

## No 15 Sir Charles Sherrington (1857- 1952) (II)

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1. In the last talk, I gave you a short biography of Sir Charles Sherrington and a glimpse of his scientific work. There is no doubt whatsoever about his eminence as a scientist and his crucial importance in the development of neuroscience.
2. Today's question is where does he fit into the Alexander Technique. Unlike the case of John Dewey, they were never friends and Sherrington never had Alexander lessons.
3. But we can piece together a few bits and pieces and I think there is quite a bit more to be worked out.
4. They were close contemporaries. Sherrington was born in 1857 and Alexander in 1869. Sherrington's major book *The integrative action of the nervous system* was published in 1906. Alexander had come to London two years earlier in 1904 and was building up his teaching practice.
5. But there is no evidence I have come across that either of them had even heard of the other in the years leading up to the First World War. But they had some contact after the war.
6. Jean Fischer, for example, says in *Articles and Lectures* that they probably met in the early 1920s<sup>1</sup>. In a lecture Alexander gave at Bedford Physical Training College for women in 1934, he mentions a conversation he had with Sherrington about breathing going wrong in young children in which Sherrington said to him  

*Mr Alexander, when we realise that children of three today have perverted respiratory processes, it is about time that we began to have our way.*<sup>2</sup>
7. But that's about it on the personal level.
8. What we do know is that in 1924, or very early 1925, Alexander became aware that interesting scientific work had been done by Rudolph Magnus on the working of the postural reflexes, and that the conclusions it reached supported his own findings on the workings of the human mechanism.
9. In a lecture he gave to The Child Society in February 1925, Alexander says

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<sup>1</sup> Alexander (1995)p197

<sup>2</sup> Ibid. p180

*Regarding the central control: in the technique I am using, it will interest you to know that during the past fifteen years, Magnus has worked to explain the scientific significance – as has been brought to our notice recently by Sir Charles Sherrington – in connection with that very control which I have been using for twenty-five years.<sup>3</sup>*

10. Whether that is a reference to a personal contact between the two men or just a more general reference to Sherrington's role in promoting the work of Magnus I do not know.
11. Moving on to more established facts, we do know that Alexander includes two substantial quotes from Sherrington in UCL which was published in 1941.
12. One of these is on p85 of UCL. It is from a very elegant and not-too-technical lecture called *The brain and its mechanism* which Sherrington gave in Cambridge University in 1933.
13. Sherrington was seventy six and coming up to retirement and in this quite a reflective lecture in which he is putting his fifty years of experimental work into a broader and more philosophical context.
14. It is full of all kinds of thought-provoking observations. I quite liked this

*Inside the animal's form sits the brain, its work broadly to increase the animal's grip on the world about it, and hardly less the grip of the external world upon the animal.<sup>4</sup>*

15. Here is a very nice observation on the leading role of the head:

*That leading end, the head, has receiving stations signalling from things at a distance, things which the animal in its forward movement will next meet. A shell of its immediate future surrounds the animal's head.<sup>5</sup>*

16. This lecture was published as a booklet which is long out of print but I managed to get hold of a copy of it from a bookshop in New Zealand through ABE books. It is quite short and well

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<sup>3</sup> Ibid. p148

<sup>4</sup> Sherrington (1933)p6

<sup>5</sup> Ibid. p15

worth reading if you want a good flavour of Sherrington. I am giving a copy to the library.

17. The quotation from Sherrington which Alexander included in UCL:

*I may seem to stress the preoccupation of the brain with muscle. Can we stress too much that preoccupation when any path we trace in the brain leads directly or indirectly to muscle? The brain seems a thoroughfare for nerve action passing on its way to the motor animal. It has been remarked that Life's aim is an act not a thought. Today the dictum must be modified to admit that, often to refrain from an act is no less an act than to commit one, because inhibition is co-equally with excitation a nervous activity.<sup>6</sup>*

18. As we know, inhibition is a central idea in the AT. Alexander includes this quote in a section in UCL headed *Inhibition* and in the subsequent pages he makes some extremely interesting and important points.

19. This does leave any doubt about the importance Alexander attached to inhibition:

*Inhibition is a human potentiality of the utmost value in any attempt to make changes in the human self, and my experience has convinced me that it is the potentiality most in need of development. I have found that if a pupil can inhibit his habitual reactions even moderately well when faced with unfamiliar procedures, remarkable changes in his use and functioning can be made in a very short time, changes which judged by ordinary results would seem impossible.<sup>7</sup>*

20. This whole section in UCL is well worth careful reading and rereading. It is quite key to the Technique and Alexander must have been quite pleased to find such a relevant quote from Sherrington.

21. There is also another, much longer, quote on p117 of UCL. This was sent to Alexander by one of his pupils, a psychiatrist called Duncan Whittaker, who briefly joined Alexander's training

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<sup>6</sup> Alexander (1946)p85

<sup>7</sup> Ibid. p87

course in 1946. The quote is taken from Sherrington's book *Man on his Nature* (1940 edition).

