, found me alone, and stayed the entire evening. First fitting me with back and neck braces to prop me up better, she then settled down on our living room sofa to ask me in considerable detail about the history of this problem. She suspected at the outset that it
was a primary muscle disorder, a conclusion that doctors have now come to thirty years later, but she was determined to prove it if she could. During the course of the evening I invited this extraordinary doctor to try my harpsichord. I wanted to show her how very light was its touch, so she would know firsthand what a small muscular effort was still giving me big trouble. To my utter astonishment, she suddenly became very nervous. I was so accustomed to being terrorized by doctors that it never occurred to me that a doctor might be equally terrified of a harpsichord teacher.

Since she was a neighbor, I soon came to know more about Dr. Jenkins and her family, and our friendship blossomed. She had five children—four girls and a boy, the youngest, who was still a young teenager. Her husband was blind, the Director of the State Orientation Center for the Blind where newly blinded individuals are trained to cope with their disability. His own coping abilities were sufficient to enable him, later, to repair the plumbing and electrical wiring in our old house. His skills also included the building of a harpsichord "kit," and then rebuilding it after an automobile careened through their living room, wrecking the harpsichord, among other things.

The harpsichord soon became a link, although it was a number of years before Léonie Jenkins could bring herself to study with me. She was struggling with the notion of keeping an "objective distance" from a difficult patient and her clear need and desire for the kind of friend I was trying to become. However, I tuned and did various repairs on both of her harpsichords, the kit and a large Neupert modern horror (later sold and replaced with an excellent early replica). In her doctor role, Léonie had prescribed extensive physical therapy, and several days a week I rode with her to Richmond Kaiser for this purpose. I soon was privy to her early morning routine, and told her teasingly that I would never make an appointment with her before 10 A.M. and assurances that she had had her morning coffee.

Early on I invited Léonie to a concert on the U.C. Campus. As we made our way out of the concert hall and up a small hill to the parking lot, I suddenly found myself scarcely able to move one foot in front of the other. I mumbled, "Excuse me, but I just have to go real slow here." Immediately her strong arms were around me in a big hug. Nothing further was said at the time, but I knew then that she knew there was nothing psychosomatic about my problem, and that she would do everything in her power to help me.

Later she told me what she had sensed at that critical moment. When she had been a medical student she had undergone an experiment in which she was given curare, a muscle poison. She had clearly remembered how, as the drug was wearing off, she was unable to lift her legs as high as they needed to be lifted in order to take a step uphill or up onto a curb. She had now seen me with this same problem, and she was convinced that somehow my muscles were poisoned and weakened in a similar fashion.
Despite Léonie Jenkins's best efforts, my health was failing rapidly. Soon I needed a cane to assist in walking. Later I used Canadian crutches, although both these assistive devices were difficult for me to use because of the pain in my hands and arms. Although encouraged by Léonie's belief in me, I was depressed, and began losing weight, eventually coming down to a cachectic ninety-five pounds. Part of this was due to my now being on codeine in a vain attempt to control my increasingly severe pain.

In later years, people have often said with some surprise that I seldom complain of pain. At this time, however, I must have complained often. When not complaining, I was grouchy and uncommunicative. I felt a desperate need to tell people about my suffering, which they could not see, and which they often dismissed as trivial or (even worse) some type of malingering. Only later, after having borne up under this constant agony for so many years, did I realize that speaking about pain only served to drive friends and family away. It did nothing whatever to alleviate the problem. The problem could often be forced into the background of my mind by keeping busy with activities that were sufficiently compelling, and only when these could no longer distract was it necessary to resort to drugs.

In any event, I was rapidly losing functionality, and it was not long before I found myself in a manual wheelchair, which I could move slowly by pushing the wheels with my arms while simultaneously moving forward with my feet. The chair would half recline, so I could remain in it for some time. Léonie added to my "up" time with a supportive stiff back brace. Nevertheless, I spent more and more of my time lying down in bed.

I was in this condition when I received some visits from a young harpsichordist and teacher of piano who had just moved to the Bay Area from Modesto. This was Charlene Brendler, who was later to become a regular student of mine. She went on to have lessons with Leonhardt himself, and eventually became one of the Bay Area's fine musical resources as teacher and performer in her own right. At this time, however, she had become fascinated by my playing style (Léonie and I had made a trip to her Modesto home to try out her harpsichord, preparatory to Léonie's purchase of one by the same instrument maker). Charlene could hardly contain her enthusiasm, as she sat by my bed and questioned me at great length about my approach to performance. What was it that made my playing so special? What could I tell her about seventeenth century composers? Etc. It was the beginning of a warm friendship and a good relationship that lasted as long as I continued to be active in the field.

Léonie was increasingly worried about my health status, however. She insisted that I go for one more medical appointment, to a rheumatologist at San Francisco Kaiser. So one of my students drove me across the Bay on a cold, stormy day in midwinter, not long after Shamal, Pranati, Amitava, and Ranu's mother had all moved in on us. It was good that Ranu had this family at home with him, for I was not to return for over a month.
My stay in the hospital in San Francisco was a surreal experience. The rheumatologist had ordered the usual muscle biopsies (I have had most of the muscles of my arms and legs tampered with in this painful way), but early on he decided that my condition must result from a severe psychological disorder. He had brought in a psychiatrist to consult on the case, a rather vicious man who positively enjoyed baiting me with questions to which he had already decided the answers. This person then put me on a regime of very high doses of psychoactive drugs: haloperidol and imipramine. This latter was administered by twice-daily injections for the entire time I remained in the hospital.

Soon I began hallucinating. This was rather intriguing to my visitors (which included students as well as family), as I talked vaguely about lights in the sky and other odd phenomena quite invisible to my guests. And then, suddenly, I found myself able to stand by the side of my bed, and later, using my crutches, to walk around the bed. After a month of intensive physical therapy I was even walking without crutches.

What a strange happening. Almost like a miracle at Lourdes . . . What in the world had happened? The nasty psychiatrist was convinced, of course, that he had hit the nail on the head and had "cured" my psychiatric ailment because I was now "ready" to be cured. Léonie, who burst into tears of relief at my bedside, saying, "You are not going to die after all!" was not so sure that this was a psychiatric cure. Somehow this massive dose of drugs had given my muscles a strength they had not had for many years, but she reserved judgment as to the reasons. Later I was sent to a psychiatrist in the East Bay for follow-up. He scoffed at the "diagnosis," stating in no uncertain terms that one could not make a diagnosis that way. We were lucky, he said. Go and do your work while you can. It is definitely a nuisance that your condition has not, and probably cannot, be identified with certainty. In fact, he recommended that I join the local MS Society for support, as he said that people with multiple sclerosis have gone through similar weird experiences, including the accusations that they are crazy.

Skinny as a rail, I did need to get fattened up again. We had family parties at which Léonie instructed us in making homemade ice cream, which I was ordered to eat in large quantities. Was I truly cured? Surely my family thought so, although of course I was still on a regimen of pill-taking that could not be stopped. Indeed, I found I needed to take these pills throughout the day at frequent intervals, necessitating my carrying around a water bottle with which to swallow the things. (This might have, but did not, give a clue to doctors that the effect of the medicine on my muscles was a side-effect, rather than a primary effect on my brain.) I joined the YWCA, and tried swimming, which had been ordered by the San Francisco doctors. But swimming did not seem to improve anything. It left me exhausted and in pain, and I never got any better at it. I did, grimly, persist for a couple of years, but finally stopped when I failed to see any benefit at all. Instead, I began training with light weights, hoping to increase my strength. Although I did gain weight, eventually returning to a normal size, I did not seem to gain
strength. More important, my neck and back pain persisted, and I often needed (as I had before) to lean up against something for support.

I did begin to play again, and eventually to perform. My students returned as well. But something was wrong. Although I could sit for a while, practice, and get through ensemble rehearsals, my playing lacked zip. Worse yet, my teaching was dull—I simply didn't seem to have a lot to say, at least to my advanced students. Gradually they left me for other teachers. My performances were correct but somewhat listless. My head felt emptied of any creative impulse.

Not only that, but I began forgetting things. I could not remember what happened yesterday, or a few days ago. People came to visit, even to stay overnight or for several days, and I had no recollection of this or of them later on. Ranu was completely puzzled by this—was I losing my mind, or was I just so indifferent that I ignored or dropped any interest or memory of these guests? Other people in the family—or even Léonie—did not seem to notice my predicament. They continued to speak with joy about my "cure," the fact that I could walk. I became unhappy about this. I could not deny that I could walk, but was that the most important thing in my life?

As my friendship with Léonie grew closer, we began to "play" more, spending less time on my fraught medical affairs. I was at least out of danger during this "upright" period, and we had a chance to explore the many things we enjoyed in common. For several years we took a vacation each summer at my mother's home in Solvang. The patio behind the Solvang house was shady, and I remember it as one my favorite places. Lying on one of the two chaise lounges looking out into the beautiful, peaceful garden that my mother had created out of bare, adobe clay earth, I felt that there was no place in the whole world as comfortable and comforting, as restful and relaxing. Léonie would be lounging on the other chair, with Mother in the house napping or working on a jigsaw puzzle in the large, low living room.

Solvang is very hot in summer, a dry heat that is not mitigated by the stiff winds that blow through the valley every afternoon. But the patio was sheltered from the wind and the hot sun, and we had no need to move from that calm place. We were on vacation for two whole weeks—days that raced by with our purest pleasure. Léonie and I came here every summer, driving from Berkeley in a station wagon and carrying a small harpsichord and some other instruments to enjoy and with which to entertain Mother. A busman's holiday for me, perhaps, but an opportunity to study new music for which I had no time during the year of concert preparation and teaching. And an opportunity to share new findings with my friend and student, Léonie, and with my music-loving mother.

Apart from the music, we brought very light reading—mystery novels for the most part—consuming them avidly and running into the little town for more as we began to run out. These excursions were a delight, too. We window shopped in the little Danish stores and invariably stopped for homemade ice cream cones, sitting in the shade
and watching the tourists in their sometimes bizarre garb. Once we rented a bicycle for two and cruised around, finding each other not as cooperative as we would have expected! Another summer we played miniature golf, and on a few occasions went horseback riding in the hills.

But our very favorite place was this patio. The garden was so remarkably green, with several really large trees holding well attended birdfeeders. At the back were tall clumps of pampas grass, and along one side there was an equally tall privet hedge, sheltering this spot from any intrusions. The smells of grass and privet and honeysuckle, the warm sounds of bees humming and birds chirping or fluttering in the shallow birdbath at the center of the lawn, the sight of the purple shapes of mountains beyond and multicolored flowers in the foreground, all offered sufficient gratification and stimulation for our lethargic bodies. Often my book lay unread in my lap as I gazed on this peaceful scene. Mother would appear with lunch, and after a leisurely meal we would clear the table and challenge each other to Scrabble. I think I never, in all my life, truly relaxed on a vacation as we did during these charming summer hiatuses.

My mother is long gone, and her beautiful house and garden have become a local museum in Solvang, witness to her work and the care with which she nurtured this garden and the little town itself. But the beloved place has now been transferred to our similarly protected back yard and garden in Berkeley, where, in the summer, my husband and I lounge and read or talk and look out at similar greenery and bright flowers, shady trees filled with birds and squirrels, hummingbirds darting and swooping, bees buzzing in the jasmine. This magical garden, acquired since my mother's death, so reminds me of her own that as soon as I gaze out of my bedroom window or move onto the back deck I feel myself relax, and for a few minutes or hours travel back in time and relive the leisurely vacation mood of our Solvang summers.

Léonie Jenkins died on June 30, 2000, at age seventy-four. I want to set down here some of my thoughts about this person who played such an important part in my life.

She came to call me "Lil' Sis," and we exulted in the pleasures of adoptive, chosen, sisterhood. She, an only child, and I, an oldest child and only girl, had never before known the delightful closeness possible between female siblings. But our relationship was rich beyond belief—Léonie, my physician and loving caretaker, and I, her teacher-confidante-advocate.

Since early in her life Léonie was determined to become a physician. She did so at a time when this was truly difficult for a woman, managing somehow to be accepted into the male-dominated University of California at San Francisco's Medical School after a teenage marriage and the bearing of her first child. She gleefully told the interview board that they didn't have to worry about what would happen to this female if she got married or pregnant; she already had done that! And she had her second child
(eventually there were five) while still a student intern at Oakland's Kaiser Hospital, where she herself had been born a generation earlier.

Léonie was a unique and gifted healer. Always true to the original meaning of the healing art, she spent time listening to her patients. An expert diagnostician in the field of musculoskeletal disorders, she made countless people well again through the use of ingenious techniques and careful monitoring of results. But even when patients could not rid themselves of permanent injury or disability, she managed to heal by virtue of skillful management of symptoms as well as compassionate teaching, making sufferers more comfortable and less fearful of future consequences. A part of her power resulted from her own confidence in her abilities. She recognized herself as a rarity, a "thinking orthopedist," for whom each patient was special, a potential scientific challenge, a mystery to be solved. Blessed with a very high intelligence, she reveled in challenges—the more difficult and puzzling, the greater her interest and the intensity of her efforts to understand and relieve the patient's pain. She spoke of herself as a "bulldog." unwilling to let go of a difficult case, never dropping or dismissing a patient with an unresolved problem.

Léonie could not imagine herself as anything but a physician, giving short shrift to her other multiple talents. She described herself as a musical "jack of all trades," master of none, dabbling at violin, viola, harpsichord, flute, recorder, harp—even a brief fling with a trombone. Although her enthusiasm did outweigh her expertise, she truly had fun with music and developed a keen appreciation for many musical genres. In fact she was a gifted composer, with little training but much imagination. She was rather sought after by local amateur musical groups, and when she had time she lovingly tailored pieces to conform to their varying levels of ability. Later she became expert on computers and began serious composition using the synthesizer. Her skill continued to grow throughout her life.

And this was not all. Léonie loved all kinds of crafts, from jewelry making to the creation of beautiful papers and boxes. For a time she designed and produced fine jewelry to sell in local markets, but she would leave this and go on to develop another skill as an occasion arrived for its use. The boxes were used to house the extraordinary, imaginative gifts she spent all year dreaming up for her friends. Paper parasols and the delights of Japanese origami entertained her children and the neighborhood. An expert dressmaker, she designed and made clothes for her five children in their relatively impoverished youth. (Wherever did she find the time for all this?) Often, her creative ability to use her hands and design things was put to use in her orthopedic practice—designing special braces, or adapting standard ones to fit nonstandard patients.

There seemed no end to the intellectual corners into which Léonie poked her inquisitive mind. An avid and constant reader, she slurped up everything from mystery who-done-its to mathematical philosophy. Her profession required a great deal of reading, of course, but she was curious about medical matters that went far beyond simple office orthopedics. She was a natural speed reader, and when we went on
holidays together we had to carry a small bag of books for me and a large bag for her, which she usually consumed within a day or two, necessitating frequent emergency stops at bookstores to replenish the supply. When she finally got around to learning how to use a computer, she started at the top—writing programs with no previous instruction, simply because there were no available programs for the things she wanted to do. She would wander into my house with a question or two (I had by then become a professional programmer) and would promptly be off and running, and I would not see her again until she was stymied with another "bug."

Léonie's persistent inquisitiveness and learning of new skills resulted in a fund of miscellaneous knowledge that constantly surprised her friends. She shrugged this off as her "blue serge brain"—it holds nothing of importance, she would say, but it picks up lots of "lint." However, whether lint or vital information, her quick intelligence enabled her to put this miscellany together in wonderful, creative ways that were characteristic of her persona both in medicine and the arts. Early in our acquaintance she suddenly asked me whether or not I was "able" to use a dictionary. Whatever did she mean? "Don't you find yourself utterly absorbed in the meanings of all the words on that page and the next and the next, forgetting all about what it was you thought you were looking up in the first place?" Indeed, I had to acknowledge that this was somewhat true—another commonality between us.

Soon after my first meeting with Léonie, as "Dr. Jenkins," we discovered our "Bermuda grass" phenomena. She and I seemed to have connections everywhere—in music, in science, in mutual friends, and we even lived in the same neighborhood. Léonie remarked that this was just like Bermuda grass—that ubiquitous weedy stuff so common in Berkeley. It's very hard to eradicate because the roots are interconnected for miles around, and tufts of connected pieces burst up above ground in unexpected places. Somehow this is typical of the university environs, where everybody seems to know everyone at some level. But we proved to have unusually broad connections. For instance, although she herself had never lived outside California, we discovered after some years that her aunt and my mother had studied in the same art school in Boston (and we did enjoy bringing these two gifted ladies together).

It would seem natural for Léonie to be a passionate advocate for the rights of women and of persons with disabilities, given her professional experience. But she had other reasons: Her husband was blind, having lost his sight in a childhood accident, and he himself was an astute and outspoken advocate for the blind both in California and nationally. Allen Jenkins had considerable legal training, although not a lawyer, and his life work was the establishment and subsequent operation of the California State Orientation Center for the Blind. Léonie was his partner in this work as well, and accompanied him to endless meetings across the country to plan and lobby for better programs for training and employing persons with visual impairments. The two of them provided me with much training in the concepts of disability rights and independent living—training that over the years I was able to pass on to others as I became more disabled and more deeply involved in the remarkable disability rights movement, much of which sprang from the San Francisco Bay Area itself.
Over nearly thirty years of friendship Léonie and I traveled many paths together, and had some extraordinary adventures. Not all of the paths were easy—each of us nearly died at one time or another and was saved by the other. Each of us held hands through marital troubles, professional ups and downs, serious illnesses, deaths of those close to us. At the same time we laughed a great deal and had playful holidays with my mother in Solvang, making music and challenging each other at Scrabble. Once, with our two husbands, we took a momentous trip to India. We collaborated on teaching materials for my harpsichord students, and performed together on occasion. She remained a constant advisor to me as my disability worsened, long after her official role as my doctor had ended, and her teaching enabled me to continue to think creatively about how to solve my disability-related problems even when she was not available for consultation. On my side, I taught her a great deal about playing the harpsichord, helped her with her musical compositions from a performer's perspective, debugged her computer programs, and in some ways taught her what it means to have, and to be, a friend.

Léonie's death might have occurred two months before it did. She struggled back from the brink, once, and determined to come to my home to celebrate my sixty-fifth birthday. She did succeed, most remarkably, but we were only able to hold hands tightly for a long moment—and it was her farewell.

One of our fondest memories was the Christmas vacation we spent on a magnificent excursion to Japan and India. There were five of us: Ranu and I, Léonie and her husband Allen, and our friend Frank Talamantes. Frank had also been a student of Howard Bern's, and was now a professor at U.C. Santa Cruz. We really were tourists this time, spending only a few days in Calcutta with the family, which included a memorable New Year's celebration at a posh country club to which Aparna's brother belonged.

After a few days in Japan, our first stop in India was Bombay, at Barda's flat. From there we traveled to Ellora and the Ajanta caves, where extraordinary ancient sculptures and paintings are preserved. Our travels were complicated by the fact that I needed to carry water with me at all times, in order to take my infamous pills, and in India it was necessary to purify the water with iodine tablets (ugh). I had purchased a camper's water bottle from the Berkeley Co-op, and the thing leaked all the way across Japan and India, constantly leaving me with a wet, dripping carryall bag and wet clothes. Complications ensued, also, owing to the fact that our interpreter, Ranu, spoke only minimal Hindi, the language spoken in most of the places where we traveled. Additionally, the internal Indian Airlines simply seemed unable to reliably provide reservations. In many places we ended up spending much of our time inside the airline offices, waiting impatiently to confirm our tickets. Eventually we learned to go into a back room with the ticket agent and grease his palm with a ten rupee note at every stop (approximately one dollar at the then rate of exchange), allowing us to escape into town.
to see the sights by what Frank came to call "the power of the ten rupees." Occasionally, such as the time when we were told we were being "bumped" in favor of a French tour group, the ten rupees had to be increased to a higher power before we could ensure space on the plane to our next stopping point.

We traveled to Rajasthan, visiting the Indian rajas' palaces in Jaipur and Udaipur, celebrating Christmas in a typically dingy hotel room in Jaipur with some scotch whiskey Allen had obtained from a duty-free shop on the way over. The whiskey had to be consumed British style, without ice or water, because of the dangers of infection. But we agreed this had to be about the most memorable Christmas any of us had experienced. Traveling along the dusty Rajasthan roads we encountered camels and elephants, plus the ubiquitous cows, as our taxi crammed with the five of us made its blaring way through the foot traffic, other taxis, and a few private cars, plus the highly decorated trucks with their signs that requested, "Please Honk." Our taxi driver invariably complied with enthusiasm. As we wound our way through the narrow streets of Udaipur, a cow meandered slowly and stubbornly directly in front of the taxi. As we passed through a still narrower gateway the cow lifted its tail and left a steaming deposit on the taxi's hood.

In Delhi we stayed at a guest house at a government science station, guests of a Sikh gentleman who had visited us in Berkeley. He and Ranu had been working on plans to place young Indian scientists who had been trained in the U.S. into better jobs within the Indian scientific establishment. Here we were treated like visiting royalty, provided with elegant meals, and a car and driver to take us to see the old city of Delhi with its Red Fort and other relics of the Mogul Empire.

From here we traveled to Agra, the city of the Taj Mahal. But at this point we ran into trouble. Both Allen Jenkins and I became ill with dysentery, in spite of all our precautions. I got so sick that a doctor was called to our hotel. I was immediately rushed to a nursing home, India's equivalent of a small hospital, where I was infused with fluids to combat my severe dehydration. I remained overnight in the nursing home, but it was necessary for us to get back to Delhi the next day in order to connect with our flight to Calcutta. Ranu tried to delay our departure as long as possible to allow the doctors to continue my treatment, but the taxi driver we had hired for the entire trip was impatient to leave. He was terribly concerned about the prospect of "dacoits." or bandits, holding us up on the road after dark.

We did end up on the road back to Delhi well after dark, with me lying in the back seat of the taxi with my head on Léonie's lap. I was plenty miserable, and the vague fear of "dacoits" on top of what ailed me made this one of the longest taxi rides of my life.

Ranu and I had gone on another international trip during the period while I could still travel. This was to Prague, Czechoslovakia, to visit a young scientist who had worked in Ranu's lab earlier. On our way we decided to take a holiday in Spain, which
we loved. Madrid was really special to us, with its big, spacious squares filled with lively people and outdoor restaurants with wonderful food partaken only late at night. We traveled to Toledo, admiring the sights in that ancient city, and later spent several days in Granada and the Alhambra. I told Ranu that I thought he must surely love travel so much because it makes one feel so irresponsible—we had only to get to the train or plane on time, and otherwise were waited on and free to do as we pleased. Although I did enjoy the holiday spirit, and was very eager to see all these splendid places, travel made me very uncomfortable indeed. I did not have an appropriate easy chair to sit in, one that supported my head, back, and arms. I was still limited in how far I could walk.

Prague is a beautiful city, but we were there before Czechoslovakia became free, and the city and its surroundings showed all the characteristics of Eastern Europe in the Soviet Bloc. New buildings were drab and poorly constructed, people lined up to purchase the necessities of life, and life seemed somber and grim. Our friend, Joseph, invited us to his apartment for meals with his wife and two children. He was telling his children that he was "ashamed" of his country, but that they were not to say anything about that at school; they must always appear to be party enthusiasts in public. While we were there Joseph took us to a harpsichord performance by an eminent Czech artist. I was disappointed, however, to discover that the famous performer gave a concert that was comparable to what one would have heard in the 1930s in the United States. No trace of historically informed practice. Once again, when we left Prague and stopped in Vienna for a day or two, we found the contrast to be as great as the one we had observed twenty years before, traveling from Moscow to Athens.

And early in 1983 I went on a trip by myself to Paris for several weeks, to study harpsichord with Davitt Moroney. Davitt and I had been friends in Berkeley, and I greatly admired the musicianship of this brilliant young man. I was still desperately trying to find my own musical creativity again, and thought possibly I was just going through a middle-age dry spell, such as one often reads about with authors or other artists. Maybe some lessons would shake me loose from the doldrums that had left my playing so lifeless and my mind so empty of new ideas.

I adore Paris, and did enjoy my sojourn there, which was very relaxed. Davitt's lessons were excellent, but they did nothing in the end to repair my malaise. But Davitt kindly allowed me to practice at his home when he was at work as editor at the music publishing house of l'Oiseau Lyre, and I enjoyed the time I spent with him and the music we worked on. I also paid a visit to the Paris Conservatoire, which houses a wonderful collection of historic French instruments, and I was given a good opportunity to try many of these, including one from which my own harpsichord had been copied. I visited a few friends, and at the end of my stay I traveled to Amsterdam to see some of our old friends there. This was a farewell trip, as I would be unable to travel again.

My mother died a difficult death in October 1983. While we were in India, she had undergone amputation of both legs as a result of severe arteriosclerosis. In
a later chapter of this book I include a brief portrait of her at that time, speaking about the difficulties she had adjusting to a major disability. But six months before she died, a series of small strokes had left her brain addled and her body helpless. A fiercely independent woman, she had never adjusted to life as an amputee. After her strokes, however, strange hatreds and fears loomed large in the parts of her mind that were still awake.

At first we had tried a nursing home. One institution after another, "good" places in beautiful Santa Barbara, fifty miles from Mother's home in Solvang. Mother was terrified of these places—strange people coming in and out of her room, strange noises day and night, no understanding of what was being done to her even in simple matters such as bathing or feeding. My brothers and I conferred, reviewed family finances, and finally decided to move Mother back to her home in Solvang and hire twenty-four-hour nursing care. There was risk in this—my brothers and I lived far away, and far apart from each other as well, and we could make only periodic visits for a few days at a stretch. Would the home care be reliable? We decided it was worth the risk when we saw Mother relax as she found herself in her own bed among familiar surroundings. The nurses were kind and competent, and lovingly helped us in our long wait.

The wait was not easy. The three of us, busy in our own lives, traveled from afar as often as we could to be with Mother. We spelled each other, taking turns to relieve each other of the burden, so I often found myself sitting alone beside her bed with the nurse. Sometimes, when my brothers were not around, I would play a little music on my harpsichord (I had left the small "vacation" instrument in her home for her last months). Mother seemed to enjoy that—in her semicomatose state she would smile a little. I would try un成功fully to read or study, but much of the time I just sat, waiting.

During one of these periods when I was waiting so, Mother began to choke. Her body heaved painfully as she gasped for breath. What to do? I panicked. The nurse said she needed suction, but at that time we had no machine for this. We would have to call the paramedics. "Call them," I gasped. "Do something!" The nurse put her hand gently on my arm. "If we do that, they will take her back to the hospital. Are you sure that is what you want? What your mother wants?" Oh, no, I thought, grateful that the nurse had reminded me of what had led up to this day. No, Mother could not stand that. And if she were to die now, that would surely be for the best. But it was so very hard to stand there, doing nothing, watching her heave and thrash and writhe on the bed, knowing that help could be here within minutes.

Miraculously—or is that the right word?—Mother did not die then. Somehow she caught her breath again and her throat and airway cleared on its own. I marveled at the strength with which the human body clings to life, and wondered again and yet again why it should do so under these terrible circumstances.

There were other times when all three of us—I and my two brothers—turned up on the same day, one departing, another arriving, deciding to spend a weekend
together there with Mother. As she slept, we sat in the bright kitchen that she had lovingly decorated years before. I had tried to bring some classwork I was doing, but quickly abandoned that as my thoughts could not stray out of this moment, out of this house. My brothers and I began talking about this difficult time in our lives, what our memories of Mother were, how we felt about her prolonged, agonizing struggle. Then, slowly, we began to speak of our memories of each other, how grateful we were for the support each of us was now giving to the other two, how we were growing closer together than we ever might have been had it not been for this shared, difficult, experience.

It took six months for Mother to die. I was not present at the end. One of my brothers called from Solvang to say that she had slipped away in her sleep, perfectly peacefully. All three of us were at peace, too, knowing that the long ordeal was at last over. But what had happened to us? Was there "meaning" in that last struggle?

