

Half-way round but still 40 days

Being a sequel to the earlier epic: Around the world in 40 days. Also posted on this website.

Cast of Characters:

Bektur Baizhanov: my collaborator in Kazakhstan; the joint grant with him is the foundation of this odyssey.

Laura Baizhanov: His 10 year old daughter.

Oleg Belegradek: Russian logician working at Bilgi University in Istanbul

Marco Mazzucco: My Ph.D. student in 2000 who works with Bektur and me.

Massoud Pourmahdian: Iranian logician; recent Ph.D. at Oxford. Visited me in summer 2000; invited me to Tehran

Yi Zhang: Ph.D. Rutgers with Simon Thomas; working at Bilgi University, Istanbul. Invited me to conferences in Antalya and at Bilgi.

16, 2000 May

I left POlk street in a rain storm about 1:00 PM on Monday. This set me up for a long wait in O'Hare. Then 1 hour on the runway and finally we took off. The trip was uneventful. I had a single seat although the plane was perhaps 80 Turkish air provided a toothbrush, toothpaste, eyeshade and shoehorn in a plastic case. There had been partial plans to buy an airticket from Istanbul to Antalya, Fortunately, Turkish Air in Chicago said, it will be cheaper in Istanbul. Oleg Belegradek met me as I got off the plane. He had bought me a round trip bus ticket to Antalya. We went into the city. I discovered I was still in Europe both literally and figuratively. I hadn't crossed the Bosphorus and this section of Istanbul is quite European in texture. Oleg made us a stir-fry for lunch. We napped. Then went to dinner at the Haci Baba. Good food and copies of paintings from the Topaki of what I think is the story of Haci Baba and Oleg thinks are just scenes. I am writing on the bus about 2/3 of the way to Antalya (or actually to Kemer where the conference is.) The bus system is great, Very modern buses A mini-bus picks you up in town then you transfer to a tour bus in the outskirts. The bus company owns rest stops which are more modern than the ones in U.S. The first 100 or km out of Istanbul, the population was very dense: Ohio like. We are now driving through very green fields, rolling land with mountains in the background. I can't quite place a landscape - maybe Southern France. I am traveling with Vladimir Tsolytin (sp). At least I hope I am, he found a single seat to sleep better and then I didn't see him at the last rest stop.

evening near midnight) Arrived without incident at the Grand Hotel Golyar which is a resort hotel inhabited by Germans (that my young mathematician friends describe as 'old, over 50'. Went to three lectures but only Simon Thomas kept me awake. Skipped the afternoon session to find the internet cafe and try to write home. Had tremendous trouble doing anything. Unable to telnet, I opened with great difficulty a yahoo mail account. Then it turned out the whole problem stemmed from the i key on the Turkish keyboard. It displays as an i but is really nothing . YOU have to type a different key- the dotted i. After another wonderful dinner - I skipped the meat except for veal wrapped in eggplant and feasted on the salads, there wasn't a whole lot to do. There was supposed to be a rock music show but we couldn't find it. Talked a bit with some young turks.

May 17. I will go to check e-mail again. Discovered that my panic over the battery is at least partly a malfunction of the linux battery gauge which seems to think a fully charged battery is good for about 8 minutes. On the other hand, it is only good for an hour. Great lunch, many salads, how many ways can one prepare eggplant? And a some squash soaked in sugar for dessert.

May 20: The conference got going in earnest and I didn't write in the diary for several days. I am now on the bus to Denizli/Pamulkalle. HOW I got there will appear in due time. The conference covered a wide range of algebra with only a few logic talks- all I think pretty good although both Simon Thomas and Jeel Hamkins did better than me by focusing on a single theorem. I spoke a lot with Dave Pierce and may have an improvement of the mcsigma paper. But I spent most of my time talking with a number of young Turks. There was a surprising percentage of women among the mathematicians- at least 1/4. Many were eager to talk; several were looking for post-doctoral position in U.S. - but I think on Turkish money.

ON Friday we went on a tour to Mira. This is the home of ST. Nicholas, an amazingly well-preserved but apparently not restored amphitheater and cave-tombs of the Lydians - dating back 3 or 4 centuries BC. We also took a boat to look over a submerged city - little to see- and then swim off the boat- which was really nice. A man and wife and their child drove up in a small boat to sell us ice cream. My seatmate on

the bus was from the village of Kas (name in computer guide) and I bought a postcard from his village since we were nearby. His father grew vegetables. As did everyone. The guide said there were millions of tomatoes in the greenhouses near Mira. I was skeptical then did some estimates. At least 10's of millions and maybe 100's. My camera seemed to have completely run down. I must have failed to turn it off properly because it seemed to recharge properly. I am still having a terrible time storing pictures.

The food at the hotel was fabulous. I ate very little meat because there was such a wonderful assortment of vegetables and fruit. And also fancy desserts that I was pretty good about. I went with in the end about 30 people to a bar on Friday night. One of the ex-pats insisted on going to a remote place where he thought the beer was cheap and (he would get a kickback). The beer was cheap 1.25 but he had thought .75 and I think drank free. After awhile the turks began to dance. At first mostly women but then both. Mostly just in groups with everyone doing his own steps; some line dancing and a few couples performed.

The people at the Internet cafe were very friendly but their lines were incredibly slow so contacting home was very frustrating and I couldn't figure out whether Sharon had actually made reservations in Selcuk. I began to talk with Steve and Judy and Judy pointed out that I was going right past Pamukale - although at the current plan in the middle of the night. I looked in guidebook and discovered a hotel in Pamukale with internet. So I switched plans at the drop of a hat and took of Pamukale. This involved sharing a cab with the Smith's to Antalya- \$20 instead of \$1 and then because I was foolish and didn't care much another 5 to go on to the bus station. It was 4 or 5 miles (at least as he drove). At the bus station I discovered that despite my hopes the Varan company on which I had a ticket didn't serve Denizli or Pamukale. I went to the Pamukale desk and they said - bus leaving now so I ran out and was the last one on. \$6.00 to Denizli which should be about a 5 hour ride and then another hour to Pamukale. But this splits the trip in half and I will go into Izmir in the morning. Spectacular scenery.

May 20/21 Pamukale:

The bus from Pamukale involved a change at Denizli. I worked this out with a Brazilian couple at the rest stop. Then I looked at their travel guide. They'd been traveling in Eastern Turkey so I followed their advice to choose a pension in Pamukale. I should have trusted my own reading of the guide.; The tout that we were so strenuously ignoring was from the Melton Hotel. My friend translated the guidebook (French) as saying the place wasn't very honest. Once I figured out that French for tout is rabattour, I decided the guide book was saying. Great place, it's a shame they have such unscrupulous touts. We went to a place called Kervansaray. My friend bargained so hard that it created a bit of bad feeling. (He of course thought the owner was bargaining too hard. But dispute was over less than a dollar. Of course this may mean more to a Brazilian. My rate was 9000 lira if the internet worked. On Sunday night when I was desperately trying to contact Sharon before she left they had messed up their subscription so I couldn't get on. Then I wanted to call. First he wanted to send me to a public phone for which I had no phone card. When it was too late, he offered to use their phone and I placed a call to Chicago and left a message on the answering machine. The next morning the internet was working and I discovered no last minute messages. So I paid the guy his full bill- including \$3.00 for leaving a message on the phone for Sharon to laugh at when she gets back.

Pamukale, Heiropolis is a Roman spa. Hot springs and vast bluffs of travertine. But the water has dried up. So all you have is rather beautiful limestone cliffs. I couldn't get the directions straight and so walked the long way around including a stretch that came dangerously close to my walking on the forbidden travertine- as well as a walk through cane. (More later, it was impossible to type on the bus so I quit and am filling in Selcuk.) There are ruins of both Byzantine hotels and the ones they have just torn down in attempt to reduce the drain on the water supply. The water is almost all gone - the pictures in the guide are from at least 5 years ago. They do run a little water over various places on a regular schedule to try to preserve the stone. But the deep blues are absent.

May 21/22 Selcuk- Ephesus: (written on evening of 22nd) The Brazilians were on the same bus but I left them at the bus station to see if it worked better not to get in a fight with the owner about price. From their guide, I located Pension Baikal. The owner offered me the luxury suite for \$25 double including breakfast. I took it. The room is pension normal; but we have the entire rooftop terrace to ourselves. This includes a nice view of three mosques and at the moment a nice breeze. Genghis Baikal is the owner. I expect he is about 70 and a very nice man. After carefully considering the easiest way for me to pick up Sharon at the airport he agreed to drive me for \$50 - this seems to be well below at least the first price asked. At it was a good thing he was with me. Sharon cleared customs in Istanbul; but her luggage didn't. She first

deplaned at the international terminal in Izmir— then they said she had to bus over to the domestic terminal. I had been waiting at the domestic terminal; when she didn't arrive, Genghis drove me to the international terminal. But she wasn't among the customers getting off there either. Genghis convinced a policeman to take me upstairs to examine the passenger list. There they told me that Sharon was now walking back to pick up her luggage in the international terminal and, indeed, as I came down the steps she walked up. We ate that night at the restaurant next to the pension— wonderful appetizers, an excellent -Pamukale red- wine and good lamb shisk-kebab. We were charged 16,500, lira but I think some got a decimal point wrong and we should pay at least \$10 more. I expect to ask about that this evening. (Especially, since they threw in free raki and coffee.)

