

After-Dinner Speech – Subir’s 70th Birthday

- Good evening, I was asked to give an after-dinner speech in his honor. Actually, I was more “told” to give such a speech by the organizer, behind the organizers. I feel very much honored to do so.
- Now, this is more of a British tradition ... i.e. with humor. The problem is: I am German. As if that is not enough, I am also US American. So here we are. We’ll do the German version. So everybody stand up ... no just kidding. LET’S GO.
- To start, an image which Subir sent me a year ago.
- Subir’s fantastic work as a scientist is being discussed extensively in the meeting. So I shall speak on a more personal note.
- I will start by telling you a bit about Subir’s early life. (No!, he wasn’t always like this!) and then get to the part how we met and how I have experienced him.
- Subir was born 70 years ago, today – in Ichapur, West Bengal, close to Kolkata. Like many Indian particle physicists of his generation Subir is Bengali. In secondary school in Ambarnath is apparently the last time he wore shorts – we shall return to this. He performed his undergraduate studies at the IIT Kharagpur, also in West Bengal.

- Subir did his PhD research at the Tata Institute in Bombay. This is a wonderful location and scientifically a great place to “grow up”. And grow up he did, although he took his time, 8 years in fact. But it was time very well spent. He started out working in experimental cosmic ray physics. But then switched to more theoretical work under the supervision of Ramanath Cowsik, know for example from the cosmological bound on neutrino masses. It is from Ramanath that Subir says he learned to be a physicist - neither TH or EXP - but a physicist. And as you all know, he became just that, with some astro and cosmology thrown in for good measure. His last paper at Tata was on n - \bar{n} oscillations in astrophysics. A very nice, very very short paper published in Nature, with surprisingly exactly 0 citations. I am sure Subir can give an at-length explanation as to why. But no, not now, Subir. ☺
- Anyway, life in Bombay. It turns out Subir, with others adopted a lifestyle more similar to what here in Europe is known as the Viennese Café culture. Leopold’s Café was the hot spot. Leopold’s, named after a Belgian King, is quite famous in literature (e.g. Shantaram) and unfortunately also in the Bombay terrorist attacks in 2008. I am told Subir spent a lot of time here. Always discussing physics, but as the day wore on also politics, literature, movies,

and love – all with a beer in hand. I am happy to say that this has persisted to this day. Anyway, if you would like some quiet don't go to the Café! Or share an office with Subir. But next time you ARE in an **intensive** discussion with Subir (and aren't they all) just lay back and imagine you are in a nice Café with some mango lassi or Sacher Torte, or even a beer ... and wait for your possible turn to speak.

- In the middle of all this, one day Mandy walked into Leopold's. For a brief moment there was silence! And life was never the same again! Mandy arrived from Oxford and came to work at Tata on her first postdoc. However, being an experimentalist, I assume she spent a bit more time at the Institute, as opposed to the Café.
- In 1978 Mandy got a Royal Society Fellowship to work in Japan. Subir was able to come for an extensive visit in 1979 and after jumping over some significant bureaucratic hurdles they got married. The wedding had to take place where the resident foreigner, Mandy, was living, in Oho-Machi, Tsukubagun, at KEK. They had never married a foreign couple before, so their marriage certificate is serial number 1!
- Next step: honeymoon! Where to go? Maybe the beach in Japan? On top of a mountain? A small remote village? Mandy and Subir decided to go to

the Zen monastery of Seitai-ji, the only one at that time which accepted gaijin visitors. They were able to spend an extended amount of time. You may have wondered, but it is here in a Zen monastery that Subir developed his serene calmness that we all know him for to this day. It is since then that he speaks in a minimalist fashion, koan-like.

- However, just to make sure he could get his argument across he also began his long path in martial arts at this time. The monastery had been founded by Omori Sogen a Zen master of both sword-manship and calligraphy. (The calligraphy part passed him by.) He took up Goju-ryu Okinawan karate-do upon returning to Bombay and eventually made it to 2nd dan black belt. We shall return to this.
- Subir (finally!) finished this thesis in 1982. By then Mandy had moved on to RAL and Subir wanted to at least visit in Oxford. However Subir was quite outspoken in India also about the nuclear weapons program and was endangered of being put on a no-fly list. He finally showed up in Oxford, ill prepared for any further steps in his career. Enter Dennis Sciama, who among others was the thesis advisor to George Ellis, Stephen Hawking, John D. Barrow, Martin Rees, and David Deutsch. Quite a list. Subir went to talk to Dennis and handed him his thesis to read. Dennis read it and came back after a few days,

offering him at least a short term position to get started. He also gave Subir some advice: astroparticle physics. That went down well! Subir was off and running with stops at CERN, where he started working with John Ellis among others, and eventually back in Oxford since 1990. So cheers to Dennis, whom I had the honor of meeting in Oxford in the 90s. Many of us have at least one Dennis Sciama in our lives. For me it was John Ellis and Graham Ross.