I am convinced that there was meaning, and I am most grateful for it, and for my mother's willingness to live long enough for her three children to come closely together in this way. Had she died on the day of the choking, this would not have happened. Had she had a massive stroke and died quickly, this would not have happened. Had the nurse not stayed my hand, had Mother been taken back to a hospital, the surroundings and circumstances of her death would have been immensely different. The lessons learned from this natural death were to give me much to think about as we later confronted proposals for legalizing suicide.

During the six years prior to Mother's death I had kept on with the strange combination of drugs which had had a seemingly miraculous effect on my muscle tone. During all this time I had struggled with the continuing agonizing pain in my back and neck, arms and hands and legs, they had kept me functioning somehow in spite of the pain. All but my back and neck, it would seem. I could never hold my head upright for long, and desperately sought a supportive chair with comfortable back and head rest the moment any task was complete. I could hardly speak of this problem. My family was overjoyed that I seemed so well. I looked well, indeed, having gained sufficient weight and developed a healthy color. How I felt was internal, not to be shared with anyone. I had long ago learned that complaining aloud about my pain helped me not a whit, and only served to drive others away.

During these six years I continued grimly to keep up my daily routine of exercise. This consisted largely of weight lifting, in a very small way, since I was busy working out with three- to five-pound weights next to my neighbors at the gym who hefted fifty or one-hundred pounds or even more. Each morning I would begin, in the picture window of our house on our brightly colored, round astrological rug (we had substantially renovated the front of the house, removing the old porch and reorienting the new window so it looked directly out over the San Francisco Bay). I would systematically work my arms, legs, back muscles—stretching and lifting, grunting,
listening to a classical music station and staring out the window at the world beyond. Never would I succeed in surpassing any previous record. At most, I was keeping myself reasonably flexible. At worst, I may have been damaging muscle tissue in an unknown fashion. Probably I was simply wasting my energy on an activity that could never result in any gain. At least, with good Dr. Jenkins's astute advice. I had given up trying to perform aerobic activities.

During these six years I continued to walk, daily, down and back up the hill to and from town and to and from the University. Rain or shine I would walk. If I tired too much I might ride the local bus back home, having walked at least down the hill. Sometimes I took excursions in another direction, a mile or two or three through the hills to the reservoir, or down into the small neighboring town of Albany. Weekends Léonie would walk with me, and we would reward ourselves with an ice cream cone near her mother's house in North Berkeley, complaining that after our "reward" we must return in the up-hill direction, which was not nearly as much fun.

To me, the walk was only partially for exercise. More than that, it was to see the world as it is, rather than the imagined world one passes through when sealed into an automobile. I moved from one jasmine bush to another in June, or to the privet hedge in July, and sloshed through great puddles in January. I sat for hours in the downtown square near the rapid transit station and chatted with shoppers, with homeless people, with school kids—with whomever chose to sit near me as I munched on a bagel or a sandwich brought from home, drinking the now-fashionable cafe lattes or cappuccinos from a rolling cart parked on the sidewalk. On the bus, I met the cleaning women going up the hill to the rich houses beyond ours, the bicyclists riding up to the wilderness areas of Tilden Park beyond the reservoir, the school children on their way home, and an occasional retired professor deep in a tome (I once peeked into the lap of such a one, and discovered the reading matter to be in Russian).

With this physical routine, and with these medications, I had managed to keep my body intact sufficiently to care for Mother—to make the many flights and auto trips down to Solvang (300 miles south of Berkeley), to share with my brothers the burden of staying with her when she was no longer herself. I grieved for my mother, of course, but my mind was blank. I have earlier spoken of the lack of creativity in my music-making and teaching, the absence of clear memory of events that were passing by me. In addition, I had suffered increasingly from severe constipation until by now, at the end of 1983, my digestive functions had virtually—and dangerously—come almost to a complete halt. With Mother's death I was free to investigate my own problems, and a visit to the Kaiser clinic in Richmond was immediately arranged.

At the clinic a complete "workup" was ordered, with the results of one investigation leading to yet another. One X-ray indicated a tumor. Further investigation of that revealed no tumor. It had been an error in the preceding round. At least they were keeping me busy! But finally the doctors said flatly that the cause of my intestinal problems were the medications I had been taking. Why was I taking them? They were hardly specific to my disorder, whatever that was. (How could they know that? They knew nothing about my disorder. They knew practically nothing about the drugs they
had been feeding me over these years. Only later were we to discover that these drugs, primarily used as psychoactive agents, had secondary effects on muscle tone—sufficient effect, indeed, to account for my upright posture.) The advice was that I had better cease and desist, or I would die from intestinal complications.

Cease and desist I did. Immediately. This was the spring of 1984, and by summer I could no longer walk without the aid of canes, later using heavy armrest crutches on which I could lean without damaging my hands. But to my wonderment, by this same summer my mind had cleared. Suddenly all my creativity returned! I could think again, and dream, and create an atmosphere that would allow my students to steep themselves in the beauties of the early music that became once again my passion. I could hardly sit up. But when I did sit, I could play again! The music flowed—never flawlessly, but with excitement and rich with emotion.

Never had it occurred to anyone that the drugs that kept me on my feet were destroying my mind. How fortunate I was that my body warned me before it was too late, before the destruction had become permanent. I alone had known of this mental destruction. It seems a mystery to me that others around me had not been aware. They were so intent on my apparent physical health that they had not perceived what must have been a gradual change in my personality and mental acuity. Only the children noticed. They, of course, had not known me in the days prior to my miraculous "cure." But they did notice and did not hesitate to tell me how much more they enjoyed their "Sonama" even as Sonama became increasingly physically disabled. How charming that the children could see so clearly which Sonama they preferred!

I continued to stagger along on my walks, using the bus more, and once again giving up any attempt to drive. I felt it no longer safe—I could not count on being able to press the brake hard or give a necessary yank to the steering wheel—and it would have been agonizingly painful. I could hardly clamber in and out of the car, in fact. I began to notice the difficulties elderly persons had with public transit. I could no longer use the rapid transit (BART) trains at all. It was not safe, on my clumsy crutches, to attempt the escalators, and the stairs were too much of an effort. The elevators, on the other hand, were way off at the ends of the stations and nowhere near the ticket entrance gates or the trains themselves. There were no benches in between the elevators and these other areas.

Buses posed problems as well. There were few bus stops with benches, and I especially needed a bench with a good backrest. I began to make circuitous trips from one benched stop to the next, since even when I reached my destination I needed to sit awhile to rest. When I groaningly hauled myself with feet and hands up the steep steps onto the bus, the driver frequently took off before I was seated or even had my balance standing up. A number of ignominious falls occurred.

There were other difficulties. I could not stand in line at the Post Office or the bank. I began to write letters. In a few instances these letters resulted in some constructive changes. The post office initiated a system of "take-a-number," placing
benches around the lobby and calling out one's place in turn. But asking for a similar system at the bank had no effect whatsoever. A few extra bus benches sprang up around town, and the paraplegic disability access coordinator at the bus company learned a few things about disabilities other than his own. A few scattered shots, but a learning experience that would stand me in good stead over my future advocacy years.

We redeployed the little sit-down outside elevator that ran up and down our front steps. Like a movie film running in reverse, I lost function gradually but inexorably, needing to spend more and more time in bed. Ironically, my music school began again to flourish, and I had students of all ages and skills, taking on many beginners, both children and adults. Workshops with this group were marvelously rewarding experiences for all of us. At each level of experience, the students reveled in the clear progress of each of the others as much as they delighted in their own. I confined my "performances" to short lecture-demonstrations at these workshops, and they became a select and privileged experience for our own inner circle. We did invite others on occasion. For example, with Léonie's help we created much material for performance on two harpsichords, much superior musically and as an ensemble experience to the rather stilted and awkward performance of duets on a single keyboard. We had the local Music Teacher's Association come and witness the fact that very young children were able to learn to play together in ensembles as a result of this type of musical practice. As I had done earlier, I also invited performers on other instruments to come and play with us and for us, so that the developing keyboardists learned to understand and appreciate a variety of musical sounds and skills.

But this was too much for me. How could I bear to turn off this flourishing enterprise? I must think of something more constructive. I contacted two musical acquaintances and asked them if they would like to join my studio as teachers. Joan and Susan were vastly different personalities and had entirely different views of the harpsichord and harpsichord pedagogy, but both were experts and eager to help me and to participate in this rather unique venture. So, by the time another year had gone by I was again spending almost all of my time in bed, getting up to assist with workshops (which I conducted fairly successfully while lying on the floor—only having to warn our blind student not to step on me!), and allowing almost all of the individual lessons to be taught by my new assistants.

And, lying in bed, my next adventure began...
Chapter III — EMANCIPATION (1984-2000)

1. Publishing — First Solutions

The computer entered my life some time during the year 1984. At age forty-nine, I once again found myself lying in bed. I could, with the aid of a trapeze dangling over my head, maneuver myself into the lightweight, manual, semireclining wheelchair, and sit up for fifteen or twenty minutes at a time. Enough to dress myself, and then, later, to play a little on the harpsichord (I just couldn't leave it alone no matter how painful it was to sit and move my fingers and arms). With this wheelchair, however, I could not leave our inaccessible house, and in any event I could not sit up long enough to go anywhere. Maneuvering was difficult, as I had to use both legs and both arms together to make the chair roll at all, and our old house-on-the-hill was full of secret slopes and valleys known only to myself. How easy it was to roll from the kitchen into the living room, and how difficult to push myself back up to the kitchen! And how hard to get around the stairwell and into my bedroom through the too-narrow doorway.

My predicament made the rest of my family intensely unhappy for a variety of reasons. Naturally they were sorry to see me lose the ground once gained, physically. But my new-found mind was leading me rapidly in new directions they could not follow. Ranu became more and more silent, avoiding me and going to his study upstairs as quickly as possible, where he was literally out of reach. He had brought in a contractor to remodel the upstairs master bedroom, creating a wonderful eyrie for himself with a marvelous Bay view and much light and warmth and sunshine. I glimpsed the room once, having hoisted myself up the stairs on my fanny to have a look while still able to do such a thing. Ranu loved that room, did his studying there, and came downstairs only to help with meals, eat, and come into "our" room only to sleep. My bed was now a separate hospital bed, tucked up against his, but freeing me from the jarring pain caused by his movements. As time went on, he complained of noises I made during the night, as I was in constant pain unrelieved even during my snatches of sleep. Eventually he removed himself to the upstairs guest bedroom with greater and greater frequency, and we saw less and less of each other, while we each mourned separately. My anguish, and my pre-menopausal disposition, caused me to let loose with frequent bouts of temper, which further estranged us. How we needed each other, and how far apart we were, as though separated by a great geographical distance.

Unwittingly adding to the rift were my caretakers, who seemed to be in constant attendance. Earlier experience with my condition in this extreme state had indicated that mechanical massage of the muscles could relieve pain overall and increase function. But the massage was excruciatingly painful, it had to be repeated daily, and it seemed only to keep things more-or-less mobile and stretched. Apparently the
mechanical kneading of the muscles released some toxic wastes (probably lactic acid) from the muscles, often causing severe aches and sometimes triggering myoclonic seizures. Not an easy task for the masseuses. I honor and admire these wonderful women who came so steadfastly, supported me during these daily treatments, and became such good friends. Karen, with her wicked wit; Louise, ever loving and kindly; Joan-Marie, who added me to her schedule of basketball players; Charlotte, who loved India and became a part of the family (still known among the nieces and nephews as "Scarlet Charlotte"). But, finding me surrounded by these women who seemed to be giving me everything that I needed, Ranu was driven still further away.

Although many new ideas were now flowing through my mind, I could not always understand how to implement them. I talked at length with Joan and Susan, reviewing the progress of our students and making various suggestions. One of these involved simplifying difficult music so as to make the much-loved Baroque repertoire playable for beginners. I spent some of my 'up' time trying to write out simple versions of pieces that would illustrate this as a process, and give them a few pieces for starters. This endeavor had to be abandoned almost before it was begun, however, as my "up" time got progressively shorter each day. Occasionally I found myself giving odd-ball "lessons" from my bed, as I had once done with Charlene Brendler. Several such occasions quite successfully brought out a new approach to Bach from one of our local cellists.

My head was full of ideas about teaching, based on twenty years of experience with harpsichord students of all ages and levels. I thought seriously about what Janet Smith, my keyboard pedagogy teacher at the San Francisco Conservatory, had said about the clear need for a harpsichord "method" for beginners, and my unique position to undertake such a task. My thoughts turned to what would be needed for such a book, designed to introduce a musical beginner to the harpsichord as an instrument, and to teach the basics of music specifically as these basics relate to this one instrument. Not since the eighteenth century had such a book been created. But how to do it, mechanically? Not only could I not sit up to write, but my hand could no longer hold a pen or pencil for more than a few moments at a time, and my penmanship had become almost unreadable, even to myself.

One of the students in our joint music studio was a blind lady who taught word-processing and other computer skills at a local community college. It was she who suggested that I try dictating my book onto audio tapes. Soccoro was an expert typist, and would be delighted to contribute her transcription skills to the task, as she felt she would probably learn a lot while doing this. And so the book (later books) began. I lay in bed and talked into a microphone, and later in the week Soccoro returned with reams of fan-folded tractor-fed computer paper printed with my deathless prose.

Deathless indeed! Surely the death of anyone. I just could not seem to get the hang of organizing my thoughts while dictating, and this stuff was a mess. Well, what about editing? This turned out to be my first lesson about the world of disability, about alternative input and output devices, and about the strong skills and severe
limitations of a computer user who was blind. One afternoon we got on the telephone, I with my fan-folds and she with her talking computer. The latter spoke all of the words on the screen in a monotone, one after another. Punctuation marks were special noises or words, reminding me for all the world of a Victor Borge theater piece performed by R2D2. Of punctuation I remember very little, except that the word BANG signified an exclamation mark, which appeared altogether too many times within a short piece of my flawless text.

On the computer, the beauty of word-processing lies in the ability to reorganize text at will, to insert and change words, to "cut" text from one area and "paste" it into another. This is easy for a sighted person—far easier than it had ever been on the typewriter or with the old yellow pads of paper that Ranu and I had grown up with. But these simple edits are an altogether different proposition for the blind. As we worked together through several pages of text, Soccoro would have to let R2D2 read each screen until we finally found the spot where I wanted to make a change. If this involved pasting something from further down in the file, R2D2 would then have to continue to read until we found the new area, marked it, and finally went back and located the first spot again. After an hour or so of listening to the monotonous, raspy voice, Soccoro suddenly shouted, "Shut Up!" This was entirely too difficult, monstrously slow and painstaking. We were at our very worst on each end—she trying to edit, and I trying to say anything comprehensible on a first pass at the tape recorder. We would have to give it up.

Soccoro suggested that I get a computer, and she would teach me the skills of "twentieth-century keyboarding." But how was I to do this? I was lying flat on my back. Everybody else I knew who used a computer was sitting up, typing in a position similar to the one that I couldn't maintain while playing the harpsichord.

Until this very instant I had had absolutely no interest in computers. During recent visits my brothers had enthusiastically chatted about their experiences with computers, in some incomprehensible language that bored me to tears. But I was a musician, an artist, a harpsichord player, a teacher, a thinker, a writer—weren't those enough things to be without having to learn about some machine?

But today my perspective changed. If I could figure out how to use a computer, then I would be able to carry on with this writing project, which had gotten hold of me like an unsheddable foxtail. I must write all these things about teaching the harpsichord that I had learned working with my various students, that I had discovered through my own ups and downs as well as theirs, that I had incorporated into my own teaching from those who had taught me so many different aspects of music making and pedagogy. There just had to be a way—but what was it?

Through some resource that has long since passed from memory I had acquired a trade paperback full of generally useful information for persons with disabilities. Browsing through this now, I chanced upon a brief half-page describing an organization based in Chicago consisting of disabled people who use computers. I dialed the telephone number, and after a long-distance hunt found myself connected with a
member. He told me that they kept a private database listing members, the nature of their
disabilities, and the types of computers they used, along with any special information
about their set-up or what is now known as "assistive devices." He would look, and if he
found someone who used a computer from a flat-on-the-back position, he would get back
to me.

A few days later I received a call from a charming and thoroughly cultured
gentleman by the name of Fred Fay, located in Boston. He described his situation. He
was a high quadriplegic, unable to move because of the instability of his condition. He
had a four-poster bed-frame that supported an IBM monitor directly over his head.
Various other fixtures were located within easy reach. He sent me pictures, along with a
magazine article about himself and his computer. At this time, 1985, he was the only
person listed in the Illinois database with a situation even remotely like my own. Fred
was astonishingly gracious, sharing his time and information with me freely, and
enthusiastically encouraging me to proceed. "If you need financial assistance," he said,
"why don't you contact Judy Heumann in Berkeley? She may be able to figure out how
to get the Department of Rehabilitation to help you."

I had heard of Judy Heumann. She was famous as one of the early
activists who had brought the Berkeley Center for Independent Living into the forefront
of disability culture. I had never connected with CIL, except for fruitless attempts to get
help with some alterations to my house or to come up with some information that I might
be able to use in my travail. Somehow—possibly the CIL advocates sensed it—I still did
not relate to the world of disability, and so CIL did not relate to me. But I called Judy
Heumann. Again, like Fred, she was astonishingly generous with her time. Surprisingly,
she seemed to care about me. At the end of our lengthy conversation she suddenly said,
"I am most upset by the fact that you are lying in bed in a house you can't get in or out
of. You really ought to get yourself a fully reclining wheelchair and move."

Kindly meant, I thought, but what does Ms. Heumann really know about
me, my life, my husband and his need for this house, the things that are really important
to me, and on and on in this vein. I was to think of this conversation many times in
subsequent years, but for this moment I put it out of my mind. It was clear that financial
aid was not an option for me since our total income was far too high to qualify for any
program. I guess I would have to just invest in a computer system. It would not be
exactly like Fred's, because, unlike Fred, I was able to get in and out of bed several times
a day. I needed something that could be swung out of the way when unwanted (including
those daily hours when masseuses were battering my body), and could be swung over me
when in use. I consulted some contractors to see if something could be built according to
a design not yet fully visualized. I sent for computer catalogs, and browsed until I had
stumbled upon a solution, or rather, a combination of solutions.

Soccoro found a computer expert who could assist me with the purchase
of an IBM computer (286), a noisy second-hand impact printer of typewriter quality, a
small green-screened monitor, a standard keyboard. In 1985 IBM computers and their
clones still ran under the Disk Operating System (DOS), and no mouse functions were
available or required. Text commands were the thing—perfectly feasible for the blind and anyone else who took the trouble to learn the lingo. Perfectly accessible, too, to people who could not hold a mouse or operate such a thing in bed.

Meanwhile Shamal and Pranati bought me a sturdy wooden stand-alone bookshelf that they stood next to my bed on the side away from Ranu. From my catalogs I purchased two monitor stands, which were attached to the top shelf. On a lower shelf went a telephone and a new Talking Book machine. (I had learned from Allen Jenkins about the free books on tape available from the Library for the Blind and Physically Handicapped.) On one of the monitor stands I placed the monitor; on the other, the computer keyboard. Both of these could be swung over the bed. (In the case of the one that bore the monitor, this was not without risk. On one occasion the monitor suddenly flew downward toward my face; I managed to get out of its way with a heave that left me wrenched and exhausted for hours.) The keyboard was a problem, however. I could reach the keys all right, but I could not see them since my eyes were directed ceilingward. This would not have mattered on a typewriter keyboard, but computer keyboards carry extra "Function Keys," which are out of reach of the normal handspan, and one's hands never stay long in the "asdf-jkl," touch typing position.

The final link in my access modifications was a mirror. My neighbor Yvonne brought me a rear-view mirror off a truck. Just the thing! We clamped this on to the pole supporting my trapeze, behind and slightly to one side of my head. I could just turn my head enough to look in the mirror and see my hands (reversed, of course) on the new keyboard. Another slight turn enabled me to see the words appearing on my new green screen. I was off and running.

For the following two years (1986-7), I pursued a philosophy of "Those who can't do, write." Although the mechanics of computer use were taken care of, there was still a lot to learn. Soccoro came to the rescue by teaching me the twentieth century keyboard skills needed to get a start with word-processing, and we laughed heartily about our mutual teacher-student roles, and of the blind leading the halt and vice versa. I found typing exhausting, but learned quickly to use the cut-'n-paste features of MultiMate. Yvonne's husband taught me how to set up batch files in DOS to call up my various programs. The children—Rini, Rhea, Amitava—wandered in and out, asking me whether or not I had "any games." I looked at them in some bewilderment. This entire adventure-box seemed to me like a game, and I couldn't imagine the need for anything more specific. The kids continued to hang around, and since I was unable to get up to retrieve anything I printed out, they soon enjoyed earning small sums of money acting as my print managers.

The pain and exhaustion produced by using my fingers on the keyboard did result in my experimenting with some early assistive software. I learned about IBM's center for the development of adaptive equipment, about Prentke-RoeMitch and the University of Wisconsin's Trace Center, early and consistent players in the research
and development of special keyboards and programs that enable people without full use of their hands to use alternative methods to input words and other data into a computer. "Sticky" keys are a simple, effective method allowing the user to type two or more keys in sequence that normally must be held down together (now a standard program on IBM computers and clones). Another kind of program is word prediction: a letter is typed (or selected from a keyboard shown on the screen) and this causes a small dictionary to pop up from which further selections can be made. If the desired word does not appear the first time around, the selection of a second letter will further narrow the search. These programs were still rather crude and very slow, having now (as of this writing, 2000) become much more sophisticated. But I quickly saw the advantage for myself in using these as alternative means of working. As the muscles involved in typing fatigued, I could still work by calling in one of these adaptive programs. (This was an approach I had long used when practicing the harpsichord—when tired from practicing one type of technical passage I would switch to a wholly different problem and use a different set of muscles, simultaneously relaxing my mind and my exhausted fingers.)

I began writing in earnest, but I needed musical illustrations. I also needed drawings. For the latter I enlisted two of my students, architect Thomas Smith and art student Mark Farmer, to do cover designs and keyboard illustrations, respectively. Léonie Jenkins was eager to write music on demand, and relished the prospect of composing little pieces that would exactly fit the keyboard skills of the student at each new page. Printing these was another matter, however, and I needed to find a music graphics program that would enable me to write the music on the screen and print it out. This was an area in which the IBM technology was far behind that of the Apple/MacIntosh computers. There was only one serious program usable for my immediate needs—an application produced by a small company in Hawaii. Ultimately this program proved insufficient for use in publishing, but for the present it served to produce draft music graphics once I had acquired an inexpensive dot-matrix printer. To learn the program, I practiced by creating a variety of simplified pieces for our current group of students, including a Christmas carol for each to take home and add to their holiday celebrations.

Finally, as a text began to chatter its way out of my tractor-fed printer, I needed to determine whether or not this really would help anybody learn to play the harpsichord. My intention was to make a method accessible to children with the help of a teacher, but also usable by an adult beginner with or without a teacher. I hoped that the method would assist teachers, many of whom were pianists and really did not understand a true harpsichordist's approach to the instrument. I was sure that many keyboardists were approached by students who had constructed harpsichord "kits," but these teachers would not know exactly how to teach expressive performance on this instrument that many pianists still viewed as a somewhat inferior "forerunner" to their own keyboard. Apart from the need teachers had for a method book that would guide them in instructing their students, there were many geographically isolated adult beginners who had happily built a kit and would like nothing better than to sit down with a book that would step them through the process of learning to play.
I hoped, as well, that many adult students who had had piano or other music lessons earlier in their lives would still enjoy a simple approach to this "new" instrument, and by starting with fundamentals might unlearn old bad habits and acquire new good ones. I had seen this happen in my own studio—could I really make it happen through a book?

Among my associates, I "advertised" for a musical guinea pig. The requirements were to be without any previous musical training whatsoever, and to be willing to spend a few hours a week trying to learn to play the harpsichord without a teacher. Two of my masseuses offered themselves up to this endeavor. The game plan was for the guinea-student to sit at the instrument with the day's written pages on the music desk, and try to work her way through the lesson, including Léonie's latest little teaching piece. The writer, meanwhile, lay in bed in another room, studiously not interfering in any way. Only when the student became "stuck" and could not clearly understand the instructions, was she then to come into my room and request a rewrite. This would be produced on the spot, clattered out of the impact printer, and the student would return to the harpsichord to try anew. In this manner we worked our way through studies that would eventually take the student through a two-year course of keyboard lessons, graduating into regular literature with no further need of a "method" approach.

Thus *Starting on the Harpsichord* had its practical inauguration. By the time the text was complete we were convinced that it was indeed a workable method. One of the guinea-students, Louise, became sufficiently proficient that she joined our workshop group and performed for the other students. Would the book really be a success?

What did I think a success might be? I was passionately interested in spreading my teaching philosophy to other musically minded people around the country, especially as it applied to this marvelous instrument for which I had developed such love and insight. Naturally I was not looking for a commercial success, since harpsichord students are never numerous even in early music centers such as the San Francisco and Boston areas. But how could this book get distributed, in fact? Should I seek a publisher?

Apart from this problem, hardly unique to new writers, I realized that the beginner's method did not contain all that I wanted to say about teaching the harpsichord. During my workshop presentations, I discovered that there was much of value to the harpsichord lover that should be taught, but that went well beyond the scope of learning the mechanics of playing the instrument. Again there were no books for musical novices that discussed performance style, or explained the essence of the different types of pieces encountered in the Baroque literature, or talked about tuning and its significance for the harpsichordist. There were scholarly books, to be sure, that described these matters in alarming detail. These were sure to frighten off a novice who hardly understood the musical language in which the descriptions were couched. Reflecting on these matters, I began to work on a second book, *Skill and Style on the Harpsichord*, which I hoped
would be accessible to anybody who loved the music, whether or not they were trained
musicians.

A third book followed these two in due course, with Léonie's help. This last, *Playing with the Elements of Music*, was designed to give a background in modern musical theory, but using the harpsichord as a tool. This one has since been criticized by early music performers and teachers as not teaching the "early music approach" to harmony and other such matters. To me, it was important to allow the music student to develop an understanding of the musical language that would enlighten any modern discussion of music structure and harmony, and indeed, open the door to reading the literature mentioned above (beyond my own three-part series). Additionally, it was hoped that this book would allow a student to develop some skill at improvising music at the keyboard, so simple but progressive instructions on improving little free preludes were included. These activities are natural to the harpsichordist, but can equally well be used by piano students, and develop the ease of sight reading and the understanding of musical structure that enhances both musical memory and analysis.

As this work continued, I did try to find a publisher. One or two were interested, and grasped the import of the works, but we ran into problems of cost. Book publishers told me that they basically were set up to print books—that is, the written word. But my books, they told me, were half music, and needed to be published by a music publisher. Of course, the opposite was true when the music publishers were consulted—there my books were said to contain too much text, and were not suitable for a press that was set up to publish music. One company that seemed serious about trying to pick up these pieces that had fallen so completely through the cracks did come up with a cost estimate. For a small printing, the cost to the purchaser of each book would be very high indeed, precluding their use by the very audience of students for whom they were intended. The universal result of these investigations was the advice to self-publish these books, which left the question of distribution moot.

Jumping ahead more than a year, I did eventually determine that I must self-publish my books if they were to see the light of day. To accomplish this I needed to learn much more sophisticated desk-top publishing techniques. I decided to use WordPerfect for typesetting, along with a sophisticated music publishing software called Score. A recorder-playing acquaintance of mine had begun a music-publishing business, and he kindly instructed me in the use of this complex program. I was off to a somewhat lumpy beginning: with my first book, the word processor and music programs were not yet compatible, so it was necessary to carefully paste up all the music—even individual notes scattered throughout the text—by hand. This was accomplished with the wonderful assistance of Rica Anderson, who worked with me throughout the spring of 1989. We managed to get *Starting on the Harpsichord* ready for printing that year, with the second and third books following shortly thereafter. By the time we reached *Skill and Style on the Harpsichord*, I was able to import the music directly into WordPerfect and no longer
needed the painstaking paste-up job (luckily, inasmuch as I had run completely out of money and unhappily had to let Rica go).

This endeavor took more than a year and a half, during which I pursued many other activities described below. Apart from book production, I also learned what it meant to be a small publisher, how to copyright my books, how to market them, and all the rest. I established a publishing company, called Bon Gout (meaning "good taste," reflecting the ultimate guide to refined performance practice in eighteenth century France). In the end I accomplished what I had set out to do, namely to spread my ideas around among harpsichord players and teachers.

