

Comment

An eloquent and persuasive Mr. Smee

Erio Tosatti

John Ziman with his old-fashioned ways, was a real British gentleman of the colonies. Born and raised in New Zealand, Ziman belonged to that large group of men and women that went back to their fathers' land in the last century from the Commonwealth countries. In many cases, they were individuals with an outstanding intellect and, therefore, a real treasure trove for Great Britain, which drew from those remote places not only gems, tea, perfumes and raw materials, but also enlightened minds and reliable personalities. His special determination, his fighting spirit, but also his particular accent when speaking English, and his career as a scientist and thinker made John Ziman an excellent representative of the former British settlers. I still recall his good manners and courtesy, matched by a firm and resolute character. He certainly had an intriguing personality, although on many occasions he did nothing to appear engaging or indulging. In short, he was a man accustomed to expressing with polite resoluteness and refined determination his view of things, regardless of other people's beliefs and needs.

It was during my Physics studies at the University of Modena, that I first indirectly had to face him and this side of his personality. I had one of his books in my hands, *Principles of the theory of solids*, adopted as a textbook for the course on physics of the solid state. Using that book to find one's way through physics – and especially through its derivations – was not an easy task for a student like me, who was seeking beauty and unity rather than mere formulas and figures. Making the reader follow the reasoning line did not appear to be the focus of that book, with its original structure. Since I had a background on elementary particle theory, I could neither love that book nor its subject matter. But when, a few years later, I picked it up once again, I became aware of its true worth and realised how exquisitely the subjects had been selected – in short, I realised that it was an outstanding book.

I personally met John Ziman in Trieste, in the late seventies, when within the ICTP (International Centre for Theoretical Physics), the school of elementary particle physics was joined by the school of physics of the solid state. I was sent to Trieste by the *Scuola Normale* of Pisa, where I was taking my doctorate, in order to attend the courses of the first Trieste Winter College, strongly supported by the Italians Bassani and Chiarotti, by the Swede Stig Lundqvist and by Ziman himself, who, at the time, could already boast a first-rate CV for a scientist. First lecturer in Cambridge, at the institution considered in the fifties and sixties the European cradle of the solid state physics, then professor at the University of Bristol, he had already published fundamental books such as *Electrons and phonons*, with an outstanding scientific value. His education, his broad view on his field of studies, were absolutely remarkable too. Indeed, we students followed his lessons with great respect and attention in a climate – one of a pre-1968 fervour – which made his aloofness, his old-fashioned teacher approach, and his imperiousness all the more striking. Even if compared to the other teachers from those courses, first and foremost Stig Lundqvist, a scientist and professor with an enthusiastic personality, mesmerising and unconventional, Ziman was not – and I believe he never wanted to be – a student-charmer.

I remember his uncommon rigour and firmness from an episode which involved me personally. For a number of reasons, I was given the task to follow a Russian physicist in his stay in Italy. He was a slightly obscure member of the renowned theoretical school of Landau who happened to be in Rome, where I was staying at that time, quite by chance, on an invitation that someone had given me six or seven years before. Having to attend the ICTP courses, I decided to go to Trieste together with my colleague, although he did not receive any invitation by the Triestine institute. For reasons that still are not totally clear to me, my idea was not greeted with great enthusiasm at the ICTP. The unexpected guest was not particularly welcomed, probably because he was believed to have been allowed to leave the Soviet Union too easily compared to his less fortunate colleagues. However, while nobody in Trieste adopted a clear stance against the Russian, who had to face only some minor obstructionism, John Ziman was the one who made things clear, as he was wont to do. In a written note he drove my colleague out

from the school in no time at all. I do not know what information he had received about him, but aside from this very episode Ziman certainly knew the issue of Eastern scientists quite well. We were going through the cold war then, and Eastern scientists found reaching the West a quite difficult enterprise, albeit for a limited period of time. This problem probably affected him personally as well, since he was Jewish, for the well-known problems Russian Jews had in reaching Israel, or even in temporarily leaving their country. And this was a problem Ziman had surely faced as an organiser within the ICTP, with Russian scientists encountering great difficulties in participating in the activities organised by the Trieste physics centre. This was a topic he dealt with in *Letter to an Imaginary Soviet Scientist*, published in *Nature* in 1968, a contribution which helped him to come into contact with one of the most famous dissident scientists of that time, Zhores Medvedev. And this led to the publication in the Western countries of *The Medvedev Papers*. In their preface, Ziman wrote that, although the author could not give his permission to publish that material in the West, the text should be published anyway. As described by Sir Michael Berry and John Nye from the University of Bristol, this attitude totally reflected the “most eloquent and persuasive” Ziman. As mentioned above, Ziman was a man from the colonies: in other words, he came from the periphery of the world. Once established as one of the most important scientists in his field, he devoted great efforts within the ICTP to the less fortunate part of that periphery. Great Britain had been one of the fiercest opponents of the decision to establish the ICTP in Trieste, a facility whose main objectives comprised a high-quality scientific education in the field of theoretical physics to be provided to researchers from the Third World. In a tense international climate, perhaps owing to the prejudice against an institution capable of stealing human resources coming from the developing nations, sending them in a remote location, far off from the largest international research centres, much opposition built up against this move. And yet, when the time came for launching the institute British scientists ranked among the most active supporters of the initiative and Ziman committed himself with great participation to that new adventure, in which there was much to invent, plan and work on. Among other things, he was also responsible for the involvement in the activities of the physics centre of two other British scientists, Norman March and Paul Butcher, two real gems in their field of research, and two men with a high moral stature who worked with great commitment and dedication for the cause of the ICTP. In the same way, he had to bear the brunt of the planning and the implementation of the intensive courses for scientists from the developing countries, referred to as *Spring Colleges*, organised for four or five weeks every two years, as well as the *Summer Workshops*, taking place every year over the summer period. His and other scientists’ involvement in this enterprise was surely not grounded either in an economic interest, nor in a merely scientific one, but in the interest in sharing knowledge with researchers coming from the depressed areas of the planet who, in their countries of origin, could not obtain a suitable education in those fields of physics. Hence, homage should be paid to the merit of scientists such as John Ziman, who in those years laid down the foundations of the research in the physics of the solid state of the ICTP, now an important research centre and a real model for international cooperation and the spreading of scientific knowledge.

I do not know whether his commitment within the ICTP was only one facet of his interest in science also from a social viewpoint, or if it was rather the starting point for the turn which radically changed his life and career, when he placed his experience acquired as a scientist at the service of the community. As early as the 1950s, he had been wondering about the importance of science in contemporary society – and about the role played by the various stakeholders who have been intervening more and more frequently in the scientific debate. Yet late in the seventies, Ziman ultimately left physics research in order to commit himself to what had been for many years one of his major interests: the sociology of science.

I met him again many years later, at the conference organised in 1997 at the ICTP in memory of the Pakistani physicist and Nobel laureate Abdus Salam, founder and director of the ICPT for nearly three decades, who had passed away one year before. Ziman was very polite and lucid on that occasion, and apparently in good shape, not very different from how I remembered him, still very similar to Mr. Smee from the Peter Pan cartoon. Twenty years had passed since the last time I had met him and time had been particularly kind with him. Owing to the impression he left me on at that last meeting of ours, I was particularly shocked by the news of his death in January 2005. Possibly because, quite oddly and beyond any rational explanation, one may think that for eminent figures such as John Ziman, death is simply a possibility not worth considering.

Translated by Massimo Caregnato

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