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BANQUET ADDRESS IN HONOR OF C. R. RAO AT THE  
INTERNATIONAL CONFERENCE ON  
STATISTICS: REFLECTIONS ON THE PAST AND VISIONS FOR THE FUTURE,  
SAN ANTONIO, TEXAS  
by G. P. Patil

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Invited Banquet Address in Honor of C. R. Rao at the International Conference on Statistics: Reflections on the Past  
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***BANQUET ADDRESS***  
**IN HONOR OF C. R. RAO AT THE**  
**INTERNATIONAL CONFERENCE ON STATISTICS:**  
**REFLECTIONS ON THE PAST AND VISIONS FOR THE FUTURE**

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**Abstract:** This paper is based on the banquet address given in honor of C. R. Rao at the International Conference on Statistics: Reflections on the Past and Visions for the Future, San Antonio, Texas, March 2000.

**Keywords:** Rao, Putting chance to work, Intellect, Joyous life, Fountain of youth.

Thank you, Alan, for your kind words of introduction. And thank you hosts for this wonderful occasion.

**Friends:** It is a great pleasure and privilege for me to speak about Rao tonight. And particularly so about his amazing self even at this amazing age in the happy valley at Penn State. We all greatly appreciate being here this evening. A charming historic occasion with a great teacher and pioneer of the statistical world. A shining inspirational star in the science, art, and technology of putting chance to work.

Mahalanobis spoke of his young age, and younger look, when Rao became Fellow of the Royal Society.

Radhakrishna looks young forever, like Krishna.

Modular algebra suggests his age to be modulo fifty. After fifty, discount fifty. That puts him at thirty. So what does he do at age thirty? He does what a typical thirty-something does. Works hard. Wants to be creative. Wants to be prolific.

Rao does it all. But he does not stop there. He publishes like anything! Even today. Take the latest survey article on statistics publications that have appeared in classical statistics journals during 1985—1995. He is way ahead in the forefront. Again, like Krishna in the Gita, Arjuna chooses him over everyone else because in him he sees much more and many more than the sum of the rest. We are pleased that Rao is with us at Penn State. We feel particularly good that this has been possible.

Speaking of the records, Rao did the Rao-Cramer inequality overnight in response to a classroom question at age twenty. At age of near eighty, he has been the oldest in the history of the academic world to go on a sabbatical, as we understand it in the academic world.

Numerous prestigious awards, coveted positions, and honors, such as membership of the National Science Academy, even if a statistician. And honorary degrees? An astounding number of them. Some twenty plus. From around the world.

*What is the secret?* Rao himself provides an answer in the dedication of his biography book to his mother, who instilled in him the classic habit to wake up at 4:00AM, the most creative yogic hour of the day. The great mother was a super mother. Caring so tenderly the eighth child, allowing this child to grow in the eight-variate surrounding like a fish in water and to cultivate eight-fold concentration. It is the 'ashtavadhani' in the Gita in a constant state of preparedness for every good opportunity and challenge. Something that a great statistician must do if he is to successfully engage himself in groping, formulating and squeezing, as Herman Chernoff put it in his inaugural speech. This is in the spirit of EDA in the profession. EDA meaning Exploratory Data Analysis, engaged in turning dry looking non-communicating figures into artistic articulate figures. It appears that Rao has his secret with super EDA at the same time, but around the clock. Super EDA meaning Exercise, Diet, and Attitude! And with a constant attention to the COMPASS—Compass meaning COMBination of Practicality And ScholarShip, essential for statistics to be a win-win, since statistics cannot be a winner on its own in isolation.

*Any other secret?* Yes? Rao has shown with his personal example—statistics means synergistics. And synergistics means harmonious—grow and help grow/ mindset shared by the involved scientist, quantitative scientist, and the statistical methodologist. Not just for the first moment, but also for the second moment. And so on. And not just moment in temporal time, but moment in statistical expectation also. Even there we see picture precision and operational efficiency in Rao, whether it is an eye for detail or a vision of direction. Well, you can also be thinking of secrets.

*But what is the top secret?* I am sure by now you also know the top secret. His ever cheerful wife and caring companion for half of the 20<sup>th</sup> Century, now both stepping into the 21<sup>st</sup>. I must admit I am happy that I have had the good fortune to have known her almost that long.....Bhargavi Devi....Let us give Bhargavi Devi our big hand.

It was in 1955 when I went to Calcutta. Rao had sent me a telegram to rush to Calcutta from Poona to start as a research scholar at the Indian Statistical Institute to join in around Haldane, Wiener, Fisher, Neyman, Kolmogorov, and others on the occasion of the silver jubilee of the ISI. It was a great honor, and a great opportunity.

And can you believe? Something unbelievable in India of that day happened. I found myself at Rao's home in South Calcutta for a wonderful weekend dinner event and the weekend. I received a special treat. Rao's charming little daughter was proudly escorting a novice in Calcutta to help fetch the famous masala pan from across a very busy and huge avenue of South Calcutta....on foot....the little one holding my hand, and not me holding hers! Teja is here with us.....Teja....Let us give her a big hand.

And how nice. Veera and Malini are also here tonight. Two of my favorites. Rao's son, Veera. Our computer software representative to this information age...Veera....And his charming wife, Malini. A speech pathologist, having her own melodic speech and voice....Malini.

What a wonderful feeling it is to be a part of this wonderful family. And for all of us.

At this conference, we have seen Rao on his feet for twenty-four hours. Henry Ford put it so very well.

*Anyone who stops learning is old.*

*Anyone who keeps learning stays young.*

*The greatest thing in life is to keep mind young.*

Even today, Rao is curious, inquiring, humorous, scintillating. Even with the little ones around. Even after, it is not easy to know if he learned or the little ones or both. It is a joy to see. I have witnessed this joy between him and the four of my children, some of you know. For some thirty years now. Even today.

Rao has students all over. Real ones. Adopted ones. Most inspired. Many inspirational. And how nice, he knows. He has mentored fifty Ph.D. students. Varadhan is one, a recent member of the U.S. National Academy and the present Editor of *Annals of Probability*.

Rao has mentored one D.Sc. It is my privilege to be that. I have been fortunate to experience the ultimate student-teacher relationship, in which the Guru may be silent, but the student becomes doubt-free. Rao has been very encouraging and participative in my initiatives of statistical ecology, environmental statistics, and earlier of statistical distributions in scientific work, over these past forty years. It feels there has been much more to it than chance.

The famous philosopher, J. Krishnamurty, of the 20<sup>th</sup> Century has said: relationship is life. How true and beautiful. Rao has such an intimate relationship with intellect that there is no inkling of separation from, meaning retirement from, intellect. This forms the flow of his life, a most beautiful flow of a joyous life.

My inside salute to my beloved teacher, philosopher, colleague, and a mentoring friend.

And in behalf of all of us, a sincere wish and prayer on his lasting fountain of youth. And so also for Bhargavi Devi.

In body, spirit, mind, intellect, and attitude.

Thank you all.