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978-1-107-62333-0 - Sir James Jeans: A Biography

By the Late E. A. Milne with a Memoir by S. C. Roberts

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J. H. Jeans

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A BIOGRAPHY

BY
THE LATE
E. A. MILNE



WITH
A MEMOIR
BY
S. C. ROBERTS

CAMBRIDGE
AT THE UNIVERSITY PRESS
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PUBLISHERS' NOTE

Shortly before his death Professor E. A. Milne had finished the biography of Sir James Jeans which the Syndics of the Press, in consultation with Jeans's executors, had invited him to write, but his failing health had made it impossible for him to give it his final revision. At the request of the Syndics and of Milne's executors, the biographical chapters (I–VI) have been revised by Mr S. C. Roberts, who has also contributed an introductory memoir, and Dr G. J. Whitrow has corrected the later chapters for the Press.

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MEMOIR

My first meeting with Jeans was, I think, in 1912 in Charles Sayle's house in Trumpington Street. I was then quite a junior member of the staff of the University Press and Jeans was little more to me than the author of some of those big, blue mathematical books with which I was beginning to be familiar in the Syndics' catalogue. When I returned to the Press after the 1914 war, I began to realize more clearly his importance as an author, but it was not until I became Secretary in 1922 that I had personal dealings with him. Reprints and new editions of his earlier books involved a certain amount of discussion and correspondence, but it was the publication of *Astronomy and Cosmogony* (1928) that led me into more intimate talk with him. I remember very clearly Ralph Fowler coming in to my room at the Press and asking me whether I had read Jeans's latest book. I took the enquiry to be a jocular one and reminded Fowler, in reply, that I was not obliged to read every book that I published. Then, more seriously, Fowler said: 'Ah, yes, but you should look at the last chapter.' It was good advice and I realized, especially after promptings from my colleague, R. J. L. Kingsford, that cosmogony might contain the potentialities of best-selling beyond the dreams of academic avarice.

At that time I frequently travelled by road to Worthing, where my parents lived. Jeans's home at Dorking was only a few yards off the main road and accordingly I proposed myself for lunch on a day when I was due to go to Worthing. It was the first time I had seen Jeans at home and he gave me a most friendly welcome. He produced an admirable claret and after lunch we retired to his study. After a few preliminary *pourparlers*, I approached my main topic and asked Jeans whether he would consider the writing of a popular book. His reply was characteristic. Looking at

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me with a kindly but slightly scornful expression, he said: 'Oh, yes, several publishers have approached me about that.' 'Well', I replied, 'what about us?' 'Oh', he said 'you're the finest mathematical printers in the world—but you couldn't sell a popular book.' 'Well, have you ever written one?' I countered. From that moment onwards the situation was easier. I could see that Jeans set a definite value on being published by a press famous for its high standard of printing; and, as I afterwards realized, he was also keen to maintain his friendly rivalry with Eddington, whose *Nature of the Physical World* was one of the publishing successes of 1928.

Jeans never haggled over royalties and an agreement was signed in April 1929 for a book to be entitled *The Universe Around Us*. We took a good deal of trouble over the illustrations and the book was published in September. The first edition was one of 7500 copies and was sold out during October. By the end of 1929 11,300 copies had been sold. At the Press we were, of course, delighted and so, in his own way, was Jeans. By that time I had begun to realize that what prevented him from a full display of pleasure or enthusiasm was his shyness. He could rap out a caustic criticism of anyone or anything in a way that chilled his hearers and made them shrink from pursuing the conversation. But when he was genuinely pleased, he found it difficult to express himself. There was no doubt about his satisfaction at the success of *The Universe Around Us*, but it was with an effort that he said to me: 'I always thought the book would do well, but you've sold more copies than I thought you could.' I confess that I felt rather as Boswell did when he had contrived to take Johnson out to dinner to meet John Wilkes: 'I exulted as much as a fortune-hunter who has got an heiress into a post-chaise with him to set out for Gretna-Green.'

