

3.3.5 I Leave GCL

In the last year of my MSc. (1951 – 1952), Dr Abdus Salam had returned after his PhD from Cambridge. He was already a famous scientist. I remember attending some of his extension lectures on quantum mechanics – and was much impressed by him. Actually, when I first arrived at GCL and resided in the New Hostel, Salam was also living in that Hostel and reading for his M.A. in Maths. I saw him with his thick-lensed spectacles, looking like a gaunt, serious student. They said, outside his room there were always reams of paper on which he had been solving problems throughout the night. There were stories (I am sure apocryphal and exaggerated) that his father was a very demanding, severe man. If Salam did not produce outstanding exam results, his father would stop his food, attach a leather bag (ڈبڑو) to his mouth and make him eat like a horse from it!

Actually, as mentioned earlier, Salam had been brought to my Grand Uncle, Hakim Muhammad Hussain, Principal of the Intermediate College (i.e. offering high school classes 9 and 10, and then College Classes 11 and 12 – Intermediate or Pre-B.A.), by his father – who was a clerk or a low-grade official in the education service. The father said: ‘Sir, you must take great care of my son’. “Why is that?” asked Hakim Sahib. “Sir, because he is a genius”, quoth the father. Hakeem Sahib used to tell us: “I first smiled – a genius, indeed, in this backwaters, I thought. But then when I looked at Salam’s work, I realized that indeed he was a prodigy”. At the age of 14, Salam solved in 2 pages, a mathematical problem that the great Ramanujan (then, or earlier, at Cambridge?) had taken 6 pages to solve. Salam published his solution in a mathematical magazine (GCL?) at the age of 14. Hakim Sahib said, I then started giving very special attention to Salam’s development. It was this that led to Salam breaking the Punjab University record for the matriculation exam (with 765/850 marks) in ~1941. I used to see Salam in 1951 – 1952 swimming in the College pool. He was staying at the Principal’s Lodge with Qazi Aslam – a fellow Ahmadi. I eventually saw Salam at Cambridge – to where he returned as a Fellow of St. John’s College in 1954. There he used to come to my supervisor, Denys Wilkinson’s coffee evenings on Tuesday nights in the Prioress’s room at Jesus College, Cambridge (where Denys was a Fellow). Salam became an FRS and a full Professor at the young age of 31, when he left Cambridge in 1957 to take up his Professorship at Imperial College London (date of birth, 29th January 1926) – the same year that D Wilkinson also became an FRS (at 33 or 35?) and a Professor at Oxford. Salam later on was my External Examiner for my PhD (*Cantab.*) in March 1959. (I was then at Oxford – Nuclear Physics Laboratory in Keble Road, attached to Brasenose College from 1957.)

I had had a I Class in all my exams (from Matric (1946) to MSc Physics (1952)), and so received a Roll of Honour of GCL. I remember Qazi Aslam asking me: “Durrani, what are you going to do in life – science or literature? For you are or have been an editor of the *Ravi*, contributing poetry to it and to other literary magazines; have been the secretary of the

Sondhi Translation Society and the Majlis-e Iqbal; a debater of the College Union, and yet you are also the secretary of the Jones Physical Society, and have just stood second in the University in your MSc (Physics) exams. So, what will it be?" "Sir", I answered, "There are two possibilities in front of me: Either, I can take up science as my profession, and literature as my hobby; or vice-versa. But it is impossible to pursue science as a hobby – for one needs a laboratory and instruments, etc. (assuming that one did experimental physics); so I shall have to choose science as my profession, and do literature as my hobby". And this is, precisely, what I have done throughout my life - both during my studentship and career, and now as a retired person.

