I met Mohammed Shukur at a cocktail party. He was the general manager of the Iraqi Bank. He had taken me for an Iraqi and was surprised to learn that I was an American working as an international civil servant for Unesco. He spoke English perfectly with a British accent.

“What is the nature of your assignment here, Professor Baez?”

“Well, I am a physicist and am here as the chief of a Unesco mission whose task is to teach the basic sciences and establish science departments at the University of Baghdad.”

“But there is no University of Baghdad, Professor Baez.”

“So I have learned. Strictly speaking you are correct, but I am teaching at the College of Arts and Sciences, which is supposed to be the nucleus of the future University of Baghdad.”

Shukur was a dark, urbane looking Arab dressed like a British businessman. He lit up at the mention of the college. “You know, there was an Egyptian physics professor at the college last year who ordered a lot of equipment.”

This took me by surprise. I had heard of Professor Nooh but had begun to doubt his existence. He was expected back this year but the semester had started two months ago and no one
had heard from him. People simply said, “Oh, the Egyptians always arrive late.”

I said, “It is interesting you should mention the equipment. No one at the college has been able to tell me where it is. No one seems to know.”

“Well, I know where it is,” said Shukur. “The Iraqi Bank handled the financing of its purchase. The equipment itself was entrusted to the Iraqi Bank for safekeeping until such time as a physicist at the college could identify all those items whose names mean nothing to any one else. As general manager of the bank I am responsible for it. The boxes are sitting in our warehouse. I would be happy to turn it over to you once we get the authorization to do so from Dean Duri.”

And that was how I discovered the location of the equipment. It fell in line with my experience thus far that everything of importance to my work and my life in Baghdad would be discovered by accident. That’s how I had found a house, my first-year students wandering about the halls of the college, and books for them at the USIS.

After a series of maneuvers that were almost as energy consuming as getting my books out of customs, I managed to have all the equipment transferred from the bank to the college. There was no place to store it so it was put in the auditorium. The chairs were pushed aside on its tile floor and soon we were opening boxes and cataloging their contents. An advanced student from the law school was assigned to me as equipment clerk. He knew nothing about physics, but he was next in line for a government post and the job of equipment clerk for physics at the college was the first to open up.

His name was Shauki. He was very dark, had heavy eyebrows and a generous mustache, walked with a slight stoop, always wore western clothes, and had a warm smile. I liked him immediately. He was very respectful. He realized that he knew nothing about physics equipment but was determined to learn. He appreciated very much the fact that I assigned my bright student Hassan Ahmed Hassan as his advisor on matters of physics. He had access to the catalogues which listed and described each piece of equipment and he pored over them with the diligence of a lawyer examining the evidence for a case. He was given full responsibility for the equipment, and he took this assignment very seriously.

I had told Dean Duri that although I had many bright students who did well in theory, they were all very weak in the experimental and practical aspects of the subject. In fact “practicals” was the term—of British origin—used in Baghdad for what we Americans call “lab work.” The Iraqis had had essentially no lab work.

“You know,” I had said to Dean Duri, “the most important contribution I could make while I am here would be to set up a well-equipped physics teaching laboratory. If I could do that my stay in Baghdad would have been worthwhile.”

And Duri had said to me, “Right you are, Professor Baez. The government of Iraq has set aside 150,000 dinars for this purpose.” That would have been the equivalent of close to $450,000 US dollars at the time. But neither the Dean nor anyone else was able to tell me how to get access to those funds. I began to despair. We had no place to put the equipment I had found so that it could be used for actual experimental work.

On another social occasion I ran into Professor Ritchie, the Canadian who was the Dean of the School of Engineering. He told me there was an abandoned dormitory of the School of Engineering about three blocks away from the College of Arts and Sciences and that he was quite sure I could be given access to it. I jumped at the chance of using it as a temporary lab. Details were discussed between the two deans and soon Shauki, with the help of students like Hassan, began moving selected pieces of equipment from the auditorium to the old engineering dormitory three blocks away. We began doing some experiments there by using the large boxes in which the equipment had arrived as tables. We borrowed a few chairs from the main building. The students even used the tile floor itself instead of tables.

The security implications of the set-up were serious, and Shauki, who was the only one who had keys to the dormitory
building and its rooms, did not allow any one else to use them. He once said to me: “If any of this equipment is stolen, I will be held responsible and will go to jail.”

As time passed I began to lose hope that any of the 150,000 dinars would ever become available to me. I felt, once again, that I had to do something drastic to awaken the authorities. So I wrote a letter to Unesco in Paris saying that I had reached an impasse. I told them that neither the Dean nor the Minister of Education had taken any steps to implement the construction of a lab and that I felt it was useless for me to stay on in Baghdad. The construction of a lab, I wrote, was the most important step to be taken if our mission was to have any real impact. If no action was forthcoming I would be ready to drop everything and leave. I sent a copy of my letter to Dean Duri and another to the Minister of Education.