Starting on the Harpsichord received a very nice review from my old friend and teacher, Laurette Goldberg. Perhaps the value of the books is best illustrated by another incident, however. Shortly after the first book came out I was able to attend a concert of my Amsterdam teacher, Gustav Leonhardt. He eagerly came out into the hall to greet me, and with his usual kindness asked after my health, and sympathized with my clearly increased disability. I asked him if he would like to see the book. "A method?" he asked, rather scoffingly. "I don't think anyone past fifteen years of age should have to use such a thing." But then, leafing through it, he began to smile and said, "Well . . . perhaps twenty-one years." I laughed, knowing from his typically understated praise that he considered my work well done.

Although I found this solution to the publication problem eventually, before I got to that point I needed to make some drastic changes in my life. My friend, doctor, student and co-author Léonie Jenkins had continued to try and find a useful diagnosis of my medical condition. Another student, a neurologist, in fact did take me into his clinic and performed a muscle-nerve biopsy (ghastly memory, that!); he pronounced my disorder to be a case of Kugelberg-Welander Syndrome. He seemed vastly enthusiastic about pinning a name to my perplexing symptoms, and my present medical doctor has encouraged me to keep this name on all medical records. So this has followed me over the intervening years, a name with no meaning or attachment to my reality, but a name that the Social Security Administration and Medicare have accepted as their reality.

Because Léonie had become so very close to me personally she no longer wished to manage my medical problems on a day-to-day basis. By this time she also had retired from Kaiser Permanente and had only a small home practice that could not support any extensive testing or other potential needs for my complicated case. Ranu and I decided to go to a different HMO, which allowed us to obtain a family physician as our primary medical provider. It was difficult for me to get out of the house to go to a doctor, but my student-friend-teacher Soccoro advised me to call the City of Berkeley to see if I was qualified to take something called "Paratransit." She told me that there was a van service for people in wheelchairs.
And so I met Vicki Riggin. Vicki had just begun providing van services in Berkeley for disabled people, and her service was unique. "Vantastic" would indeed see to it that I was signed up with the City of Berkeley's Paratransit program, but in the meantime she would take me to the doctor anyway. I explained that I could not get myself from the house to the street because, although I could transfer to the little chair lift, I couldn't simultaneously bring my wheelchair down to street level. Vicki would take care of that, she said. "No problem."

Incredible! I found myself leaving my house, being lifted into a van, and transported to the doctor's office. I explained to Vicki that I could only sit up for twenty minutes or so. That was ok. She would get me there and out of the van in ten. She would wait for me while I saw the doctor, and whisk me home in a jiffy. Well, if she could do all that, I said, I would schedule another ride with her that was to a fun place—not a doctor! Indeed, the next and several succeeding trips were to concerts. Of course I couldn't "sit" through a concert, so I took a rolled-up mat with me and lay on the floor, hopefully somewhere out of the path of traffic. I must have been a bizarre sight, more so than the ordinary wheelie so common in Berkeley, but at my age I minded not a whit. It was exciting to have a way, once again, to get out and hear my friends and associates and others perform.

The doctor's visit was productive, however. I requested, and obtained, a home visit from an occupational therapist. The latter had helpful things to say about transfers, hand holds, and—most important—about fully reclining power wheelchairs. If I could recline fully, she thought, I might be able to teach again. Couldn't I essentially use a recliner as a daytime "bed," parking it in the living room near the harpsichord, and teach from there? Maybe so—at least it was worth a try.

This led me to another long-time helper, Stewart Johnston of the local orthopedic supply shop. Yes he could help me. He had an old (really, really old and decrepit) electric wheelchair with a recliner on it, that could be used inside the house. There was no possibility of using it both inside and outside, inasmuch as the heavy power chair could not be carried up and down the steps, in contrast to my little mechanical semirecliner. Anyway, the point of this was to get into the living room, was it not? So this old thing ought to do.

The experiment—expensive as it was—was not an immediate success. My back was very unstable, and indeed I had torn a spinal ligament just moving around in my bed. (I began to think of myself as a thoroughly boiled chicken, with easily detachable vertebrae.) Probably for this reason I just could not get used to the recliner. No matter how many cushions or pads I stuffed into and onto it, I could never stay in the thing more than twenty minutes or so, so that it did not extend my out-of-bed time enough to make it worthwhile. Eventually we sent this machine back to the shop, although it did not stay there indefinitely.

In fact, despite the lack of a clearly defined path ahead of me, it was obvious to me that I would not remain in this limited and limiting situation. I was
exploring, experimenting, listening, learning. Gradually the next steps would become apparent, even obvious. Again I was about to embark on new experiences and even a new life.
2. Coming Out

My confusion regarding entry into the disability community was profound. During this entire period of rapid decline, from 1983 to 1987, I tried a number of countermeasures. In fact, I was ready to try absolutely anything to get myself out of the situation in which I now found myself. Surely if I had once been miraculously "cured" I could do that again, couldn't I? Hopefully without the same effect on my brain.

So I began a journey through all kinds of alternative medical and psychological treatments. These were interesting adventures indeed, and I learned much that would help me over subsequent years. Chief among these medical ventures were homeopathy (two different practitioners), Chinese herbs and acupuncture (with a well-recognized local practitioner and eventually his Chinese teacher), and Indian Ayurvedic medicines. Some of these interventions seemed to help for a time, and I became convinced that I could drum up a dandy "placebo effect" at the drop of a hat. As time wore on, however, it was clear that none of the treatments, nor indeed the standard medical drugs of earlier years, had really had any effect on the course of the muscle disorder. The psychoactive drugs had masked some of my symptoms, but had not prevented the progress of the underlying problem. Looking back, I could see that I had experienced a gradual decline in muscle function, a worsening of the pain, and a falling away of muscle strength in each affected muscle. Gradually, over those years, more and more of my skeletal muscles had been affected. What had begun in my neck and back had spread to the shoulders, arms, hands, hips, legs, feet, respiratory muscles, eye muscles and, later, facial, tongue, mouth, laryngeal, and pharyngeal muscles—in short, just about everywhere!

My alternatives were not restricted to the biological or scientific. I subjected myself to faith healers—one a shrewd psychologist who really helped me in an odd way by enabling me to see my early childhood with a new clarity. After this session I called my father and had a long talk with him. Blessedly, I was able to tell him about misunderstandings that I had had and to ask and receive his forgiveness. A second faith healer, a rather splashy individual of momentary fame, caused a psychological disaster and created a nearly unhealable rent within Ranu's and my shaky relationship.

I had continued with massage and other therapy. For years I kept up a rigorous exercise program, working out daily with weights and stretches. The physical therapist who taught me Feldenkrais techniques was firmly of the "use it or lose it" school of thought, and insisted that I push myself to get on my feet and, using platform crutches that supported me by my extended forearms, drag myself across the living room each day. Finally, exhausted, I had a sudden revelation: What was so great about the other side of my living room? If I simply remained, more rested, on this side, I might have the strength to accomplish something truly useful.

Apart from my slow and tentative awakening to the reality of my disability, I was now going through menopause, with all of its attendant emotional
instability adding to my mental confusion. I was certainly not getting adequate counseling—or at least the advice coming from family, friends and healthcare workers was terribly one-sided. Ranu was not hearing my anguish, or not comprehending it. Finally, after a few tearful shouting matches with an utterly bewildered Ranu, I decided I must go to a psychologist and try to understand myself. I forget, now, who recommended the young lady with whom I made a series of appointments, but she turned out to be the right person at the right time.

It was a struggle to get to her. Her home office was inaccessible, so I found myself crawling through her hallway and onto a mattress on the floor, where she was wont to perform Reichian exercises with other clients. Flexibility itself, this good woman announced that she would forgo any such treatment in favor of plain talk, of which we did plenty. Finally, after several sessions, she declared, "You simply must admit to yourself that you are disabled. I really don't understand what your husband expects you to do, but it is certainly unfair of him to stand in the way of your acquiring a good wheelchair and letting you get out in the world. In any event, you need to drop your endless search for cures and get on with your life."

Remarkable advice! It was just what I needed to move on. I came home and called Stewart Johnston and began negotiations for a new wheelchair, and asked him to refurbish the old one so that I could use it outside. Would I be able to go around the block with it? Even downtown?

Meanwhile Léonie suggested a brace to help me sit more or less upright for periods of time. The wheelchair recliner would enable me to rest as often as needed. It turned out that Stewart was a brace-maker (orthotist) as well as salesman of durable medical equipment, so he and Léonie together designed a brace that was functional for quite a few years. In the brace, and using the platform crutches with which I was able to stagger for a few steps, I managed to park my manual chair at the top of the stairglide, transfer to the mini-elevator, stagger down to our garage, and literally fall into the wheelchair. With glee I simply "took off," often falling into potholes and being rescued by the good-hearted residents of Berkeley. Coming home was harder—neither the old wheelchair nor I was quite up to the long hill, but I was free at last!

It was clear that I would not be able to make the difficult trek on crutches to and from my precious wheelchair much longer. I would simply have to get out of this house. Did Judy Heumann's words come back to me at this time? Possibly not consciously, but they surely influenced my growing resolve to move. After more hysterical arguments with Ranu, I finally persuaded him—I am sure to his immense, if unadmitted, relief—that a change was imperative. He agreed to an experiment, to try to find an accessible house that we could rent for a year, after which we might be able to come to a decision about our future.
Now for the first time I found myself confronted with discrimination based on disability. I had been aware of the fact that, as I happily tooted down the street in my ancient chariot, many people looked the other way and failed to make eye contact. It saddened me, as I realized they hadn't the slightest notion of the joy my wheelchair brought me. But I was less aware of the deep-seated distrust and real fear that my appearance evoked. As Ranu and I set out to find new housing together, I began to be conscious of the barriers confronting a person who can take no step without a wheelchair. Few places indeed were even close to being accessible to me. We finally located a comfortable home for rent in a lovely neighborhood, but a temporary ramp was needed to manage the few steps up to the entrance. The owner refused to allow even this modest construction, although I later realized that the problem was less the ramp itself than the perceived potential for damage to the house interior.

We gave up. There was no way that we were going to find an abode that would suit us both. Ranu wanted something in which he could feel as comfortable as he was in our own home. I just needed something that would enable me to come and go independently. We decided to split up or rather I decided to do that, hoping to be able to locate something at a later time that we could purchase for a permanent home together. Ranu said little, withdrawing into his shell, leaving my next steps up to me.

For a couple of months I scoured the length and breadth of Berkeley and Oakland hunting for an apartment. Vicki took me to look at the few apartments that were accessible, warning me against the seamiest parts of town. I located a decent made-over basement apartment on the shore of Lake Merritt that looked as though it would work. The owners lived upstairs and seemed compatible. I came home excited, sure that the deal would close that evening. Then Ranu took the call—the owner informed him that his brother had just called and was going to need the apartment. Crushed, I was ready to accept this fabrication. Ranu, more experienced in the language of discrimination, told me the cruel truth: I was unwanted.

At last I found a relatively new apartment building in North Oakland that advertised an accessible unit. This one unit was strangely located on the third floor, and was expensive. Here again I recognized that without Ranu and his University salary this too would have been totally out of reach. It was indeed humiliating to be required to call Ranu and ask him to sign papers on my behalf—so much for any pretense of true independence. Apart from that, of course, I needed his assistance in moving my furnishings into the spacious two rooms. With help from my brother David and two friends I soon found myself alone, if not fully independent, with my hospital bed, computer, and harpsichord. My personal care attendant, hired the year before while I was still in Berkeley, was able to work a few hours a week at my new Oakland digs. Massage therapy continued on a reduced schedule, so at least I had a few familiar faces around me. After the initial flutter of moving, however, Ranu rarely came to visit and was clearly uncomfortable there, as though visiting a patient in the hospital.

I felt terrible for Ranu, and wished there was some way I — or anyone — could help him with his pain. His understanding of disability was nil, but his hurt was
such that he was unable to hear what anyone might say on the subject. He simply didn't want any of this to be happening, but it was unstoppable and inexorable. His pain was as great as mine. I talked with his closest friends—could anyone else help him? In the end, only time and other circumstances were able to heal him.

So began my life as a disabled person—a "crip," as I soon learned to call myself. A few months prior to my move, Vicki Riggin had asked me for help organizing the disabled community to find more funding and improve county services for Paratransit for the van users countywide. I told her I would be happy to help if she would provide transportation to and from necessary meetings. Soon I found myself on the telephone for hours every day calling people on Vicki's list of van riders. For the first time I began to meet other "wheelies," as we traveled together to meetings of the Alameda County Board of Supervisors, the Regional Metropolitan Transportation Commission (MTC), and the Alameda County Paratransit Coordinating Council (PCC). My head was awhirl with new acronyms associated with transportation, and new concepts about funding sources and the power structures in city and county government. The lead transportation planner working with MTC on Paratransit, David Kaufman of Crain & Associates, became a mentor. I struggled to understand the planning process needed to allocate new sales tax revenues for special transportation for seniors and disabled persons (recently passed as Measure "B" on the Alameda County ballot).

My scientific background helped a lot. With my new knowledge I prepared a detailed report, showing it to my new friends in the disability community. They were excited by it, and together we went to the Berkeley City Council, presented the document, and asked for its support. "Great paper," I was told. I not only got city support for these proposals, but also for ongoing supplemental Paratransit funding for Berkeley residents. My first successful advocacy!

I began attending the Berkeley Commission on Disability meetings. All members were disabled, with a variety of disabilities represented among the nine members. The Chair at that time was a remarkable woman by the name of Katherine Corbett O'Toole, who became my parliamentary role model. She had a wonderful style. She invited everyone to speak, listened carefully to their concerns, yet managed to keep the meeting moving right along, conscious of the time, always smoothly completing the full agenda. What an education! I was like a sponge, soaking up information about the myriad of problems existing for persons with disabilities even in our enlightened city. Eagerly sharing my new insights into transportation planning, funding, and outlets for advocacy, I soon began to get the commissioners' respect and support. One, Mark Kennedy, became my right-hand man from Berkeley.

Another close Berkeley collaborator, Judy Greenwood, was soon to be a dear friend as well. Suffering from severe rheumatoid arthritis, she, too, was in a reclining wheelchair. It amused us enormously to observe that "ABs" (as we called able-bodied persons) could not tell us apart. Having observed her from afar, while my
disability was still hidden, I was utterly delighted to become her friend. After her tragic death in a senseless accident, I wrote the following piece (from Recollections of Judy Greenwood, later published through my Bon Gout Publishing Company).

I had witnessed her travels around Berkeley for years and, foolishly, was afraid to introduce myself I had seen the inner glow on her face, and knew from my own experience the profound joy given by her hard-won mobility.

Living in the same part of town, I encountered Judy frequently. Her little black dog Trixie—would bark furiously at my crutches, fiercely protecting her mistress against my presumption. Judy became a role model. I suffer from a progressive muscle disease, and knew that some day I would need her special mobility aids. Observing her fearless travels gave me courage.

When we finally met it was in a Paratransit van. We had both been requested to assist in the improvement of county special transportation services for the elderly and disabled. Our rapport was instantaneous, and we spent the next twelve months working closely together on transportation projects. We gave each other total support—her support continued to sustain me after her death in completing the work we had begun together.

Our friendship grew and deepened. Judy was younger than I, but with a world of experience and wisdom in the area of disability which was new to me. Judy mothered me, fed me, and brought me into her loving family of caregivers. To my amazement, occasionally I was able to give her help with my own insights, and we reveled in our shared experiences. We shared sorrows, too, and in doing so, lightened our burdens.

Still, many of our experiences together were rife with humor. Since we both tooled about Berkeley in reclining wheelchairs, the rest of the world could not tell us apart. What perfect proof of our contention that the world at large saw only our wheelchairs and not the rest. We called ourselves the "Bobsy twins," and raced about together, checking out each other's rear wheels and belts, laughing hilariously the while.

We delighted in each others' creative lives. Judy loved my harpsichord playing, and treasured a tape I had given her—playing it over and over, declaring that it was her favorite music and her favorite performer. I struggled to learn in depth the important ideas she was formulating for her thesis on disability in literature. She was shy of sharing these details, and many were lost with her.

Indeed, her delight in other people, her other-directedness, often concealed significant areas of her own life. I knew of several important activities that she had not shared with me. I wondered how many friends she had—equally close—who likewise did not know of her interest in music or in the particular areas of transportation with which
we struggled so hard. It seemed to me that she loved all people whom she considered fair, and that she instantly became intently absorbed in each of their interests and activities. So much of her true inner joy came from the pleasure she derived in exploring and supporting the work of others.

Judy's legacy to her friends lives on and continues to bring joy to us. She passed on to me her wonderful secretary [Rica], which enabled us to support each other in our grief over the loss of our dear friend, and which enabled me to complete a project which was dear to all three of us. Shortly before her accident she introduced me to another friend [Mary Elliott], whom 'you ought to meet.' This, too, blossomed into a friendship of importance to us both—just in time, too, to enable us to sustain ourselves during our period of mourning.

As I dash about town on the way to various adventures, Judy remains at my side, egging me on, laughing with me at life's pleasures and absurdities, and sustaining me with her courage and compassion. Through this friendship, my personal view of the world and its people has been changed forever.

This tells as much about me as it does about Judy. How far I had come in a brief time, with her help and that of many others with whom I worked during these early formative years of my "disability" character. Before I left Berkeley for my new Oakland apartment I had been elected Chairperson of the Alameda County Paratransit Coordinating Council—an unwieldy collection of thirty-two members representing seniors, disabled persons, service organizations, and city Paratransit providers and staff. I had also acquired my new power reclining wheelchair, spectacularly decorated with reflective spots by my nephew Amitava. For the next year I was immersed in politics and "life on the streets."

I will defer further description of my tenure as Chair of the Paratransit Council for Section 4, below, on my advocacy work. At this point as I want to elaborate a bit further about the "street life" mentioned above, since this was a big part of "coming out" as a full-fledged member of the disability community.

I had to learn to get around by myself. Vicki and Paratransit were fine for long-distance travel, but public funding limited us to only three or four rides a month in those days before the passage of the Americans with Disabilities Act (ADA). I would have to try to use public transit.

BART (our local subway/elevated service) was moderately easy for a power wheelchair user, in contrast to its utter impossibility during my years on crutches. However, finding the elevators with which to access the system was a challenge, as there was no consistency from one station to the next as to their location. Furthermore, even experts among disabled riders were stymied by the frequent elevator breakdowns and outages. In most stations, getting from street to train involved two separate elevators.
When either of these was out of order, it was necessary to travel one or two miles just to get in or out of the BART system. Sometimes the problem was simply that the station agent had failed to turn on the power at the elevator. Since the intercom allowing communications with the agent was electronically linked to the elevator itself, in these cases one could not even call for assistance, and the system was rendered effectively inaccessible. Other BART hazards included the gap between platform and train, which varied in width depending on the individual car's "leveling system." On several occasions my front wheels were trapped in this gap and I could be freed only by fellow passengers willing to lift my heavy chair out of its predicament. The first time this happened I was terrified that the train would take off, dragging me along with it, but I soon learned that it was programmed not to pull away while I remained an impediment on its exterior.

I spent a lot of time in and around BART stations, since most had accessible pay telephones. Most of my daytime business, for the Paratransit Council or for the publication of harpsichord books (I was now doing business as the Bon Gout Publishing Company), was conducted on the fly from BART pay phones. My other daytime haunt was the headquarters of the Metropolitan Transportation Commission, where most of our formal transportation meetings were held. The MTC building had a large lobby with accessible pay phones, and a cafeteria where I often had my lunch. I was so busy downtown that I practically had a regular "job," traveling to MTC via BART in the early morning and returning home late in the afternoon. Informal meetings were commonly held in Berkeley cafes or restaurants, where we activists huddled around a table in an accessible spot and had confabs over a light meal or coffee.

Traveling on the street from my apartment house to the nearest BART station I had to go through one of the seamier parts of Oakland—past a string of motels and broken down houses teeming with prostitutes and drug dealers. I used to feel a knot of fear when one of these characters, or the shabby homeless folks downtown, called to me or stopped me on the street. What did they want? Would they confront me, even attack me? You read about that daily in the newspapers. But I soon discovered that in my wheelchair I was not a target, but rather considered to be another down-and-outs, and under the protective eyes of the street people. When one of them did come up to me and try to cadge a coin, he was immediately shouted out of the district by a gang of tin-cuppers yelling, "Stupid, you don't go begging from her." Soon I felt slightly fearful only when it was plain that one of them was caught in the mental prison of a bad drug trip. Would he think I was a tank bearing down on him in my power chair? Would he lash out with some weapon in his own fear?

I came to know many of these people—none of them by name, nor did they know mine. But we saw each other in the early morning, as they were just arising from their cardboard shanties and I was making my way to the subway. Again we met in the evening, as the sun went down, and they—we—were trying to decide what the night would bring. Would it rain or be cold—should they try to get into a shelter, and would one be available to them? Could they hunker down in their "regular" doorway, and survive another night? (And, on my side, would I make it home without a breakdown?)
Somehow, as we greeted each other, they just treated me as part of their scene. To them, although I knew better, I was a fellow unfortunate, to be protected in times of need. I never gave any of them anything beyond a smile and the time of day, although I asked after their health and how well they had survived the last twenty-four hours. They treated me with love—embracing and even kissing me from time to time. And when my chair malfunctioned, a shadowy figure was immediately at my side, with a hand of assistance.

One evening on my way home I heard the tall black man dressed in rags whom I had just whizzed past call out, "Hey, hey you, come back! Come here!" Insistently. "I want to give you something." So on this occasion, with my friend's urgent call, I turned back to see what was on his mind. In his hand was a beautiful bunch of flowers—wrapped, so I do not know where he got them. But he insisted on placing them in my lap. "We want you to have these, because we love you," he said. "We homeless people want you to have these flowers. Please know how much we love you." He touched my hand, then grasped it in some secret kind of handshake. "They is closed right now—because they is cold," said my friend. "But when you get them home they will open." Indeed they did, and so would he, had he a home to open in.

On another occasion I had been in Berkeley visiting the family, and found myself at a bus station late at night trying to get back to my Oakland apartment. A thin, dark, ragged man was poking in a nearby garbage bin, and he kept looking at me—leaving the garbage and circling around me, going back to his task, coming back and circling again. Finally he got up the courage to ask, "What are you doing out here at this time of night?" When I told him I had visited relatives and was on my way home, he asked very seriously, "Does your family know you is out here? Do they even let you come out by yourself at night?" I assured him they did, and he went back to the garbage. In a few minutes he was back with an indignant cry, shouting, "Well what kind of a family do you have anyway?" At that he gave up his search and settled down on the bench near me to keep guard until the bus came.

By now I was an experienced "wheelie" and a pro at riding BART. On the street, I had had various accidents—flat tires, dead batteries, broken belts, electronic malfunctions, and front wheels trapped in potholes or grooves on the edges of driveways. Once one entire front wheel popped right off leaving me stranded in the middle of the street in Oakland's Chinatown. Probably fifty people passed by before one was found who spoke English and to whom I could explain my plight. But the predicament that terrified me the most was a failure of the recliner mechanism. Of course this could leave me either fully reclined (in which case I could not maneuver the chair) or worse fully upright. Since I could only tolerate a few minutes upright, in those instances I had no choice but to fall forward out of the chair onto the ground or floor and lie flat until I could be rescued.

Life with a disability involves hazards in the home as well as outside. One evening as I worked alone in my third floor apartment I had a fire alarm go off in the
hall outside. I wheeled out into the hall and lay in my chair outside my door while people ran around shouting, trying to find out what was happening. Soon a lady stopped and said to me, "Don't worry, Hon, it's only a fire in the elevator." "Oh, great," I thought, "That's just my only way out of here."

Indeed it had been "only" a fire in the elevator, and soon we were free to return to our apartments. But now I was in a dilemma. I had meetings the following day at the Metropolitan Transportation Commission headquarters, and I soon determined that the elevator would take several days to fix. Furthermore, Ranu and I had planned to go to San Francisco at the end of the week to stay for a few days in a hotel there during the American Society of Zoologists annual meeting, at which our dear Professor Howard Bern would be honored in a big way on the occasion of his retirement. What to do?

The next morning I called the fire department. Weren't they the folks who rescued people trapped in the upper floors of buildings? "Oh, no," I was told, "that is only during a fire." Hmmm. What next? I tried the police department. They did send somebody over to check out the situation, but when the police officer got a look at me and my heavy chair he told me that he had a "bad back" and was unable to help me in any way. Finally I called my friend Vicki Riggin. She was the rescue person par excellence, and proved worthy of her reputation. She said it was certainly an "emergency" to be stuck on the third floor of a building with no escape, and she promptly organized a group of her drivers to come over, carry me down two flights of stairs in my reclining manual chair, and then bring my heavy power chair down by itself I went off to the transportation meeting, and called Ranu to tell him we would have to go to our San Francisco hotel early, and I would simply wait out the elevator repair job at the zoologists' meeting. Lucky ending to this story!

But it is not always so easy. On another occasion I needed to find an accessible hotel in Berkeley. There turned out to be only one, and staying there was not easily arranged, as the one available accessible room had to be refurnished just for me. As always, I thanked God and my mother for her trust fund and the extra dollars it gave me to cushion such shocks.

Despite my coping with BART and street misadventures, I was still not mobile enough to suit myself. BART stations are far apart and go to limited parts of the city, and the wheelchair alone was limited to a few miles under the best of circumstances. I really wanted to learn to ride a bus. At the time, the best bus lifts and roomiest wheelchair seating were to be found on the MUNI buses in San Francisco. Since I now knew the staff of various transit companies, I called and made an appointment with MUNI's accessible services guide to take me on a trip. With his instruction I managed to get onto the wide, solid lift, and I learned how to back into the designated wheelchair area with its fixed tie-downs, where I could recline half-way. At that time I could still tolerate a trip of a half hour or so without fully reclining my chair, so I was excited at new travel prospects. This training excursion also included the narrow MUNI railway (a second subway system, separate from BART, that ran only in San Francisco), but I never felt comfortable on this: the cars were narrow, and the gap between platform and train
horribly wide. Moreover if one failed to park on the appropriate side (unmarked), the floor would suddenly drop out from under the wheelchair as the stairs descended when the train made its first street-level stop.

East Bay (AC Transit) buses were a different problem. The narrow, rather decrepit lifts often did not work, and many of the ill-trained drivers were plainly unwilling to assist wheelchair users. Worse yet, the farebox was located too near the door, so that it seemed impossible to maneuver the large chair (backwards) past the box, miss the post adjacent to the stairwell, turn into the narrow aisle, and finally position the chair in its tie-down position next to the window and behind the first seats. I had petitioned the Board of Directors of AC Transit several times to move the farebox to make the buses more accessible. I complained to them that I required costly Paratransit to get to locations away from BART in the East Bay because I could not get on their buses.

One morning a friend of mine with a disability—long-time transportation advocate and activist Hale Zukas—called me at home and insisted that he had solved my bus-access problem. "I am sure you could get on a bus," he said. "While I was taking my bath I was thinking about your chair and the exact locations of the door, the post, the farebox, and so on. I just know that if you turn hard exactly when your wheel hub is lined up with the post, you should make it past the box and straight into the aisle." How charming! The thought of brilliant Hale in his bath reminded me of Archimedes. I rushed out and waited at a bus stop where I knew the drivers had a ten-minute layover, and begged the next driver who turned up to let me "practice" getting on the bus. He was a good man, and patiently worked the lift up and down while I learned to maneuver. Hooray! We did it! I was now free to travel all over the Bay Area, by train or bus, once going as far as San Jose, and another time to Sausalito (Marin County) over the Golden Gate Bridge. Later I took friends to Sausalito by ferry, announcing that I was their tour guide.

Ranu and I did see each other fairly often, but it was apt to be at a downtown restaurant for dinner with the family. We did have those few days in San Francisco in the grand celebration of Howard Bern's retirement. But it was obvious that I could never go back to our home in the Berkeley hills. It was not at all clear to me whether or not we could even get back together as husband and wife. Since I was by now having a full and productive life on my own, not only could I not physically return to an inaccessible home, but also I could never undo what had been unleashed in terms of my emotional and psychological independence.