Actually, our MSc results had been delayed. Sometime around 1951 (when I was doing my preliminary year of MSc – called MSc 'Previous'), Dr Rafi Chaudhri – who was a rather cantankerous and independent-willed individual – had fallen out with his colleague, Professor Mian – an able theoretician – who had been made (if I recall correctly) the Head of Physics Department of Punjab University where both were then teaching. Dr Chaudhri refused to accept a subsidiary position. He intrigued to break up the Department, and succeeded in setting up an independent MSc Physics Department at Government College. The students were given a choice to stay in the University Department headed by Dr Mian (who some 10 years later went to set up a Department of Physics at Islamiah College Peshawar, whence he had come) or move to GCL with Dr RMC (Rafi Md Chaudhri). I remember that out of 12 students, five (who had previously been GCL students) of us migrated back to GCL with RMC – including myself, Arshad Toor, and (I think) Salahuddin. Zafar Ismail stayed with Dr Mian (I think) – as did Arif Zaman Siddiqi (son of Dr Saliem-uz Zaman Siddiqi, FRS – the renowned organic chemist, who had been educated in Germany) and Mumtaz Shaukat – who later on joined the Pakistan Atomic Energy Commission where I recommended him to succeed me as Director of the Atomic Energy Centre Lahore (AECL) (in 1965). Eventually, Mumtaz Shaukat stood first in the MSc exams of the Punjab University – and I second. Another person who stayed with RMC was Sibtain Bukhari – who later joined AECL under me in 1964. (He was a rather two-faced intrigue, I found!)

Anyway, all these things – and my other non-science-related activities – combined to give me the feeling that I was ill-prepared for the MSc exams due in the spring of 1952. I wrote a very demoralized letter to my father (who was then stationed either at Sialkot or at Campbellpur (again)) begging him to allow me to skip the exams that year and let me take them the next year (1953). I think, Father remembered the case of Zulfiqar – who had committed suicide while undergoing similar tribulations re forthcoming exams. So he wrote a very gracious letter, saying he had full faith in me and left it entirely to me whether I sat the MSc exam that year or next. In the event, I think the exams got postponed for a few months for some reason or other – and I took them in 1952 after all. The Experimental Dissertation

was also allowed by Dr RMC to linger on (for everyone) and the results came out in the spring of 1953. As stated above, I stood II (second) in the University. Thereupon, Dr RMC invited me to become a Lecturer in Physics at the GCL – a great honour.

In the meantime (March – September 1953), Dr Chaudhri also started persuading me to apply for scholarships to go to England to study for a PhD. The first was an “1851 Exhibition” – just one in the British Commonwealth; commemorating the Crystal Palace Exhibition of 1851 at London. But Dr RMC sent some of the documents too late, so that my application could not be entertained. (I found later that an Australian from Brisbane/Adelaide, Bill Wignall, got that Exhibition – and indeed studied at the Cavendish Laboratory, Cambridge, under Denys Wilkinson’s supervision, just like me!) The second application that I made was for a Viscount Rhondda Open Research Studentship, offered by the Gonville and Caius College, Cambridge – and open to the whole of the British Commonwealth, Eire, and the USA. As described above, Dr Chaudhri made a very strong recommendation of me (“the most brilliant student he had come across in his 25 years of teaching”) to Professor Sir James Chadwick, Nobel Laureate (1952) and Master of Caius College, whom RMC had known in his own student days at the Cavendish (1933 – 1936). In making that application, I remember I used to go to a typing agency in the Anarkali Bazaar (within walking distance of GCL) to get my documents and letters typed. I vividly remember the typist (a young clerical type in his early 30’s) remarking to me: “How lucky you are! The whole world is at your feet – or open in front of you. You have had it made;” I remember how excited I, too, was at the prospect of my going to my beloved Cambridge to read for a PhD – like Allamah Iqbal (1905 – 1908) (actually Munich!) and Dr Chaudhri himself.

