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A LETTER FROM RAOUL BOTT

R. BOTT*

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Dear Michael,

It is with great pleasure that I salute you on this happy occasion! With my "Bravo" for all your achievements, and best good wishes for the future, I also bring good tidings: There is life after 70, in fact it is a "breeze"! For at our Biblical ages the intense youthful pressures for self-achievement fall away and, granted tolerably good health, we can perceive our subject through more evenhanded grandfatherly eyes. It is also an age in which we can: "Speak when we have Nothing to say," as Serre so charmingly put it, to our hearts content.

But primarily, I would like to take this opportunity to thank you and Lilly for the many wonderful memories that I and my whole family now have of our long and happy collaboration. Apart from the exciting memories of our day-to-day working together: at times in complete harmony, at times with skirmishes on points of view but always with complete honesty, these memories also abound with purely human moments of camaraderie, fun, adventure, and, at times, trauma.

Preeminent amongst these moments is of course our trip to India in 1960! The impact of this remarkable new culture on us was accentuated by the debacle of my having no visa and all the many, at times, amusing consequences that ensued. For instance, the wonderfully absentminded gentleman whom Chandra Sekharan appointed to put things right, and who instead muddled things up even more after giving us a charming tour of Delhi. But surely most unforgettable of all, was that sight of the Taj Mahal in full moonlight on a clear balmy night!

And then there are the early memories of St. Catherine's, the hard work there combined with the fun and pomp and circumstance of academic life in Oxford. There are the daily walks from our offices across the parks - often in the company of Graeme and/or Nigel - to luncheon and St. Catherine's, followed by the give and take of the luncheon table regarding American versus British foibles.

All these early memories - now already shrouded in the mystery of having once been young - complete with so many later ones! Our visits to you at the Institute for Advanced Study, your visit at Harvard during the Cuban missile crisis, your later visits to us at Dunster house where I had foolhardily become Master, only to be trumped by our visits to your Master's lodgings at Trinity!

All these personal recollections, and many more, are joyous mementos of our 40-yearlong friendship and collaboration. For me, they also serve as signposts for the problems we worked on. For instance, there is Woods Hole where we worked on our Fixed Point Theorem, and which I now associate with a bright afternoon when we tried to keep up with my son's frisbee throwing. There is the long trip from Trinity back to Oxford in your car, where we hatched our localisation theorem for Equivariant Cohomology, and many of our aforementioned walks to St. Catherine's dealt with K-theory in the 60's and Yang Mills Theory in the later 70's.

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I now also remember with great pleasure your "closing" rituals whenever we would put aside the problem for the time being. Always the optimist, you would invariably single out some ray of hope, however farfetched, in our floundering discussions.

I am writing these remarks in Hong Kong, where I believe I barely missed you on your recent visit here. This, I am sure you will agree, is indeed a good place for all of us over 70. One meets with kindness and courtesy at every step of the way. And I expect it is this fine Chinese tradition of honouring one's elders that inspired Yau to honour you on your 70th birthday also with this coming together, once again, of all four of us old comrades-in-arms. So in conclusion, with my thanks to Yau, let me also thank Fritz and Izz for their contribution to my happy memories. Were I to go into detail on that score also, I am afraid this laudation to you, Michael, would get quite out of hand.

But ultimately our collective thanks are due to Providence for allowing all four of us a glimpse into that realm of which Edna St. Vincent Millay speaks when she said:

> "Euclid alone has looked on beauty bare,
> Let all who prate of beauty hold their peace...."

Happy Birthday Sir Michael! I wish you Godspeed and, foolish old man that I am, yet a few more small joint glimpses into that Euclidean realm.

Raoul