This morning we went to Ephesus. Genghis drove us around first, pointing out many of the sights. He took us to the 7 sleepers, which we thought at the time was a Moslem site. But it turns out is some Christian martyrs burial sight. Supposedly they slept for 300 year (or maybe 200) after being martyred- and then were given a proper Christian burial after the conversion of the Empire. Little cloths were tied to the fence as some kind of symbol. Genghis took us on up to the upper gate to Ephesus. We first took a cab another 5 km up to the Virgin Mary's house (He asked 18,000 and settled on 10,000 which Genghis later indicated was the right price.) The house has been made into a church; the same cloths as at 7 sleepers were tied on a wall below. There were explanations in more languages that I could count. In particular, the English referred to the Ephesus Association of Ohio. Genghis had explain that was the instument of George Quatman who had been giving 150000 per year to the preservation and restoration of various Christian shrines around Ephesus. But 5 years after he died the sons had stopped the money.

Ephesus itself had many wonderful buildings or rather mostly foundations or walls. The main ampitheater was in good shape and a show was being prepared for the evening. The legend on one house read: private house falsely referred to as a brothel. The travel guides not only call it a brothel but have imaginative tales abouts secret passages to nearby temples. The library is indeed a striking building. With some difficulty we located the Church of the Blessed Virgin. This was the cite of the Ephesus Council of 431 which fixed some of the dogma about Mary.

We met Steve Smith and Judy Baxter touring the ruins. They were going up as we went down. We took a horse cart back into town. Our lunch was Turkish pizza - no tomato paste. Sharon got pure cheese and it was a bit salty. I got vegetarian - mostly tomator, some pepper onion, and either eggplant or mushroom. The museum had a superb bust of Socrates and a beautiful Eros on a dolphin but not much else. We took another walk around town and on the third try picked up our airplane tickets for tomorrow. Then we sat; with difficulty I got the latest bunch of pictures unloaded and then wrote this.

Sunday May 27 7:30 AM I'll fill in the last couple of days. Wednesday turned out to be a whole travel day. I had relied on the train making a 1 hour trip in 1 1/2 hours. It was 20 minutes late and lost another 20 so we arrived at the airport as the plane was leaving and it was 8 minutes later by the time we got to the check-in desk. But the clerk said he would write we had had arrived at the take off time and got us on the next plane with no trouble. Of course we had to sit in the small airport in Izmir for 2 ours. Then, I was unable to find the address of the hotel (it was in a different wallet) and spent an hour on an internet cafe finding in what strange place I had filed the message with the address. Then I checked the internet and got directions indicating it was walking distance from where we were down to the hotel. True, but only if you knew where you were. Took us an hour of asking many people. In the evening we walked up to the main Istiklal Caddessi and had a great meal at Haci Baba. Our \$40/night hotel room has a marvelous view over the Bosphorous.

Thursday morning I went to the Iran Consulate. Needed more pictures, had to fill out the forms and get a money order. In meantime Sharon had discovered that we were just above the garment district. So we strolled through it looking for a cafe for some breakfast while filling the forms. Found a nice little place. A boy of 12 or 14 asked about England then ran off for his brother to translate. We had a nice conversation. The young man's uncle runs an import-export business in Sheffield. The brother's girl friend is an au pair with an Egyptian family in England. NOW we discovered the consulate was only open 8:30-11:30. As we were trying to figure out how to get to the sights, we were helped by and a Turk and then his boss - a woman from Florida. The accent was genuine. She oriented us on the map and suggested we might want to visit the underground palace. This is a cistern from the time of Justinian. Now you just walk on a boardwalk above about 2 feet of water amidst towering Roman columns. It must have inspired the Phantom of the

Opera. Then Haga Sophia and Topkapi. Haga Sophia was vast and some mosaics go back as far as the 6th century. We walked down the hill to the harbor and then a taxi back to the hotel. After resting a bit had a nice dinner at the hotel.

Friday I got up early to rush off to the Iranian consulate. Promptly at 8:30, the guard told me it was closed that day – come back Monday. So I took cab subway cab and arrived at the conference on time for the first talk. In the evening the whole group went to a fish restaurant on the Bosphorous.

Saturday afternoon, I ducked out from the conference and Sharon and I planned a cruise up the Bosphorous. But the best laid plans went astray again. We couldn't find the 3:00 tour boat. So we took a ferry across to the Asian shore, had a Kofte and coffee walked a round a bit. Then another ferry to the old city for a visit to the Spice Bazaar. I bought a shirt and got Barry some tea and tea glasses. We walked back across the bridge and up a very steep hill to Istiklal Caddessi. Beer at the James Joyce pub, dinner at Subhaya (??) and a walk back to the hotel.

Sunday AM. Sharon is off to the airport and I am catching up before going to the last day of the conference. (Whatever I wrote seems to have gotten lost.) Filled in on Tuesday: Sharon and I had intended a cruise up the Bosphorous. But somehow the time was wrong and we missed the boat. So we took a ferry across to the Asian shore, sat around awhile, another ferry to the old city. We walked back including up one very steep hill. Finally we ate at a rather more European place -o at least it had a wine list.

Monday afternoon: The conference finished late Sunday afternoon with my talk. I managed to make a reasonable description of stability theory instead of the technical talk I had planned and it went over ok. A number of us went out to dinner in a fish place. Ali said he had gone there as a child. I went over to the Iranian consulate Monday morning. They wanted one more photocopy of my passport and then said come back at 3:00 to pick up passport. So I wandered around that area of the city. Unfortunately the museums are closed on Monday but I saw the Blue Mosque. I had lunch at a place where women dressed in peasant costumes rolled out large pancakes. Mine contained fresh spinach and was really good. I also bought what I thought would be some weak lemon soda at a stand and got really good lemonade. As I was walking down the street a young man began to make conversation in excellent English. I feared a salesman but at worst I got a mild plug for one bazaar over another. At 2:30 or so I got into the consulate and waited with 6 or 8 other people including a Molly Malone who writes for the Washington Post. Eventually they just handed me the passport with the new visa. Then I took a taxi back to Taxim and bought my plane ticket from Tehran to Tashkent. Hit three internet cafes to keep Massoud and Sharon up to date (and to hear Sharon had made it back to 3 dogs and two cats). She had a double fare to airport but so far my taxi drivers have been honest. Between 2 and 3 million lira (i.e. 2 and 3 dollars)for the 10-20 minute ride depending on time of day from Taxsim/hotel to Sultanhomet. After my walking around and nervous waiting I wanted a beer. I was hoping for an outside table but this is really a tourist district attraction (for beer, there are plenty of places to sit and drink coffee and tea) so you can find such in Sultanhomet but not Taxim. Sharon had discovered the James Joyce Pub which is a real find. But since I'd been there twice I tried to find something else. I discovered a basement bar decorated in pictures of many Turkish heros -but of course I could only recognize Attaturk. It seemed much like a Turkish James Joyce Pub. At 5:30, there was no one else there but after a bit someone began playing a guitar. I hope he was practicing. I came back and lay down for awhile. The electricity is a mystery. The bellboy explained that we had to put the key in a slot to turn on the electricity for the room. Sharon and I did that. Yesterday, I came in and turned on the tv forgetting this; it worked. I mentioned this to Ringling Jin who had noticed the 'energy saver' slot in his room but didn't know what it was for. Today, I tried to turn on the television and it wouldn't work without putting the key in the slot.

Tuesday afternoon. May 29: Spent most of the day at Bilgi University. I tried to deliver the 'finished copy' of my paper but discovered that I forgotten to incorporate the bibliography. And even after ftping the bibliography file from Chicago, I couldn't make the tex program recognize it. So I came home to the hotel and did it on my laptop. Now I have to get hold of Yi and deliver the file. Oleg has sharpened the conjecture we have been talking about on and off since I arrived. (But it depends on showing Udi's example has the finite model property).

The main reason I went was to try to recruit some of the Turkish graduate students for UIC. Mainly, I explained about American Universities with prompting from Ali. Ali runs a small summer school for these students. (He has about 10 spread of 4 years and gives them a really intense training). He invited me to

come for several weeks some summer.

We heard one of the horror stories later. One of the Russians (Katie and Lydia's friend Andre) is here for 9 months. He got quite sick and was rushed to the hospital. The university promised to pay but discovered later that it was really the responsibility of a different funding agency. Some nonsense about the insurance only kicking in after 6 weeks which was not in the contract. So Andrei may be stuck with a large bill.

The hotel asked me to pay as I came in today. Somehow, they had thought I was leaving today instead of tomorrow and I arrived a day early. So it is not surprising that they are nervous. But apparently my visa card worked. They now want me to come down and check over the bill they have already submitted ??? to visa. I went up and got a quite reasonable itemized bill of what I have so far spent. On careful review it also contains tonight's room charge— The total is 282 U.S. dollars (totals are strange; the charge for tonight is listed below the total but included in it). There should be no further charge except for phone calls (which will some how be magically added to the visa.) We should check Visa and object to any significantly larger charge.

Wednesday Morning: Monday night I went to a fish restaurant in a corridor recommended by Joel and Barbara just off Istiklal Caddesi. I just picked and chose and asked for a fish other than sea bass. I was surprised by the 25 dollar bill. But it was accompanied by a menu which verified the items - \$10 for the fish – but it was a big one and not the usual kind. And I had eaten three appetizers which two people would have shared. Talking it over with Joel and Barbara it seemed that they paid \$16 for about the same amount of food for two (and on fancy) fish. So they may have special tourist menu that doubles the price but no worse than that. Thursday night I went back along the avenue and ate at one of the places with the women rolling out the pancakes in the front window. \$5 complete for Turkish ravioli, salad and ayran. They had run out of the soup I ordered but this was enough.