I was to get a handsome studentship (scholarship) at Cambridge; Father would only have to pay for my boat-trip to England. I started corresponding with Sir James Chadwick: the ‘Matriculation Ceremony’ was to take place on 1st October 1953. The Caledonia ship was to arrive at Liverpool (from Karachi) only on 5th October. “Should I take an earlier ship – arriving on 15th September – to be in time for the matriculation ceremony? I wrote to ask. No – it is quite all right for you to arrive on 5th October; wrote back Sir James. So that is how I took the Caledonia, leaving Karachi on 16th September 1953, and arriving at Liverpool on 5th October.

Before leaving Pakistan, our coterie of friends (Arshad, Inam, Zafar, and another friend of Inam’s (Agha Sajjad?), and I) decided to go on a mountain-trekking trip in the Himalayas. We had heard much of the beauty of the Kaghan Valley on the way to Kashmir. So Arshad and Inam booked a whole carriage of a train going from Lahore to Rawalpindi (at special concession for students). From Ravi Road, Lahore, we hired for two weeks a large tent and some long bamboo poles to erect it. We were laden with such paraphernalia and all

our personal effects in suitcases, etc. Unused to such expeditions, I am sure most of our luggage was impractical and some, unsuitable.

From Pindi, we hired a jeep or a 4-wheeler, which was driven up the steep, terrible roads with such speed and recklessness that our heads were spinning and we were violently sick. From time to time there would be sudden hordes of mountain goats, sheep, and even camels blocking our way or straying on to our narrow path. The jeep driver would often have only 2 or 3 wheels on the track – and the other 2 or 1 overhanging the terrible precipice – with the river Kunhar (?) gushing in the gorge some hundreds of feet below. I remember a fellow-passenger, an American, remarking: “Oh boy! We were often only one wheel away from eternity.”

On arriving in the Kaghan Valley, we hired some mules and muleteers to carry our tents and poles and our bags, etc. Actually, some of the latter were carried by the porters on their heads and shoulders, and for part of the way we, the young men, rode on the mules. Though quite sure-footed, the mules nevertheless from time to time made such precarious progress (with their bodies making a 30 degree angle with the horizon) that it was quite scary.

I don’t remember how we had booked some ‘dak-bungalows’ (Government rest places) in the area – but we slept in them in succession. The area looked little less than a paradise on earth. There were lush meadows and pastures, tall birch and conifer trees, enchanting lakes (especially the Saif-ul-Muluk lake – where a Prince of that name had (putatively) been bathing when some fairies stole his clothes. There is a classical Punjabi romance of that name in verse by Mian Muhammad Bakhsh (?). At that height – 10,000 feet above the sea-level – there was a lot of ultra-violet radiation in the strong sunlight. In our stupidity, we wore no headgear or shade except, I think, for Agha Nisar, who was used to hunting in the wild. (Nisar also carried a gun – with which we (me included) shot some birds; his father was a high police officer.) The result was that I had a strong sunstroke. I was running a high fever and had to retire in a rest house. There, by chance, a Government doctor also was putting up. He told me that I had had a heatstroke. I should drink a lot of water and keep my head cool. Luckily, I recovered the next day (I was 23). We had, all in all, a wonderful time – and in my old papers, I found a few years ago a 70-page unfinished Urdu travelogue describing our adventures.

When we arrived back in Lahore around 5th or 6th September 1953, my mother was very distressed to find me looking so black all over (the UV had badly tanned my face – and I still had peeling lips and nose-skin and face-skin from all that exposure to the sun and the UV). And I was to leave for England in about 10 days’ time – looking so black! Anyway, she and my father helped me pack all the necessary (and a lot of unnecessary) paraphernalia – including a lot of physics and poetry books (some Persian poetry of Iqbal – the books having

been given as prizes to my elder brother Sajjad for gaining a high position in various exams at GCL). I still have these books with me today – and a 2-volume Qura'n in Arabic with translation by Marmaduke Pickthall belonging to Sajjad. I also had a lot of clothes, bedclothes, laundry bags, quilts, etc., recommended by Caius College (to English students who had homes in the UK!).