Johan Schioldann: History of the Introduction of Lithium into Medicine and Psychiatry Birth of modern psychopharmacology 1949

Part II Renaissance of lithium therapy. Birth of modern psychopharmacology 1949

Chapter 27. Cade and Schou exchange thanks

In 1970, at the Taylor Manor Hospital Symposium on the 'Discoveries in Biological Psychiatry', Cade¹¹¹⁰ pointed out that it was 'a source of singular satisfaction' to him that after 'the lapse of years the therapeutic and theoretical importance of lithium has at last been recognized', reiterating that 'the person who has done most to achieve this recognition by validating and extending my original observations has been Mogens Schou of Denmark'.

Subsequently, in June of that year Cade visited the Risskov Psychiatric Hospital. Here Schou¹¹¹¹ presented him to the audience as the man who

introduced lithium into psychiatry and described its antimanic effect [...] [The history of lithium] started with Dr. Cade's experiments in 1948 and his publication in 1949. I do not have it in my power to endow knighthoods or honorary degrees but permit me to express quite simply to you, John Cade, the gratitude of all the psychiatrists and scientists for whom your work has been an inspiration and a stimulus. I think also I may thank you on behalf of the very, very many patients all over the world who have, and the still many more who will, derive benefit from and have their lives entirely changed through treatment with the drug you introduced.

In turn Cade expressed gratitude to Schou (in the words of the latter, being 'the nicest compliment we have ever received'):¹¹¹²

I [Cade] feel rather like a woman who as a girl had an illegitimate child and had adopted it out. And now, 20 years later, I am visiting the adoptive parents

¹¹¹⁰ Cade JF.: 'The story of lithium', in Ayd FJ, Blackwell, B. (eds.): 'Discoveries in biological psychiatry'. Philadelphia: Lippincott, 1970. pp.218–229. cf. Jefferson JW.: 'Lithium: a therapeutic magic wand'. J. Clin. Psychiatr. 1989;50:81–86.

 $^{^{1111}}$ Risskov Psychiatric Hospital, 8 June 1970, quoted from Schou's manuscript. Kindly placed at the author's disposal by Mogens Schou.

¹¹¹² Schou M.: 'Lithium perspectives'. Neuropsychobiol. 1983;10:7–12 (The first John Cade Memorial Lecture, delivered at the CINP Congress in Jerusalem, June 22, 1982).

and finding out what a big fine boy he has grown into, but knowing far less about him than his adoptive parents.

'This was of course less than the truth, but typical of John Cade's modesty', Schou added.

The following month, Schou¹¹¹³ wrote to Cade thanking him for his visit.

It was so interesting to hear you tell about the early experiences with lithium as well as of your later interests and studies, and it was valuable to get to know your scientific personality. You and I certainly have widely different approaches, and this just goes to show in which peculiar ways the scientific spark jumps between different individuals. Science is certainly not the cold process which one sometimes would like to think.

In the 1977 Beattie-Smith Lecture in honour of Cade, Schou¹¹¹⁴ elaborated on Cade's visit to Risskov. After having depicted the tree that had grown from the seed that Cade had sown, he drew a fascinating sketch of 'two scientific types, very different but both necessary', namely 'the systematic scientist' and 'the artistic scientist'. The former, Schou said, 'is characterised by working methodically, by going forward step by step. He starts at point A and proceeds via point B and C to reach point D'.

Schou thought that this would presumably best illustrate the popular image of a scientist. In the other type of a scientist, he went on,

his way of progressing is less obvious; he works as hard as the former, but he works by intuition as well as by logic. Starting at point A he also proceeds to point D, but not necessarily via B and C; eventually he may even arrive at point E or F. How he does so, is not always easy to tell, but he does it.

Schou did not leave any doubt that both types of researchers are 'essential for scientific progress'—the systematic scientist by adding to 'our knowledge with solidity and precision', whereas the artistic scientist 'is often the real innovator, because he has the livelier phantasy and perhaps the greater courage'. Thus, Schou said, the artistic scientist 'is a man of surprises', and he expanded on this by saying that 'John Cade always brings surprise'.