A realtor friend of ours had been looking for a suitable house for us, one she thought could be fixed up to please us both. By the summer of 1989, she had located a beautiful house in North Berkeley, away from the hills, but in a lovely neighborhood. Our family was ecstatic, as they had been very uncomfortable with our enforced separation. But Ranu himself was reluctant—the housing market was at a peak and the
down payment would take more than we were able to scrape together without help from a loan from my mother's Boston Trust. He felt we were all pressuring him to come to a quick decision. Indeed the decision had to be made fairly rapidly in order to secure a purchase. Only later did I realize with sorrow how very much Ranu had loved his new upstairs eyrie in our old house. I had never been so attached to a place, and it astonished me to discover just how rooted he was to that home.

Grumbling, Ranu went along with the deal. It would prove to be a considerable financial loss for us. It took us another two years to sell the old house, and in the interim the market collapsed so that in the end we could not recover anything close to the value of the new one. In the meantime, we had to hire a contractor and do a great deal of construction—ramps, and accessible bedroom and bath on the ground floor. These added enormously to our initial outlay. But we moved in eventually, I happy to be on the ground floor without an elevator, Ranu glad to be with me on one level but continuing to mourn the loss of his favorite place.

The end of this story is a happy one, however. After we finally sold the house on the hill, Ranu suddenly relaxed and began "nest building" in our new home, gradually making it comfortable for himself and feeling truly at home. And in that time he came to truly appreciate what my freedom had done for me. I was now a happy person, at least psychologically comfortable with my disability, and continuing to explore new avenues for my creative energies. More than at any other time in our lives, we were able truly to enjoy each other, and we have continued to grow closer and more contented as the years go by.

How fortunate we were in this! Now I know that many of my sisters and brothers with disabilities find their marriages collapsing along with their physical capacities. Often people are forced into divorce for financial reasons, and in many other cases the nondisabled partner simply cannot cope with the major changes required to live with a spouse who has a significant disability. How sad, after adjusting to physical loss, to then lose a once-loving partner as well. In contrast, Ranu and I now contentedly enjoy the exploits of the young members of our family, host our many mutual friends and relatives, and share ideas about world events and our own work.
3. Professional Life — Information Systems

During my year in Oakland I had honed my computer skills through the self-publishing project described earlier. I now felt that surely I ought to be able to find a real job that would pay me something. Early in 1989 I went to the Center for Independent Living in Berkeley, seeking vocational counseling. Strange to say the people at CIL seemed never to have heard of the Computer Technologies Program (CTP) that had been started by CIL itself, which had only recently become an independent nonprofit supported largely by the state Department of Rehabilitation. Although computer training would seem to be a logical choice, in considering my abilities the CIL counselors recommended instead that I take a course in grant writing. They thought that I might be able to make a living doing this type of work.

I did eventually become fairly good at grant writing, which proved valuable later on. But I quickly learned this very competitive field was hardly a way for me to make a living. In a three-day workshop put on by the Los Angeles Grantsmanship Center, I wrote a proposal to fund a hypothetical nonprofit paratransit provider. This was harshly criticized, teaching me the hard (but important) lesson that grants are seldom available to cover operational costs that are likely to be ongoing year after year.

I spent many hours taking classes and looking up materials at San Francisco's Foundation Center, to learn more about grant writing. The Center was located on the third floor of an old building on Sutter Street. The only accessible way in was through an artists' supply shop next door. In the back of this shop was an ancient freight elevator (the oldest in San Francisco!) that provided access to the upper floors of the adjoining building. One evening I worked late at the Center, forgetting to keep track of the time. I felt a chill when I realized that the art shop was already closed, and the accessible elevator now unavailable. There was another elevator leading to the ground floor, but this one could be reached from the street only via a couple of outside steps. As the Foundation Center was about to close, I rolled out into the hallway, confused as to what to do next.

"Can I help you?" A cheery voice asked. "Gosh, aren't you the person we rescued off the top of Nob Hill?" I laughed. Indeed I was. Six months earlier, while Ranu and I were staying in San Francisco to celebrate Howard Berl's retirement, I had attempted to travel on the street from our hotel to Chinatown, where Howard's closest friends had arranged a special banquet. Not knowing my way around, I consulted a map, picking the street that seemed to provide the most direct path to the restaurant. Starting out alone after dark, I soon found myself going slower and slower up a terribly steep hill. I knew my chair would not make it to the top, and then I reached an abrupt end to the narrow sidewalk and found that it had no curb-cut! The sidewalk sloped perilously toward the street and was so narrow that I could not turn my chair around without fear of toppling off the rather high curb onto the dark, steep street. Not knowing what to do (try to back down this hill?), I remained poised at the edge of the curb. Suddenly a young
couple approached from behind. "Need some help?" they called. I gratefully explained my predicament, and they carefully turned my chair around, helped me down to street level, and gave me clear directions to the Chinatown location via safe, reasonably flat streets.

Now here was the same Good Samaritan! She escorted me to the elevator, the location of which I did not know, and we traveled together to the ground floor. Somehow she located a security guard and a strong passerby, who together lifted my heavy chair down to the street. My friend waved a cheery goodbye and hastened away before I was properly able to thank her or even learn her name. Sadly, I never saw her again, although I was to spend the next six years roaming the downtown streets of San Francisco.

It was clear that I needed better help with skills training than appeared obtainable through CIL. As it happened, at this juncture I needed the assistance of a lawyer to help me establish my little publishing business, Bon Gait. Vicki recommended a friend, a severely disabled but very smart lawyer, who took care of my small needs quickly and then asked what I was going to do next with my life. I told him about my desire for good vocational counseling, and he called a friend of his who was then the top counselor for Berkeley's Vocational Rehabilitation office. This man, Bruce St. Cyr, was taking no new clients at the time. Fortunately for me, however, because of this personal connection he agreed to take me on.

Bruce explained that Vocational Rehabilitation was strictly for people who want to get full-time jobs. Was I really looking for that? I promptly dropped any other ideas I might have had and said, "Yes indeed I am." He asked me to go to Berkeley's Computer Technologies Program (CTP), a few blocks away, and arrange to take their aptitude test to see if I was a likely candidate for training as a computer programmer. I did this right away, even though it had never occurred to me to consider computer programming as a possible career. The aptitude test, which quite cleverly simulated the skills needed by a programmer, was so much fun that I told the admissions officer that I was convinced I really did want to take their training. Apparently he, too, was convinced, and I was admitted as a student in the next starting class, about four months away. The Vocational Rehabilitation Department would pick up the tab for the training and provide me with a set of monitor/keyboard stands to use at the school, enabling me to recline my wheelchair under the stands and to access the school's computers. Meanwhile, it was recommended that I take an introductory course in computer technology through the University of California at Berkeley Extension Division.

So the die was cast for the next year or so, and after the training I would try to get a job. I began commuting from Oakland to the U.C. campus in Berkeley to take a wonderful course presented by a gentleman whose career in computers had spanned the entire development of the computer industry. This class provided an in-depth view of how computers work, with an introduction to programming. This was a wonderful prelude to the Computer Technology Program's curriculum, and a perfect adjunct to my
desktop computing skills. Throughout my work in this field I had an unusual breadth of understanding of computer technologies. This greatly enhanced my ability—required of professional programmers—to make rapid adaptations to constantly changing computer environments.

In September I began classes at CTP. This school had been developed at CIL by two programmers, themselves disabled, who wanted to enable students with disabilities to qualify for jobs in the business world by learning to write programs in COBOL for mainframe computers. Because businesses are gradually moving away from such older technology, COBOL programs and mainframes are frequently referred to disparagingly as "dinosaurs." However large businesses and government agencies still have many of these "legacy systems," installed in the 1980s, so programmers who can maintain them are still very much needed. In fact students from subsequent CTP classes were much in demand to fix "Y2K" problems in the late 1990s. Apart from the real business justification for this type of training, COBOL turns out to be a fairly simple language to teach thoroughly in a fairly short time (the CTP course ran for nine months, whereas similar training through U.C. Berkeley's Extension classes took two years). Once a student is thoroughly grounded in a single language, with programming principles and good habits solidly learned, it is fairly easy to pick up other languages and techniques.

CTP's course was rigorous and its teachers excellent. The idea was to force students into a job-like situation in which assignments were given and students expected to complete their tasks successfully within the time allotted. The assignments covered many of the basic programming problems confronting the professional: sorting data, formatting and printing reports, various types of searches through data for specific information, etc., using the common COBOL tools for these functions. Students were free to discuss their individual problems with other students, sharing information in the manner that occurs in an office setting, but each was responsible for turning in his or her own assignment. We attended school eight hours a day, were expected to be on time, and often had to catch up on evenings or weekends if we had not completed the work. This environment was ideal to test whether or not the students—all of whom had some type of disability—were capable of meeting the demands of an actual programming job. Successful completion of the CTP program (only about half of the original class stuck it out beyond the first month or so) gave us a lot of confidence that we would really be able to succeed in the business world.

CTP did a lot more than this to make us employable. Three times during the year our completed assignments were subjected to review by outside examiners, all of whom were professionals working at the kinds of jobs we were being trained to do. These people discussed with us the manner in which the school assignments resembled tasks demanded by real life situations. They interviewed us at length and gave the CTP teachers their assessments of our readiness to undertake the rigors of the work world. The final Review Board, as these examinations were called, was designed to resemble an actual job interview, preparing us for the kinds of questions to expect when we applied for work in the field.
My own reviews under this system were generally complimentary, although examiners questioned whether I would be "happy" doing the job of an entry-level programmer. One group commented that it was a little like "questioning Einstein," referencing my bright mind but generally scruffy appearance. I was carefully coached the next time regarding the correct business attire, with which I complied, although I felt it rather irrelevant given my upside-down stance. Another reviewer thought that I had "too strong a social conscience" to be satisfied with the life of a programmer. These comments were certainly perceptive, although I managed to enjoy the niche I ultimately found in this field as long as my strength to carry on the work lasted.

Another way CTP prepared us to find employment was the Internship Program. In order to graduate, each student was required to complete a six-week internship in a business setting, using the skills learned in our nine-month course. Many students were hired right out of these internships into the departments in which they had worked as interns. CTP's job placement officer spent a good deal of her time and energy finding internships for each class, and developing strong relationships with the business community to create ongoing opportunities for both training and ultimate job opportunities. The business liaisons thus forged provided resources also for our Review Board panels, and many Information Technology departments discovered CTP to be an excellent resource for well-trained and dedicated entry-level programmers.

I had quickly discovered that computer programming required the same skill set that I had developed earlier throughout my lives as scientist, music historian, teacher, publisher. The approach in all of these endeavors was to analyze the problem to be solved, find an appropriate tool (for computers, this might be a report format, or a method to sift through vast amounts of data to answer specific questions, for example), and work out the details of its application. The business of testing one's programs surely resembled practicing at the keyboard—working and reworking the material until it was nearly infallible, and developing fall-back alternatives for those few inevitable instances of failure.

Couldn't I use my knowledge in a field like transportation, for example, to enhance even more my ability to solve problems for people working in such a field, now that I had these computer skills? Thinking along these lines, I spurned the offer of an internship-on-a-platter, and decided to try to find one myself at a local transportation agency. This turned out to be no easy task, and my insistence on limiting myself to a field that I already knew something about delayed my entry into an actual job. Eventually I wised up and realized that I shouldn't be so picky.

However, I did finally land an internship at AC Transit, the East Bay bus company. Although their Information Systems did use COBOL, many other aspects of the computing environment and the technologies demanded of me were quite different from what I had studied at CTP. This turned out to be an important lesson in itself, inasmuch as the details of all businesses differ from one another, and a professional programmer was always going to need to learn a great deal on the job.
My sojourn at AC Transit was enlightening in more ways than one. I managed to muddle along with their new system, and I had just started to produce useful reports when I was asked to search the databases for some information that astonished me. The General Manager wanted reports on employee absenteeism: how much was due to illness, how much to other kinds of "days off," how many days were excused, how many were not, how many employees were off for more than ten or twenty days at a time and for what reasons, etc. I was simply horrified to learn that this major transit company, already in business for something like twenty years, did not have a handle on such information. Although I was unable to complete these reporting programs myself during my brief internship, the final results generated a fair amount of political spin-off in the ensuing years.

Although CTP allowed me to graduate on time, in June 1990, I did not complete my internship until July of that year. About half way through my AC Transit project I suddenly experienced a retinal tear in my right eye. I was utterly inexperienced with the symptoms, which of course occurred on a weekend. I called my doctor's emergency number, and described what appeared to be a swirl of blood in the eye, accompanied by flashing lights, and weird images that looked like spiders crawling up the wall on my right side. Ugh. The doctor suggested I go to the drop-in clinic then available at a location within reach of my wheelchair, but the doctors at the clinic could make nothing at all of these odd symptoms, and simply told me to make an appointment with an ophthalmologist on Monday. When I finally reached the specialist he told me these symptoms were a "classic" description of a retinal tear, and that as soon as I had called his office he had known what was wrong.

Immediate laser surgery was necessary. At the time, the hospital owned only an upright machine, and I was forced to sit (or rather to be held) up against the eyepiece while the doctor sealed up the wound in my retina. The upright position was more traumatic than the surgery itself, and it resulted in major spastic jolts of my body during the procedure. However, the surgeon was sufficiently expert to cauterize the torn spot in spite of having a moving target, and the eye healed nicely. The doctor told me that he "approved" of my generally horizontal life-style in this case, but nevertheless I was required to take off from work for a week or two, delaying the completion of my internship.

By mid-July 1990 I was seriously looking for work. CTP's job placement officer was only mildly helpful in my case. I think she was put off by the fact that I had decided to go my own way with the internship, and that I had hitherto shown little interest in the banks and HMOs that were high on her list of business prospects. Although she did set up one interview with a human resources person at Wells Fargo, that led to nothing at the time.

It was clear that I would have to put in time and effort to land a job. So as not to lose ground during this time out of school, I signed up for another U.C. Berkeley
Extension class, this time in the programming language known simply as "C." Although I never did use this particular language professionally, adding another major and somewhat lower level language to my repertoire was immensely important, once again adding to the flexibility and ease with which I could move from one technology to another once on the job, using PCs or mainframes. C was fun to play with at home, as one could readily program enhancements to a PC with it. This had its hazards, though—the language was sufficiently powerful that it could destroy data or even overwrite the entire operating system. For example, I attempted to write a program that would create an animated display. To my horror, my computer's monitor ended up permanently blinking! Desperately I searched through the code to find and reverse the offending command, while the program's listing on the screen flashed on and off like the neon sign on a motel. But I soon learned to deal with such mishaps, and continued to grow in confidence and skill using computers.

In between classes, I began making the rounds of transportation agencies. I was disappointed that AC Transit had not offered me a job, and I soon discovered that neither BART nor MTC used technologies with which I was familiar. I began widening my search. I took an examination to qualify for a job with the City of Oakland, and failed to pass it. I was chagrined, and the CTP staff was astonished. Somehow Oakland had a slightly different approach to COBOL, and the exam questions had confused me. I registered with the LEAP program, in which disabled persons were given preference when applying for government jobs. I applied for some jobs in San Francisco and with the State of California. Nothing was available at this time. It was the same story with the City of Berkeley.

So I began daily examination of want ads in the newspapers. I applied for a job with a nonprofit group in Emeryville. This involved d-BASE programming, to which I had been introduced briefly at CTP and which I had used at home as well. However, my interview did not go well, as I had already forgotten some of the d-BASE syntax and could not quickly answer questions about programming details. This was my first inkling that programming languages disappear from the mind with great rapidity when not actively used. Most of these languages use similar—but not identical—commands to perform equivalent tasks, so it is easy to confuse one with another.

As it happened, the job in Emeryville would have required not only a BART ride but also a subsequent transfer to a bus in Oakland. It would have been difficult to arrive on time every day, week after week, given the shaky state of bus lifts and schedules. I realized that my ability to get and keep a job was going to involve a good deal more than familiarity with specific computing tools.

Next I tried U.C. Berkeley. Once again, many different technologies were in use; seemingly each department had its own. I had an interview in one department that also came to naught. This location, too, was hard to reach in my chair. It involved a climb uphill that would have been difficult during rainy weather. Looking back, I see that I was more clearly defining my limitations with respect to transportation and other job requirements.
I went to the Employment Development Department in Oakland where there was a Job Club for people attempting to reenter the workplace after losing a job or deciding to change fields. This group had a week-long training program in résumé writing and job hunting. After this candidates were offered an unpaid job within the group that would exercise some of their new skills while job hunting. The Job Club also distributed a monthly bulletin to local businesses to advertise club members' availability and skills. This was a rewarding experience—the training was excellent and went much further than what had been provided along these lines at CTP. The members provided comradeship for those of us who were by now getting a bit discouraged with our job searches. Although I was the only severely disabled person in the group, I was welcomed, and spent several weeks working on their dBASE application, as well as answering the phone and making calls to businesses to solicit support for our little magazine.

Through the Oakland Job Club I learned about the Job Forum in San Francisco, which was a weekly meeting put on by Human Resource personnel from a large number of San Francisco businesses for an audience of job-seekers. The program was simple: four or five audience members submitted their résumés to the evening's panel (a different group each week) and were interviewed in front of the audience, after which the panel publicly commented on their presentation and their résumés. "Don't put your résumé in the first time you go there," I was cautioned, "They can be rough on you." By the second evening I did dare to submit my résumé, and to my surprise I was praised pretty highly. All well and good, but somehow I had to get my foot in the door for that real interview, and my résumé had to be read by somebody who had a job to offer.

Finally, reluctantly, I decided to try my own luck with Wells Fargo Bank. This institution had close ties with CTP, and a number of my fellow students had already landed jobs there. Wells was training the special programmers who work on ATMs. I hoped that I could get in to this specialty—ATM programmers were in high demand both within the bank and in other institutions. I applied for the training and was interviewed several times, but ultimately not accepted. I felt my rejection had to do with my disability. Probably they were right—the training was rigorous and involved travel to another city for part of the program. But I resented the rejection, and felt that it should have been my choice, not theirs, to determine whether or not I was capable of undertaking the program. I next went to visit Neil Jacobson, the brilliant man with cerebral palsy who was a cofounder of CTP and now a vice president of Wells Fargo. He was pleasant but not helpful. "Yes, possibly you could be an asset to Wells Fargo," he said, but nothing came of this encounter. I was surprised that he was not more helpful and supportive of a CTP student, but then he probably had had lots of requests for help over the years from the many CTP classes.

Finally I was able to put some of my theoretical knowledge into practice. "Know as much as possible about the business to which you are applying." One of the panelists from the San Francisco Job Forum was employed at the Wells Fargo Human Resources Department. He kindly sent me a lot of material about the bank. "Don't
depend on the want ads; the best jobs come through networking." The wife of one of our Zoology professors was a vice president at Wells, the head of a small department within the Finance Division. I sent her a copy of my now-spiffy résumé and told her I was looking for a programming job. She called me and said that although she herself had no available jobs, a manager down the hall was looking for a programmer and she had passed my résumé on to him.

Voila! This is indeed how the wheel turns in business. Within a few days John Wong, the applications manager for the Finance Division, called me and invited me to come for an interview. Typically, there were several interviews, each with a person higher up in the department's management. The final interview was with John himself, along with the head of the controller's group. They managed the bank's General Ledger, which would be my first assignment. John tossed a huge pile of fan-folded computer printout, representing hundreds of lines of code, onto my lap and asked me, "What would you do if you were asked to make a change to this big program?" I told him that I would have to find another way of looking at the code—preferably online, possibly just Xeroxing some small sections of the printout. I also suggested that what he was really looking for was a problem-solver, and I said, "You really have to know that I am a problem-solver if you find me here in your office in this reclining getup asking you for a job!"

I got the job. In this instance my disability was probably an asset. I don't know how many other candidates applied for this particular position, but I am sure that at this time (1990), just after passage of the Americans with Disabilities Act, managers were rewarded for hiring competent people with disabilities. Thus, all other things being equal, a person with a disability was likely to be selected. I ended up working in John Wong's department for four years, and was at Wells Fargo for five.

Before I could start, of course, there was work to do in the matter of accommodations. Now that I had obtained a full-time job, Vocational Rehabilitation agreed to let me keep my special equipment (monitor stands). John Wong had one of the programmer cubicles remodeled so that I could fully recline in it. The monitor stands were duly installed, the computer terminal on one, the keyboard on the other.

There were other barriers. The bathroom was accessible—except that the outer door was too heavy for me to push open. This was immediately fixed. The outer doors to the building downstairs were also too heavy, and there was no automatic door opener. This matter took a bit of negotiation, as Wells Fargo simply rented two floors of this building, and the building owners raised many security issues. Finally a compromise was reached, and one of the doors was made to swing open fairly easily. I could then grab a bar on the door, back up my chair away from the building to open the door wide, and then quickly drive around and through it before it swung shut again. However, after 5 P.M. or on weekends I had to rely on a security guard to let me out or in.
Another problem was the door from the upstairs lobby to the Finance Division's offices, where my cubicle was located. There was little or no reason for the public to enter our work area, so we had no receptionist and the door was always kept locked. The door could be unlocked by entering a security code via a keypad, but the door itself was heavy; again, there was no automatic opener. There was absolutely no way for me to manage this by myself, yet I was often expected to come in after hours, alone, to troubleshoot problems. This issue took an entire year to resolve. It was after a high-level finance manager realized that my work was important enough for him to get involved that a solution was implemented: install an automatic door opener responding to the keyed-in security code. Once this was in place, it took no time at all before it was duplicated on the floor above us where the bank's controllers worked. I had not asked for this, because the controllers had a receptionist who could let me in, and I had no business there after hours. However the controllers had found my accessible door so handy when they were loaded down with papers or packages that they wanted one of their own. Typically, removing barriers that block disabled people enhance everybody's life.

Finally, there was a problem with the curb-cut at the corner just outside our building. San Francisco curb-cuts were much more hit-or-miss than those in Berkeley, or even Oakland. But this sidewalk had been newly laid, and the contractors had carefully constructed an ADA-compliant curb-cut at the corner. The trouble was, it did not reach the street! During the first few weeks of my tenure at Wells Fargo I kept falling into a hole at the bottom of the curb-cut, frequently having to have my heavy chair lifted out by passersby (when I could get their attention, as they rushed out of the buildings to catch their evening trains). Once again, fairly prolonged negotiations were necessary among Wells Fargo, the building owners, the sidewalk contractors, and the City of San Francisco, before everyone could agree on who needed to take action. Eventually, however, somebody did what was necessary to build the street up to the level of the bottom of the curb-cut, so I could get in and out safely.

After these fits and starts at accommodations, I have to say that Wells Fargo did a lot to keep me functional and happy during my work there. About six months after I started, a newly hired Disability Compliance Coordinator came to visit me, and insisted on knowing any problems I might be having, or that I anticipated having. He soon brought me a specially adapted keyboard that folded up into three segments, so that I could more easily place my fingers on it, reaching all keys without having to move or strain my arms. The first one he brought was too stiff, so he got another very light one and installed that. Three years or more after this, unbidden, he introduced me to the latest (for the time) voice activated technology. He brought Neil Scott and his group from Stanford University to demonstrate and later to install their newest device—a modification of the Dragon Dictate system—and to train me to use it effectively.

So on the whole, Wells Fargo was very sensitive to my needs as an employee with a disability. I only wished that they treated their customers as accommodatingly. It amazed me that my comments on customer access were brushed off rather summarily, while I was being so well treated on the inside of the bank. In fact, over my years there I became something of a "poster child" for Wells, as my large chair...
and rather spectacular accommodations were quite photogenic. Early on I was featured
in a PBS segment discussing the Americans with Disabilities Act and how employers
were opening their doors to hiring and accommodating persons with disabilities. Ten
years later, long after I left my job, clips from this same piece were featured in a PBS ten-
year retrospective on the ADA and its effect on the disability community. Wells also
used me for in-house training films to show what could be done to help disabled
employees work effectively.

What an education I got working for a major bank! This was the first
time I had ever worked in the private sector, and the difference in philosophy from the
public University system or government-supported nonprofit organizations was eye-
opening. On my very first day I was delighted to discover that I already had a special skill
that my mainframe programming colleagues did not have—namely, my ability to use a
personal computer (PC). I was assigned to work on a PC application that tracked the
actual costs of the programming work that we were doing. Upper level management
took our monthly cost reports seriously, and I was struck by the fact that everything we
did had to pay for itself in benefits to the bank or be discontinued. I was also appreciative
of the management skill of John Wong, who was quick to see where I could add value to
the General Ledger (GL) team. Thus while I was learning the ropes of mainframe
programming I still made a significant contribution.

It was surprisingly difficult to learn the ropes. My first programming task
was to fix a program written in a language I had never even heard of! Scary as this was, I
soon discovered that my colleagues on the team were wonderful about sharing their
knowledge, helping me find online resources to guide me, and showing me how to
perform necessary tests. They got me going with the assignment before I had time to
panic.

My next task was to make changes in a very old, very lengthy, and
involved COBOL program written in what we called "spaghetti code." In the early
period when this "legacy" program had been designed, the newer principles of structured
programming we had learned at CTP were not observed. The written program
meandered on and on without anything to clarify the functions of its various parts or to
indicate how they were connected, confusing anyone coming upon it later and trying to
make an intelligent alteration. My team colleagues instilled in me the Wells Fargo
standards of careful analysis, complete documentation of every change made, and
carefully designed testing to determine not only whether the change performed as
expected but also that it not upset some other aspect of the program's functions.

I caught on quickly. I told Ranu that programming was like science with
"instant gratification," as one had to solve the puzzles within a matter of hours or days,
rather than the lifetime often required to untangle a scientific problem. Indeed, in
science, one never knows whether there is an answer to one's question. In a business
setting there is no such uncertainty, but a chief concern is the cost-effectiveness of the
solution. My wide-ranging background often led me to make unusual suggestions, including ones which might not involve a computer at all. This was surely not expected from a programmer, but an important use of our special knowledge should include recommendations against computerization if that is less efficient than some other method.

Soon I was working directly with the controllers to fill their demands. But my understanding of what a General Ledger was, and how it worked in the financial/accounting field, was pretty slim. Earlier experience in moving to a new field suggested the solution to this problem. I decided to take a course by correspondence through the U.C. Berkeley's Extension Division, this time in accounting. Eventually I took the entire two-year lower division sequence of courses in this field. Now that I could comprehend the accounting jargon that was flying about my ears in the bank, I understood why some things had to be subtracted and others added, and what "closing" the books meant in real-world terms. With this background I could much more intelligently—and satisfyingly—apply my programming skills to these accounting tasks. Later I took other U.C. Extension courses in the management of databases and of information systems.

Wells Fargo had an extensive program of continuing education, and there was never a time when I was not taking classes. For the most part this ongoing training was over and above work hours. Occasionally I was sent to a technical workshop for a day or two, even a week, which gave a respite from the work routine. Some classes could be taken via the Internet. Classes involved a wide variety of technologies, and helped me leap into the new techniques we always had to deal with at work. These courses also enabled me to suggest innovative approaches that might lead to fast, effective, and efficient solutions to business problems.

During my first few months I was sent to a U.C. San Francisco Extension class in relational database technology. The class was given at night, during the winter months, and the weather that year was absolutely terrible. The location was too far up Market Street to reach by BART or MUNI, and it poured rain or even sleet every single class day, save one. I missed that particular day, as my wheelchair broke down—the one thing that was sure to keep me at home. When I turned up the following week amidst a wild rainstorm, a fellow student asked me, "What's that matter with you? Do you only come to classes during storms?"

I must indeed have been a sight! We had purchased an extra-large white poncho with a hood, and cut the back of this very short, taping the extra material from the back onto the front. I could thus wrap myself up all the way to my feet in what must have looked like a shroud, undoubtedly startling anybody past whom I whizzed in my fully reclined gurney-like "chair." I still managed to get pretty wet, despite all these precautions. When the rain came down hard it felt like I was sticking my face directly under a shower—I couldn't see, and water seeped down past my neck brace, soaking my chest and shoulders. Worse yet was the wind. I was terrified of the wind—it would snatch at my shroud, billowing it up over my face, sometimes loosening the ends of the poncho and allowing them to catch in my wheels. The wheels themselves, and the belts
that drove them, became slick and slippery in the wet, so that they lost traction and the chair had difficulty moving uphill. On the slick floor of the BART station my wheels would slip and slide, and I panicked lest I slide right off the platform onto the train tracks. But of course I went to class.