- One more step before Subir and I met. As you must have also experienced in many discussions, Subir is very much an idealist and I mean this in the most positive sense. The so-called “realists” claim to own the world, but I disagree. In 1988 Mandy and Subir decided to leave academia and join an education project in Bhopal, India. Place of the infamous Union Carbide chemical accident in 1984. Apparently a very beautiful city, the city of lakes. The project was based in science education including curriculum development but they were mainly involved in setting up a reliable science news service for provincial newspapers in the local languages. This project called “Srote” (Source) is still on-going.
- Then there was a very pleasant surprise: Shanti was on the way. Upon medical recommendation Mandy and Subir returned to the UK and Shanti was born

in Nov. 1989. Harry joined the family in 1997! They were back in Oxford to stay. The first time I visited Subir and Mandy at home was in Nov 1990 for Shanti's 1st birthday party. - You certainly have grown Shanti!

- I arrived in Oxford in 1990, 1 year after my PhD, after an unhappy year at DESY. In order to build my character Graham Ross put me in an office with Subir. Also in the office were Steve Abel, Manish Mehta and Hiroshi Kuratsuji. I believe Steve Abel and Manish Mehta's characters also needed building. It was Dick Dalitz's former office, who had just retired. So like on a football team, the expensive star moves on and they bring in 4 young guns.
- Only in preparing this speech did I realize that for Subir this office must have been a small recreation of Leopold's. We had discussions, and then we had discussions. And then we had more discussions. It was fascinating but it could also wear you out ... there was no beer! And like at Leopold's we talked about everything. Noam Chomsky, Margaret Thatcher, the Gulf War – and of course lots of physics. I was happy and it was here that I realized I wanted to do this research thing for the foreseeable future. Thank you Subir and thank you Graham, with whom I discussed in more peace in his office, 2 doors down, every day.

- I asked Manish for some memories. He said, well on Subir-da, also known as the Yoda of cosmology, he mainly remembers the excitement over the 17 keV neutrino, an experiment which was also repeated in Oxford. Subir had much to say about it. Steve Abel thought the rants kind of blurred into each other after 33 years. I think that was also meant nicely.
- Since then I would say we have become close friends. Thank you Subir!

5 Lessons I learned from Subir

- **Lesson 1:** Oxford is a strange place. Scientifically super stimulating and exciting. However you also run into a lot of weird people here, and not just the future politicians. Some of them, also physicists, think A LOT of themselves. Of such people Subir used to say: they think the sun shines out of their arse. An image which has stuck with me and has helped in dealing with at times unbearable people.
- **Lesson 2: Fight with what you've got** Given Subir's extensive Martial Arts experience I once asked him: if I get into a street fight, what do I do? His answer: go for the goolies! (balls, I guess, or eggs, as we say in German). So if you have to: fight dirty. I was once in a street fight, before I had met Subir. They were 6, we were 2. We decided to run.

- **Lesson 2: Self-Discipline - be the master of your own body:** Jane story
- **Lesson 4: Don't wear shorts.** Subir has been quite adamant on this. Shorts are for boys. To which I can only say: unless you have good looking legs! So here I am in shorts!
- **Lesson 5: Don't wear shorts II.** or “Less is More”. “Less is More” is a slogan by Mies van der Rohe, a Bauhaus architect, actually from my German hometown Aachen. He built many a building in Berlin and Chicago. Anyway, when you share an office for 3 years you learn a lot about each other. Sometimes more than you had planned for. Anyway, Subir's interpretation of Mies' maxim is: real men don't wear “under”-shorts, i.e. underwear! “Going commando!” we say in America. Yes, I know, once it's in your head you can't get it out. “Kopfkino” (head cinema) we say in German. You are now sitting there thinking ... does he still? I went through 3 years of that in close quarters. Now it only occasionally returns as a flash-back. Maybe Subir will have a few words afterwards on the status of this maxim.

Three Short Stories

- **Toilet**
- **Rowing**

- **Greece, Delphi 2.0** Rules: 3 questions. Also about scientific issues. Don't talk about questions or answers!

Finale

- So before I finish - finally - one more thing. Subir and I spent 3 years together in an office and have gotten together many times since then. We have talked about many things including also death. - In a positive, constructive way also, yes. We are all heading there and it can have a big influence on you. Subir always says, in THE OFFICE, we didn't realize how old he was. Back then he was already 9 years older than me, as he is today as well. But I think HE didn't initially realize what we or at least I had been through as a conscientious objector in Germany and looming nuclear war in central Europe. Anyway we discussed death, and it was a positive discussion. So I'd like to finish with a song by John Prine. It is mostly a spoken song, thank God. Only the chorus is sung and I believe we can sing that together.