This action had the desired effect. Dean Duri called me at once into his office. “You should not have sent a copy of this letter to the Minister of Education, Professor Baez.”

“I’m sorry, Dean Duri,” I said. “I was desperate. I have been here over two months and nothing has been done about the construction of science laboratories. The only thing all students in science in Baghdad need is actual contact with instrumentation. The knowledge they are getting is too theoretical. What’s more, you have repeatedly told me that 150,000 dinars have been set aside for laboratories but no one can tell me how to latch onto any of it.”

“Right you are, Professor Baez,” said Duri, lighting his pipe. “I will speak to the Minister of Education about this tomorrow.”

That very afternoon, however, I received a phone call from the Minister of Education summoning me to come to his office downtown. “Professor Baez,” he said, “we have not met. You should have made an appointment to meet me as soon as you arrived.”

He was right, of course, but my knowledge of protocol was deficient and I had spent so much of my time in finding housing for my family, books for my students, and equipment for experiments that I had had no energy left over for protocol. But he was also playing a game. He was putting the blame on me when, by rights, he and the other authorities who had requested and obtained technical assistance from Unesco should have treated the Unesco team of Mohler, Wilcinski, and Baez with more diplomatic deference.

The Minister continued, “You should not have written Unesco about money for the laboratories. The problem you have raised is an internal one. Money for laboratories has been appropriated but it will take time before it becomes available.”

“I am very sorry to disturb you,” I said, “and I apologize for writing to Unesco about it, but, technically speaking, I am a member of a Unesco team and must write periodic progress reports to Unesco.”

The phone rang and the Minister picked up the receiver to answer it. He also managed to light a cigarette and put it into his mouth where it remained throughout the rest of the conversation. This was a behavior pattern I had now seen several times among higher officials. The Minister kept saying, “Ei,” “Na’am,” or “Beli” over and over again—different ways of saying “Yes.” Occasionally he would shake his head and the ashes from his cigarette would fall to the floor.

The interval gave me the opportunity to pull out a list of needs for converting one floor of the engineering dorm into a modest but well-equipped physics lab and seminar room. I had visited Father Connell at the Baghdad College and seen his marvelous lab. Father Guay, another Jesuit priest, and Father Connell had designed their own lab after considerable study of available construction materials in Baghdad. They had, for example, designed the supports for the lab benches along the walls using brick instead of wood because bricks were cheaper and more readily available. They had offered to lend me their blueprints and gave me the right to copy anything I wished from them.

When the Minister had finished his phone conversation he said to me, “What would you need to get something done this year?”

“We could convert one of the large rooms in the old engi-
neering dormitory building into a physics laboratory and build cabinets for the equipment for a minimum of 1,200 dinars," I said offering to show him my list.

He didn’t bother looking at it but called in a young engineer named Alaka and assigned him responsibility for helping me to get the materials and workmen necessary to do the job. The next day the Dean received a check for 600 dinars as a down payment with a promise to send the balance in due course.

Work got started immediately on the construction of cabinets and the brick supports for the benches. Most of the handwork I had seen in Baghdad was of very poor quality but the carpenters who built the cabinets and the plumber who installed the sinks were quite skilled. Alaka would give them verbal instructions and very sketchy drawings. They were not used to following blueprints. Alaka came by every day to supervise their work. He never touched anything. In this society that was beneath him. He was always impeccably dressed in a suit of English cut. As a Christian who had studied engineering in the United States, he treated me with respect and I reciprocated.

As an engineer he understood the importance of what I was trying to do, namely, to infuse scientific education with an experimental approach. He also respected my wishes to install the wiring in the lab so that it was hidden. Normally wires were nailed into the walls after the painting was complete, giving the room an unfinished appearance.

An Armenian Christian by the name of Albert was hired to supervise the painting of the walls and the ceilings. We became very good friends. He was a very competent painter. He no longer did any of the painting himself but he came in almost daily to supervise the mixing of the paints for the walls to make sure it produced the soft green color I had chosen. His crew worked rapidly and well.

Albert had painted the Regent’s Royal Bilat and in his work for us he gave us the “royal treatment.” He understood what I was trying to do and took pride in making a contribution to the establishment of a laboratory. It took him and his crew several weeks to finish everything, so we still had to conduct labs in the other empty rooms of the dorm, but now I knew that when I left Baghdad there would be a place for students to do experiments and where equipment could be stored safely. My students now did not mind working in the other bare rooms, knowing that something better was in the offing.

