

Meeting Jule Charney Profoundly Influences Shukla

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For the first time I met Charney on 30 November 1968, and our last meeting was on 13 May 1981.

30 November 1968:

Jule Charney was attending the international symposium on Numerical Weather Prediction in Tokyo. As an accident of the Indian bureaucracy, I was sent by India Meteorological Department to attend this symposium and present my paper on vertical coupling in the tropics, a paper that had been prepared with the guidance of K. Gambo and T. Nitta of Japan. The theme of the paper was a criticism of Charney’s earlier paper in which he had proposed that the tropical atmosphere has weak vertical coupling. Since my graduate education was not in meteorology, but in geophysical prospecting, I was not aware of Charney’s contribution to meteorology. Since I did not recognize him, I needed to ask one of the local organizers to identify Charney for me. Something began to worry me when I noticed that every time Charney would get up to make a comment, there would be a complete silence in the room, and a battery of cameras would begin taking his picture. At the coffee break, he was completely surrounded by other participants.

By the time I had to present my paper, my worry had changed into complete fear for I began to realize that he was one of the most important persons at the symposium. Speaking nervously and so fast that the chairman reminded me a few times to speak more slowly, I somehow completed my presentation in less than 10 minutes and felt relieved when I saw no raised hands for questions. Then suddenly, my worst fear came true and Charney raised his hand. “I have four questions.” Somehow I manage to argue back and forth with Charney, but he had the last word, stating that “Your paper proves my hypothesis.”

What happened next is an unforgettable experience for me. At the end of the session, Charney took me to a blackboard and began to explain some more work he had done on the dynamics of tropical motions. I was in a daze. There were several quite important people who were waiting to talk to him, but he spent a good bit of time explaining his new work to me. He also asked me to come to his hotel so that he could give me a preprint of his new paper. His room was a real mess with piles of papers everywhere (something about GARP he said!). I was so impressed by Charney that when I returned to India, I applied for admission to MIT in Meteorology and wrote to Charney reminding him that we had met in Tokyo and that I would like to be his graduate student. Of course, he never replied. One day a

postman delivered the MIT admission letter to my village from Phillips, who was the Chairman of the department.

13 May 1981:

On May 13, Charney called me at home around 8:30 am and wanted to know if I could come to Boston to see him. I told him I was planning to see him the next day, but he indicated he would like me to come that same day. I told him that after I went to the office, I would check flights to Boston and let him know when I could come. He already had checked the flights to Boston and gave me the timings. By about noon, I was in his apartment. He looked very thin and weak and said his appetite was very bad. He prepared some lunch for himself and we ate some fruit. I volunteered to make his lunch, but he insisted on cooking it himself. At one point, one of the utensils fell in the soup, but he took it out and continued to cook. He insisted on carrying his own tray from the kitchen to the sofa and then to the round table, and in the process, he came close to stumbling and dropping the food, but he managed to hold on and to eat a part of his lunch. After a brief conversation about my one month old son, Chandran, we started discussing science. Charney wanted me to be the Ph.D. thesis supervisor for his student Carlos Nobre who later joined us.

That was the last time I talked to him; the next time I saw him was on June 16, 1981 around 11:00 pm on his hospital bed. Dr. A. Eliassen, Dr. Y. Mintz and I rushed from Washington after hearing from his friend Pat Peck that his condition was deteriorating fast. He had died about a half-hour before we arrived. It was an impossible sight for us. He had become so thin within a short period of time. I could not believe for a moment that this man could be lying so powerlessly because he had always been a source of energy for us. But then the present status of dynamic meteorology is a vivid example the Jule Charney lives and will always live with us.