Referring to Cade's visit to Risskov, Schou added: 'We asked him to give a lecture and of course expected to hear about the lithium discovery. However, Cade's lecture dealt with strontium'. Further, Schou told the audience how Cade on this same occasion had paid him and his associates 'the nicest compliment we have ever received'. Then he cited Cade from the tape about 'the illegitimate child, lithium, adopted out', adding:

And now, my dear John, your child is not so young any longer. It comes back to the biological parent and says: 'You are now a grandfather, a great-grandfather, and your descendants are here to honour you. Behind us is the

¹¹¹³ 22.7.1970 (from Mogens Schou).

¹¹¹⁴ Schou M.: 'Lithium in 1977. In honorem John F. J. Cade. The 43rd Beattie-Smith Lecture, University of Melbourne. February 4, 1977'. (pp.41–48); also in Schou M.: 'Lithium perspectives'. 1983, op. cit. (Jerusalem Lecture, 1982).

¹¹¹⁵ cf. Watson S, Young AH, Hunter A.: 'The place of lithium salts in psychiatric practice 50 years on'. Cur. Opin. Psychiatr. 2001;14:57–63.

huge number of physicians and scientists who are engaged in lithium work, and the thousands, perhaps millions of patients all over the world whose lives have been altered by treatment with lithium. We who are gathered here act as their spokesmen. We say from our hearts: Thank you, John. You did well!'

During the present author's studies on the history of lithium therapy, he had the opportunity to discuss with Schou why Cade might have chosen to speak on strontium rather than on his early original lithium research in the 1940s.

Schou had written to Cade, on 16 March 1970, that is, four months before his visit to Risskov:

We look forward very much to get to know you, and I wonder whether we could impose on you to give a small informal lecture about your experiences with lithium, both the early original ones and your later ones. It will presumably be to a rather small group, but we would appreciate it very much.

Cade answered Schou, on 1 April 1970: 1117 'I shall of course be delighted to discuss our recent experiences with lithium especially the identification of lithium responders with the aid of a lithium excretion test'.

Just a couple of months before his death, in September 2005, Schou communicated to the present author: 1118

I have now perused all the approx. 40 letters Cade and I exchanged between 1963 and 1978 [and later perused by Schioldann] [...] I did not hide my admiration and gratitude for the contribution he made with the 1949 article. At no time have I had any skepticism towards this work. I do not know whether there was something behind Cade's choice of lecture when he was at Risskov. I had exhorted him to give an account of the background for his discovery of lithium's antimanic effect, however, against all expectations he spoke about his investigations with *strontium*. On the basis of your work [that of the current author] it could be that he was concerned that I as biochemically and physiologically more knowledgeable was going to ask him delicate questions. This thought [with reference to Schioldann's work] never occurred to me. I believed his [1949] account blindly, although I had difficulty in following his logic.

Cade thanked Schou publicly again at the First British Lithium Congress at the University of Lancaster in 1977. He stated that 'It was fortunate indeed that [my 1949]

¹¹¹⁶ Letter kindly placed at the author's disposal by Schou.

¹¹¹⁷ Letter kindly placed at the author's disposal by Schou.

¹¹¹⁸ Schou, personal communication, 7 July 2005

¹¹¹⁹ Cade JF.: 'Lithium—past, present and future', in Johnson FN, Johnson S.: 'Lithium in medical practice. Proceedings of the First British Lithium Congress, University of Lancaster, England. 15–19 July 1977'. Lancaster: MTP Press, 1978. pp.5–16.

paper came to the attention of Mogens Schou in Denmark quite early and he enthusiastically followed it up. He has done more than anyone to validate and extend my original observations'.

Finally, three months before his death in 1980, reflecting on his original concern about the toxicity of lithium, Cade¹¹²⁰ wrote to Johnson:

Oddly enough, I did not frantically pursue [the discovery of lithium's antimanic effect]. I knew the results were valid and simply cast my bread upon the waters. It was, I now realize, perilous to do this. Fortunately it was turned into cake, pre- eminently by Schou and his co-workers, although it was over twenty years before we met and cemented our friendship.

¹¹²⁰ Johnson FN.: 'John F. J. Cade, 1912 to 1980: a reminiscence'. Pharmacopsychiatr. 1981;14:148–149.