An easy entry to Ramanujan’s magnificent mathematical palace

Two revelations struck me after reading carefully K. Murukasapillai’s review of the book Srinivasa Ramanujan: A Mathematical Genius (Curr. Sci., 1999, 76, 697). The first is that he holds the view that too much importance is given to the role played by G. H. Hardy and others in enabling Ramanujan to become a great mathematician. This view is certainly unorthodox and even original. Murukasapillai has gone one step further (see Curr. Sci., 1998, 75, 326–327) by writing that all the available biographical literature on Ramanujan does not do justice to the greatness of Ramanujan as a mathematician, who appears only once in a while and he feels that since Ramanujan was born with a ‘mathematical spoon’, his genius would have flowered even in India. However, I feel that he should substantiate his views by writing perhaps a long essay on how Ramanujan would have developed as a mathematician since he was living in grinding poverty, in contrast to C. V. Raman, Satyendra Nath Bose and others. In the life of every genius, certain apparently trivial incidents do tend to trigger a sequence of events which enable him to realize his full potential. In my view, Hardy’s response to Ramanujan’s letter is one such incident. It is for Murukasapillai to prove otherwise. It is worth remarking here that we live our lives only once and despite infinite possibilities, our lives trace out particular paths. If Ramanujan had not gone to Cambridge, he would have led a life of misery and poverty and one may even conjecture that he would have ended his life by committing suicide!

The second revelation is that the author of this book, Srinivasa Rao, has done a remarkable job in writing it despite his lack of training as a pure mathematician. His researches on the relation between hypergeometric functions and quantum theory of angular momentum led him to get acquainted with some aspects of Ramanujan’s work. This aroused his curiosity to know more about Ramanujan. The advent of the birth centenary of Ramanujan (in 1987) and the worldwide celebrations of the event in the form of symposia exposed Srinivasa Rao to the immense contributions Ramanujan had made to the world of mathematics. This book is the result of a labour of love over a decade. Since the birth centenary, numerous books, conference proceedings, and even a journal called the Ramanujan Journal have appeared satiating all except the serious mathematicians who are involved in the topics related to Ramanujan’s conjectures and results and often one is engulfed in a feeling of déjà vu.

Stirred by the harsh remarks of Murukasapillai on Srinivasa Rao’s book on Ramanujan, I read the book carefully. In my opinion, the book provides an easy access to all the known source materials relating to Ramanujan’s life as well as to his enormous achievements. One should remember that Srinivasa Rao’s aim is to convey and share his joy of discovering the incredible mathematical achievements of Ramanujan to the coming generations. None can deny that Srinivasa Rao has succeeded in this. One of the attractive features of the book is that it contains all the struggles of Ramanujan in becoming a mathematician. The book contains even a list of websites related to Ramanujan. For those interested in getting to know more about Ramanujan, these will be really useful. Another noteworthy aspect of this book is that Srinivasa Rao has taken great pains to give credit to all those who have struggled to keep the memory of Ramanujan alive despite severe lack of financial and administrative support. In my opinion, there is nothing wrong in retelling the story of Ramanujan at several levels – from the profound to the popular – just like our epics, the Ramayana and the Mahabharatā. Ramanujan is indeed an epic mathematician and so also the story of his life. Though the lack of an index, both subject-wise and author-wise, cannot be compensated for, the appendices and the notes at the end of the book are very valuable additional material. I have no doubt in my mind that this book does provide an easy entry to the magnificent palace full of mathematical riches which Ramanujan has bequeathed to the mathematicians of the 20th and even the 21st century.

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