I wandered into several book stores. Only Robinson Crusoe has a lot of English books. And it is a very intellectual fare with 2/3 of the stock non-fiction and a very wide range of novels. The Turkish book stores also had a large number of Western classics in translation. From Shakespeare to De Sade to Pushkin. And some modern American in translation. E.g. Aztec with the same garish cover.

I went into a bar about 9. There was no one there except a man playing (I think a synthesizer) but Turkish ballads and the bartender and the doorman. I talked for quite awhile with the bartender. He is 50 with sons 16 and 11. I think they are with the mother in California. I couldn't figure out whether he had been in California or not but he had worked as a chef in Yalta for awhile. He and the doorman were very eager to look through the little Turkish cook book I had bought and explain various dishes to me. It may have been that the musician was just practicing. He sang ballads for about an hour. Then a friend of his came in and when I left they were sitting in front drinking beer.

May 30: on the plane to Tehran: I spent the day wandering around Istanbul after a little work in the morning. I wanted to go to Ortakoy and thought there was a ferry from Besitikas. But this didn't exist and I succumbed to a bit of extortion and tomfoolery by a shoe-shine boy who first offered me directions (which turned out completely false) but cost me \$4. (Unexpected appearance of food and wine) more later. Dinner finished, I return to the report. I was a feminist tract at the Robinson Crusoe book store with title like reconstructing gender in the middle East. I'd begun to wonder about this the night before. As I sat on fish restaurant street, I tried to decide if only the western women clung so frantically to their purses. After 10 minutes of observation I decide purse snatching must be as real in Istanbul as Chicago since clearly Turkish women walked prudently with a hand on the purse. This evening as we prepared for the flight to Iran, women began to pull chador from their bags and put them on. But not all. One woman clearly displayed a cross. A few were in western garb: jeans and tee shirts. But on the plane across the isle are a family of a woman in her late 60's, daughter, son-in-law (who was with me until he found more room) and granddaughter. I was going to say they are wearing only dresses, but grandma has a chador on now. Of course, the hoods aren't up yet. And her daughter is still in tee shirt.

I had lunch at the restaurant Simon had recommended- up the steps behind you as you enter the Egyptian bazaar from the entrance nearest the water. It really was good though a bit more expensive than I had intended. I said the \$10 appetizer plate was too much food. So the waiter recommended a smaller appetizer. It was outstanding. Doner - i.e. gyros but as not tasted in the U.S.. Very subtly spiced over an eggplant \$2soufle. Followed by sea bass in pappillote. I charged \$25 to mastercard with glee.

Then I went up to the archaeological museum. Those who complain of the Ishstar gate in Berlin and

Chicago should look to history. The lions of the processional street to the Ishtar Gate (700 BC) are in the Istanbul museum, along with mummies and other Ottoman tribute. But very interesting were the sarcophogi of Sidon, dug up I think this century. (Linux says we have no battery - before it said 157 minutes). I will save frequently and ignore. I have forgotten how old the Sidon stuff was but I took pictures. After the museum I found the zoo; this may be in the hippodrome. There were cats that must be angora, camels, and a Turkish bear.

Earlier today: I couldn't find the ferry to Ortakoy so went like Sharon and I the other day to Uskasar, then walked to Harem (so-called I think because it directly across the Bosphoros from the Harem). I took pictures from several other vantage points of the lighthouse (as Sharon said) mislabeled a mosque above, which is in the harbor very near the Asian shore and so nicely illuminated at night that I took some time exposure from our hotel room.

I had ample time in the airport and even worked on my refereess report for Tapani. The airport's English books were like an American airport: Daniele Steel, Jackie Collins and mysteries. Not fair; also some good literature including a collection of classics.

May 31 in Tehran: I went through passport and customs in nearly record time. The only slow-down was they wanted a phone number of where I was staying. All the women had scarves by the time we left the plane. A nice young man offered to help me; he had just been in Istanbul trying to get a visa to U.S. to study but it had been refused. But no help was needed.

Although it was the middle of the night there was considerable traffic. Massoud met me at the gate and we were quickly in a taxi. The gate, which Massoud had used before, to the 'Sports and Industrial Complex of Ministry for Labour and Social Affairs' was closed. But he was able to call on his cell phone and we quickly got in. The only trouble with the cell phone was the noise of many trucks rumbling by. But these trucks were not heard in the very comfortable suite where I write this, I got breakfast from room service. I don't know if this is the only option or was just easiest thing to tell me in the middle of the night. Massoud just called that he will come in about 1/2 hour. Last night he gave me an invitation to a reception this evening. I think Sam will be there as well. It is extremely hot although the room is well airconditioned.

June 1: Breakfast the last two days was in my room. Apparently, the restuarant in this complex isn't open although it's kitchen is - or maybe they order out. Massoud and I went by taxi to the Institute. It took almost 1/2 hour. For lunch, we had pizza (American style) brought into Massoud's office. We talked off and on all afternoon. I spent an hour talking with the director who had spent time at Cornel and UIC; we had many common acquaintances. He is Sam's brother-in-law. But Sam is not coming after all. There was a brief reception, hor d'ovres, ice cream, cakes, coffee, tea juice. I don't know the occasion. Just a bunch of people standing around talking in the courtyard. But I had a formal invitation and Massoud wasn't invited. I discussed the hat problem with the director and another mathematicians. Most of the crowd were physicists.

The institute is in a beautiful site in a grove of sycamores. It is the former office of the Queen of Iran.

Then I was put in a taxi back to the guest house. Fortunately, they had paid him advance so I wasn't worried when he left the main streets and charged along residential streets to avoid the traffic. But 100 yards from the Guest House (I now know) he met a major obstacle. Six streets converge on a traffic circle with no lights. A single policeman valiant went around untying individual snarls but we sat in one spot for several minutes. I took a stroll up and down the avenue. There was an array of small restaurants, shops, paper stores, carpets etc. Most impressive were two shops selling nuts in the same block. I had already ordered dinner from the guest house. It was immense: chicken shish, huge amount of rice, pickles, and salad. With a coke that I had explicitly not asked for. I haven't figured out the system. I left my tray in the room yesterday but apparently no one came in to clean so it was still there in the evening. I took it downstairs. But for the two meals since, I have just put it in the corridor.

Friday afternoon. The Institute is closed for Friday; there will also be a couple of holidays next week. (Tuesday is the anniversary of Khomeni's death.) On these days, Massoud will come to the guest house. We talked for several hours this morning. Then, he had a family engagement. I swam in the pool of sports complex. The pool was only open to men at that time. There was also sauna and hot tub. The pool was fairly large and very crowded. As I entered the pool house I traded my shoes for a locker-key that strapped around my wrist.

After swimming, I went for lunch. The only way across the very busy street is to pick your spot and

run. I found a little shop whose owner denied he spoke English. Then successfully sold me a meat borek. (This was a roll around 6 inches in diameter with a hamburger in the middle.) With a salad and drink, it cost about 1.20 U.S. The drink was Doq (????)- a kind of yogurt drink but much more sour than the ayran I liked in Turkey. It was sold in very small bottles.

The television in the guest house has about 10 channels. One is Euro News which keeps repeating the same stories. Some in depth stories around the world but the only American news has been McVeigh and the Bush girls. I just stumbled over the Fresh Prince of Bel Air. The Iranian channels have a lot of news and talking heads - mainly Ayatollahs. When there are stories they seem often to involve children.

Saturday evening June 2: Busy day today- I left for the Institute before 9 and got back about 8. Two new taxi routes. Masoud called the taxi for me to go home but this time they let me pay. In the morning the guest house man gave written instructions to the driver who then went to the institute office to be paid. This is sop,

Just got tired of seeing the same review of a film about a little boy playing a robot. The arab music with shots of the mosque is more interesting. But it turned into a commercial.

This isn't Kansas. I went for a short walk after dinner. The Guest House is on a main street with traffic that you need to be a New Yorker to cross without fear. I walked down hill this time. Discovered a major mosque. It has the only traffic light in the neighborhood. I saw some people eating ice cream and crossed up to where it looked like it came from. Decided I could do without soft ice cream from a machine. Three guys were hawking fresh roasted corn along the street. Another man had a small tray of coals. He was roasting a fish by just dropping in on the coals. That could well be where the fish I had for dinner had the guest house came from. It certainly seemed to be cooked in the same way. I passed a man carrying a hookah as I walked back.

This part of Tehran has many major buildings set back from the street with wrought iron fences or stone walls and often some trees on the front part of the property. Both sides of the main street have a wide ditch down each side with contains closely planted large trees. This provides shade over the entire 4 lane street. There is running water in the ditch on one side. In some ways it may turn out to be easier to navigate here than in Istanbul. Most of the streets are labeled in both Farsi and English. But I haven't managed to get a map yet.

There are pictures of the Aytollah Khomeini everywhere. The reception desk either has a relief or a holograph; I haven't quite decided. But the moderate president is favored for reelection and his partisans control the legislature. The first time the conservatives have lost control since the revolution.