And I went to work, no matter what the weather, getting up at 6 A.M. and departing our Berkeley home a half hour later to begin the hour-long commute to San Francisco. Sometimes, particularly coming home at night, the travel time was considerably longer. In order to make sure I was never late to work, it was necessary for me to get an early start. One could never know about breakdowns of elevators along the route, and sometimes I had to travel miles out of my way in order to exit the BART system when I got to San Francisco. But since I often had a little extra time after reaching the financial district in the morning, I would stop for coffee and a roll before going on the few blocks to my workplace. This was a delightful, relaxed moment in the day, and I made a few friends among fellow breakfasters at popular downtown cafes.

In fact I enjoyed the commuting, hard as it was. I enjoyed the stares and occasional comments of fellow passengers, although sometimes they were downright rude, pushing themselves on board in front of me and blocking my entry into a crowded train. I soon learned, whenever it was possible, to go to a station where the crowd was thinnest. Fortunately I lived near enough to the end of the line so that, by leaving very early in the morning, I avoided the worst commuter rush. Occasionally, especially on the ride home at night, I would have to let one or even two trains pass me by before I could push my way feet first onto a crowded car. Once, to my chagrin, I backed out of the train at my stop and directly into a blind person attempting to board!

On the train itself, I would settle down in my fully reclined position, pull out technical materials to study, and put on my "frog glasses" to read. These special prism glasses were quite a sight, and excited much comment from fellow passengers. My brother David had dubbed them "frog glasses" because, he said, they made my eyes look as though they were popping up out of my head like a frog's. The glasses are sold through medical supply stores, and are officially known as "bed glasses." More or less after the manner of a periscope, they allow a reclining person to prop a book on his or her stomach and read while looking upward toward the ceiling. I must have done a booming business for our local medical supply shop on these commutes! Apart from the glasses, I got frequent questions from commuters about my condition, my equipment, whatever I was doing on the train, and so on. Once in a while I would get angry at some wisecracks—a common one was "I wish I could lie around like that, you look really comfortable." Inasmuch as I was in constant pain I found this irritating in the extreme, although I confined my rejoinder to "In fact, I would prefer to be sitting upright."

There was considerable division of labor among the programmers in the Wells Fargo Finance Division. One group, with which I came to be involved only later in my career, was responsible for a number of small Finance applications that used FOCUS
database technologies. This entire system was vastly different from that which had been taught at CTP. The senior General Ledger programmers developed new financial applications in COBOL, with which I was familiar, and also with interactive software. The latter enabled controllers to enter data directly into files which would later be processed through the elaborate network of programs which ran overnight. These programs were triggered to start in a certain order so that results from the earliest processing were fed into later-running programs that appropriately "filed" the information and reported on all of the bank's financial activities. Reports were delivered to the controllers and other departments each morning.

Junior programmers such as myself were responsible for making needed changes and fixes to the batch programs which ran each night. Once I had achieved sufficient expertise, I was also assigned to a second, smaller, financial system called Branch Settlements. This matched funds sent from one bank branch to another, and was considered very important because these internal transactions had proved to be easy prey to inside embezzlers of funds. I soon became responsible for maintaining, improving, and operating the part of this small system which used COBOL programs running in their own network overnight. I continued to work on the General Ledger as well, and after a few months I was included in the task of overnight monitoring of both systems. For the very large General Ledger, this job was assigned in monthly shifts among all the programmers with sufficient expertise, but the Branch Settlements programs were my responsibility alone.

Overnight monitoring was quite a responsibility indeed. Controllers and other managers expected their reports first thing in the morning, but if anything went wrong with any single program in the network, the entire network could be held up until a fix could be made. We had weekly conferences regarding all changes made to the system, which were regularly installed on Fridays (unless an emergency required an in-between fix), so the programmer on call knew exactly what to expect with every running program in the networks. If a program crashed during the night, the responsible programmer would be called at home (often awakened from a deep sleep) by the console operator monitoring the mainframe. The operator would read job control messages over the phone, providing fairly cryptic information that we were supposed to interpret in our sleepy fog. We would have to respond by explaining to the console operator either how to create an override that would bypass the bad spot in the program, or tell him or her to skip the program altogether, if that was possible without messing up the resultant data or reports. Clearly we had to know exactly what each program did, and the dependencies of each upon the output of others, in order to make these decisions. I always thought that the computer operators must believe all programmers to be idiots. I certainly felt like one at 3 A.M. when trying to figure out how to get a stalled network restarted.

Security made it impossible for the most part for us to have log-on privileges from home, so I would have to depend entirely on the documentation in the job control programs to guide me in these fixes. Early in my career I would sometimes have to call one of the senior programmers for help. Later on, as I gained assurance, I would occasionally have to travel in to San Francisco as soon as BART "woke up" at 5 A.M.,
and code and install a fix to a program to complete the morning's reports. If these were delayed as a result, I would also have to leave apologetic messages for the various managers to the effect that I had goofed and their reports would be late. This often involved getting in touch with the report management staff to request a special run of the General Ledger reports later in the day.

Individual employees could feel uncomfortably conspicuous at Wells Fargo. If a mistake was made, it was very clear who made it. But if someone worked very hard to fix problems, to avoid potential problems, and did one's best to keep everything on track, this was also noted and praised. The famous "Wells Fargo Way" was to put in every ounce of energy to keep the bank running smoothly. Although this was frequently a pain in the neck, there is no question that if one did do that, it was recognized and often rewarded. Indeed, after my second year with the Finance Division, I won an award and received some bank stock for my service to the group. I was truly proud of this—it had nothing to do with my disability, and everything to do with my ability to put my shoulder to the wheel along with everybody else in my group.

Of course, "recognition" could work both ways. On one occasion I had extensively revised all the Branch Settlements reporting programs. These programs generated important reports that went on a daily basis to every single branch of the bank throughout California (at the time Wells Fargo operated only in this state), and were studied carefully by the branch managers. In my code revisions, I had inadvertently moved the identifying branch accounting unit number one character to the right of its original position in every program, forgetting that the technology that identified the branch and its location scanned each page and picked up this number from its precise location on the page. The report managing software automatically split up the reports for mailing and printed cover pages with each branch name and address. The result of my gaffe was that every single report went to the wrong address! By midmorning the phones were ringing in the Report Management office, and RM was ringing my phone demanding an explanation. Gulp! I had to quickly recode my programs and restart the jobs, ask Report Management to restart the jobs on its end, and get the reports completed and mailed out before the next night's batch started with new data. When it came to Branch Settlements, the buck definitely stopped at the desk of Jean Nandi.

Seldom are we truly prepared for a disaster. However, by law, banks must have a viable plan to recover immediately from any kind of disaster, small or large. After all, they hold in trust all of the public's money. The bank's plan of recovery was known as "Business Resumption," and involved strategies for restarting work and recovery of data in case of a major failure, such as might happen to our systems in an earthquake.

The information systems part of Business Resumption was a bank-wide effort to plan how all the data processing could restart at a new location within the shortest possible time without losing data, and ensuring that all systems would come up in the proper order. For example, departments that brought in raw data from ATMs and
other account processing systems had to run their systems first. The General Ledger would need to run a day later since its task was to report on activity that had already been processed by the rest of the bank.

Each year staff came together from all departments in all three of the Wells Fargo data centers (San Francisco, Concord, and El Monte in Southern California). After intensive planning that took some months, we participated in a weekend exercise in which all processing was brought up in a new and remote location, just as it would if a real disaster had occurred. I participated in these activities for two years in a row, taking most of the responsibility for the General Ledger and Branch Settlements recovery systems. I needed to document the way in which our networks must be started, identifying all data files that must be received from other systems so that nothing started without appropriate input. Then I spent a tense weekend carrying a pager, troubleshooting help calls from console operators at the remote site in any instance where something went wrong.

This was indeed a learning experience. I had to understand the data processing of the entire bank, seeing how our finance systems fit in with all the others. Naturally I could not undertake this task without having gained a thorough knowledge of the General Ledger and Branch Settlements networks, although by the time these exercises were completed my understanding was considerably more sophisticated. With each new added skill I enjoyed the work even more, as I became increasingly responsible for figuring out how to get things done and for making suggestions as to how to make improvements in the bank's operations.

I had worked with the Branch Settlements COBOL batch systems for some time, but the Finance Division's FOCUS programming group developed and maintained the interactive software and online reports for the Branch Settlements controllers. Mr. V., the head of Branch Settlements, was a martinet, greatly disliked by the controllers and other staff who worked under him. But he was an Armenian, and after I had introduced myself as Alan Hovhaness's daughter, I seemingly could do no wrong. So when the programmer in charge of the Branch Settlements FOCUS system quit her job, Mr. V. decided that he wanted me to take over that part of the processing as well. This suited John Wong, as it would result in a programmer trained to work on both the COBOL and FOCUS systems, able to troubleshoot when there were problems sending or receiving files between these systems. I was eager to do this too, as it would greatly add to my repertoire of skills, as well as to my responsibilities and my ability to make independent decisions within the department.

I had a great deal to learn! Gradually I became expert with the new software and networking protocols, finally learning to develop new interactive data entry systems. No sooner had I accomplished this, than Mr. V. set me to work on two additional small systems under his management. So I had an opportunity to get a peek at other functions of a major bank. One of these was to report annual escheatments ("dead"
accounts where the owners could not be located) to the State of California. The bank forfeited all monies from such accounts to the State, and a special report had to be provided each year and sent to Sacramento on a tape. The second system was a Travel Application, which began as a reporting process for employees who traveled on bank business. Eventually I had the fun of developing this into a more elaborate system in which airlines and hotel accommodations were tracked, although my little application was soon abandoned when the bank decided to outsource the entire travel management.

Outsourcing and contract work were only two of the potential hazards of our professional life at the bank. Clearly my Wells Fargo job was full of interest, challenge, and intellectual stimulation. Other aspects to life working for a large corporation or financial institution in the 1990s were less than ideal, however. I had seen very early how cutthroat these highly competitive businesses could be. Wells had a reputation for being "lean and mean," and retained its competitive position in the stock market by continually cutting costs and keeping a vigilant eye on the bottom line. For employees in all departments, this meant ever-longer hours and much overtime without extra pay. We were not allowed to declare these extra hours as overtime, presumably being given some sort of comparable time off, but even this latter was done "under the table" and sometimes not at all.

Then came downsizing. Wherever costs were seen to rise, personnel was cut (being of course the most expensive part of any operation). My first encounter with downsizing came about when a large number of systems programmers were laid off without any warning. They simple walked in to work one morning and were told to clear out by noon. These programmers were our gurus—patient teachers who helped us set up and schedule our networks, helped troubleshoot when a program failed to work properly due to inadequate system resources or a lack of understanding on our part about how to maximize program efficiency. They were the folks who installed our program changes and who could be called upon to assist if a new installation went awry and we needed to quickly make and reinstall a change. Almost all of these hard workers—voices on the phone to me, but guides on whom I depended for success in my own work—were suddenly gone. And gone in a particularly nasty fashion, as was only possible in a nonunion setting (true of all banks). Not only was the loss of this support a sudden, severe shock to us, but it also demonstrated most cruelly our own vulnerability. Above all, we must be able to prove to the bank on a daily basis that we were worth our cost. This was particularly chilling to me, as a disabled person whose options for moving to other jobs were clearly limited.

A second shock came to me when a gentleman tapped me on the shoulder one day, saying in a low voice, "You won't remember me, but I met you at the San Francisco Job Forum when I was on the panel. I have just lost my job here, and I wonder if I could borrow the computer next to you to make up my résumé." In some shock, I realized that this was indeed the man from the Wells Human Resources Department who
Jean Nandi

Unconventional Wisdom

3. Professional Life—Information Systems

had given me such help and encouragement while I was still searching for my job. And now he was asking me for help....

I realized that Wells Fargo was using the cruel, cutthroat methods of so many modern corporations—getting rid of higher-priced, long-term employees and hiring part-time staff or contractors, neither of whom were paid any benefits. Similarly, if work could be done by another organization, so that Wells paid "by the piece," rather than hiring in-house staff, more money could be saved and the stockholders satisfied.

The result was an undermining of employee loyalty, and we chafed under the increased load caused by the perpetual understaffing of our projects. Apart from this, we were feeling the winds of change in information technologies in general. Wells Fargo became ever more serious about retraining us in newer technologies such as client-server and object-oriented programming. However, we knew that when our departments did make the changes from older systems to these new techniques that contractors or new staff would be hired and we who lacked hands-on experience with these methods would be shunted aside and replaced. In some instances, whole departments were being moved around, so that ultimately Branch Settlements was moved to Concord, and many of the staff in the Concord Data Center were moved to new facilities in Arizona. When such moves were made, people were simply told to "take it or leave it," and other jobs were not found for staff who chose not to go along with these dislocations and relocations.

A final insult to those of us who were still relatively junior staff was a new organization of personnel levels or grades. When I had first been hired, the bank followed a system similar to that of the civil service. I had been advanced two steps within the first couple of years. At my next review I was scheduled to be moved to a G-16 level, which would give me recognized seniority and a substantial salary boost. Just prior to this annual review, the change in grading system was announced. Now there would be only four grades from the most junior to the most senior, leaving all of us below G-18 in a huge "entry-level" category. Those of us who were due for promotion were furious. We now had nothing to show for our years of effort, but simply remained in the large pool of junior personnel.

I was becoming restless. I had probably absorbed most of what I could learn in terms of the Finance Division's current information technologies. Also, knowing much more about this field now, I felt that it had been a mistake to allow myself to get boxed in to the FOCUS programming group. FOCUS had limitations in both size and flexibility, and was not likely to grow significantly within the bank, or elsewhere.

However, a couple of different and more positive aspects of life as a Wells Fargo employee temporarily distracted me from these thoughts. Although I was working very hard and was largely focused on my programming activities, I continued to maintain an interest in disability politics. I was a member of the Berkeley Gray Panthers, and went fairly often to Berkeley Commission on Disability meetings. I maintained strong connections with the Computer Technologies Program as well. One year I was a
member of a CTP Review Board, and had an opportunity to meet with a new class of students and talk to them about their work. Additionally, I encouraged John Wong and his group to hire a couple of CTP graduates, one of whom worked out very well and stayed with the bank many years after I left. I was given the task of overseeing the work of these new employees, teaching them all I knew about the General Ledger system, and getting them up to speed.

One day my eye was caught by an article published in the Gray Panthers' Bulletin by Professor Paola Timiras of U.C. Berkeley, an early mentor during my graduate student days. I had seen her occasionally at gatherings of staff from the Zoology and Physiology departments. Just returned from a sabbatical year in France, she wrote eloquently about the French continuing education system as a "public health measure" for senior citizens, arguing that ongoing mental challenges promote both mental and physical health in aging bodies.

I called her and told her how impressed I was with her article. Would it not be possible, given the large number of educational institutions in the Bay Area, to develop a program enabling seniors in the area to attend classes at low or no cost? If the institutions and teachers were willing, then it would be a matter of providing the necessary information to seniors, connecting them with the classes in which they were interested. Paola was ecstatic, bubbling over with her usual Italian enthusiasms. And so The Senior Education Program was born.

Over the next couple of years we worked together. First, with Paola's help, we determined that the University of California at Berkeley had no administrative problem with allowing seniors to audit classes for free, provided that space was available and that the individual professors did not object. Then we did a formal survey of the Academic Senate, and got a wonderful collection of responses from the University Faculty. Most were in favor of having interested older people attend their classes, because they felt that this would enrich the experience of their undergraduate students as well as the older auditors themselves. There was a wide variety of expectations, however, with some teachers wanting full participation in all class work, and others wanting nonstudents to simply sit and listen.

Through the Gray Panthers, we sent a survey to elderly people who might be potential students under our proposed project. Again, the responses delighted us. Many said that they were looking for meatier fare than was handed out in the senior centers or the "Older Adult" classes offered by local night schools. They loved the idea of being able to audit real University level classes just for the pleasure of learning something new.

We surveyed other local institutions, and eventually prepared a handbook to distribute through the Berkeley Senior Centers, to give information about many local colleges and the University, provide details of the types of classes offered, the fees exacted, and the manner in which an older nonstudent was expected to approach the institution and the teacher in order to ensure a comfortable relationship. At appropriate
times in the spring and fall I would hold little meetings of senior citizens in my home, on
weekends, during which I showed them the U.C. catalogues and explained just how to
talk to professors and get into a class.

And then Wells Fargo too got into the act. Each year Wells gave a series
of "President's Awards" to employees who made outstanding volunteer contributions to
their local communities. I received one of these awards for the Senior Education Project,
which included a handshake with the bank's President, and more important, a check for
$1,000 as a contribution to the project itself. This money, which was again awarded in a
subsequent year, enabled us to print our informational handbooks, and later to update and
reprint them, so for quite a few years these were available in the Senior Centers for our
local citizens. All three Berkeley Senior Centers let us place the handbooks in their
lobbies. The staff and board of the North Berkeley Senior Center worked with us to
formally receive the Wells Fargo grants and help us with printing and distribution, and
also listed our project in their official Handbook for Seniors in addition to making our
own materials available to the public.

This outside activity, along with the inside Wells Fargo support, gave me
much pleasure and helped distract me from job worries and dissatisfaction. But it also
caused me to think hard about the comment made back in 1990 by the CTP Review
Board about my strong "social conscience," and the fact that it was unlikely that I would
be satisfied as an entry level programmer—or maybe as a programmer at all.

The fact was, that despite my junior personnel rating, I was no longer an
entry level programmer. It was time to make a move out of the Finance Division. I
wanted work that would provide me with more responsibility and independence.
Although I was not sure I would find this within Wells Fargo, it would be easier to move
to a new department within the bank than to look outside. Given the independence of the
various department managements, such a move would be almost equivalent to an
"outside" job. Wells managers tended to give preference to current or former Wells
employees. In addition, the "new hire" did not have to learn certain aspects of the bank's
information systems or the "Wells Fargo Way."

I soon had an interview with the small department that ran the Retail
Compensation System. This group served the retail bank branches directly, and had
developed a system whereby all retail employees received bonuses based on their sales of
bank products (everything from simple checking and savings accounts to credit cards,
certificates of deposit, annuities, and insurance policies) to their customers. I soon
learned that the retail part of the bank was even more cutthroat than was its central
administration. Branch employees were paid low wages and were dependent on these
bonuses for their livelihood, as were sales staff in any other corporation.

While interviewing with the managers of Retail Compensation, however, I
was yet innocent of the problems inherent in this system and the antagonism it caused
among bank branch employees. The job was definitely challenging and interesting. The entire system was run using FOCUS databases and elaborate reporting programs developed almost "on the fly" by programmers each quarter, because the rules of the game changed so rapidly. I told the individual in charge of the programmers that I would consider the job only if it included a full step promotion and I had considerable independence in my work. Inasmuch as there were only two programmers and we would be on equal footing, the independence was assured. My promotion was accepted as a matter of course. The department manager told me that she hoped I would consider how to redesign the system to streamline and otherwise improve their processing.

So I left my friends at the General Ledger and turned Branch Settlements over to others, and found myself in an office above one of the main downtown San Francisco branches of Wells Fargo. At this time I received my Dragon Dictate machine, and after training, found myself talking to it all day and signing my emails "the Dragon." 

I soon discovered deficiencies in Retail Compensation. It soon became clear to me that FOCUS was a poor choice of software for such a large and complex system. Probably it had been selected because the business of bonus compensation had started small, and FOCUS was an easy language to use for the quick development and fast changes required by quarterly modifications to the system design. However, by the time I arrived on the scene, dozens and dozens of bank products were subject to bonus payments to the seller, provided certain minimum sales were reached. Branch and regional managers received extra compensation as well, based not only on their own sales, but on the competitive marketing success of the branch or branches under their supervision. The system was patently unfair, in that the biggest compensation went to the management, and the sales minimums were adjusted for each product differently each quarter, making a tangle of rules that were impossible for the affected staff to understand clearly and that were often "fudged" by the system managers for political reasons.

It was at this time that I took the Information Systems Management course at U.C. Extension. I used our own Retail Compensation System as a test case to design an entirely new approach, using relational database and client-server technologies. Although my design was highly praised by my U.C. teacher, it ultimately was ignored by my department.

The technology was not the only thing wrong with the Retail Compensation department. The head of this department was an extremely ambitious woman. As I attended meetings with upper management and with the product managers who worked together to design the compensation program for each quarter, I saw the constant jockeying for position, with staff members falling all over themselves and each other to climb up to a higher rung in the corporate ladder. After only a few months, the woman who had hired me and was my direct supervisor left the department for a better (higher) position in another department. Another woman, equally ambitious, who ran a small and highly regimented group of her own, now became our programming supervisor. When I left, after almost a year, more than half of the staff also had left. It was clear to me that, despite their words to the contrary, neither woman had the slightest
interest in hearing from a lowly programmer about how to redesign the system. Indeed, shortly before I left, a contractor already experienced in client-server technologies was hired to accomplish what I had hoped to develop myself. Although I again learned a great deal during my tenure in this department, I was dissatisfied with the work. I felt it was impossible to do a good job with the tools provided and with the constantly changing rules. I also disliked the hard-nosed manner in which the bonuses were distributed to hard-working salespeople within the bank.

As an illustration of the unpopularity of this system, when I went to my own branch of Wells Fargo to set up a new account, I mentioned to the man who helped me that I was an employee. He asked me, "Which department?" When I told him, he went to the back and brought out a colleague, saying to his friend, "Should we really let this person out alive?" His joke reflected sadly on the reputation my output had among the retailers who benefited so meagerly from my work. On another occasion I was myself presented with a bonus for some extra good work I had done getting out reports during one difficult quarter, and for adding a system for the new mini-branches being opened in grocery stores around the state. My $1,000 bonus pleased me, until I looked at my paycheck. Because this extra compensation was over and above my regular salary, it was whittled away by taxes until the actual amount received was less than half the promised gift. Good grief, does this happen to everybody? No wonder nobody was satisfied, even when they succeeded in making significant sales and supposed paper profits.

The extraordinarily hard work that Retail Compensation demanded began to take a toll on my health. My constant annoyance with the business end of the work, as well as my increasingly strained interpersonal relations with my superiors, did nothing to relieve the stress. Unhappily, I had also to admit that my physical condition was worsening as my disorder progressed, so that I could no longer hold up my end of this truly unsatisfactory system. It was clear that it was only a matter of time before I would become redundant in any case, inasmuch as the new contractor would soon be setting up the system in an entirely different way. I felt incapable of fitting into the new environment, and did not trust these managers to let me try.

I announced my resignation. I was tired, and thoroughly fed up with Wells Fargo Bank. For another month I continued to try to help Retail Compensation finish a quarter's work as a contractor from home, but even this was beyond my strength. By this time the department managers were also fed up with me, and so we agreed to part company, permanently.

I made good friends while working at the bank, although unfortunately these friendships did not last beyond my time there. Programmers are surprisingly social and cooperative human beings, and I enjoyed being with them. There was a good deal of camaraderie associated with the hard work we shared, and we all were dependent on each other's expertise and good will to get our own tasks completed. For the most part I was readily accepted as a full member of the team, although occasionally joshed for "lying down on the job." I had some problems with one woman, who resented having to help
me with certain physical tasks, such as getting things out of the printer. I thought her resentment quite justifiable, inasmuch as "waiting on" a fellow programmer—her junior at that—was not part of her job description. Although I worked hard at smoothing things out, trying to help with tasks that I could do for her, our relationship remained a bit uncomfortable. In any event, the constancy of human interaction was a truly positive aspect of working in a large business like Wells Fargo. For a person with a severe disability, such interaction is particularly gratifying, as restriction can become the norm, and friendships are often limited to fellow "crips."

After leaving Wells I tried to get another job. I earnestly started a job search similar to the one I had conducted in 1990. But the field had changed quite a bit, and so had I. I soon found I was no longer really up to the task. This undoubtedly had precipitated my abrupt departure from Wells in the first place. But I had a few interesting adventures during the few months that I attempted to remain in the work force.

I tried to connect with some agencies that place workers, sometimes hiring them directly and farming them out to businesses, or more often making contracts with both workers and the business, matching them up and taking a cut off the top. These places seemed to take a dim view of my disability and were not very interested in my background, which by now was not in what they considered to be "cutting edge" technology. I applied for a couple of jobs that were not dissimilar to the work I had done at Wells. One of these places—Southern Pacific Railway, with an office in downtown San Francisco—turned out to have an inaccessible workplace in its old building. When I asked where the bathroom was (a necessary early question from me in any interview) I discovered that the only accessible one was two floors down. I would never have dared enter it on my own for fear of never getting out again. I had an interesting interview with a Risk Management Group in Oakland that had many contracts with the statewide University of California System. The group was working on the "scrambled egg" case at U.C. Irvine (doctors had mixed up human eggs from different women who had come for in vitro fertilization, and any resultant offspring would have had indeterminate parentage). Fascinating, but I never found out the real reason for being rejected, as was too often the case.

Finally I did land a job that looked like a really good fit. In this one I could "telecommute," working entirely from home while logged into a company computer. My two bosses were a couple of young entrepreneurs doing contract business with Charles Schwab. They had access to the Schwab mainframe computer (located in Phoenix, AZ) and the company's financial databases. The work was interesting, and used a slightly different FOCUS database technology from the one I had used at Wells. Unfortunately, however, Schwab was busy converting its information systems to the newer client-server technology, and the organization simply failed to maintain its mainframes. My programs ran very slowly, the system was constantly clogged up with other actively running programs, and I was unable to complete my tasks quickly enough to keep up with the contract work. After a couple of frustrating months I finally resigned,
telling my two young bosses that I simply was unable to do the work, given the equipment provided. They didn't seem too unhappy, as they had also seen the handwriting on the wall, and had been actively seeking and acquiring other contracts for financial services that did not need my help.

Finally, a classified ad caught my eye: the broker for the new East Bay Paratransit, to be operated jointly by BART and AC Transit, was looking for managers in both their certification and their customer service departments. This new paratransit service, required under the Americans with Disabilities Act, was just about to get started. I applied, saying that I thought I could handle either of these jobs, with my background in transportation advocacy as well as the business background I could now boast of after five years working in the bank. I was interviewed, and I think I would have landed one of these jobs, but I withdrew before any decision was finalized. I realized that I was no longer capable of the long hours, the commute, or the rigors of work away from home.
4. Advocacy — Disability Wisdom

Advocacy is political. I suppose I caught the "political bug" from my mother, who was active in local politics and intensely interested in progressive causes in general. My brother David worked to secure the ban on smoking in public places, and also worked within some nonprofit organizations dealing with a variety of causes. I learned much from observing his experiences organizing advocates through phone-trees, letter-writing campaigns, and newsletters. However I acquired the urge to get involved, now I believe that my entire life led up to this period of active disability advocacy. I utilized all my skills as researcher, biologist, patient, teacher, and computer expert, as well as the business and organizational capabilities and grantsmanship that I now possessed. The last five years have truly been the most satisfying of all my years—the period in which I believe I have made my greatest contributions to my fellow human beings. These are the years when I have received the greatest rewards in terms of human friendship and love.

At first, I was afraid that my Gemini personality would interfere with my ability to lead. Always being able to see at least two sides to every argument, I was sure that I would be frozen into inaction by an inability to make up my mind. However, when I picked my battles carefully, I found that choices were easy. It was always right to help folks who needed help, and if one could offer a kind of assistance that empowered its recipients to continue on to help themselves, so much the better. At the same time, my sympathy with people on the other side of any question enabled me to work with these others too, often to gently prod them into agreement or, if necessary, to push them into changing their position.

