

subsequent generations. The increasing number of women mathematicians in British universities is an effective tribute to her influence.

LILY ATIYAH

*3/8 West Grange Gardens, Edinburgh EH9 2RA*

### **Sir James Lighthill F.R.S. 1924-1998**

A personal reminiscence by Sir Bryan Thwaites

Not for me, now, the typical tribute to a man of stupendous intellect and achievement – such has already been paid in obituary columns, notably of *The Times* (20 July 1998) and *The Independent* (22 July 1998). And in due course we shall have his entry in the Biographical Memoirs of The Royal Society which will describe his scientific achievements with an authority beyond my own capacity. Instead, I would like to offer to the members of The Mathematical Association some glimpses of James – as I shall call him here – which perhaps even those who knew him through mathematics may not have seen, and with which younger members might enhance their more distant perception of a mathematical colossus.

Winchester College is, I suppose, the most academic of all schools and its seventy scholars, at least when they enter, are clever far beyond normal reckoning. But what hit the school in 1936 was, even by its standards, quite remarkable – a pair of mathematical wizards intellectually out of reach of ordinary Wykehamists like myself. I think that James had only one inferiority complex in the whole of his life and that was against Freeman Dyson: Freeman even beat James by one year to his F.R.S. (but both, uniquely in modern times, before the age of thirty). And if James was not all that attached to his old school – as was hinted in the oration at his funeral service – it was probably because neither boy felt the need for ordinary teaching as a supplement to the resources of his own intelligence. Certainly this theory can be supported by James's amazing gift, later in life, for picking up languages by himself through bed-side reading.

So in those days my contact as an exact contemporary of both was confined mainly to the Chapel Choir where, as a bass, I was in a good position to observe his alto's strange tuft of silver hair among the brown which I fancifully regarded as the aerial which picked up inspiration from the aether. His music, however was more pianistic than choral, and he used to insist that the Hammerklavier was the greatest of keyboard works. But if this was arguable – and not much was ever arguable with James – it led him to meet a cellist named Nancy whom he married, typically precociously, at the age of twenty-one. The great happiness that the two of them then shared throughout their life together was itself an inspiration to their friends, especially so because of the difficulties they courageously surmounted over children's early illnesses; and only they know the pain of a daughter so seriously handicapped that she has never lived with them.

Nancy has always been the only person to exert any meaningful influence on James (apart from the likes of Littlewood in his days at Trinity

Cambridge). Thus, it was during their first few years of marriage that James underwent an astonishing change from a shy and retiring swot to an amazingly extrovert and engaging personality. They began to throw the most splendid parties: one of my many recollections is of their hospitality in the R.A.E. Director's Marquee at the annual Farnborough Air Show. And how good it was to see them surrounded by old friends at their Golden Wedding celebration in University College where he had been such an outstandingly fine Provost (see Sir Eric Ash's letter to *The Times* of 25 July 1998).

Nancy was also the most effective puncturer of his ego. After one of his characteristically boastful displays in private – done deliberately and concluded by a great laugh and snort of breath – she would say simply and slowly, ‘Oh James’, and that would bring us all down to earth again. And when he indulged in that conversational bluff – ‘of course you know what Popopovski wrote in the autumn of 1793 . . .’ – it was as much fun for him as for his protagonists. That he could get away with it was just another manifestation of the respect and affection in which his friends held him. An academic of almost (but not quite) as great gifts famously said of James: ‘I dislike the man; it's not that he is cleverer than I, it's that he *knows* he is!’

I referred earlier to two obituaries. They were short on James's great interest in education. For a start he was a truly great teacher. For him, the lecture-room's dais was a stage on which to perform with word and gesture alike so as to entrance the audience. But, as in so many other fields, he played on the world stage. Thus, for example, he was the first British President of ICMI and in that capacity presided over the 1972 Congress in Exeter. He gave me creative support in the foundation of the SMP and for many years later was a highly valued Trustee. Simultaneously, he was founding the IMA (and insisting on the A for Applications), and of course he was the obvious choice for the Presidency of our Association in its Centenary Year.

As for his hobbies, in recent years bridge had become a serious accompaniment to his regular piano-playing and he took great pride in his son's national reputation in the game. And then there was his long-distance swimming which he had taken up in the late 1950s: I remember our two families meeting on holiday in Cornwall then, and Nancy's anxiety at his disappearances round the headlands – an anxiety which turned to confidence as he developed his strength and endurance. No-one could have circumswum Sark so many times as had James. Lest there be any doubt, he was not foolhardy; and on his last swim, he fell foul not – as some newspapers suggested – of strong tides or rough seas, but simply of a heart attack. For him, perhaps a blessing: for the rest of us a grievous opportunity for us to show Nancy and her family how much we all loved and revered James not just as one of the very greatest of mathematicians and scientists but as a man of immense warmth, generosity and capacity for friendship.

SIR BRYAN THWAITES

*Milnthorpe, Winchester SO22 4NF*