June 4 am: Yesterday, the receptionist at the guest house gave careful directions and a letter to the taxi driver. I was delivered and he went in to get paid. Today, the taxi driver got quite lost and we drove in circles near the institute for about 10 minutes. I think the best direction came from one of three teenage girls. They were arguing over the directions and the driver followed those of the girl who was most confident. When, we arrived, he came in with me to get paid. (I am pretty sure I am not supposed to pay). I was whisked away to the physic department where someone spoke English and took me to the Math department. A young woman then went down to pay the driver who had disappeared but I was waved off to my office.

June 4 5:30 PM. Masoud had to teach this afternoon so we quit after several hours of going throught the Baldwin-Holland paper. Because several of the people are interested in weak arithmetics I am going to present a section of Tapani's paper proving the uniqueness of real closures in a new ways. I worked out one of the lemmas with Morteza Moniri and Mohammed Bagheri this afternoon before coming home. Moniri arranged with the administrator that a cab will pick me up the guest house each work day at 9 and then we will arrange for when to come back. Next two days are holidays. Now I have my computer account.

June 4 8:30 PM: I worked until about seven and then went for a walk. I am staying in North Tehran; the institute- 20 minutes by taxi without serious traffic is also in North Tehran. The population of Tehran is about 20 million. One shouldn't expect taxi drivers to be familiar with all of it. I haven't gotten a map yet so I haven't ventured to go downtown. Massoud has spoken of going to the bazaar on Wednesday. The guest house is on a broad street described above. Like Western Avenue in Chicago it goes clear across Tehran. This evening I walked a mile or two further north and back. About half the time I am passing big building set back from the street with no street level business. The rest is small business. There are the usual array of groceries, pizzerias, only one actual doner kebab stand, florists. There were several places selling very European china; another with a couple of chinese pieces and long carving of about 20 sheep

and some turbaned shepherds. One of the China shops was called Susan's Castle. This was the only store with an English name. One place had fantastic silver. There were several carpet stores including one with a carpet of an American \$5 bill. Is it sacrilegious to walk on Lincoln? I eventually passed one restaurant that had the prices and menu up in English: pizza, hamburgers, and kebabs. There were several very fancy restaurants.

I passed a campaign office for President Khatami. He was showing on 4 or 5 televisions and there about 20 people on the sidewalk watching. As I came down the street later I passed 4 stores in a row with his poster in the window.

I now know the essence of the American dispute with Iran: the expropriation of Coca Cola. It probably cost coke 1/2 of their world-wide profit. I have drunk more coke in 4 days than in the last 4 years. I say, "not coke", the waiter says, "juice"; I say "yes". I get coke. But the Iranians like coke.

The Russian channel showed a very badly dubbed American movie. I was going to guess Airplane 6.6. The protagonist is a woman stewardess who eventually shoots the bad guy and lands the 747. In the credits it seemed to be called Turbulence. I recognized none of the cast even when I read the credits.

June 6 6:30 PM: Yesterday was the death day of Ayatollah Khomeini so the Institute was closed. Bagheri and Pourmahdian came to my room and we worked for several hours. Then we joined Morteza Meroni at a restaurant that had been the home of a wealthy person before the revolution. It has been turned into a clock museum. A bit of a faux pas. Meroni's wife was waiting with her daughter as we entered. I said at best hi thinking she was coming over to the table. But it turns out she just wanted practice her English a little before going off to another appointment. Of course, I didn't know this until later. I am correcting, mostly the English, a paper of Meroni. It is based on Craig Smorynski's Ph.D. thesis at U.I.C.

I was very tired afterwards -turned out to be the beginning of fairly severe cold. So we decided not to meet on the 6th as we separately prepared various things. I have managed to commit for two lectures on Thursday. I had dinner at a restaurant near the hotel. The menu was in English - although no prices in English. I finally managed to get something other than grilled. I ordered green rice with lamb meat and got a lamb shank in tomato sauce and a huge pile of rice, white, green, and yellow- with mushrooms.

Today is the anniversary of a massacre by the Shah which began the revolution. It seems to be a more serious holiday than yesterday. At least when I went out at 3 many more things were closed than yesterday. It was 'Mad dogs and Englishmen' hot and many stores were closed. So I finally gave up and went to the nearest restaurant to the guest house: Country Fried Chicken. It is, I think, a Kentucky Fried franchise that was expropriated. I ordered two pieces of chicken and salad and seven-up. This cost about 2 dollars. To my surprise, I also got mashed potatoes, a nice mix of rice, peas, and garabanzo's and a large dinner roll. The restaurant is decorated with large stills from black and white movies; Chaplin as the little tramp; Laurel and Hardy, Chaplin and Mary Pickford??; and 7 cowboys on horseback; none of whom I recognized. There is also the requisite picture of the Ayatollah and on the other side pictures for children.

June 7, 9:00: Mother complains that I am always writing about food. But that is where it is easiest to pick out differences with our culture and also where I have the most contact with other people. I went this evening to the sandwich shop where Massoud and I had drinks on Friday. I went up to counter prepared to point at what I wanted. I thought I was stepping in front of a man and motioned him to step up. Somehow I said something in English and he replied. He told me I had to pay first and translated to order me a sandwich (would cow be all right?), salad and some orange drink. He offered me coke but I persisted in pointing at the orange drink dispenser. He asked me where I was from and then wished me success for my entire life. Very nice old geezer, i.e. maybe a few years older than me. One thing is very different from Turkey. In Turkey there was fresh squeezed orange juice every where. I haven't managed to get any actual juice since I arrived in Iran. I saw as I picked up my sandwich that this store has orange juice in foil bags. Maybe next time. The restaurant is reminiscent of a small lunch room in the states. Until you realize that both floor and walls are tiled in marble. Oh, yes, the meal was U.S. 1.10. There is a picture of Khomeini on the wall but also of a middle aged man in a business suit. The other pictures are landscapes; some of them were very European.

This evening the traffic circle was completely tied up again. When I went by on the way to dinner there was no policeman in sight although a soldier with a rifle was lolling against the wall. When I came back, a policeman was there and had straightened things up a bit although the very heavy traffic on the avenue north was making for a snarl in any case. I think the holiday is over and this street will be full of revelers this

evening. Most of the cars are of European size although there a few, usually quite old, American monsters.

Tehran is nestled against the mountains. I can see the snow covered peaks from the yard of the cultural center. At least here, the pollution is not as bad as you would expect from the geography. But it may well be different downtown.

June 6 7:30: After Massoud and I talked for awhile this morning, we went up to the Shah's palace. This is maybe a 1/4 mile from the Institute. The Institute is where the Pahlavi Foundation was headquarter and Farah (the last wife of the Shah) had an office there. But we also saw her office in the palace. There are actually two palaces; one built in the 19th century and expanded later and the other built in the 60's. Both are on the scale of the European palaces- 15 foot ceilings, huge rooms. The furnishings vary from modern to classic French (in style though newly made). There was a golden vase (more of a pitcher) given by Nixon and a painting of a seashore given by the Johnsons. I am sure there is a message here but I don't know what. The building is certainly spectacular and that is probably part of why it is on display to the populace. I had to pay 3 times as much as a foreigner but still less than \$7. The Shah's closet is about 10 feet wide and 30 feet long with closets down both sides containing displays of his clothes. The center of the room is a long flat table. I asked what it was for. It was a sewing table for the two tailors permanently working for him. More than 1000 pounds of gold were taken from the bathroom and deposited in the national treasury. Of course, there were many beautiful carpets on both floors and walls. Other walls were all mirrors. The second palace was similar. It had one painting by an Iranian painter; the man in the painting seems to be looking at you no matter where you stand. The war room looked a lot the American cabinet room; the windows were of bullet proof glass. This was the working palace in the 60's. Next to his office, the Shah had another bedroom. Several of the rooms preserved some of the 19th century decoration. I now have a map of Tehran. It seems I am about twice as far from downtown as from the institute. We were back at 1:30 and worked till about 6:30. Checked the net and was pleased to see that Leahy rather than Biden will head Judiciary. As I came home the traffic circle seemed jammed but my driver just bulldozed in and we went right through.

June 7, 8:30 PM: I gave two talks today. One to the logicians and one to the institute at large. Both seemed to go pretty well. In the first case we are trying to understand the strength of a new argument of Hyttinen for a very old theorem. In the second, I was just advertising model theory. The logicians liked the ad, but they hadn't gotten any feedback from the others yet.

We had lunch a restaurant near the institute and did not have grilled meat. Several had chicken with rice; but we ordered several bowls of horesh (sp??). This turns out to be the generic name for cooked vegetables. One was eggplant, mushrooms and corn with a pleasantly sour taste. Maybe a lot of lemon juice. The second looked like spinach with lamb - like an Indian dal - but Massoud insisted the vegetable was not spinach although he didn't know the English word. Naturally, this came with coke.

They have laid on a day trip on Sunday to Isfahan. This will be 1/2 hour plane ride each way and a day of touring. I'll be accompanied by the 'business manager' of the institute. This should be fun. This is an ancient capital of Iran with fine mosques. Tomorrow is the election, but we will go first up the cable car and then walk a bit on the mountain. And we will find out if Blair is the first ever labor P.M. of Britain to be reelected.

The Euronews is reporting the story of a child in Geneva, who died of neglect, after the mother was arrested for petty theft. The role of the police, welfare etc. are under the questioning one would expect.