In the following year, 1930, Jeans was invited by the Vice-Chancellor (A. B. Ramsay, Master of Magdalene) to

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deliver the Rede Lecture before the University. As soon as I heard the announcement I wrote to Jeans telling him that we would of course like to publish the lecture and asking him to let us have 'copy' in good time so that we might have the lecture on sale immediately after its delivery. By this time, Jeans was becoming alert to the potentialities of popular publishing and he not only promised to send the manuscript well in advance, but suggested that the book might be considerably longer than the lecture. In this I cordially concurred and a few weeks before the delivery of the Rede Lecture we had 10,000 copies of *The Mysterious Universe* printed and bound. The lecture was to be given in the Senate House at 5 p.m. on 4 November. Two days before this date I was rung up by my old friend Harold Child of *The Times*. 'S.C.', he said, 'the whole office is buzzing about Jeans. Can you let us have the manuscript of the lecture in advance?' I replied that I could, adding a warning that review-copies of the book, as distinct from the lecture, had, of course, been distributed to every newspaper. So *The Times* had its early sight of the Rede Lecture, and, on the morning after its delivery, had a 'turn-over' on the middle page, together with a leading article. In the middle of the morning Jeans came into my room. I could see that he was immensely pleased, but he had the embarrassed air of a sixth-form boy who had just won a scholarship and wanted to thank the form-master for his help. 'I've got a very good show this morning', he said, and added jerkily, 'thanks to you, I expect.'

For the next few weeks our chief concern was to keep *The Mysterious Universe* in stock. Walter Lewis, our printer, cleared the decks with great gusto and we sold 1000 copies a day for a month. Reviewers in a wide range of journals wrote about the book at length and country vicars introduced it into their sermons.

By this time I began to feel that I could talk to Jeans as a friend and not merely as a successful author. I paid frequent

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visits to Cleveland Lodge and saw a little of his daughter Olivia when she came up to Newnham. One popular book followed another and I remember one harassing day which Jeans and I spent in London in an endeavour to settle a dispute between the *Sunday Express* and the B.B.C. *The Stars in Their Courses* (1931) was an expansion of a series of broadcast talks and we had sold the first serial rights to the *Sunday Express*. The first of the Sunday articles happened to correspond rather closely with one of the talks printed in *The Listener*, and the manager of the *Sunday Express* felt that he had a grievance. The legal adviser of the B.B.C. on the other hand, dismissed the claim with contempt. They were both Scotsmen and both obstinate and Jeans and I endured much coming and going between Fleet Street and Broadcasting House before a concordat was reached about 6.30 p.m.

In 1932 my wife died after an intermittent illness of several years; two years later Jeans had to bear a similar blow and the bond between us was strengthened. Quite soon after his wife's death Jeans asked me to spend a night with him at Dorking and for the first time the barriers of shyness seemed to be broken down. He was desperately lonely and unaffectedly glad to welcome me. His daughter was ill in bed and he was clearly pleased to have someone to whom, in some measure at least, he could confide his troubles. Sitting in his lovely garden, he tried to tell me how he felt. 'Sometimes', he said, 'I wish I'd been a games-master at Eton.'

Later in that summer of 1934 Jeans stayed a week-end with me at my house in Barton Road. He was still tired and depressed, but I think he was cheered by the change of scene and company. My mother was also staying with me and I noted with pleased surprise how docilely he listened to her words of old-fashioned advice and comfort.

Early in the summer of 1935 he approached me in his curiously stilted way:

'You never go abroad, do you, Roberts?'

'I haven't been lately', I replied, 'but before my wife's

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illness we often used to go to France for ten days or so. Why?’

‘Well, I was wondering whether you’d care to come for a holiday with me this year?’

It was the tentative inquiry of a shy and lonely man. I said that I’d certainly like to arrange something—but on a fairly modest scale—and Jeans undertook to obtain particulars from the travel agencies. Towards the end of May I gave a Friday evening lecture at the Royal Institution. Jeans came and talked to me afterwards and we arranged to discuss itineraries on the following morning. After proposing trips to Istanbul and other places, which were quite beyond my resources, he agreed upon Pontresina and to Pontresina we went.