During the winter months before the new labs could be used, it got pretty cold in the empty rooms where my students were trying to perform experiments under the direction of Sue Gray al Salam, an American woman physicist from the University of California who had married an Iraqi mathematics professor. It was so cold they had difficulty manipulating the equipment. They would keep blowing into their hands. I was dismayed.

Several weeks earlier the Dean had promised to send six kerosene Primus stoves to the lab.

I had a single stove in my office in the main building three blocks away. I took it to the lab. I then phoned the Dean and asked him if he would stop by my office on his way home, and we agreed on a time. I was ready, wearing my overcoat and sitting at my desk when he entered.

When he walked in he said: “Professor Baez, it’s cold in here. Don’t you have a stove?”

“It is cold, Dean Duri,” I said, “but I took my stove over to the physics lab because it’s even colder there, and my students have difficulty in handling the equipment.”

The next day I had my stove back and there were six new stoves in the physics lab.

As the school year progressed and I became more and more immersed in my work at the college, I relied on Joan to carry the burden of caring for the children and their needs. It was difficult enough for her to do the shopping for food and the cooking but with the advent of Joanie’s illness she had to cope with that as well. This meant more trips to the doctors and a search for the medicines prescribed by a battery of specialists Ali had brought in to “help.”

One afternoon, when I was getting ready to leave the house to return to the college after my siesta, Joan saw me in the
This afternoon the first one to return was Amelda, the young woman who had been assigned to help Shauki as the main caretaker of the physics laboratory and its equipment. She seemed disconsolate.

"How do you like your job, Amelda?" I asked.
She hesitated, began to respond, and instead began to sob.
"What's the matter, Amelda?"

When she regained her composure she said, "I like my work, but it's Shauki; he treats me like a slave." This was not difficult to believe. In the Arab world of that day women were treated as inferior beings even though by law women had the right to hold positions in the university and according to the newly developing customs women did not wear the black abayah while they were within the college grounds. Still it was difficult for men to break away from long-held traditions.

When Shauki came to the lab I called him aside and spoke to him about this matter. Shauki was very dark and good looking, with a black mustache which sat very well on him. He took his responsibility at the lab seriously, but he broke out in a warm smile whenever he spoke with me. He sensed that a feeling of mutual respect existed between us. I decided it would be best to speak first with him alone, because he might have felt humiliated if I had called in Amelda at the same time. But after I had explained to Shauki my perception of Amelda's role, which he was able to accept, at least intellectually—they were both law students in the same grade—I told him that I wanted to speak to both of them together. I called Amelda into the room.

Shauki held me in such high regard that he was able to take from me advice which he probably would have rejected from anyone else. Amelda was by nature timid. She held her head low during this meeting, but it was clear that she was pleased by my intervention. I can't imagine that this talk changed Shauki's innermost feelings, but for the rest of the year Shauki and Amelda worked well together.

With the support of the Minister of Education and the daily help of Mr. Alaka, the engineer whom he had employed
to oversee the work, we began to see cabinets and workbenches built and gas, water, and electrical outlets installed, all with a minimum of external wires showing and no unsightly nails in the walls.

The construction of benches and tables and the painting of the labs would not be finished until the last week before my departure; but as the work progressed, the students, who still had to work in improvised settings, began to peek in daily to see the changes that were taking place. They seemed pleased.

They treated me in a friendly but very respectful way. They smiled when I said “Sabah el noor” (good afternoon) and they returned the greeting in spite of my mispronunciation. My minimal Arab vocabulary also included the words for water (mah), gas (ghas), and electricity (carabah).

My third-year Palestinian student, Hassan Ahmed Hassan, had taken on the role of laboratory instructor on a volunteer basis, partly to help me, since Shauki knew no physics, and partly to gain some experience in performing experiments. He realized he was weak in that area, even though he was brilliant in theory.

The students had very little knowledge about the relative costs of laboratory materials. I questioned them about the cost of the voltmeters and ammeters they were using, and it was clear that they didn’t have the foggiest notion about it. They gasped when I told them that a voltmeter cost 15 dinars. This was what Shauki received as a monthly wage. I explained to them that if a voltmeter were damaged it would have to be sent all the way back to England to be repaired at great cost and loss of time. Their appreciation and respect for the lab and its contents began to grow.

Once one of the students accidentally pushed a beaker off the table and onto the hard tile floor where it broke with a crash. The student immediately went in search of the farash and ordered him to sweep it up. I intervened and said that in this laboratory the student responsible would get the dust pan and brush and clean up the mess himself. Whereupon I started to illustrate my point by doing it myself.