Friday June 8, 4:00 PM: Today is Friday so the institute was closed. In addition, it is election day. Yesterday, a slightly smaller country (Great Britain) for the first time reelected a Labor government. I went with Massoud and the elder Mironi up the TeleCabin to the mountains north of Tehran. In 3 stages taking more than 1/2 hour the cable carries individual cabins up over 1700 meters. There is a splendid overview of Tehran as you rise. The cable is suspended on 30 or 40 foot towers and goes up and down hill. The cars moving in opposite directions are on different cables. The Shah had proposed to continue this cable way another 50 Km to the Caspian Sea. (50 KM as the crow flies; 400 by road). In fact the last stage that we rode today was not finished until this year after a 20 year delay. The temperature dropped from the 80's to the 50's with wind. Some snow remains. We had a wonderful soup at the top. We walked another couple of hundred meters from the top stop. There are few trees on the entire route; but there are recent plantings on the lower slopes.

Massoud reported that a woman friend of his family had reported that women were more relaxed here than in Saudia Arabia and this conforms with my limited experience. A couple of girls on the bus to the

TeleCabin were playing loud rock music on a CD. This brought the comment that they couldn't do that in the city.

A couple of times today, somebody has been playing with the TV controls and I found out that there satellite systems receives many different stations beyond the ones usually display: China TV, TV Dubai, TV Rumania, and many others not so easily identified. If only we could get that in U.S.?

Monday June 10:

report on June 9: Cheated Friday night and went to an Indian restaurant. The menu and prices were in English and I got about what would get in U.S.; chicken tikka, a nan filled with vegetables and cheese. Etc. But it cost almost \$7 which I think is twice what any other meal I have eaten in Iran cost. We worked on Saturday until about 7 and then I came home. Relaxed a little bit, very nice fish dinner at the Ali Shabbat (\$3.50) and to bed.

Sunday June 9: This is the anniversary of the birth of the Prophet Mohammed. With Majid Zamani (check spell) the manager of the institute I went to Isfahan. This was extremely convenient as he bargained with taxis etc. and arranged where to visit. We flew down on a Fokker 100, holding about 125. The view out the window was extraordinary. I couldn't tell whether I was looking a sky or land but we finally decided that the wildly patterned surface was in fact desert and sheer sides of mountains. Eventually, major superhighways spread across the deserted landscape.

The first stop was the most interesting. The cathedral of Vank was built in 1604. It was active as a church until at least 1931. There is still a Christian church active in the area. The church is completely painted inside. And the paintings are fully preserved. The lower tier of 10X10 murals depicts passion week. The upper tier is harder to interpret. One scene was Moses; others seemed to reflect medieval battles. The view of Jerusalem clearly displayed the Dome of the Rock. The huge scene of the Last Judgement reminded me of Bosch with the pitiful damned at the bottom. This connection was not accidental. We found in the museum that this Armenian community had had close ties with the Netherlands. There were other Dutch and Flemish paintings from the 16th century on including a print of some sort of Rembrandt's Father Abraham. The museum had originals of many edicts of Shah Abbas, the founder of the Persian Kingdom centered at Estafan in the 17th century, protecting the Armenian minority. More surprising were the illuminated manuscripts – whole books, dating back to 10th century. There was also a copy of the 'smallest book in the world', a 14 page book about 1/2 inch square containing the Lord's prayer in 7 languages- printed in Germany. The first printing press in the Armenian community, Julfa, dated from the 16th century; they had one from the late 1600's, labeled the third. And they had old Armenian bibles, some printed in Amsterdam, and some in Julfa, more than 400 years old. There was a case devoted to the Armenian republic; founded in 1918 -died??. Another recounted the Armenian massacres by the Turks in 1915. They estimate 1.5 million dead and 1.5 million deported.

We went through the palace of 40 columns: 3 rows of 6, 2 before the entrance and a reflecting pool. But the pool was dirty and did not reflect. Then we went to main square, 3 major mosques and a palace. The mosques were beautiful. The one we went through is being reconstructed. The palace required climbing many narrow stairs but almost none of the ornament was left. There were a couple of very European style paintings. We then had lunch at the best hotel in Isfahan. Again the main dish, a tasty chicken choresh over rice, cost less than \$3. It was now 2:00 and siesta time. We rested a bit in the garden of the hotel. The Hotel is named the Shah Abbas and really is deluxe in decoration.

We then drove 15 minutes to the shaking minarets. Supposedly if you climb up one of the minarets and shake the tower the other will shake as well. We separately climbed the narrow stairs and made the minaret, which was open, shake but we couldn't detect any movement in the other one.

I had some kind of digestive upset and was uncomfortable for most of the next couple of hours. But we took pictures of two other 17th century bridges, had some wonderful strawberry juice, and some kind of lemon ice which did my stomach no good. We went back to the main square and I bought a small printed table cloth for under \$5. The square gradually filled up with families picnicing.

Tuesday June 12, 7:15 PM: Yesterday I took the logicians out for dinner; a rather bright graduate student joined us. He had spent a year with Poizat and has apparently proved a nice result. He was very interested in the Armenian church; he was as surprised as I that there was such intimate contact with western Europe in the 17th century. He thought this was the first time Armenians had moved into the area of Isfahan, which I find doubtful.

It rained today and the Iranian slowed from being race car drivers to normal American speeds and following distances. The usual driving shows that at the cost of a lot of fender benders, the 10 ft per 10 mph isn't needed. Everyone was at least an hour late for work.

There are fewer women on the street than in the west. They all have their heads covered but to varying degrees. Maybe slightly over half wear the chador. But while most wear dark scarves covering all their hair; others display one to three inches of hair at the front. Women drive; but not taxis. Men will ask strange women for directions; certainly forbidden in Saudi Arabia. Young couples stroll arm in arm. Many of the guides at museums are young women. Women are clearly working at a wide variety of jobs. But I have not had a conversation with a woman since I got here. The daughter of President Khatami is a graduate student in mathematics. She has a graduate assistantship and needs it because her father draws a salary of only about \$750 per month. No, I think that is his income including renting out his home since he lives in the presidential residence.

For the last couple of days Channel 9 has turned from English to Chinese. I found out why this morning. There are four or five Chinese staying in the guest house. It's back to English right now and except for the Bush 'charm offensive', the stories are all ones I heard two days ago. The Persian television includes coverage of European newspaper editorials and some stories taken directly from European TV - but with Persian commentary. There are many long segments of quiet music and scenes of the countryside and various scenes of daily life. There is usually a mullah speaking on at least one channel.

Amid Rassoulion who got his Ph.D. from U.I.C. a couple of years ago is head of the department of math at Tehran University. He is planning a sabbatical at UIC next fall.

Thursday June 14; 7:30 AM: Yesterday was museum day. After Massoud and I worked through an argument of Hyttinen in the morning we were off to sightsee. We left the institute at about 11:45 and it took about 45 minutes to reach the carpet museum. There are many beautiful carpets, most with designs. One of the more intriguing was made for a Shah at the end of the 19th century. It had pictures of many famous people, including Washington, Queen Victoria, Grover Cleveland and a somewhat distorted Lincoln. Another carpet from Tabriz had Moses, Adam, Abraham and Jesus in the four corners and we couldn't any specifically Islamic figures. I suggested it might have been made for a Christian and Massoud agreed, saying there were many Christians in Tabriz. There seemed to be more of these figured carpets on the second floor but unfortunately it was closed. The National Archaeological museum was another half hour away by cab. This contained pottery statues and bronzes from prehistorical through the Sassanids (I think) the periods were not well-described in English) in one building. The second building focused on the Islamic period. We then had lunch at a nice hotel. \$2.00 for a salad bar.

Then we went to the bazaar. A very large area, Massoud says it extends 20 km, has covered streets lined by shops. As soon as I said that like Isfahan, this differed from Turkey in that you weren't attacked by the vendors, a carpet. And neither Massoud nor I knew whether \$300 for a rug 1/4 the size and comparable quality to what cost 2000 in the US was 10x an expert that Massoud knows. Also this particular dealer was selling old rugs with a supposedly higher price for age. Not my cup of tea. As we walked around we saw several in windows that were more interesting. One shop had a couple of framed pictures of woodland scenes - made of carpet. One was especially nice but the asking price was \$900. We stopped off afterwards at a government handicrafts shop which had fixed prices. They were certainly significantly less but the items weren't directly comparable. I bought a few small souvenirs.

I haven't been well. I don't feel that bad except tiredness but I have a touch, at least, of turista and the last two nights have sweat while sleeping. The room is cold and I pull on covers and then don't get them off. Last night I slept for 11 hours and didn't have dinner. Right now I feel ok.

Thursday June 14 7:20 PM: Massoud and I worked until about 1; then after lunch we went shopping again. I still wasn't satisfied with the carpets we looked at or price. So even though, I liked some of them better than before, I settled for a number cheaper souvenirs. Among other places we visited a new shopping center. It is beautifully decorated with painting on tile about 2 feet square every 10 feet. There are mosaics and stained glass windows. Even though built since the revolution the painting are romantic depictions of young people in the style of 17th century Persia. Massoud, thinks this a recent redecoration but, if so, it involved installing new glazed tiles.

Bush is speaking (well actually it is a joint press conference but all the questions are of him.) He has done very well (i.e. sounding much more conciliatory than he actually is) except for one gaffe. Someone

asked him why he stopped the bombing in Vieques. He gave standard kinds of reasons and said well our friends asked - implying that Puerto Rico was somehow not part of the U.S.