It was my first experience of Switzerland and I entered upon the expedition with a pleasantly ingenuous feeling. What pleased me was that, although I was too old to learn to climb in the technical sense, one could do quite a lot by stout walking. Jeans showed me the Morteratsch glacier in the course of our first day, but his knee was not very reliable and once or twice I went off on my own. One day we went over to St Moritz and spent the day with Helen and Harley Granville-Barker. After an exquisite meal out of doors, described as a picnic, we went over the Maloja Pass and wandered round the picturesque corners of Soglio. Over some very poor beer at the inn, Jeans with the rest of us, became quite hilarious and Granville-Barker proposed that we should send a picture post-card to someone whom all of us knew. We fixed upon Winstanley, then Vice-Master of Trinity and sent him some doggerel beginning:

As duodecimo to folio
Bears very slight affinity
So is the beer of Soglio
To Audit Ale at Trinity....

But Jeans had another expedition to Italy in mind. He persuaded me that it would be a good plan to drive over the

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Stelvio Pass and spend a few days at Solda just over the Italian border. He added that he had been asked by his friend Lady Heath to look up a young musician whom he had met at a party in London. At the time I did not realize the significance of this supplementary motive for the journey.

We had an interesting drive over the pass, partly because the car we had hired frequently showed signs of giving out at the steep parts of the ascent. But we arrived at Solda without mishap in the late afternoon. After we had been allotted bedrooms, I came down to the entrance hall of the hotel. Most of the people were Italian tourists, but suddenly a most elegant and individual figure approached—a tall girl in a white climbing-suit. She looked inquiringly at me and we introduced ourselves; she was Susi Hock, the young Viennese musician whom Jeans had met at Lady Heath's party. Then Jeans appeared and our introduction was formalized. Susi had just done a little climb (about 10,000 feet) and went to change for dinner. After dinner we went out on to the hotel terrace. It was a brilliant starlit night and Susi asked many questions about the stars, which Jeans was only too ready to answer. There was also much talk about music. Feigning weariness after a long day, I announced that I was going to bed early. There was no protest. The situation was becoming quite clear to me.

The weather next day was not very good. We climbed up to a nearby hut in the morning. Jeans was a little slow and it was quite easy, and convenient, for me to act as pathfinder. Later in the day Jeans asked me with some embarrassment, whether I would mind if Susi came back with us to Pontresina. I assured him, with complete sincerity, that I should be delighted. The holiday was acquiring an element of romance and excitement for which I had been wholly unprepared. We decided to return to Pontresina by a different route and I quickly announced my desire to sit

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in front with the driver. On our return to the hotel we aroused some interest. Two days before, we had left—a pair of detached and unromantic widowers. Now we returned with our elegant prize. The dowagers of the Kronenhof were agog with curiosity. But our gaiety was not damped. We went up the Schafberg by the funicular and had lunch at a hut on the way down. There were some odd characters in the hut and we rioted over the silliest jokes. I had never before seen Jeans shaken with helpless laughter.

A day or two afterwards I returned to England. About ten days later I received the following letter from Jeans from Vienna:

‘Just a line in haste to tell you—before you see it in *The Times*—that I hope soon to marry Susi Hock.

‘I expect this is no surprise to you and fear you must think I owe you an apology for Pontresina and Solda. I am really sorry if you felt it broke up into a 2+1 party, but I had not quite foreseen how things would turn out. Anyhow I hope we may all three meet again soon.’

Thus was the seal set upon my friendship with Jeans. I had a share in the happiest adventure of his later life and although it was always difficult for him to confide frankly in anyone, he would from time to time consult me in a jerky, sceptical way about problems other than those relating to books and publishing. I became godfather to his elder son, Michael, and some years before his death I had agreed to be one of his executors, but I did not know, until his will was read, that he had nominated me as co-guardian, with Susi, of his three children. It was characteristic of him that he had not brought himself to the point of asking me during his lifetime.

Jeans was not a man of many friends, partly because of his temperamental shyness and reticence and partly because of his intolerance of what he deemed to be second-rate. With his own quick perception he lacked the patience which

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would have enabled him to understand and appreciate a slower-moving mind and consequently he missed those intimacies which he fundamentally desired.

Of Jeans as a man of science it would be impertinent of me to write. As a man of letters handling the problems of the universe he was outstanding and I count myself fortunate to have been not only his publisher, but his friend.

S. C. ROBERTS

January 1952