My first political advocacy position was the Chairmanship of the Alameda County Paratransit Coordinating Council (PCC) in 1988-89, before I started at Wells Fargo. Earlier (in "Coming Out") I described how I acquired this position, along with some of the early mentors who taught me to conduct meetings effectively and who gave me an understanding about the field of public transit and the transportation of people with special needs. Here I will describe more of what I learned at the PCC, for this year laid the groundwork for my future success as a disability advocate, and it is instructive to look at both my successes and failures.

Effective advocacy requires the setting of clear goals—hopefully ones that are achievable within a given time. The first of my goals as Chair of the PCC was to ensure that funding designated for Paratransit was utilized to maximum effect. This turned out to be the easiest of my three main objectives, and the only one that was achieved during my tenure. The county sales tax measure allocated a small percent of revenues for Paratransit, but I soon discovered that most of the politicians responsible for oversight of the complex network of county providers had never even heard of it. My
first task was to disseminate information about this specialized transportation, and about the people who so desperately needed a Paratransit option.

I began by visiting the county supervisor from my own district, an extraordinary man who, in the 1980s, had been called the conscience of the Board of Supervisors. Struggling to gain a foothold in the political world into which I had been thrust and about which I knew nothing, I called to ask if I could meet John George. I wanted to tell him about my hopes and plans for improving transportation for the elderly and disabled populations of our county. But an aide, Mr. M., told me that the supervisor was ill and not seeing anybody. Mr. M. offered to meet with me instead, and promised to pass my information along. What I learned then was that Mr. George had suffered a stroke about three months earlier, that aides were keeping this quiet and were doing their utmost to protect him from the public, and that the stroke had left him aphasic (unable to put his thoughts into words). In short, John George was now disabled.

To my surprise, when I arrived to see Mr. M., I was ushered directly into John George's own office. The aide explained, "John told us to bring you in to talk to him directly. He says that this is extremely important." Nothing wrong with his hearing, anyway! Nothing wrong with his intellect, either. He had instantly recognized the significance of the fact that I was the first disabled person to hold a leadership position in the organization that purportedly advised his Board on the transportation needs of the disabled and elderly. Realizing that I had better live up to Mr. George's expectations, I quickly laid out a list of problems confronting users of Paratransit, along with some proposals for improvements. I asked him if he could help me determine which local politicians were most likely to be interested and able to assist us, saying that I was new to the political scene and knew no one.

Haltingly, through signals to his aides and writing things down on a notepad (apparently he could translate his thoughts into written, but not spoken, words), this small, frail man outlined the paths of political power on the local transportation scene, explaining who controlled funding and who was involved in expenditure planning. He told me that there was a meeting the next day at the Alameda County Transportation Authority, of which he was a member. "You be there," he instructed. "Tell them this," he said, giving me a suggestion. "I will see that you are properly introduced."

He was as good as his word, and for two or three months John mentored me, stepping me through the thickets of county politics, introducing me to key figures, transforming me into a knowledgeable insider. As he did this, I learned more about this remarkable and caring humanitarian. From a poor black family in Richmond, he had indeed risen to be the voice of conscience for the political body on which he served. The four other members of the Board looked to John George for the final word on what was truly and ethically right, as opposed to convenient, cheap, popular, or politically expedient. He never wavered from what was right, good, or most helpful to his constituents. Enormously popular with these constituents, John George could have become far more prominent and powerful than he was on the relatively obscure county Board of Supervisors. But he felt that he could serve "his people" best from this position.
Six months after I met him, John George died. I deeply and publicly grieved for him, joining his aides and hundreds of friends in a candlelight vigil in the courtyard of the county office from which he had served for so many years. Truly I wanted to emulate this good man. It had never occurred to me that one could find this kind of caring, selflessness, and generosity in a political figure. Were I to continue in politics, I would model my own work after his. Not to seek power, but to open myself to hearing the needs of my constituents—all of them, and to figure out the best, most effective ways to help them. Over the years I tried my best to learn how to achieve this high goal. Given the rarity of true leadership, I knew that I had been blessed to see it in action. Thank you, John George, for showing me the way.

Whereas overall funding for Paratransit was still utterly inadequate, we worked hard to get as equitable a distribution of the available funds as possible. By the time I left office, city councils and other government bodies around the county were well aware of the problems of transportation for those unable to drive or to use public transit. Over the ensuing years I continued to bring these issues to the attention of politicians and their public.

---

A second problem I tried to solve at the PCC was to bridge the enormous gulf between seniors and persons with disabilities. It remains a problem to this day. People whose disabilities result from aging seem to feel that younger persons with disabilities have nothing in common with them, although of course the barriers to mobility and the need for transportation are similar. On the PCC, the few actual seniors and the many more people who represented them wanted to make sure that the younger disabled groups didn't snatch away any of the resources they were carefully husbanding for their constituents. The very fact that I was under sixty-five and in a wheelchair was cause for distrust. I spent many hours talking to individuals on the Council and to seniors themselves, most of whom seemed able to grasp my points more quickly than did their representatives. I explained that the difficulties I experienced with transportation were much like theirs: I couldn't get on a bus, and my efforts to get around simply exhausted me. I was eager to reach across this artificial gap and win the seniors over to my proposals for equitable distribution of resources among both groups.

To my dismay, as I began to woo seniors to my side, I lost the support of my disabled peers. Apparently they had elected me because they, too, assumed that I would most strongly represent the interests of wheelchair users. Seniors were in the majority, of course, and for years the PCC had simply catered to their larger numbers by providing them with greater resources. The senior majority resented efforts by disability advocates to get their often more costly needs met at an equivalent level. The goal of the younger minority was to grab more of the funds for their own use, claiming that they deserved more and better service because they were younger. They argued that seniors were satisfied with medical trips, weekly church attendance, a few visits with family. The younger people with disabilities had much more active lifestyles and wanted all these
things and more, such as transportation to work, to school, or to recreational activities. In fact Paratransit funding was not adequate to meet even the most urgent transportation requirements of either group, and I refused to consider that either faction was more deserving than the other.

My third goal was to restructure the overly large and unwieldy PCC Council itself to do a better job representing actual users of Paratransit all across the age spectrum. I had convinced many PCC members and other concerned politicians of the justice of my proposed changes, but before a plan could be implemented, my disabled peers staged a coup. They went to the Board of Supervisors behind my back and persuaded several of them that my process was simply taking too long, and that I was not fairly representing them as their Chair. As a result, the supervisors stepped in and abolished the entire organization.

What happened next is instructive. The staggers of the coup got themselves appointed as a small committee to carry out the mandates of the original PCC. Demonstrating that it is a lot easier to criticize than it is to accomplish positive change, this committee failed to move forward in any way whatsoever. After two years it, too, was abolished, and a new Paratransit Advisory and Planning Commission (PAPCO) was established. PAPCO turned out to be almost identical to the structure I had proposed three years before. Sometimes, at least, planting the seeds yields flourishing plants only many years later, and often patience is all that is needed to allow the rest of the world to come around to something close to your own view. Admittedly I was continuing to nudge city and county politicians on the subject of Paratransit during the interim.

Conditions for all of us needing Paratransit improved dramatically when, in 1995, the local transit companies (AC Transit and BART) began providing complementary Paratransit as required by the Americans with Disabilities Act. Although PAPCO still exists, its influence has been marginalized by the fact that county funding for Paratransit is now only a minor portion of the total available to its elderly and disabled residents.

Although my first position as leader advocating for disability rights was hardly an unmitigated success, I did make many important friends. I remember accompanying Hale Zukas to a couple of demonstrations and transportation hearings in San Francisco. At one of these, I heard a powerful speech by Maggie Dee, who made an eloquent case for the needs of her disabled colleagues in the relatively rural area of eastern Contra Costa County. Transportation problems clearly were even more difficult there than in our citified part of Alameda County. I never forgot this presentation or the person who spoke with such passion and compassion. It was not until six years later at the twenty-fifth anniversary of the founding of Berkeley's CIL that I finally met this wonderful advocate, who has since become a strong collaborator and a close friend.
Another friendship was forged when Sue Hodges approached me for assistance in setting up a peer training program to teach disabled and elderly people to ride BART and public buses. This kind of program is very important, inasmuch as it can move people off of the more costly Paratransit, at least some of the time. Furthermore it has the potential to free people trapped by their immobility, as I had once been myself. After Alameda County hired Sue to run the pilot program, I became one of her peer trainers. It was such a pleasure to take both elderly and disabled people on outings, teaching them to ride the bus and to find their way around BART's complicated system of stations and elevators.

The use of elderly and disabled peers was the strength of this particular training program. I had been impressed by the power it gave me to have a disabled person (Hale Zukas) tell me that I could get on a bus. He knew exactly what I needed to do. It is much harder to trust this type of instruction from an able-bodied person, who often does not know what the person with a disability can accomplish. For example, AC Transit staff had told me that I would be unable to ride their buses. Unfortunately our transit training project was killed early on because legal minds started worrying about the potential liability of volunteer peer trainers, should any of our clients get hurt.

In spite of the failure of this project, Sue Hodges also remained a good friend and colleague. She had just graduated from Mills College, the campus of which was then very inaccessible, so she understood the need for advocacy. She went on to become the Chairperson of the Oakland Mayor's Committee for Persons with Disabilities. We continued to work together on transportation and other issues over the next decade.

Many others could be added to this short list of friends and fellow disability advocates I came to know in the late 1980s. It is with great pride that I include the distinguished leader of our Berkeley disability community, Ed Roberts, and his assistant Patrick Connally. Ed tried hard to get me to try air travel in addition to my other transportation options. I resisted this because of the danger of damage to one's wheelchair, which is placed in the airplane's baggage compartment and subject to notoriously rough handling. I dared not risk my local mobility for an airplane ride. Since I had done so much traveling earlier in my life I felt no urgent need for extended trips of this sort. Were I much younger, or had I not experienced international travel, I probably would have felt differently.

As a matter of fact, it was Ed Roberts who first gave me the idea that bus travel would be possible, although Hale Zukas was the person to provide the specifics. Ed himself, one of the founders of CIL in Berkeley and later the Director of the California State Department of Rehabilitation, was a ventilator-dependent quadriplegic who also used a fully reclining wheelchair. Once he commented to me that he had been somewhere on AC Transit with his son. "On a bus?" I exclaimed. Of course if he could get on a bus, I surely could, and so I began the investigations that ultimately enabled me to do this. This again demonstrates the power of peer guidance.
After Ed's untimely death, I continued to see his former assistant, Patrick Connally. Patrick has been a strong supporter of many of my subsequent advocacy endeavors. He moved across the Bay to Marin County and formed the Disability Rights, Education, Enforcement, Services (DREES) group, which later became a part of our San Francisco Bay Area Network on Disability.

The puzzle of how to get seniors and persons with disabilities to reach out to each other as people with common needs continues to haunt me. Not only have I worked a great deal among seniors, but my own slowly progressive disabling condition gives me special empathy with the experience of gradual aging. Recently I wrote the following vignettes to illustrate the disconnect between the concepts of disability as viewed by the elderly and by younger people with disabilities.

Pates (my mother's) body was wasting from arteriosclerosis, and eventually she had to have both legs amputated below the knee. She was in her seventies at the time, and she gamely tried to get on with her life. But it was no use. An artist, she seemed unable to work at her easel from a sitting position. She rented a three-wheeled bicycle and attempted, using her artificial limbs, to trek about her small town and look nondisabled. But this never really worked either—it was an exhausting, futile business. Why could she not have climbed into a power chair and whizzed all over the lot in that? Never! That was a too-obvious admission of disability. Could she perhaps have used some adaptive equipment to help her manage her paints and angle her gaze properly at her canvas and her subject? Even I—perhaps especially I—could not persuade her that the acknowledgment of disability is the beginning of wisdom on the subject. She did not live long after becoming disabled, and although she showed a bravely cheerful face to the world at large, she admitted to me that she could no longer find happiness.

Ken (one of my graduate school professors) suffered from a slow neurological breakdown—Parkinson's or a related disorder. His mind remained perfectly clear, but he moved and walked with increasing difficulty. For a number of years he continued to come to the laboratory—first several times, then only once in a week. But this exhausted him, and eventually he just stayed at home, moving slowly about the flowerbeds at his hillside house, first using a cane and later a walker. I spoke to his wife and learned that he secretly used a manual wheelchair at home, but seldom left the house because he could not bear to be seen in public in this device that revealed his distress to the world outside. They no longer went to theaters or musical events, the opera, or museums—the life they had previously loved to share. By that time I was using a power wheelchair and gadding about town easily on trains or in Paratransit vans. I decided to visit Ken, and arrived at his home in a van. The house itself was perfectly accessible, although situated in a part of town without the service of public transportation, and on an impossible hill. But once inside I showed him how much fun it was to race around the garden and in and out of the house itself in my chair. I told him about the concerts I went to. I said how Paratransit vehicles could so easily release him from his isolation. He seemed excited by all of this, and I felt him on the verge, that evening, of taking the
plunge. Sadly, the next day his excitement was gone; a year or two later he died, having never left his beautiful prison.

Margaret is in her eighties, and has a slowly progressive neuromuscular disease. She can still walk very slowly and unsteadily with the aid of a walker. At home she has an electric wheelchair in which she inexpertly dashes through the house, banging the walls and getting stuck in doorways. But her house is unramped, and any venture out of it involves transferring to a manual chair after the slow, tortuous descent down her two front steps. She has been unwilling to take Paratransit, because "somebody might see me." Instead, she asks a friend to load the folding wheelchair into a car and sneaks off to the doctor sight unseen. Of course her front steps could be ramped—indeed, when she purchased the house a few years ago it was ramped, and she had the "unsightly" thing removed. Margaret is an artist too, but she no longer attempts to paint, preferring to lie in the sun in her bedroom stroking her ancient cat and staring out the window, thinking about her past. Our mutual personal care assistant arranged for us to meet, and I dashed into the restaurant with my power chair (recliner) at a rakish angle, red booties (the braces I wear on my feet) preceding me down the aisle between tables. In the restaurant, we saw three other wheelchair users having a casual lunch together. All three were friends of mine, so we exchanged jovial greetings and maneuvered our chairs, backing and filling until all were comfortably situated. Margaret's eyes bulged, she began to laugh, and much to her own surprise she did not feel a bit out of place. We've gotten together several times. She's thinking about rebuilding the ramp, maybe even trying to paint a little some sunny morning. Will she? I hope so. But in between visits her mind falls back into its earlier thought patterns, and progress is slow. There is not much time, and I can only watch and hope that she will come to spend some of it with zest, with laughter, with purpose.

The elderly are products of their own time, no matter how forward-looking they may try to be. Elderly people who become disabled late in age share the attitudes and prejudices about disability that they acquired earlier in life. They may feel that disability is intolerable, literally a fate worse than death. The idea of starting a new life in an utterly new direction may seem hardly conceivable. Maybe these aging minds cannot make the about-face necessary to adapt. Can we help? There must be a key, if we can find it, to unlock the capacity to live again, to laugh again, to have a reason to live out their lives to the fullest.

After I left Wells Fargo, I entered into the next phase of my career in advocacy. The question of the elderly vs. the disabled was to come back full force again and again. During my years at work I had continued to attend Berkeley Commission on Disability meetings. I was frustrated by the weakness of the group after the departure of its powerful Chairperson, Corbett O'Toole. A Berkeley ADA Coordinator, city staff to the Commission, had been hired to implement the Americans with Disabilities Act's Title II requirements. This person, although well-meaning and conversant in the law, ran the Commission meetings in accordance with her own views of what the disability
community "ought" to want. A divergence between staff designs and constituent desires seems to be a constant in advocacy groups that are set up only to conform to the law. The advocates on these committees need to have the strength to steer their own course. Berkeley's Disability Commission had been organized and promoted by the active advocates of the 1970s and early 1980s. What a shame that it now appeared to simply rubber-stamp staff's dictums, as I had seen already at the staff-run AC Transit and BART accessibility committees. No wonder disabled people in Berkeley found a disconnect between their lives and the activities of this commission.

The city's ADA-Coordinator was a problematical appointee for other reasons. She herself had at least one disability—a severe repetitive strain injury—that required accommodation. I observed that she had failed to get adequate accommodations from the city, and she appeared under constant stress as a result. Indeed, there were tearful breakdowns during commission meetings that were hardly seemly as she carried out official duties for the City of Berkeley. I wondered out loud how much help she could possibly be to our entire disability community when she was unable to help herself in a simple, work-related accommodation. Eventually she resigned, but not before going out on medical leave for a couple of years, leaving the Commission without any guidance at all. An official who knew nothing about disability matters was assigned to staff Commission meetings during that time. Unfortunately the commissioners themselves did not have the wherewithal to take charge. The Commission needed to be rebuilt in its original image, as a body truly reflecting the views of its constituents that could appropriately advise the City Council.

Over the years various city councilmembers had asked me to represent them on the Commission on Disability. Only after I was free of work entanglements, in 1996, was I available to accept this responsibility. My timing was fortunate. At my very first official meeting the commission was presented with an "ADA Transition Plan" for its approval. This plan, a requirement of the Americans with Disabilities Act, had been drafted by a contractor with no real input from the community, although a couple of persons with disabilities did act as his consultants. I immediately saw this as an opportunity to reshape the Commission.

The implementation of an ADA plan requires the introduction of several million dollars into modifications of much of the city's infrastructure, in order to ensure access by the disability community. The plan covers all city programs, involving city departments that are open to the public, libraries, roadways and pathways, parks and recreational facilities, and all public meetings—essentially everything run by the city itself, exclusive of the schools (these are under a separate jurisdiction in Berkeley). I immediately introduced a motion to table consideration of the ADA Transition Plan until such time as the Commission could organize a series of public hearings and create a plan of its own to prioritize the changes ultimately required to conform to the Americans with Disabilities Act.

My fellow commissioners had already come to respect my views even as a private citizen, and had frequently looked to me for guidance whenever I had chosen to speak up at meetings. On this occasion, my motion was passed unanimously, and the
ADA Transition Plan was to become the primary focus of my work on the Commission for the next two and one-half years. When I asked the contractor and the city staff who were present whether we could view the detailed analyses of the physical plant which formed a basis for their report, I was told that these analyses and projected plans were "inaccessible" to persons with disabilities (at least, major disabilities such as my own). I exploded, "That is illegal and just plain outrageous! Who is this plan for, anyway?" I insisted on being told of the location of these documents, housed in the city's Engineering Department, and soon found a way to view them for myself.

This brings me to a description of the helpers in my life. I believe that nobody accomplishes much of real significance entirely "on their own," but this is particularly true of the severely disabled person, who cannot lift or hold anything, or sit, or paper-shuffle, not to speak of dressing herself, preparing meals, performing ordinary housekeeping tasks, etc. I was to have a very large number—indeed, a continuing stream—of attendants, secretaries, and other helpers who kept my life going and enabled me to perform my work or political activities and almost all else for which I have been responsible during the past two decades of my life.

My first attendant, Mimi, was with me during my years of transition from the house-on-the-hill through my Oakland year, and on into our new accessible North Berkeley home. Mimi washed my hair, bathed me, did housework, cooked all my meals when I was alone, shopped, and helped me with my first experience using a urinary catheter and legbag. I was still able to dress myself—like a fireman—because I could sit up just long enough to haul on my heavy brace and pull my clothes on over it, if I did it fast.

When I started commuting to San Francisco to work, we had a dilemma. Mimi could not work on weekends, and I could not bathe on weekdays. Clearly another hand was needed. CIL sent me a list of people willing to provide attendant care services in Berkeley. The woman who answered my very first phone call sounded pleasant and understanding, and was available to come the very next Saturday morning. It happened on that day that Ranu was away, and I lay alone in bed in some fear and trembling, not knowing what to expect. Edna came in through my unlocked back door, introduced herself, and proceeded to bathe me without fuss. She was kind, gentle and compassionate, yet so full of humor that we were laughing by the end of the bath and feeling good about each other. Dear Edna has been with me almost continually ever since, gradually taking over the entire management of our household—cooking, cleaning, washing, shopping, and my ever-more-complex personal care tasks. Now I have a number of attendants, but Edna is "the General," keeping all the rest (including Ranu and me) in line, and training a succession of people in the tasks required for my personal care.

Mimi left within a few months—she didn't enjoy housekeeping in an empty house, now that I was gone more than twelve hours each day. Since I could still dress myself, during most of the Wells Fargo years Edna managed my attendant needs herself. As I got weaker, however, I could no longer sit up and do these things for
myself. When Edna left town temporarily, she brought me her niece, Vivian. Ah, how we all adored Vivian! Hardworking, caring, and full of fun, she lit up our lives for many months. She brought something few others can bring to personal care—the knowledge of what it feels like to be on the receiving end. Twenty years before she had suffered an aneurysm that nearly killed her, and had come back from death through sheer will power. What an inspiration she was, and also how tenderly she ministered to my pain. Tragically, she suffered a stroke after a year with me. Although she recovered almost all function, she was not physically capable of carrying the load my work required. By this time Edna had returned, and Vivian moved away. Although she comes back occasionally to visit, we continue to miss Viv's unique vitality, charm, and wit.

Now that I require several hours of attendant care each day, with a three-hour morning routine, and another hour or two at night, the number of attendants and their turnover has increased apace. Currently I have two beautiful women along with Edna, with one or two others filling in the gaps. I become truly close to the best of these caregivers, and several I view as sisters. With indifferent attendants, one can remain indifferent, but the care becomes a job to be endured. At the present time I am virtually bedridden, which means that in addition to the daily routine, I must be accompanied by a skilled attendant whenever I go out of the house (now almost always to a doctor). When hospitalized, it is necessary to have my own attendant stay with me overnight, as hospital staff are not prepared to deal with a severe disability on top of the post-operative or other nursing care required.

Apart from hands-on caretakers, I have long needed other assistance to manage my life. Although I am able to enter things into a computer in one way or another, I am incapable of handling pieces of paper. While I was still Chair of the PCC, the Council hired an Oakland neighbor of mine, Esther, to act as PCC secretary. Esther was twenty years older than I, and a perfect delight. A linguist, she had a small business typing manuscripts in various languages for academicians in the Bay Area's education-enriched environment. This very bright and active person soon picked up the jargon of transportation policy, took notes at meetings, worked with me on the preparation of documents, and typed everything neatly and efficiently. I enjoyed her lively personality and knew I would miss her when my tour of duty at the PCC was over and I moved back to Berkeley.

I had seen Esther often prior to this time, although I did not know her personally. The mother of Elizabeth Blumenstock, the wonderful lead violinist of Berkeley's Philharmonia Baroque Orchestra, Esther was usher at many of the concerts I had attended. I knew Elizabeth slightly from my musical circles, and was very fond of her playing. At one of these concerts, a mutual friend had pointed Esther out to me as Elizabeth's mother. I always remembered the glow of Esther's beautiful smile as she greeted me at the door, handed me my program, and let me know where I could unfurl my little mat and lie on the floor, hopefully out of harm's way. I had thought, "What a wonderful mother!" It was a musician friend who suggested that Esther would be a good choice for PCC secretary, since she did that type of work and lived so close to me.
Once, after I was already at work at Wells Fargo, I went with a friend to a popular North Berkeley cafe. Suddenly there was Esther, greeting me with her usual warm smile. I was delighted to see her, and asked her whether I could call her about another job. By this time I knew I would have to have help at home with our household accounts and other paperwork, including filing the masses of paper I was beginning to accumulate from classes and Wells Fargo work papers. Later this would include the entire Senior Education Project, with which Esther helped materially. And so Esther began to come regularly on Saturdays to take care of these needs. Admittedly I was often very tired after a week of twelve-hour days and frequent nightly interruptions by Wells computer operators, so we would have a prolonged coffee hour prior to settling down to work. When the weather was fine we would have lunch and coffee at the popular Cheeseboard and French Hotel first, and then trek home for work. Other times I would decide we needed a holiday. If something special came up we would take off for a museum or some event or other, postponing all paperwork for another week.

I suppose we neither of us knew how much we had come to value each other until Esther, then nearly eighty years old, suddenly took off for Israel for a whole year. I panicked! She left me a substitute, who was very nice and did the work quite adequately. The experience made me realize that Esther was much more than just a secretary, but a dear friend whom I sorely missed. And I was not a little worried about her. Israel was a safer place then than it has since become, but it was not exactly like home. And she was all alone, and had chosen to live in an Arab section of Jerusalem, and she was elderly, and . . . dear God, anything might happen. Some of it did. She was robbed once, she fell and hurt herself once, and she herself was terribly lonely. Occasionally I received extraordinarily long letters printed in a neat and tiny hand on picture postcards. They told of her loneliness, although none of the other happenings, and I answered with computer printed letters telling her how much I cared about her.

On her return, our friendship was sealed. Although Esther continued to be my secretary, she eventually "graduated" to factotum (her word). And so, at the time of my entry onto the Disability Commission, it was Esther who smoothed the way for me to get into the City of Berkeley's Engineering Department, and Esther who unfurled the many pages of Transition Plan documents, held them before my eyes, took notes as I commented, and made the plan and its physical basis accessible to me. It was Esther who subsequently assured my safe passage to and from the many evening meetings at the Commission and the City Council, who supported all my work during the next several years of my active political-advocacy life. Esther, as much as any other member of my family, shared my triumphs and glories, as I was eventually heaped with honors that she carefully put up on "the Wall" outside my room.

As of this writing, dear Esther (now eighty-five) is my daily companion, reading to me as I lie in bed, distracting me from the fact that I can no longer do the things that meant so much to me. We listen to music together, laugh together with my many visitors. She carefully measures out food and fluids into the bag suspended above my bed, as I now must take these through a gastric tube, and chases away visitors when I get too tired. When Ranu is away, she stays here with me, and we feel ourselves to be
constant companions even when apart. Indeed, Esther and I have been on many intellectual and spiritual journeys during these years. She introduced me to her church, the experimental Episcopal church in San Francisco, St. Gregory of Nyssa. These were the first religious services that I truly enjoyed attending, and I regretted it very much when I was no longer able to make the trip to San Francisco. But friends from St. Gregory continue to participate in my life, and Esther and I have explored not only our own spirituality but also delved deep into early Christian and Jewish history. We have held many discussions about areas in which Christianity has gone astray from its original purpose.

Esther is equally beloved by every member of my family and all my "staff," as General Edna laughingly calls the motley crew of caregivers who minister to my every need. Without such marvelous support, I could never have achieved the things for which I have been so honored.

By the rules of the Berkeley City Council, persons elected to chairmanships of advisory commissions may remain in office for a maximum of two years. Elections are annual. In February of 1996, three months after my appointment to the Commission on Disability, an election was held for Chair and Vice Chair, and the current Chair was required to step down. This individual made a deal with me—she would nominate me as a candidate for Chair (virtually assuring me the election) if I would nominate her for Vice Chair. I went along with this, as it seemed harmless at the time, but it would prove to create difficulties for me down the road. It developed that she was interested in the title, but utterly disinterested in helping me or the Commission, and in fact she attended meetings as seldom as possible consistent with remaining a member at all. It was many months after my taking the chairmanship that I was finally able to persuade her to resign from the Commission and thus to acquire a Vice Chair willing to share the burden of leadership.

By this time we had already scheduled meetings and discussions about the ADA Transition Plan. After I became Chair of the Commission, we appointed a joint Parks, Waterfront, and Disability Committee made up of members from three commissions and other interested citizens to discuss and prioritize the many changes that would be required to bring our city parks into compliance with the ADA. Meanwhile, we made proposals for some of the more urgent library changes, changes to the senior centers (we were meeting in one of these), sidewalk enhancements such as curb-cuts, and access improvements to a few other essential city departments. We scheduled the first of three public hearings to obtain public input on these proposals. Prioritizing was difficult, inasmuch as we were working with moving targets. It soon became apparent that one hand of the city knew nothing about what the other was doing. General city improvements are ongoing affairs, and we were trying hard to get a handle on the things that were going to happen anyway, because any major construction by law would have to include at least minimal access improvements. I was trying to preserve the $1.7 million
annual ADA budget for things that would not happen in the normal course of city maintenance.

Apart from my priority of getting the ADA Transition Plan on track and accorded an appropriate public process, I was eager to bring the Commission itself up to full membership and to have a good spectrum of disabilities represented. I encouraged blind and deaf residents to apply for membership, and soon we had a blind and a deaf commissioner, along with an elderly person who had suffered from a mental illness. There were several wheelchair users, but these had a variety of illnesses and/or other mobility disabilities, including environmental illness and multiple chemical sensitivity.