Taxis and driving: Taxi's are about one dollar U.S. for a 20 minute drive. Many of the drivers are private. I.e. people just out working with no particular license or insurance. It must be a family car.or ? Massoud didn't really explain. The institute successfully insisted on paying the drivers directly. This was just to save me time. But, it is a real imposition to the driver. He loses time worth half the fare if he manages to be at the Institute. Driving is fast on the freeways and faster than Istanbul on the streets. Partly because the streets are straighter and wider. Following distances are much shorter than in U.S.

Democracy in Iran: The English language press here headlined- Iran most democratic state in area. Seems quite plausible. Certainly, if the competition is Iraq or Saudia Arabia. If the competition is Turkey, well. The religious parties are suppressed in Turkey and the military stands ready to step in (and does fairly frequently). The Iranian constitution gives much power to the Supreme Leader (appointment of judiciary, declaration of war) and he is chosen by clerics. Clerics also must approve all candidates for parliament and the presidency. But clearly they have to respond to popular pressure. For this election their strategy was to approve only candiates tending towards reform - hoping to split Khatami's vote. But he increased his percentage of the popular vote (with a decreased turnout). Many of the reform newspapers in Tehran have been censored (i.e. closed). And several reformers including a leading member of Khatami's cabinet have been jailed, basically for saying the wrong thing. The parliament contains 124 members of the governing party with 15 in a smaller party to give 139 votes against 128 for all others. But only some of these are characterized as conservative. Massoud at least characterizes conservative versus reformed mostly as clerical vrs secular.

left my travel disk in the office. Be sure to ask Massoud to transer some files. Feeling much better now.

June 15 8:00 AM, Tehran International. I have passed customs, they opened one gift and decided I was too cheap to worry about and passport control. The woman checking passports stamped mine cleared and then looked very worried. I think she realized she hadnt checked for my Uzbek visa. She didn't look further but sent me through. I had asked to be awakened at 6; luckily I woke up at 6:15. No one seemed to be around at the guest house. I unlocked the door to go out to meet Massoud and he took me to the airport.

The listing on the board for my flight has changed from 'is checking now' to 'pass check'. I'd better find out what this means. (10 minutes later) Windows hung when I shut down - displaying the screen= Windows is shutting down. It apparentlu used up another 5to go through security. So I am now sitting a less comfortable chair on the other side of a glass wall from where I began this morning's notes.

Earlier, I went to the duty free store. I bought some gaz, the famous candy from Isfahan at the duty-free store. The salesman was efusive when I said I was from the U.S. 'Americans are very intelligent; so happy to see you'. I also looked at their duty free carpets. The prices weren't too much different from what we'd seen but I think I bit cheaper than the last place we looked. I think he wanted 250 dollars (first price but no offer to bargain) for a 2 X 4 foot rug which struck me as almost American prices. Here a 3 X 5 was about that price.

The waiting room is filling up. Some women have turbans rather than scarves. And one man has an intricately embroidered green and (mostly) red on black skull cap. One guy looks American. Why, body type and big watch.

June 15: 2:10 PM. Tashkent, Uzbekistan.

First the trip: The flight over Iran was amazing. The country is DRY. Nothing was really green; we left over some farmland west of Tehran then circled back and passed over a deep river valley with green near the river. But mostly we traveled over high rugged mountains. Hundreds of miles of rock. Then we were coming down towards Uzbekistan. First there was a broad green valley; actual pasture and a lake. Then as we came down a real broad river- still flowing unlike the one in Isfahan.

the arrival: The line for passport control was extremely slow (actually only the line I picked); but my passport was just glanced at and stamped. I had to declare in duplicate how much money in various currencies I was carrying. There was an even longer wait for the luggage to get off the plane. But when it arrived, there was no problem going through customs; the customs inspector was very helpful. He asked for my pen to fill in line I'd miswritten but with a different color of ink than his. His English was excellent with little accent, but pen for pencil. Bektur and his daughter greeted me as I came out the door.

The women started to take off their chadors as soon as the Iran air plane landed. Here dress is as U.S.

Although, I still haven't seen any shorts. The temperature is probably at least 28 C, not the 18 C announced by the stewardess.

In Tashkent: We are back on the tourist service. We went to a bed and breakfast I had booked on the internet. The room, which I will share with Marco, has twin beds. Room service is advertized with beers ranging from \$1.5 to \$2 (Russian and Heineken). But there doesn't seem to be an airconditioner. The room has a very high ceiling (at least 12 ft) and was cool enough when I came in but is warming up now. And you switch the water between the sink and the tub/shower with a long spigot. The TV has a remote. There are channels in English (CNN, BBC, ESPN, STAR TV of India, and more), Russian, German, and several in Turkic/Arabic tongues I can't distinguish. One was subtitled in Chinese and English. One of the channels seems to have a western on: Knights and Cossacks. Another shows a circus. A few minutes ago an ape in skirt was walking a tightwire. Now a woman is doing rope tricks first to Louis Armstrong singing Hello Dolly and now to a something I think we'd call country and western. Now bronco and bull riders. It's an Arabic station.

We are going to rest for about an hour then have lunch and a tour of Tashkent. Bektur and his daughter took the train all night from Almaty. They have arranged that a friend of a friend of a relative will drive us for 3 days. \$110.

Tashkent 8:15 PM: Tashkent, City of Fountains. Laura and I kept wanting to take pictures of the fountains and the guide kept saying, "Wait for the big one!" He was right. A wall of water 20 feet high and a 100 feet long crashes to the marble. Walking in front is like walking under Niagara Falls. And the kids and their mothers play in the pool in front. We saw the outside of the Museum of Tamerlane, had a nice lunch in a self service food court with trees and fountains after rejecting another place with nicer fountains but no trees because it had no 'plough'. I think maybe pilau is better but from Bektur it sounds like pilau. It was rice and very tasty beef. We also had a soup that Bektur said had Russian noodles with a Uzbek stock. The noodles were a ravioli that seemed more Chinese or Mongolian to me. This is the crossroads of the world. The paintings laced for sale along the main square had (at each stand) the expected traditional scenes of Tashkent and Samarkand, European style landscapes and portraits, at least one sultry lady with few clothes, and several paintings for in the fantasy sci fi style, nude heroine with wolf. And one had an extremely nice Buddha.

There was little solicitation for business except by the female hucksters for the restaurants along this strip. The young women receptionists at the hotel spoke excellent English and I made a comment about the Uzbek's having little accent in English; Bektur said the girls were Russian.

Samarkand 3:20, June 16. Last night we napped for awhile. I e-mailed Sharon from an internet cafe that wanted 1200 sum \$1.50 per hour but prorated. The telnet didn't work but I sent a letter via the Yahoo account. Then Bektur got up and proposed a stroll. Laura was about half-awake - it was almost midnight her time and she had spent the preceding night on the train. As we went off, Bektur remembered that I was supposed to get a map of the metro and ask people where it was. They kept saying - just that way for about a mile. Laura had forgotten her socks and her feet began to hurt but she soldiered on without complaint. Finally, we found the subway. There were no printed maps (ran out 3 years ago) but there was a map on the wall indicating we were one stop from the 'happening square' called Broadway. Eventually it turned out that the indicated line was under construction. So we went on another and then took a taxi to Broadway. We found a strong man act. With a 3 piece band, an m.c., and sales of physical culture books. Unfortunately the act wasn't so good. He lay down under a heavy plank with tracks balanced on it and a car passed over him. We walked up and down the Broadway; Laura had a ride in the rickshaw. Then we had a nice dinner - mezzes: soup, tongue, herring, while Laura got her well-deserved nap. The waitress was one of the singers; she turned out to be half Jewish and half Turkoman.

Bektur gallantly picked Marko up at 2:00 AM and I slept in. We were intending to leave at 7 but the driver was late and so we decided to have breakfast first and got off at 8:30. First we went through an incredibly rich valley where everything grew: tomatoes, cotton, wheat, corn, fruit, olives. Then over range land with free range cattle and finally into sheep country. The small mountains first reminded of the trip through Gilroy Southeast of S.F. to the central valley and then it became more rugged. We stopped and I have a picture of a herd of sheep that could be just outside Kamloops in the Thompson valley. Except that because of irrigation, a once mighty river has been reduced to a trickle.

Arriving in Samarkand we went first to the astronomical observatory of Ulug Beg. In the (15th?) century

this grandson of Tamerlane made the first real star chart since Ptolemy. It was reprinted as recently as 1931. The altitudes of planets agree with 10 seconds of modern computations (except Mercury where the error was 10). Unfortunately, he spent too much time stargazing and was killed by his son.

We had lunch across from the Registan, which is the main sights. More on it later. Some of us had Uzbek food; others Uigher – the furthest East of the Turks – in Sinkiang.

June 18 Alma-Aty: We pick up the story on the afternoon of the 16th in Samarkand. Samarkand stands now as a sleepy little town of 400,000. Our hotel was less than 1/2 mile from the Registan, down a graveled street through what used to be the Jewish quarter. But since the fall of the Soviet Union, the Jews have been moving to Israel. Either some remainder or whoever bought their houses is forming a tourist industry with this collection of guest houses.

