Closing remarks, Symposium on Fluid Science and Turbulence

K.R. Sreenivasan

I am supposed to say something wise now but don't see how I might have acquired that status in the last few days — or in the last few years, for that matter. In this audience, there are many people to whom I have looked up at various times, and any pretense in front of them is clearly foolish. I will do what the poet did: bow to the many great people present and seek their tacit permission to continue. I make my remarks keeping in mind the young men and women in this audience.

Let me say something as background. For Indian physicists and applied mathematicians, especially those who came away from the country of their origin, S. Chandrasekhar is a legend. You will know who he was. He was a hero to me because, despite considerable odds and prejudices that he faced, he did exceedingly well. He made numerous contributions to several different branches of science, influenced through that work many communities of scientists, received many honors including the Nobel Prize, was held in high regard for his personal integrity, and so forth. I might have thought that he was a happy person satisfied with his accomplishments and status in life. However, in an interview that he gave a few years before his death, he acknowledged that happiness had eluded him; in particular, his single-minded devotion to science had not produced the peace of mind that he had expected. The interviewer, like me, was quite surprised by this assessment. This incident got me thinking in different directions, and I wish to share a few thoughts that arose in my mind. I must admit that, while I have for many years asked the question of how one finds fulfillment in life, I have not had the time to distill my thoughts well here because of lack of adequate reflection.

1. People who have found the greatest fulfillment in their lives are those who have followed their natural inclinations. Everything then becomes effortless: "rivers flow without weariness". It does not matter that someone else is more successful by doing something different from what you are doing. Her choice may not be for you. Howsoever glamorous the other person's job may seem to you, that is not for you if it is also not natural to you.

How does one know what is natural to oneself? This is the path of self-discovery that one should undertake early in one's life, though it is never too late for it. This is the insight that one acquires through reflection, practice and self-correction, sometimes aided by the insight of the wise. In short, then, the first rule is, "know thyself," as others before have declared. I cannot emphasize this point more.

2. What are the signs that you are on the natural path? If you enjoy the process, not simply an imagined end, you are doing well already. If you derive enjoyment through every lecture you give, through every student you encounter and advise, if you enable the students to discover their potential in full, you have the potential to become a great teacher. If such interactions do not rejuvenate you but drain your energy, you are on the wrong track. The path you chose must rejuvenate you, not exhaust you.

The advantage of following this strategy is obvious and I have already said so — but let me stress once again: Your energy will then be boundless, you will do your tasks as well as possible, you will think nothing of hard work — which will become a reward in itself. External rewards will almost certainly come because you are functioning at your best, but you will care little for them at this point. If these recognitions do come, they are expressions of the regard and affection that others have for you, not a sign of redemption, not one of external validation. You have acquired them through the self-worth of the process; nothing else matters.

- 3. Even if you know what you are, even if you engage in activities that enhance your sense of self-worth, even if your tasks bring energy and joy to you, there are always obstructionists who will declare that you are wrong; they will try to put hurdles in your path and some will think that you are encroaching upon their territory. You have to learn how to deal with them without losing balance and creativity. There is no fixed recipe for how this can be done. If the price you have to pay to fight such distractions is the loss of creativity, you may be better off not fighting them and "winning". But if you do decide to ignore such distractions, make sure that there are some serious people who will vouch for your personal integrity in the matter under debate. Often, knowing that ten great men believe in you is better than the security provided through the support of 100 indifferent ones.
- 4. Finally, with all the knowledge that you may possess about yourself, there will be occasions when you will be in doubt about the path to choose, and about yourself at large. This is to be expected. As one of the most righteous princes of Indian mythology (or history) is supposed to have said, you may not find the right answers for your dilemmas in scriptures even if you are religious; you may not be able to deduce them from pure logic; your personal experience alone may be a poor guide. The right choice may well be given by the knowledge of how other great men and women have behaved under similar circumstances. Their choices should be a guide, not a binding finality.

I have been a foreigner in many countries, tried things in which I was not trained. I have just stated the theme whose rough approximation has guided me in times of distress, of which there have been several. I have, of course, constantly fallen short of my own advice.

Thank you for your patience.

Baltimore, May 31, 2008