I set about developing subcommittees to work on various aspects of disability policy: Transportation (I continued to lead in this area of my own expertise), Health Care (including review of the unique Berkeley Emergency Services for attendant care), Housing, Deaf Issues, Blind Issues. Several members were appointed liaisons to other commissions, such as Health and Public Works. One member was to work with the Board of Directors of CIL, to develop a clear understanding about how we could share expertise and resources in order to better serve the disability community. We had ad hoc committees working on specific problems, such as prioritizing curb-cut locations. One of my goals during the first year in particular was to have frequent position papers on various subjects get on City Council agendas so that the council and the public would notice that the Commission on Disability was actively supporting Berkeley's disabled citizens.

Even before I became Chair, I proposed that the Commission set up a website for the use of the community, and I offered to become its webmistress. We were the first of the city's many commissions to propose this, and the individual who was then in charge of the city's website was enthusiastic about the project. Eventually other commissions followed our lead, although few provided the extensive amount of information that we made available to the disability community. Notices and detailed minutes of all meetings, the entire ADA Transition Plan, and proposals based on our public hearings were all placed on our pages, which were part of the City of Berkeley website.

The results of this swirl of activity were manifold. Soon city staff and other commissions were on notice that they could not take actions or make recommendations that might affect the disability community without consulting us. On my part, I was learning that literally everything affects the disability community, just as it does anybody else in town, and the Chairmanship of the Disability Commission resembled the job of Mayor of Berkeley (with our constituency a subset of approximately 17,000 citizens in a city of 108,000). Suggestions from our newly activated commissioners multiplied in number, and we had the difficult task of creating a workplan that would prioritize their proposals. We learned about the kinds of issues we could influence through our strictly advisory position, and what things were not under our control. For example we could make suggestions and recommendations to local private businesses, but could not demand enforcement unless they violated a city code or
regulation. We could suggest regulations, but had the most influence on ones that concerned internal city affairs. Wherever the safety of disabled persons was an issue we could so inform city staff and councilmembers. For example, we could insist that both private and public activities did not block sidewalks or curb-cuts, allowing safe passage of wheelchair users and blind pedestrians.

One of our commissioners, a remarkable young man with cerebral palsy named Matt Wangeman, was also a member of the city's Disaster Council. About a year before I left my Wells Fargo job, he had organized a joint public disaster planning workshop sponsored by both the Disaster Council and the Disability Commission. I had attended this exciting event, at which many useful suggestions were made by members of the public. After I became Chair of the Commission, Matt came to me in despair, saying (via his alpha board, since he had no speech) that he was absolutely fed up with the Disaster Council. They had done nothing to move forward with any documentation of the workshop, and the disability community was without a plan for assistance in the event of a severe earthquake or fire. He said he had had enough of the Council, and was going to resign. But would I help him move the agenda forward, for the safety of our community?

As a result, I became our Commission's Liaison to the Disaster Council. The Council members were working with city staff to revise Berkeley's Disaster Handbook, so Matt and I together created a chapter on disability issues. This was based on notes and a transcript of the workshop, and consisted of recommendations for persons with disabilities in preparing for a disaster and in dealing with it when it happens. Included also were instructions for rescue workers or neighbors, such as how or whether to move a person with a disability in a disaster situation, and how to communicate with people who have speech difficulties or deafness. Our chapter was ultimately included as an Appendix to the official Disaster Handbook. Matt and I appeared with Disaster Council members at a workshop presented to the City Council on the subject of Disaster Planning for persons with disabilities. I also worked with CIL to develop a voluntary program to identify disabled citizens and their special needs in case of emergencies or disasters. This became the basis for joint Disability Commission-Disaster Council planning. The Berkeley Emergency Services later received a grant from the city to begin a program largely modeled on our original design.

I thoroughly enjoyed working with Matt Wangeman on these projects. At the time, Matt was pursuing a Master's Degree at the University of California in City Planning. I suggested that he work with me on transportation issues as well, particularly in approaching the "new" Paratransit Coordinating Council (now known as PAPCO), to try to redefine that organization's role in overseeing countywide Paratransit services. During my tenure on the Commission on Disability, the new ADA-mandated services provided through BART and AC Transit had begun. There was much more funding for Paratransit (we were now able to take rides daily, rather than only two or three times per month), but deficiencies remained. For example, there was no service after the transit...
companies closed for the night, no service for individuals outside the designated transit area, and trips to adjacent cities not within this area were difficult or impossible.

Members of PAPCO were now appointed by Alameda County Supervisors, a move I had originally recommended, since PAPCO was advisory to them. I was appointed a PAPCO member for a while, but I asked that Matt be my alternate on the committee so that he could take my place when I was absent, ensuring that he got a thorough education in the subject. Before long I withdrew, and Matt was appointed in my place. Despite his energy and persistence, we both eventually gave up on the prospect of influencing PAPCO to take a new direction and really work to coordinate all of the Paratransit services provided within the county, including the city programs and the ADA-mandated services.

To date, city programs funded by Alameda County sales taxes continue to be problematic. Some cities simply gave their funds over to the broker who ran the ADA service. However, because the broker could only add very limited local service in addition to that already provided, neither Oakland nor Berkeley followed that course. These cities continued to run their own local Paratransit programs to supplement ADA services. The lines were fuzzy between ADA and supplemental Paratransit, however. Unless a trip could be shown to be clearly "non-ADA" in its intent, it was not legally permitted. After-hours and out-of-area trips were easy to define, but there was still considerable scope and a definite need for non-ADA services such as assisting riders into buildings or up steps, carrying groceries, or making multiple stops on a single trip. Making effective use of a supplemental program required considerable planning and knowledge on the part of both Paratransit staff and the users themselves. Many riders were very elderly and frail, some were cognitively impaired, and it was hard for them to judge which service was appropriate for a given trip.

Matt and I hoped that we could craft a good proposal to serve both the elderly and disabled residents of Berkeley, enabling them to make maximum use of both available Paratransit systems. Through our Commission's transportation subcommittee, we also tried to develop a relationship with the adjacent City of Oakland, hoping to better serve people on a wider, more regional basis. City borders make terrible barriers for Paratransit users. For example, taxis can drop someone off in another city but can't pick them up for a return trip unless they are licensed in both cities. We were trying to achieve some coordination of services in the northwest part of Alameda County, such as we had hoped PAPCO could organize on a countywide basis.

In the end we failed completely to create any reasonable liaison with Oakland, and had endless troubles setting up our own Berkeley program. The problems resulted from my old nemesis—the antagonism and lack of trust between senior citizens (or more commonly, their "representatives") and persons with disabilities. In Oakland, members of the Commission on Aging took over the joint committee that was supposed to be working with our group from the City of Berkeley. We soon managed to lock horns and made no progress at all. In Berkeley, we eventually carved out a program that was initially approved by both the Commissions on Aging and on Disability, but the planning
process was traumatic, with unnecessary bickering and backbiting. At the last minute, while we were appearing in front of the City Council, the Commission on Aging failed to support the proposal we were in the process of presenting. As with the old PCC, we needed so badly to work together! Surely the Chair of the Commission on Aging and I had the same goals. But I found her impossible to work with, and evidently she felt the same way about me. One of my commissioners told me that watching the two of us interact was like viewing a weasel and a ferret in a cage together.

I found this leader of the Commission on Aging, whom I will call M., to be vindictive, petty, and uncooperative. She was even abusive toward her own constituents on occasion, not to speak of her behavior toward me. M. took the view that people in wheelchairs, of which I was a prime representative, were grabbing all the resources that might be spread more equitably among a much larger number of elderly persons. I tried to reason with her about the realities of costs, of the specifications of the grants received, of the often desperate situation in which a person in a power chair might find him/herself with no options other than a lift-van (as opposed to an ambulatory senior who occasionally can be accommodated in the car of a friend or neighbor). "No! And the ADA is destroying the lives of the elderly," she would storm, deaf to any reasoning. I seemed to have no defense whatever against M.'s long-winded harangues and bitter attacks on all proposals I put before her. At the end of two or three hours of such battles I could literally no longer speak, could scarcely breathe, and became conscious only of the intolerable pain that creeps up on me after hours in my chair. On one such afternoon I finally burst out at her "M., you understand nothing of disability!" On this occasion my friends protected me, consoled me, and hustling M. away from me, helped me to leave the building and find my way home.

My ultimate solution to this problem probably confirmed her suspicions that I was her enemy, since I encouraged someone else to run for her office and shoulder her out of the position that had resulted in our constant confrontation. It was interesting to note how little support she had from her own colleagues on her commission. I confess to feeling complete relief at finding her absent from the once-fraught meetings. Issues that had drained so much energy began to be solved much more readily under a new leader of the senior group. What a shame that someone with so much energy should dissipate that energy in fighting those who might well have been her friends and allies. I certainly felt myself better off totally avoiding M. Unfortunately, this scenario was typical of senior-disability confrontations, involving the personalities of those who purported to represent constituents, rather than the needs of those who would be receiving the services under consideration.

Despite some of these setbacks and difficulties, all in all I was satisfied with the work our commission accomplished during my tenure as Chair. After my mandatory resignation from the chairmanship, in the spring of 1998, I stayed on the Commission only a few additional months to aid the turnover. For a time I continued to maintain and develop the Commission's website, but soon these tasks proved too burdensome, and my attention was increasingly drawn to the Access BART Coalition and other activities described below. Both the Commission and the City of Berkeley did
much to honor my work. In February 1998 the City proclaimed a "Jean Nandi Day," and a proclamation handed to me by the Mayor is affixed to the now cluttered wall outside my bedroom. The new Chair of the Commission brought balloons and other memorabilia from my colleagues, and I am delighted to report that the Berkeley Commission on Disability has continued to be strong and independent under its subsequent administrations.

A significant new organization in the field of transportation advocacy was spawned by the Commission's transportation subcommittee in 1996. Apart from Paratransit, plenty of problems faced persons with disabilities riding ordinary public transit. I spotted a marvelous article by a local writer, whose teen-age daughter was deaf, about her trials and tribulations dealing with the staff of our local train system, BART. Her daughter traveled daily by BART to and from Fremont, and at night needed to call her mother from the station to get a ride home. The TTY (a special telephone used by the deaf that transmits and receives typed messages) at the Berkeley station had been broken for months, leaving the young girl stranded and unable to communicate. The mother's repeated requests resulted in a runaround on the part of BART staff, and the legally required TTY remained out of service.

I called the writer and suggested that she come to the next Commission on Disability meeting with her daughter and some of her deaf friends. I arranged to have BART's Accessibility Coordinator at the meeting to answer questions. We heard testimony, followed by a mouthful of excuses and fatuous promises from the BART staff member, at the end of which he suggested that we "attend a BART Accessibility Task Force meeting to air our views."

At this point I exploded: "We have attended those meetings for years! Nobody at BART listens to that Task Force. The members are not legitimately connected with the rest of the disability community nor are they appointed or elected by anybody but themselves. The committee exists just to satisfy public policy that the transit company have a committee supposedly representing elderly and disabled travelers." I turned to my fellow commissioners, and said, "BART is a regional transit agency. We need to get disabled folks from cities throughout the entire region to rise up and go to the Board of Directors demanding service equivalent to that provided other riders. I suggest that our transportation subcommittee come up with a plan that would lead to this result. No single group, such as our Berkeley Commission, has the power to change BART's attitude. But a coalition of commissions and other disability organizations might make them listen."

This was the seed from which grew the strong and forceful group that we dubbed the "Access BART Coalition," or ABC. I created an ABC webpage, and our publicity proclaimed, "ABC consists of individuals and organizations representing elderly, disabled and all others who use BART services—Trains, Express Buses and ADA-mandated Paratransit. We speak for the entire BART Region (Alameda, Contra
Costa, San Francisco, and San Mateo counties). Our goal is to make clear to the policy makers at BART—its Board of Directors—the nature of continued problems we still have accessing BART. We work with BART, offering solutions, but demanding that policies be changed."

Ultimately ABC's membership grew to well over a hundred individuals and twenty-two organizations representing elderly and disabled constituents from twenty-three cities around the San Francisco Bay. It also included other passenger groups that wanted to work toward better access, such as bicycle riders and parents with kids in strollers. We held a couple of public meetings, but these proved costly and difficult for many disabled people to attend. A six-member Executive Committee was formed that actively communicated among themselves and with the membership through email, phone trees, and a monthly newsletter. The Berkeley Gray Panthers became ABC's fiscal sponsor, and money was raised among members and other donors, including a BART workers union that appreciated our work and our support for them.

The Commission on Disability, the founder of ABC, battled with the City of Berkeley to get permission to join ABC as an organizational member. The City Attorney huffed and puffed and told us that this would be illegal. The Commission was supposed to be advisory to the City Council only, not taking independent actions with or against other legal entities. I argued that the Commissioner's Handbook clearly stated that we were to take "whatever actions were needed" to assist our community to meet its needs. Transportation was clearly one of the most important of these needs, but the City Council had been powerless to induce access improvements at BART. Several commissioners turned up at the City Council meeting spoiling for a fight. To my utter astonishment, the City Attorney (a petite woman from India), got down on her knees beside my wheelchair and told me that she had changed her mind. She had decided that what we were up to was unlikely to damage the City in any way, and so she was withdrawing her objections.

Once again, our timing was perfect. At the beginning of 1997 two legal advocacy groups sued BART for discrimination against persons with mobility impairments. As ABC began actively lobbying the BART Accessibility Task Force and the Board of Directors, we were supported by the strong stick of this impending lawsuit, and we really got their attention. ABC’s agenda, of course, extended well beyond the needs of persons with mobility impairments, and during the first half of 1997 we worked hard to get better signage for blind riders, working telephones with TTYs for deaf persons, a better public phone system altogether with accessible phones in all stations, reliable signage to indicate elevator outages. During that year we made sure that the majority of the BART Accessibility Task Force and its Chair were ABC members.

In June 1997, the Board of Directors held a historic halfday meeting with the disability community, and they listened to what we had to say. This was the very first time that the board had held such a meeting with any members of the public. The workshop was so successful that they almost immediately organized a second one with BART's bicycle riders. ABC members supported the bicycle riders, while cautioning
them to be sensitive and aware of disabled persons on the trains. We pointed out that wheelchair users and blind passengers have frequent collisions with bicycles when getting on or off trains. Wheelchair users and cyclists juggled for open seating by train doors, and blind people fell over bicycles carelessly placed on the floor. So ABC members came to the bicycle workshop as well, and spoke about the need for access for all, as well as consideration for each other.

BART staff wrote up a detailed list of our expressed needs, addressing a few and deferring the majority. At least the list became part of BART's permanent documentation for future planning. Also the lawsuit was settled, resulting in the rebuilding of old elevators and escalators and improvements in the procedures used for cleaning and maintaining them. However, we found that we had to keep a watchful eye on BART and to continue to natter away at the Board to get the various improvements satisfactorily completed. Sadly, since the demise of ABC in 1999, there has been considerable backsliding in the disability awareness of BART staff and in the maintenance of those improvements for which we worked so hard.

A favorite column in the ABC newsletter was the BART "Ride-of-the-Month," in which I invited readers to write in with their favorite BART "horror story." I include here the first one of these, which was one of my own stories.

I use a very large reclining wheelchair. At 19th St. Station recently, the doors opened and—lo and behold!—there was a 6-8 inch step up to the platform! I had visions of remaining on that BART car for the rest of my life, but fortunately two on-the-ball passengers jumped out, called to the operator to HOLD THE TRAIN (!), got back in and asked me what they should do to help me out. I explained the technique of tipping my super-heavy chair backwards to get the front wheels up and over without injuring any one of us, and so I was out. Operator's explanation? "Sorry, this train is tilted." Needless to say, no agent was available anywhere in the station either to process my ticket or to receive a report.

Although the problem of "tilted" train cars was supposedly fixed after the ADA lawsuit settlement, cooperative passengers continue to be required to deal with any problems a person with a disability may be experiencing. There is absolutely no provision for train operator or station staff assistance in cases of emergency, and a sign is still prominently displayed in cars stating: "In case of emergency evacuation of the car, passengers should carry wheelchair users to safety. Do not attempt to evacuate wheelchairs." A grim thought for any of us who could be badly hurt by amateurish attempts to "carry" us, and who could ill afford to leave our chairs behind, subject to damage or total loss.

ABC's efforts to improve Paratransit services were less successful than its demands for changes to BART trains and stations. Nevertheless, ABC was considered to be a powerful force advocating for persons with disabilities in the Bay Area. In 1998 I received an award from the Metropolitan Transportation Commission for service to the disability community in the field of transportation (this was the second such award I had.
received, the first being for my somewhat abortive work with the Paratransit Coordinating Council). One of the MTC staffers stated publicly that ABC was more potent than any of the groups set up by transit companies or cities to represent the needs of disabled people, for the simple reason that it was beholden to no one but the users themselves. No staff was involved in telling the members what they could or couldn't do. Governing bodies were quite intimidated by the potential public relations damage they might sustain, or by potential lawsuits, or by possible potent acts of civil disobedience. None of these things were necessary, and the legacy we left at BART included a completely restructured Accessibility Task Force with greater community legitimacy and close ties to the Board of Directors. Of course the effectiveness of this organization, as with all others, will depend on the leadership shown by this new membership.

Profound lessons learned from breaking new ground with ABC contributed materially to my subsequent work. First, it was clear that a community-based, grassroots organization can be far more powerful than most groups working within the government. Secondly, each success achieved by any group within the disability community acts to further empower every other group. ABC's ability to "scare" BART into doing its duty was built on the earlier civil disobedience by ADAPT (the acronym then standing for Americans with Disabilities for Accessible Public Transit), which had achieved accessibility of public bus systems. The settlement of one lawsuit that required BART to fix elevators left a threat that blind or deaf people or others might similarly force appropriate action by legal means. It would seem that our time is coming, as the successes of disability organizations—even those that are otherwise unrelated—pile one upon another. Finally, new means of communication using telephone conferencing and the internet empower people to organize without having costly physical meetings, and enable people with a variety of visual, speech, and hearing difficulties to readily communicate with each other.

A number of smaller projects occupied my attention during the years between 1995 and 1999. I continued to stay in touch with the Computer Technologies Program, and took seriously some of the criticisms that had been leveled against CTP in recent years. These largely revolved around the continuation of COBOL classes in an era where COBOL programming was beginning to be less relevant in modern business. I recognized that the solid foundation in COBOL was the essence of the excellent overall programming skill acquired by CTP graduates. It would be impossible to develop, in an equivalent time frame, the same level of excellence in the newer "object oriented" type of programming that has become de rigueur in much of the computer technologies industry. However, students needed at least an introduction to these concepts.

I suggested a possible solution. Perhaps I could build a computer-based course as an introduction to Object Oriented Programming. It would be fun for me to do, as I would learn some new skills while preparing a self-paced series of modules in Visual Basic. I had had a number of courses of this type at Wells Fargo and knew their value,
and at the same time I was familiar with the training CTP students were given and could base my course on that specific background. Unfortunately, I felt I could not—should not—do this entirely for free, inasmuch as it would take my professional expertise and many hours of my time. In the end I gave them only a sample of what might be possible. CTP was unable to come up with the money to carry the project forward. Ultimately, though, they did find other computer-based coursework and eventually hired staff to provide an introduction to more modern technologies.

Apart from the coursework, CTP had been criticized in recent years for taking few severely disabled students. They had few blind students, even though they had had a blind teacher. One of my Disability Commission members was highly skilled in using screen readers, and at the time he worked at a company in Berkeley that was producing some of this software for use by blind computer users. I learned a bit from him about using this software, and purchased a copy to donate to CTP. All in all, CTP was highly appreciative of these efforts, as well as of my earlier help in assisting new graduates to acquire work at Wells Fargo. They, too, gave me an award for service to the school, which hangs with all the rest on my overloaded Wall.

I continued to explore assistive technology, such as screenreaders and special keyboards, as much for my own benefit as for any altruistic purpose. Some accessibility features, such as alternative mouse functions on the keyboard, have become a standard part of the new Microsoft Windows operating systems. This private company was made aware of the needs of a large group of potential customers, thanks to extensive lobbying from the technologically astute disability community nationwide. However, although the Berkeley libraries now provided internet access, for example, this free opportunity to learn about and connect with the internet was closed to many persons with disabilities because they could not use the standard input devices provided. I hoped to be able to correct this deficiency, and to this end I visited Berkeley's Center for Assistive Technology, a marvelous school where disabled kids and adults are taught computer skills using a whole variety of alternative input and output devices. The highly creative director suggested that I explore the possibilities of a programmable keyboard produced by IntelliTools in San Rafael.

This was great fun! Once again I was able to creatively solve a problem and help my own community. I soon had the equipment installed on my home computer and produced a series of overlays that emulated separate keyboards—one with large keys, another with tiny keys, all with mouse alternatives, etc. By purchasing several of these inexpensive keyboard templates, I could make alternative devices enabling keyboard entry by people with a variety of disabilities. The library was interested, and we installed these at a couple of branch libraries. I don't know how much use these alternative keyboards got. A couple of my commissioners went with me to the library and learned to use them. The biggest barrier to their use turned out to be insufficient training of library staff, so that assistance for disabled users was not consistently available whenever they happened to visit the library.
Later the library received a grant to set up a far more sophisticated workstation that would allow for screenreader and voice input use as well as alternative keyboard devices. I was involved in the initial planning of the new workstation, which was installed in still another library branch. Happily, Professor Howard Bern's son, Alan, was newly hired as the accessible services coordinator for the Berkeley Public Library. It was a pleasure to work with him on this project, and to help get an excellent accessible system up and running for the public.

To expand my knowledge in this field, I took an online course in assistive technology given by the Snow Institute at the University of Toronto. The subject of my required special project, delivered in the form of a website, was what I termed the "social barriers" to access to technology by persons with disabilities. Both my own experience and the information presented in the class convinced me that there is an enormous variety of technology extant—enough to solve almost anybody's problems inputting or getting information out of a computer. In practice, a principle difficulty in gaining computer access is the high cost of the necessary assistive technology. I attempted to locate resources available at low or no cost (such as hardware donations), and to provide information about grants, subsidies, and the tax laws allowing deductions for assistive technology purchases. I placed much of this material on my own website, and I hope it helped a few people acquire facilities that enabled them, like myself, to use computers to expand their capabilities.

Apart from the prohibitive cost of hardware and software, there is a still larger barrier to making the benefits of computers feasible for persons with disabilities. Providing appropriate education and training is a much harder nut to crack. I see myself, lying in bed, needing someone to come to my home and show me how to do something, help me set up new assistive devices, teach one how to use them. Multiply this by all the bedridden or housebound elderly and disabled persons around the country—not to speak of those in nursing homes—and the size of this problem is apparent. Its solution would require a subsidized expansion of the service sector at a time when we already have an acute shortage of home health aides and attendants, let alone highly trained computer specialists.

Then-President Clinton was persuaded to stump the country in an effort to create public/private partnerships to address the "Digital Divide." Initially his focus was on underprivileged children and on people located in geographical areas underserved by Internet connections (such as Indian reservations). Through his press assistant for disability outreach, Jonathan Young, I and many others worked to persuade the President to include persons with disabilities as another special category. Members of this group remain on the wrong side of the Digital Divide both because of their poverty and because of the special assistive technologies required to serve them. In 2000, at the end of Clinton's term, small steps were made to publicize these issues and to move forward a few programs that would bring some resources to the disability community. At least by publicizing this activity among disabled people themselves, and by getting the private sector involved, there is a possibility that people will build on such demonstration projects. Hopefully the future will bring to more of us the clear benefits of technology in
enhancing our lives by bringing new tools for communication, employment, and recreation.

Like all people with disabilities, I have been acutely aware of the awful shortcomings of our present health care delivery. California has a particularly difficult problem with an ever-growing number of uninsured persons. People with disabilities have an extremely hard time finding or paying for insurance. Unless under the umbrella of a large employer or public institution they are almost always refused health insurance by private HMOs, or else refused specific coverage for their disabling conditions.

I can't remember how I came in contact with Judy Spelman. In 1998 she and her organization (Health Care for All) promoted a ballot initiative that would have set up a single-payer, universal health care system in California. I had obtained a copy while this initiative was still in the planning stage, and sent Judy a detailed critique. The proposal had not adequately addressed the needs of persons with disabilities, I complained, and I made a number of suggestions. Judy was evidently impressed, and when the voters failed to pass the initiative, she approached me to work with her on another approach. She had almost single-handedly pushed a joint resolution through the state legislature that stated specific goals and criteria for implementation of universal health coverage in California. A year later, she successfully promoted a bill that specifically stated the legislature's intent to work towards this end.

A good analysis was needed to craft a workable proposal that might pass either the legislature or the public, and would rise above the strenuous objections of the entire health care industry. Legislative analysts, Judy, and others at Health Care for All proposed a study that would draw on expertise from several campuses of the University of California. This project came to be known as the California Universal Health Insurance Coverage Study (CUHICS), and was headed by a health policy analyst at the U.C. San Francisco Medical School. Many groups were asked to contribute to the study, and a Consumer Advisory Board consisting of people with a variety of experience in the health care arena was established.

It was on this Consumer Advisory Board (CAB), which Judy would chair, that she wanted me to serve. I protested. I had almost no experience in the health policy field, and knew little about health funding sources and the elaborate network of delivery options and their public or private ownership. All I could bring to the table was the experience of health care from the perspective of one person with a severe disability, as well as anecdotal evidence from many friends and fellow advocates with different types of health care coverage and a variety of disabilities. "That's plenty," Judy insisted, "and besides, you have a lot of native good sense and communication skills."

So with some trepidation I joined the CAB. Now once again I had to quickly obtain a new education, this time in the structure of health care delivery in California, and in the names and acronyms applied to various health-related services,
supplies, and products. As it happened, however, after a couple of years of acrimonious struggle, the entire project went down in ignominy. Nobody could agree on the proposals put forward by the principal investigator, and funding for the project was withdrawn. Judy tried hard to hold us together for another attempt, but by this time it was too late for me, as I no longer had the physical resources to muster for the task. I had learned a great deal, however, and hopefully my input would help ensure some understanding of disability issues in any future work on this vital subject. My effort did gain something positive: I made a good friend, Laura Remson Mitchell, who was to become a colleague in another large undertaking.

I had already known of Laura's work as an advocate, and respected her intelligence and her insight into disability policy issues, particularly in regard to health care. Working together on the California Health Insurance study, she and I soon discovered that we respected each other's sensibilities. We began to trust each other to speak on behalf of us both when one had to be absent from a meeting or discussion. (These were almost always held via telephone conferences, convenient for all on our statewide Consumer Advisory Board, and the only method possible for me as I could no longer travel about.) This trust and mutual understanding became vitally important when Laura and I found ourselves forming yet another grassroots organization, the California Disability Alliance.

I first became aware of Laura's work and that of many others through my growing networking via the Internet. By 1997 I had joined a number of disability-related listservs (email discussion groups), and was overwhelmed but increasingly fascinated by the vast amount of information on all aspects of disability life and public policy coming to me on a daily basis. At first I eagerly reposted the most interesting news items to our local listserv for the Berkeley community, my immediate friends.

Gradually there were protests on the Berkeley list. "Don't post so much stuff that is not immediately relevant to our Berkeley concerns." So I created a new list, the "Nandi Internet Digest," which I sent out weekly to anyone who signed up. I posted gleanings from my browsing through many listservs, online newspapers, and websites to this Digest. During the next three years I made many acquaintances and some real friends among those who regularly posted to the most important of these online resources. Among those becoming recognizable names were many, including Laura Remson Mitchell, who I grew to respect for their expertise and good sense.

A blind advocate from Chicago, Kelly Pierce, posted a notice to one of our technically-oriented listservs stating that the U.S. Congressional Internet Caucus Advisory Committee was seeking to expand its membership. This committee helps educate members of Congress about the new internet technologies and their uses, gives advice on appropriate legislation, and provides forums for discussing the pros and cons of proposed regulations. Our Chicago correspondent had commented that this committee consisted of such industry types as IBM, Microsoft, and AOL, but that no consumer
organizations appeared to be included, certainly none representing persons with disabilities. "If you don't already belong to an organization, then form one and become its representative to this Advisory Committee," Kelly suggested.