We engaged an English speaking guide named Akbar Kasimov (35-03-15) who proved an able guide, adept at protecting us from some peddlars and leading us to others but throughout a font of reasonable information. His credibility was dashed a bit by his claim that Alexander didn't capture Samarkand but just married into the royal family which contradicts the guide book. But the story that can be told of Samarkand begins much later; almost everything that went before was destroyed by Genghis Khan. In the 14th century, it was rebuilt in grandeur by Amur Timur (Tamerlane).

The Registan is three theological schools (Madrasahs). They had fallen into near ruin by the late 1950's but the Soviets and later the current Uzbek government have done a massive renovation. (Some of which, typically Soviet, is coming undone again - there is big gash in the blue of the largest dome.) As usual, it is the overall effect rather than the details which grace such structures. We were treated to tea and a lecture on carpets by the local carpet factory. A Unesco plaque apparently attested to the tale that this venture was trying to restore old patterns known in Afghanistan to a people whose culture had been suppressed by the Soviets. On the other hand several gold and platinum medals earned by this company we only heard about. A few blocks away is the mausoleum of Amur Timur. In front of it and not restored is the mausoleum of his 'spiritual teacher'. With him are another spiritual teacher with Amur Timur buried at his feet with a deep green jade tombstone. Nearby are the sons and grandsons of Tamerlane including Ulan Beg. Across town, we visited another set of royal tombs - mostly for women in Tamerlane's family. One part of a minaret which survived Genghis Khan is still there. Most of the mosaics have not been restored here, except in the mausoleum for a cousin of the Prophet, which is magnificent. Here, I managed to talk myself out of some nice souvenirs by trying to beat the price down and being unable to find a graceful way to pay the full price (which wouldn't have been bad). Seems like our mastermind of a guide who was coaching these guys on how much to ask for could have saved the situation but he didn't and I didn't.

Samarkand should meet anyone's need for the exotic. Few speak English. The toilet stopped working at the hotel. The food was excellent and plentiful at the hotel. But they wanted 6 dollars each for dinner so we went elsewhere and 5 ate for \$8 - probably not as good.

Sunday morning we were out of bed at 6, out of the hotel before 7:30 and shortly on the road. Three and 1/2 hours to Tashkent - a short drive through Tashkent for Marko to see some of the sights and then lunch on the road to Chimkent. Tashkent is a modern city with a superb infrastructure. Wide streets and metro and almost no traffic. The Soviets built metros and the Shah built a telecabin.

The border crossing was uneventful although it took several stops and we witnessed several confrontations between customs officers and locals. (A customs officer grabbed a peasant who just strolled past the gate by her apron strings and drug her back for inspection.) Bektur had kept warning us of the strictness of the controls and I had been worried because I hadn't officially been able to change any money. When I paid at the second hotel (in dollars) the owner gave me a receipt in sum (Uzbek currency is the sum (soom)) since he was licensed to take dollars. Of course I didn't have any legally exchanged sum but only those that Bektur has lent me. So the receipt was useless to me. But also unnecessary. We did have to fill out our exit declaration in duplicate. Then Bektur, who did all the work at the Kazak crossing had to carry it in to show. While he was doing this I asked Firpat if there had been a border crossing during the Soviet era. He said no and then gave a thumbs up and smiled, 'Soviets good, now dark'.

On the way we stopped for Marco and I to sip and Bektur to luxuriate in some chumish. A kind of buttermilk made of horse's milk.

We had some time to kill in Chimkent and after driving around seeing the sights of another city with broad streets and little traffic, we stopped for ice cream. Laura carefully picked out the proper ice cream

bar for each (except Firpat who knew what he wanted) and we waited and waited. Turned out they cut up the ice cream bars and put them in dishes. Then Bektur nephew and a couple nieces on his wife side came by to say hello. This wasn't pure accident; I think a message had been left. But it was pure accident when we met a college classmate of Bektur's and his wife at the train station. As we got on the train they came back by to see him off and the wife joked that Marco should change seats with her husband because he was sharing a double with a beautiful young woman. The train was fine except the air-conditioner was broken in our car. It was incredibly hot as we waited in the station and at the first few stops. Mostly it was ok once we were moving. But the windows of the compartments couldn't be opened and the ones on the other side shouldn't be. Since once opened it sometimes required two of the trainmen to close. You have to show a passport to get a train reservations and reservations are very necessary since the trains have been decimated since the fall of the Soviets. So I was Beiput and Marco was Victor. But once the ticket had been stamped it didn't matter. Eventually, the conductor asked Laura if we were German. She played dumb and reported back to her father, who told her to tell him we were American.

In addition there was no restaurant car after we had made elaborate plans for first Marco and Bektur to eat and then to come tell Laura and I what was on the menu. She wasn't confident in her ability to translate for me. We had to eat separately since someone had to stay with the luggage. Instead, at a stop Bektur went out among the crowd of peasant women and bought potatoes and sliced tomatoes, sausage, bread, blintzes to supplement the raw tomatoes and cucumbers he had purchased in Chimkent. Actually Laura and I made one try to purchase. I wanted to get blintzes but she thought her father already had some and we could communicate well -in this crowd of screaming women- so we just gave up. Then she went back by herself and bought 4 simple blini as her father asked.

The country reminded us variously of Colorado and Alberta. In one place it was really flat but mostly rolling foothills of pastureland. We saw many herds of cattle and sheep, usually with scattered horses and once a herd of horses.

We arrived to an extremely apartment. It is on the top floor and was quite hot after being closed up but seems to cool off once the windows are open. We've had a nap and shower and expect to join Bektur for lunch in other 45 minutes.

June 19, 8:00 PM: We drove up into the mountains above Al Amaty on the afternoon of the 18th. They are very beautiful, forested with a small stream. Perhaps 10 miles into the mountain, there is a huge skating stadium just below a large dam. In 1973 an avalanche killed 400 in a resort village just above here (according to Voice of America, official media never admitted the casualties). But then another part of the mountain was blown down. Later there was a lake behind the dam but it is now dry, I think to make the dam more secure. We paid 13 dollars to a minivan to drive us further up the mountain. Laura and Marco rode horseback for a few minutes. We went up to the base of the chairlifts but Bektur said they were too expensive (I didn't see the price). The prices are set by the diplomats and the 'nouveau rousse', who have western incomes.

Beibut took us out for dinner at a nearby restaurant. I had to fink out early as I wasn't feeling well. I've had badly running nose, slight sore throat on and off for several days. This morning, we began with a trip to register our arrival; the border crossing is not connected to the computer. This involved standing in a hot hallway at the police station while Bektur jumped queues. Eventually, he discovered that he was going to have to create some more paper work and take the passports elsewhere. But after standing in this heat, I finally gave up and let Bektur call his sister the doctor. Once this course was decided, Bektur put me to bed and appointed the girls in the lab to cook. So I slept from 10 till noon. The two 'girls', young women- we can't figure out if they are graduate students or post docs speak almost zero English. A bit after 1, Bektur's sister Clara came over, (a house call!!) checked that my chest was clear and blood pressure normal with slight swelling of tonsils. Prescribed the kitchen sink: a) a gargle (which doesn't dissolve well and seems to be aspirin), b) nose drops, c) some kind of amalgam cold tablet including aspirin, a decongestant, vitamin C, and something that sounds like calcium, d) vaseline for nose, e) throat spray, f) more vitamin C.

We all (Doctor Clara, Bektur, Beibut, Marco, and the two girls) had lunch about 2:30, a stew which was heavy on potatoes on salad. I got more prescription of hot tea with lemon and stay out of drafts. More food was left for us. Marco tried, we don't know how successfully to persuade the girls that we could fend for ourselves tomorrow. I slept another couple of hours. Marco joined Bektur and Laura for Madame Butterfly (perhaps another reason I was ill). I have been channel surfing. Saw the Chinese news in English.

Except for emphasis on Palestian casualties it didn;t seem much different. Other stations are in Russian, Kazak, Korean, English seems to be only musinc videos. I am half watching an adventure (BRIGADE (some acronym for super FBI/Charlie's angels) in French with French subtitles. And, after 4 hours of sleep, and some of these medicines feeling better.

June 21, 8:50 AM: I am feeling much better. I fairly religiously took most of the six remedies as scheduled. I loafed yesterday spending a few hours on matematics and more on sleep. Marco found out that Bektur has some plans of starting a software company. Although I was supposed to be confined to my room, I slipped out for dinner at the Dickens pub. Marco had a hamburger but I chose 'vegetarian carry'. A dish you could only find in the southern part of the FSU, rice with a lot of tumeric in a very Indian style, covered with a sauce including, red cabbage, mushroomoms, green beans, and squash.

This morning I have already eaten, washed some clothes, typed a half page proof. It was quite cool, but the sun just crept through the clouds and it is heating up fast. We have a marvelous view from our window of the high mountains to the right and a nice mountain meadow straight ahead. Unfortunately, we are 500 meters below the meadow.

June 22, 4:30 PM. Today was spent in a little mathematics and a lot of sightseeing and carpet shopping. We actually spent close to 4 hours yesterday talking with Bektur about the paper and I thought I had a counterexample but Bektur convinced me it at least needed rethinking. Yesterday evening, Marco and I walked down to a park with a war memorial and nice old Russian Cathedral. We thought we would walk on the treed, no cars, street we found on the map. We had a little trouble in navigation because there were two such nice parkways a couple of blocks apart. But all the streets of Almaty are lined with trees. I don't think any city of comparable size in U.S. has such nice trees.

I visited with Bektur about 5 carpet sellers. It seems that I can get for approximately \$300 either a nice Turkestan style for a wall hanging, or a 6 X 9 Kazak of rougher style for the floor, or a very nice runner for the table. There are also narrower runners of lighter materials at the first museum. (That was the equivalent of the Field Museum. It is very good - running from geology through early man in Central Asia. Most of the material on the Russian era centered on the Second World war and mostly medals. Although, there was a regimental battle flag which I think was the first Soviet flag hoisted in Berlin in 1945.

We are going to Carmen tonight. I managed to buy tickets for all including the two girls who cooked for us the day I was sick. Tomorrow is a picnic in the mountains.

June 24 10:00 AM. We went yesterday morning to picnic in the mountains. Just sat around by a nice mountain stream. It looked clean but there were plenty of animal remains around to suggest otherwise. But we played chess, talked a bit and strolled in the forest. On the way back we stopped to take pictures overlooking Almaty. In the evening, Marco and I found an 'internet cafe' and were able to send the pictures of carpets to Sharon.

In the evening we had dinner with Bektur, his wife Zena, Laura, and Bektur's mother-in-law. Both she and her daughter were professors of linguistics. Bektur's father-in-law, was both a scholar and an administrator. He wrote 10 books on Kazak literature (5 each in Russian and Kazak) including the standard school text which went through 12 printings. He was at various times during the Soviet era, Minister of Culture, Minister of Foreign Relations etc. for the Kazakh government. His wife and daughter each directed institutes at some time. We had a nice dinner - but huge. First there was chicken and salad and horse sausage etc as appetizers. Then the main dish was mutton, horse, and beef stewed together and served over noodles. There were many toasts. After dinner, Laura played the piano and each of the older women sang one song- one in English, the other in French. I showed them the pictures we had taken in Central Asia. Grandmother gave me a silver belt for Katie.

This morning, it is very hot. We are to go to Bektur's mathematician sister for dinner at around 12:30.

Chez Baizhanov: This was a family party and it is impossible for me to describe all the characters. Actually, Chez Baizhanov is a misnomer because the senior person present was Dr. Clara's husband (and she is the Baizanhov. There were two cousins and I think 4 or 5 sisters of Bektur. But since Kazak's often say brother for cousin, it maybe that some sister's were also cousin's. The banquet was like the night before but more so. First, the warm appetizers of horse sausage, (several kinds), fried chickens, some salads etc. Then an intermission so a few can smoke and more can talk in small groups. During the banquet each person must make a toast, including children of around 10. Toasts were in English, Kazak, and Russian. I learned that there were three or 4 doctors, and two mathematicians at the table. One of the doctor's used to attend

logic seminars and new Baldwin-Lachlan' as well as host of other logicians. The second course was beef and noodles. Then we had some more conversation and a piano concert by the children. I dodged judging who was best but they all seemed pretty good to me. At least 3 of the 4 clearly take the piano pretty seriously. Then desserts, I had to taste both kinds of cake. Of course, here, taste means a big piece. But we really enjoyed meeting all these friendly people. Most of them are only bilingual (Russian, Kazak) although almost all know a little English. The young people know more and tended to give their toast's in English. Best joke of the day: what language should a Kazak learn? optimists learn English, the realists learn Chinese, and pessimists learn Russian.

We arrived home stuffed, slept for a couple of hours and now are moving around slowly.

We just noticed that while the soviet apartment building look terrible, they are built to last. The wall of our apartment, on the top floor, is two feet of concrete thick. The floor seems to be hardwood - I could swear one section is quarter sawn oak. I have never seen that except where dad put it in.

I was afraid with all the performances that I would be called on. Not being foolish enough to sing, I tried to recall an appropriate declamation. I think the following is right for the first three lines but there is a sentence missing. Fortunately for all, we escaped this.

Four score and seven years ago our forefathers brought forth upon this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether that nation, or any nation, so conceived and so dedicated, can long endure. We are met upon a great battle field of that war. It is all together fitting and proper that we do this. But in a larger sense, we cannot dedicate, we cannot consecrate, this field. For the blood of those who died here far outweighs the few words that we utter here. and that a nation of the people, by the people, and for the people shall not perish from his earth.

Finished the evening by finding another internet cafe and sending a few messages- and killing 40.

Wednesday June 27, 9:00 AM. Bektur spent the last two days in Astana; he is buying an apartment there. I worked on our paper and have a new version of the first section. On Monday evening, we were taken out to an airconditioned-retro restaurant (decorations from Soviet era- 50's) by one of Bektur's cousins, and two of his sisters. Tuesday, we went to the other university. I gave a lecture and so did one of their people (Kudaibergenov who has come very nice results. Bektur's sister Calygash and his nephew Marrad took us out last night. This was an extremely pleasant evening. We drove up one of the canyons south of the city and ate on picnic tables provided by a restaurant consisting of 4 yurts. Then we drove further up the canyon; there were many picnickers and there is a massive dam across the canyon for snow control. The area where we ate would be under 3 feet of snow in the winter. Then we drove to another overlook and finished the evening by playing pool in Almaty. We went to different areas of Almaty and now I can believe it has well over a million people.

Friday June 29, 7:00 AM. On Wednesday, Bektur returned and we had some good discussions so I was writing up more mathematics on Wednesday and Thursday. The big difficulty is still there and we have identified some minor ones that we should be able to fix. On Wednesday afternoon, we took the plunge and bought carpets. In the end, each of Marco and I bought a Turmen about 1.3 m by 3 m and I also bought a 2m by 3m Kazak. The Kazak is from a region called Tzal XXXX located north of the city of Turkmenistan near Chimkent.

In the evening we had dinner at the Omarovs. We found out again just how big the impact of the Baldwin-Lachlan paper had been in Kazakstan. All logicians speak of it as one of the first papers they studied. Almagendy Omarov said the classic papers were Vaught's on Countable models and Baldwin-Lachlan. All too much for my ego. To bring me back to earth, Babalut Omarov (who is now a diamond merchant) said that they were studying Shelachiana. Bektur's wife had said the other 'Shelah is the king'. All the wives and cousins know words like strongly minimal and categoricity. Of course many are mathematicians. Almagendy Omarov brought up his younger brother who became a mathematician, as did both of Almagendy's daughters. Although one now works for a bank. The other seems to be spending her summer vacation in Thailand working at an orphanage run by an Indian mystic named Sai Baba (?). We were shown a propaganda volume for the wife of the president of Kazakistan - pictures of her helping children and meeting religious leaders- Orthodox, Jewish, Sai Baba, I didn't see a moslem. A. Omarov's wife, Lydia Gabriella, is Russian by birth but we are assured she is now more Kazak than the Almagendy. She is the "mother of Kazak logic". And her vivacity shows through despite her lack of English. The Omarov's have lived in this apartment since

the late 60's, Amageldy held the chair of Algebra and logic until he was sick a few years ago. He taught an entire generation of logicians.

On Thursday, we went again to the university and heard good reports on their work by A. Omarov, Baisalov, and Nurtazin. The last two in good English. In the afternoon, we vetoed a trip to the baths and Bektur and I made more progress. In the evening, we took the party to dinner at the Outback Stake House. The only relation to the American chain in the name. But we had a good time - with considerably less alcohol and no toasts. Afterwards, Murrad, Calygash, Marco, I and Gushan played pool for an hour or so.

Saturday JUNE 30, 9:15 AM Istanbul: We worked for a bit and then went to the bazaar. It wasn't really much except for the food. Separate sections for sheep, cow and horse. Another section of Korean food. And, many, many fruits and vegetables. I bought Katie some South Korean earrings at the only stall with any reasonable jewelry. Then we went on long search for caviar. We got some red caviar. Most of the fish stores seem to have gone out of business and what looked like black caviar turned out to be fish parts.

We had dinner at Bektur's with a special pilau of mutton ribs. It was hot but we left about 9 and I had some sleep before Bektur and Beibut picked us up at 1:30 AM to go the airport for our 4 AM flight. It was a zoo; very hot, tour groups trying to shove ahead (and succeeding) =- not western tour groups - some groups of Kazak children. The leader kept collecting and redistributing passports. Bektur managed to stay with us through customs but they checked that Beibut didn't have a ticket. The custom's declarations were only in Russian. The Kazak custom took out nice documentation of the carpets so now I have to hope the U.S. customs believes me on the price. But all of this took only a bit over an hour. Then some one was ill on the plane and takeoff was delayed for almost an hour.

In Istanbul, we learned about security. I went to the transit desk to get my boarding pass for Chicago. The clerk said I had to go through security. I thought this had something to do with the checked luggage so I drug Marco along. Each person was interviewed carefully. The man in front of me had joint U.S. Jordanian citizenship, the transliteration of his name was different on different documents and the birthdate was wrong on his visa. So I thought I should be easy. But, they asked lots questions. Where I had visited in Tehran and Almaty and the formulas about luggage. Then checked with the supervisor. No problem. And Marco was passed through. The security check was only if going to U.S. I sent him through the gate for his flight to Milan. Later, I went to the entry gate and quickly through the first security check for all outgoing passengers. Then a much longer line just for the flight to U.S. The machine was set so tightly that my sunglasses set it off and I had a hand search. Then check the passport again. Then check the passport again. (This isn't a typo; two different stations to check passports and tickets.) Now I am in a large waiting hall. I suppose we are to leave in 1/2 hour. I'm typing on Windows because the linux wouldn't open.