Apart from barriers already resulting from the costs of special equipment needed for access to the internet by persons with disabilities, new "electronic curb-cuts" were rapidly being erected by poorly designed websites. These were inaccessible to many, especially to computer users who are blind. Kelly was right—we certainly needed to be represented on this congressional committee. Typically, I plunged right in and wrote to my local online list members in the San Francisco Bay Area. "Don't you think we need to be represented in Washington?" I asked them. "It is in all our interests to preserve our ability to communicate with each other as we do, online, and to enable all of us to explore information available on the Internet by ensuring its accessibility."

I proposed, since we had no "organization," that I follow Kelly's advice and form one. Let's call it the "San Francisco Bay Area Network on Disability" (SF BAND), I suggested. If you all agree, I am willing to represent you as the "Chair" of this new organization. After having received some enthusiastic support, and without realizing that I hadn't read Kelly's document all the way to the end, I hastily fired off a message to the staff of ICAC (Internet Caucus Advisory Committee) stating that SF BAND would like to join, and that I would be their representative.

I sent a copy of this message to Kelly, with a note telling him how I had precisely followed his suggestion. He wrote back with an exultant congratulatory message, apologizing for the fact that he had not done so himself. "I simply was not going to be able to make all those trips to Washington," he commented.

Oops! Did I miss something? Indeed I had! I now read the original document more carefully, and it certainly did state that participants were expected to appear at numerous meetings in Washington during the course of the year. Brashly, I wrote to the ICAC staff and told them that I was bedridden, so severely disabled that I would not be able to travel to Washington, and that I therefore expected as a "reasonable accommodation" that I be permitted to attend all meetings by conference phone. Without blinking an eye, ICAC staff immediately granted this accommodation, as I informed Kelly the next day. He was delighted, and wrote, "Thanks for reminding me that we cannot be intimidated by the system. If the system is not serving our needs, then it must change. Certainly it must change if those other than beltway bandits are going to participate in the process. We indeed must demand our place at the table. Thanks a lot."

This reminded me of Fred Faye, my original "computer consultant," lying on his back in a bed in Boston. Fred was a Professor at Tufts University, now also a respected online correspondent, running a national advocacy announcement list ("Justice for All") originating in Washington D.C. "If he can do all this, why can't I?" I thought.

For two years I worked with the Washington committee, participating in the development of a computer-based "Introduction to the Internet" for Congress
members, writing position papers on the subject of internet taxation and considerations of privacy regarding online transactions. I corresponded weekly with the members of SF BAND, keeping them informed of Washington goings-on and asking for input when I wanted to get a sense of what other disabled users needed or wanted.

During all this time I had my eye on the subject of internet accessibility. It occurred to me, as I looked at some of the websites set up by or for various members of Congress, that Washington needed to get its act together with respect to the development of truly serviceable and accessible web pages. In 1999 there were hearings on Capitol Hill about whether the ADA applied to the internet, and we argued that it should apply in the same sense that businesses "on the ground" are required to accommodate disabled customers. Additionally, the Access Board in Washington was creating rules under the Rehabilitation Act's Section 508, requiring the federal government to accommodate persons with disabilities in electronic and information technology. Among other accommodations, federal websites would have to be made fully accessible to all.

On behalf of SF BAND I surveyed House and Senate members' webpages to see just how accessible these were. The World Wide Web Consortium publishes guidelines for good web development. There is also a privately-operated online facility through which web pages can be tested for certain obvious errors in coding that result in difficulties of access, particularly for the visually impaired. (Although web accessibility considerations are most crucial for those blind readers who use screen-reading software, it is by no means restricted to such persons. People with any type of visual difficulty can find pages unreadable if the colors do not provide enough contrast, if the print is small and cannot be enlarged by a browser, if there are blinking or scrolling lights or letters, as examples. Additionally, pages that provide voice output without transcripts are inaccessible to deaf viewers, and so on.)

For a quick survey of Congressional websites I used the online test for home pages alone, determining whether entry to each site was even possible for persons with certain types of disabilities. To my horror, I discovered that only twenty percent of all the House and Senate websites passed this very simple test. I wrote a report and sent it to some colleagues on the Internet Caucus Advisory Committee. Although they were complimentary about the report, they seemed frankly scared to do anything with it, for political reasons. I was encouraged to wait another year and they would surely present a workshop on the subject, and then release the SF BAND report with great fanfare.

Well, that day never came. A year later I ran my tests again and brought the report up to date. There was absolutely no change in the proportion of inaccessible websites among Congress members, even among those who were a part of the Congressional Internet Caucus itself. Clearly nobody on Capitol Hill was listening or had learned anything about this, despite congressional hearings and much discussion regarding the new 508 regulations proposed by the Access Board. Finally, the Advisory Committee put on a workshop for congressional web developers, and I sent my report in to accompany this workshop. I never found out whether or not it was released by them, but I published it on the SF BAND website, where it was available for all to see.
Building on what I had learned from my ABC experience, I once again had discovered the power of the new online communications. SF BAND lobbied the California Public Utilities Commission on questions of telephone access charges. The group created legitimate backing for my conversations with Jonathan Young at the White House urging the President to speak out about the Digital Divide as experienced by persons with disabilities. But by this time I was exhausted. I invited other SF BAND members to take on its leadership. They had witnessed its power to change things. But as with ABC, there were apparently no permanent takers. Although SF BAND went back to existence as a couple of listservs without a leader, its website did find a permanent home (http://disweb.org/sfband/) so that the work we had accomplished would be available for the education of other advocates.

In the spring of 1999, we suddenly learned that our Berkeley representative to the California State Assembly (Dion Aroner) was proposing legislation to legalize physician-assisted suicide. Her bill was modeled after the initiative that passed in Oregon, now law in that state. A number of us from the disability community were invited to a meeting hastily called at CIL to speak with the Assemblymember about the proposal.

About thirty of us showed up at this meeting (I by conference phone), and almost everybody spoke eloquently against physician-assisted suicide. Even those few who were initially neutral found themselves agreeing with those of us who spoke passionately against it. If qualification for an "easy death" was a terminal diagnosis, what if the doctors were wrong? I spoke directly from my own experience. At age seventeen I had been pronounced terminally ill with cancer, and by these rules the outcome could have been very different. What if I had become depressed, instead of angry? What if I had given in to the pressure to go home from college in my freshman year, and waited to die? There was also that second time, in the mid-seventies. Once again doctors and family alike thought that I had not long to live, and that time I was indeed depressed. If it had been easy to request a way out of life, I would surely have asked for it then. Each day that I have lived beyond this time I have thanked my great good fortune to have had another day—indeed many days in which I have enjoyed life and in which I have made contributions to the lives of others.

There are any number of arguments against the legalization of killing or of assisting in suicides by medical professionals, whether or not they are mistaken. I won't detail them all here. But everything that I have learned during my health policy advocacy cries out against this. Too many people get the short end of the health care stick as it is. Too many are stripped of their financial resources and are pressured by their families or their insurance companies to let go, to give up, to believe that they are not valuable enough to live for a few extra days or months. It is perfectly normal to be depressed under these circumstances. A doctor's role should be to help each person in these dire straits to live as comfortable and as meaningful a life as possible. To allow the doctor
and the insurance company or HMO to take the cheap, easy way out and offer patients the means to end their lives is a dangerous and even appalling step for our society to take.

Our arrogant Assemblymember went back to the state capitol and promptly informed her colleagues that she had "consulted" with the disability community, after which she presented her bill as planned. We learned later that she had treated other constituencies, such as the Bay Area Hospice workers, in a similar fashion. People with disabilities were galvanized into action, and there was considerable discussion on our email lists about what to do.

I set up a listserv with a select group of people who were trusted to support our opposition to this bill. The list was called "Kill-the-Bill," and we gathered members from the entire San Francisco Bay Area, and also from other parts of the state. My health policy colleague, Laura Remson Mitchell, was soon on the list. We planned strategy and joined a coalition that included Catholic groups, hospice workers, nurses, other medical groups, and low income workers, all of whom had similar fears. We were soon linked to Sacramento lobbyists who opposed the bill, and were able to get inside information about when hearings would be held in the state Assembly, who was taking sides on the question, and when it would be most appropriate for us to send members of our group to Sacramento.

Realizing the difficulties involved in transporting people with serious disabilities to Sacramento from the Bay Area, I sought an emergency grant from the Disability Rights Advocates' Fund at the San Francisco Foundation. The DRA Board that reviewed such applications was friendly, and I received good advice from some San Francisco people who knew the ropes better than I. Our group, still only a "Kill-the-Bill" list, was in immediate need of a fiscal sponsor—if a grant was awarded, a nonprofit organization would have to receive and administer the money. I called around to nonprofits that served the disability community, and was fortunate to be able to obtain the sponsorship of the Disability Rights Education and Defense Fund (DREDF), a national legal advocacy group (prime mover in the development of the legislation that eventually became the ADA). DREDF had started here in Berkeley, and still had its headquarters here.

Assemblymember Aroner continued to use "dirty politics" to get her bill through two Assembly committees and poised for a vote on the Assembly floor. Although we had sent people to speak against the bill—Laura Mitchell came all the way from Los Angeles to voice her opposition—it was clear that the committee votes were rigged. One group, part of our larger coalition, had collected some 30,000 signatures protesting the bill. Our members witnessed the Chair of a committee picking up these petitions and dumping them in the wastebasket.

A number of our local Kill-the-Bill advocates decided to organize a picket line to surround Aroner's Berkeley office on a day she was home from Sacramento. Although direct action is a style of advocacy to which I normally do not subscribe, I feel that reasoned presentations at legislative hearings and a certain amount of outside agitation work well together. The latter often serves to gain publicity for our positions.
But this was a small action, and only scattered members of the press were in attendance when we tried to enter Aroner's office. Oops! As leader of this group, I went first, and I found myself up against a step inside the front door, which had been opened only after repeated knocks and entreaties. We were told that Aroner's office building was accessible, but we needed to enter through an unmarked entrance at the rear. We trouped around to the back and waited for someone to let us in. Aroner did not want to speak with us. We could enter only if the press remained outside.

After what seemed like prolonged negotiations, we were finally allowed in and Aroner agreed to hear us out. A number of us spoke. My entreaty to drop the bill was summarily dismissed, as indeed were all of our remarks. She was as immovable as a stone. It was clear from her remarks that she had a personal stake in the legalization of suicide for dying people—apparently there had been a tragic, messy suicide in her family. She also was in the process of moving her mother into a nursing home. I asked her if this was a good reason to risk the lives of others. This elicited only a tearful response to the effect that there were many "safeguards" in her bill.

I could only reiterate what I had said earlier. When people are forced into nursing homes because of inadequate home health services, their quality of life is likely to deteriorate immediately. Health plans sometimes deny services that can prolong life and ease suffering, and physicians are not always adept at managing pain. What possible safeguards are there against one's being compelled to choose suicide because adequate medical treatment and care may result in the financial ruin of the family? One of the "safeguards" is the requirement that two physicians agree death will come in six months. But doctors are not omniscient. How often have you heard of "miraculous" recoveries? Many of us with disabilities are alive in spite of dire predictions—and some of us in spite of our physicians! The Aroner bill mistakenly presumes that doctors can predict one's death with "scientific" certainty.

Finally, we argued, although a physician must provide information about other options prior to prescribing a fatal dose, few doctors are truly knowledgeable about alternatives. Those of us living with disabilities know only too well that doctors often undervalue our lives, and are too frequently unaware of resources within ourselves and our communities that can make our lives meaningful and even happy. In hospitals, persons with disabilities are frequently tricked or subtly pressured into signing "Do Not Resuscitate" orders. Managed care reviews often deny potentially costly care. It is in this setting that one would need to make a choice. A bill legalizing physician-assisted suicide cannot bring wisdom to our medical profession or protections to our uninsured or underinsured frail and vulnerable seniors, disabled and poor.

After this encounter, Aroner began to speak more publicly about her position on the subject. Some members of our group followed her about and spoke eloquently in opposition at the same meetings. They arranged public lectures on the dangers of legalizing physician-assisted suicide in venues where Aroner had been a previously invited guest. A televised forum on the pros and cons of the Aroner bill was held in Sacramento. One of our group, Professor Paul Longmore from San Francisco
State University, took the opposing side at this forum. Another powerful speaker against
the bill on that occasion was a policy analyst from DREDF itself, Marilyn Golden. I had
known about Marilyn's extensive work in the field of transportation policy and the
Americans with Disabilities Act, but I had never met her. I had been very impressed by
her presentation at the Sacramento Forum. When she contacted me to see if she could
work with us in our efforts to defeat Aroner's bill, I was both surprised and pleased.

By this time some of us in the strategy group had decided that we really
needed to create a \textit{bona fide} organization that included all of us in California who were
both persons with disabilities and strong opponents of either physician-assisted suicide or
euthanasia. Some of us met with the leaders of the national organization "Not Dead
Yet," who happened to be in the Bay Area on unrelated business. Laura and Marilyn and
I were all linked to Not Dead Yet's listserv, so we knew about their work opposing Dr.
Kevorkian and all legislation promoting legalization of either assisted suicide or
euthanasia.

To avoid confusion, I should explain that these two proposals are related
but different: In assisted suicide, the doctor prescribes a lethal dose of "medication,"
which the patient must take himself (not always possible for the severely disabled), while
euthanasia requires the physician to actually administer the fatal dose (with or without the
patient's consent). As shown by experience in the Netherlands, where assisted suicide is
now legal and euthanasia is not punished by the law, it is a simple step from the
legalization of the first to general acceptance of the second.

Not Dead Yet was fighting hard for the lives of disabled persons who were
either in despair and considering suicide or who were threatened with death because
family members decided unilaterally to withdraw food and water or other life-saving
ministrations. Although we were supportive of most of Not Dead Yet's work, and were
happy to link up with them for the purpose of defeating Aroner's bill, we felt that a
California organization representing persons with disabilities should have a broader scope
in order to gain wider legitimacy. As a group, we needed to represent positive positions
for bettering the lives of persons with disabilities, and not just be against a legislative
proposal. All three of us—Marilyn, Laura, and myself—had reputations for supporting
our community in many areas of law, independent living, and health policy. We needed
some way in which to present ourselves to the community, and to have a better handle
than "a group of disabled people from Berkeley" when forging links with other like-
mined organizations.

Laura came to Oakland to a health policy meeting on behalf of the MS
Society, for which she was a legislative analyst. While she was here we arranged a
meeting, and invited Marilyn to join us. So, around the dinner table in an Oakland hotel,
we hatched a new statewide organization. We would call it the California Disability
Alliance, and the three of us would be its Executive Committee. Our immediate goal
would be to prevent an affirmative vote on the Aroner Bill in the Assembly, but we
would also work in a positive way to help promote legislation that would enhance health
care options for our community. We would also try to promote community care and
home care for persons now relegated to institutional life. Our health policy orientation would clearly lend legitimacy to our stand against physician-assisted suicide. We would link this stand with a clear call for better end-of-life care and pain management.

And so began my last formal role as an advocate for persons with disabilities. I had some misgivings, which I quickly expressed to my colleagues, inasmuch as my health and strength were fading rapidly. I told them that I was beginning to have a reputation of going off like a Roman candle, and then quickly fizzling, recalling my ABC and SF BAND experiences. But we had to put first things first, and if my leadership would help with our immediate goals, I was certainly willing to give it my best.

We began by soliciting membership. Laura and I both had extensive email contacts around the state, and of course we invited the Kill-the-Bill folks to join our new organization. Soon the strategy list was shifted to CDA (the California Disability Alliance). Marilyn helped us get more formal fiscal sponsorship from DREDF, and that organization also willingly hosted our webpages as well (the pages have since been moved to a new site, http://disweb.org/cda/) We needed to get funding for the new organization, as we assumed that we had a long fight on our hands. Even if we won this year, Aroner would be back again (in 2002 she is running for the State Senate, and will surely attempt to use that more lofty platform to promote her views). Working with Marilyn and Laura and grantwriting experts from DREDF, I wrote several grant applications, raising about $60,000 in addition to the small grant I had obtained initially. This exercise not only brought us funds, but it also served to sharpen and more clearly define our goals and the means by which we intended to reach them.

Our website was interactive, permitting people to join (CDA soon had over a hundred members from all parts of California) and to vote on various questions of strategy. We set up listservs—one to send out information to the general membership, and others to discuss upcoming legislation and to develop actions against the assisted suicide bill. As we identified Assemblymembers who might be ready to vote for Aroner's bill, we were able to call on CDA members from their legislative districts to try to persuade them to change their position. CDA sent letters to key Assemblymembers, and we soon determined that it was the Democrats that we needed to target. Republicans were almost unanimously against physician-assisted suicide, although often for quite different reasons from those which troubled us. However, some of them helped us with strategy, and with inside information about committee meetings. Marilyn found us a lobbyist who eventually donated her time because she believed sincerely in our cause. Before the deadline for a floor vote on Aroner's bill we sent letters from CDA to every single Assemblymember, tailoring these to their known positions. And we won! At least in the year 2000. This was an election year, and many of Aroner's Democrat supporters were simply unwilling to take a position on such a controversial issue. The bill was allowed to die without coming to the floor for a vote.

Before I withdrew for health reasons, I pushed CDA into the forefront in some other significant actions. I felt it was vital to ensure that CDA became known and
recognized as active in various aspects of the health policy. We worked hard to inform the community about threatened changes to Medi-Cal regulations (Medi-Cal is California's version of Medicaid, health insurance for the poor, which covers the majority of persons with disabilities). We became embroiled in an argument with the California Department of Regulations about the inaccessibility of the web pages devoted to the Medi-Cal regulations, and in the course of this controversy, CDA joined with SF BAND to push for greater accessibility of our state government pages in general.

Another health care issue came to our attention in the form of an urgent cry for help from several people with severe disabilities who receive home care from Home Health Nursing Agencies. People who require ventilators are dependent on the services of these agencies, as part of their care must be performed by registered nurses. Some of the agencies had begun dumping their patients, and others were refusing to take new clients. The agencies claimed a shortage of nurses, which may have been real, but it was clear they were also "cherry picking"—abandoning the difficult patients in favor of those whose care (or possibly whose personality) was easier to manage. We worked with the California Advocates for Nursing Home Reform to try to draft a bill to curb this practice and create a "patient's bill of rights" for individuals who wanted to remain at home and active in their communities, but who were being forced into nursing homes for lack of available necessary home care. The proposed bill didn't make it onto the 2000 legislative calendar, but two state senators expressed an interest in carrying such a bill in the future.

We lent our support to other causes, particularly those which involved better pain management, palliative care, and home care over and above institutional services. Laura has continued to provide her expertise in the area of legislative analysis, and we have visibly supported a number of bills along these lines. I am proud of our accomplishments during the short time the California Disability Alliance has been in existence, and delighted to see that this effective grassroots organization is continuing under the strong leadership of Laura Mitchell and Marilyn Golden.

Of all the awards I have received in appreciation for the advocacy work I have done, the one I most cherish was one given to me in 1999 by CIL for my service to the disability community. I felt at last that I had forged the link with CIL that had been so long missing, both earlier in my life when I was unable to "connect," and later when the Commission on Disability struggled so hard to get CIL to recognize the many ways in which we could help each other.

As I complete these pages on the subject of Advocacy, I ask myself, "Why did it work?" Considering the many letters I have received from my colleagues in the disability community expressing their love and respect for me, I ponder what brings us together. What enables us to work together toward joint goals, and how does a leader transcend the antagonisms that may exist among groups of constituents? Even more, how do we get beyond antagonisms between our constituents and the world at large?
It seems I had a magical ability to be at the right place at the right time. This was luck, to a large extent, of course. But it also reflected my ability to seize the moment, and act when the time was right. My mother had told me when I was still a child that I should expect that doors would open for me, and that the secret of success was to be ready to pass through those doors when they did open. I would never be able to anticipate these entryways, but I should prepare myself to take advantage of opportunities when and where they arose. I see that, at least during the last few years, I was able to do this, and was able to achieve much as a result.

My life has taught me that a person with a disability is not different from others, but only may appear so. I am the same "Jean" that I was before "coming out" with my disability, allowing all to see that I could no longer walk or sit up. Just as a person reaching old age does not feel an abrupt change or a new personality, but only a gradual decline in the ability to move quickly or see well, we do not become "different" because of blindness, or deafness, or the use of a cane. My clear understanding of this enabled me to bring the experience of disability to the nondisabled, or those we call "temporarily able-bodied." I could talk easily with people who still function in that other world, where people are apt to look askance at us and turn away, embarrassed. My certainty that I was not different, nor were they, allowed us to meet on common ground. I could bring to them an understanding that by helping us better our lives, theirs too would be enhanced.

My love of teaching has guided my political life. A good teacher is ready to listen to all students, to gently guide them in finding the truth, and to be flexible in using whatever means is most appropriate for each individual. A political leader must act in a similar fashion. The leader must have a vision of the possible, and of the path toward the goal. Getting others to follow requires respect for the opinions and wisdom of members of the group. The leader must incorporate their ideas in a plan of action that will spark the interest and support of all. Just as my teaching skills evolved over time, so did my leadership ability. As teacher and leader I was never afraid to admit openly when I was mistaken, or when I needed help from those wiser than I. Consequently both students and constituents came to trust me as a guide.

This has been an eventful and fruitful journey. I hope these insights will help others along their various paths toward achieving a better life for themselves and their fellows.
Chapter IV — CONTEMPLATION

Looking back on my life, I find several threads visible throughout this variegated tale. There is no doubt that disability moved me in many of the directions I have taken. Even before my muscle condition began to take hold of me, pushing and pulling me hither and yon, I had a series of physical problems that I attempted to keep from dominating my life. The serious accident at age fourteen, followed by cancer, then a debilitating virus that lingered for several years: each time I fought against forces that threatened to keep me from the life I really wanted to live. I alternately fought off the demons and gave in to them, but it has been my good fortune that I was able to accomplish things that allowed me to have some pride of success before needing to venture into another, less physically demanding undertaking.

A second thread that pervades my life story is my love of teaching. I remember sitting with my mother over her lesson plans as she developed her history of art courses at the Columbia School in Rochester. She glowed with excitement as she described to me her discoveries, and then the responses of her students when she had opened their eyes to great works of art. In later years, after she had established an art school in Solvang, she and I would compare the details of our respective methods of teaching the graphic arts and music. Many of our techniques were similar, but there were differences as well, which never ceased to fascinate us. So I am sure my mother instilled in me this love of teaching, and perhaps some of her teaching skill as well, from an early age. In any event, throughout my several careers I have found myself in the role of teacher, whether or not that was the stated purpose of my work.

Third, my strong social conscience continued to pull me towards teaching and advocacy. My mother also gave me this strong impetus. In fact she was far more liberal than I when I was younger. It continues to amuse me to find that I grow more like her as I age. This feeling that stirred within me, to help my sisters and brothers, was a large force resulting in my dissatisfaction with "pure" science. Even while doing scientific research I recognized that I preferred teaching. At the same time I realized that superior teaching of science is driven by the kind of love and deep knowledge that can only be gained by significant involvement in scientific investigation. Music performance and teaching were similarly paired, each feeding on the other. To my great surprise it became clear that I was serving my community more fully with music than I could ever have done in science. I began my musical career at a time of great unrest in Berkeley, during Governor Reagan's "crackdown" on the "mess in Berkeley." My students spoke of my music studio as an "oasis of sanity," where they could gather strength for another foray into our streets lined with National Guard soldiers, over which hovering helicopters dispersed tear gas.
Hand in hand with a desire to teach whatever I know to anyone who doesn't know it yet, plus an urge to make that part of the world that surrounds me a better place for everyone, comes a great love for my fellow human beings. Ranu and I have, together and separately, made a very large number of good and loving friends over our years together. Love is one of those strange substances that can expand infinitely, and the more one gives of it, the more there is to give. Giving of one's love may warm others, but even more it warms the heart of the giver. No one in my position could ever feel sorrow or regret about a life that holds so many much-loved family members, and both old and new friends from every corner.

I opened this book with "Conventional" Wisdom that once dominated my thinking: "Girls don't take up science." "A woman cannot be happy and fulfilled without children." "One cannot be a professional musician unless one studies continuously from an early age." "Once in a wheelchair, your life will be over." "Disabled people who perform well in the world are admirable and full of courage."

I thank goodness that I have had support from friends, associates, and a changing world to enable me to grow unconventionally. Having been reasonably successful as a scientist, even for a short time, I find that my training in science has been a most significant background for all my subsequent endeavors. It gave me analytical tools many of my colleagues do not possess, and my specific training in biology enabled me to understand better than most doctors how to manage my disabling condition. At the least, biological wisdom saved me from the terror of not knowing what was happening inside me, preparing me for each stage of this disorder as it came along.

I confess to being puzzled by my mother's conventional attitudes toward marriage and childbearing, and can only explain them as a result of her early close association with psychiatric guru Alfred Adler and his daughter, Alexandra. Adler's central thesis was that women were constantly rebelling against their femaleness and their "natural" role in society, and that this caused many of their ills, from menstrual cramps to more serious physical or psychological derangements. Surely Mother's own life story flies in the face of her insistence that she was "happiest" when she gave up her own ambitions to become wife and mother. My observations of her could only lead to the opposite conclusion: she clearly flourished and became a strong personality in her own right only during her divorced or widowed periods.

Mother continued to harp at me for many years about my childlessness. However, I was wise not to add childrearing to my physical burdens, and I have felt sufficiently fulfilled by the many young people who have populated my life. My close nieces and nephew have been a good substitute for children of my own, and as any teacher knows, watching the development of those one has mentored is indeed satisfying and fulfilling. Although I cannot compare my happiness with what it might have been had I borne children of my own, I can compare the satisfaction of my own life with that of many women friends who have done so, and I find no shortfall.
I spent a good part of my mature life negating the third convention above, regarding the development of a professional musician. I believe that music teachers and schools of music perpetuate a harsh unreality that squelches the creativity and love of music of a great many students. The myths revolving around the supposed need for single-minded dedication to one's instrument throughout childhood in order to "make the grade" have left many potentially fine artists in the dust, groping for a way to find some satisfaction with an unloved alternative. My unconventional thoughts on this lead me to believe that a breadth of background can only enhance one's creative powers and that anyone with a real love of an art can and should pursue it at any time of life. How many potential contributions of true artistic value have been lost because of the failure to take seriously those who come to music only at maturity?

I hope that the section of my book on advocacy will show that my life was hardly over once I freed myself by gaining mobility with a wheelchair. And far from requiring admirable courage, this final segment of my life has been richly rewarding. I am still the same person, indeed, but wiser, stronger, enriched by numerous friendships and a loving family—truly happy at last.

— END OF UNCONVENTIONAL WISDOM —
ACKNOWLEDGMENTS

An email correspondence with a stranger began my probe into the chronology of my past, as the intensive exchange with Marian Erickson blossomed into close friendship. Subsequently, the "Spiritual Autobiography" class at St. Gregory of Nyssa Episcopal Church in San Francisco elicited a number of fully fleshed-out vignettes from the point of view of my inner feelings and growth. I have to thank the teachers of this class—Mary Grove, Norma Harrington, and Donald Schell—for their encouragement and for the realization that a full-scale autobiography might interest a more general public.

The book itself is one long acknowledgment of friends, family, and associates of every stripe who have supported me along my life's journey. I have named most of these in the text. However, enabling me to write a book while lying flat on my back in bed were friends such as my critic, commentator, and general booster Esther Kissling, my current group of personal care attendants, my wonderfully supportive family, and my husband.

Helping me get the manuscript in shape for production were literary agent Jodie Rhodes (who hammered out a respectable version of the Introduction), Professor Howard Bern (who wrote the Foreword), and editor Lynn Park (whose extraordinarily perceptive comments enabled me to give the text its final polish). I met untold numbers of wonderful people during my several careers; many of them read drafts of the book and graciously offered to help with publicity. This book would not now be in your hands without their work, for which I am duly grateful. I only hope your enjoyment of this memoir justifies their efforts and their confidence.