22. Alexander says that, though it arrived at the last moment, just as UCL was almost ready for the printers, he is including it because he is certain it will be of interest to his readers.

23. The quotation from Sherrington goes:

*Take this act of "standing." Suppose my mind's attention be drawn to it, then I become fully aware that I stand. It seems to me a fairly simple thing to do. I remember, however, that it cannot be very simple. That to execute it must require among other things the right degree of action of a great many muscles and nerves, some hundreds of thousands of nerve fibres and of perhaps a hundred times as many muscle fibres...Remembering this I am perhaps rather disappointed about the very little that my mind has to tell me about my standing. When it gives attention to my standing it can make me fully aware that I am standing, but as for telling me how it is that I stand, or as to helping me to analyse my standing, I get extremely little from it.*

24. In the next page or so, Alexander uses this quotation as a peg on which to hang some of his own thoughts on the benefits of constructive conscious control.

25. But the most interesting and important connection between Sherrington and Alexander comes in Sherrington's last book, *The Endeavour of Jean Fernel*.

26. This book is an historical account of the life and work of the early French doctor and physiologist Jean Fernel who was born in 1497 and died in 1558.

27. On page 88 and 89 Sherrington has a long discussion about the inter-relationship between voluntary and reflex action. He is discussing the evolution of creatures which are less reflex and more capable of deliberate control – or mentalized.

28. He makes a very interesting statement about the role of reflexes in the working of the body. He says the reflex mechanism is

*... within the control, to a certain extent, of the reactions of the brain. This mastery of the brain over the reflex machinery does not take the form of*

*intermeddling with reflex details; rather it dictates to a reflex mechanism 'you may act' or 'you may not act'. The detailed execution of the motor act is still in immediate charge of the reflex.*<sup>8</sup>

29. He goes on to discuss the difficulty of knowing exactly what we are doing when we are performing an act. He says:

*It is largely the reflex element in the willed movement or posture which, by reason of its unconscious character, defeats our attempts to know the "how" of the doing of even a willed act. Breathing, standing walking, sitting, though innate, along with our growth, are apt, as movements, to suffer from defects in our way of doing them. A chair unsuited to a child can quickly induce special and bad habits of sitting, and of breathing...But verbal instruction as to how to correct wrong habits of movement and posture is very difficult. The scantiness of our sensory perception of how we do them makes it so.*<sup>9</sup>

30. This is very close to Alexander's idea of faulty sensory perception. Most of us would settle for that as a pretty good summary of the problem of improving the use of ourselves. But then, out of the blue, a little bit further down the same page, we have the following direct reference to Alexander.

*Mr Alexander has done a service to the subject by insistently treating each act as involving the whole integrated individual, the whole psychophysical man. To take a step is an affair, not of this or that limb solely, but of the total neuro-muscular activity of the moment – not least of the head and neck.*<sup>10</sup>

31. In the whole of that book, there is no other reference to any other living or contemporary sources in *The Endeavour of Jean Fernel*, and having made this point, Sherrington moves on to other things. There is absolutely no reason, in the context of the book, why Sherrington should have introduced Alexander's name at this point. It is obviously hauled into the text because Sherrington wanted to make a point about Alexander.

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<sup>8</sup> Sherrington (1946)p88

<sup>9</sup> Ibid. p85

<sup>10</sup> Ibid. p85

32. Alexander was obviously delighted when he heard what Sherrington had said about him and Dilys remembers everyone being quite excited about it. Walter recalled writing a long letter on behalf of Alexander to Sherrington to thank him.<sup>11</sup>
33. Sherrington replied to this letter and said to Alexander:
- I need not repeat to you that I appreciate the value of your teaching and observations. I was glad to take the opportunity to say so in print. I know some of the difficulties which attach to putting your ideas across to those less well-versed in the study than yourself...I am sorry you should be worried by a scurrilous attack.*<sup>12</sup>
34. It was a remarkably explicit personal endorsement for Alexander and for the AT. The reference to a scurrilous attack was to the fact that Alexander had taken a libel action against a South African magazine which had referred to the Alexander Technique as a “dangerous and irresponsible form of quackery.”
35. During the libel trial, Alexander’s lawyer was very pleased to be able to quote from this letter from the most eminent neuroscientist of his time. In fact, he goes considerably further and in his opening address to the court he says
- Perhaps I should direct your lordship’s attention to the fact that that Sir Charles Sherrington uses language very similar to Mr Alexander’s and shows that in fact he has taken a great deal of it from Mr Alexander’s language.*<sup>13</sup>
36. The whole opening address is reprinted in Wilfred Barlow’s book, *More talk of Alexander* and the bits on the relationship between Alexander and Sherrington show a quite shrewd understanding of the work of both on the part of the lawyer.
37. There is plenty more we could explore in Sherrington’s work. But I think I have given you enough for you to have a flavour of it and how it can shed light on some of what we do.
38. There are just two other points I would like to make. One is about Alexander’s books. We have the odd chuckle or gasp at some of the things he said. But it is important to note that Sherrington’s understanding of the AT – and judgement about

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<sup>11</sup> Carrington (1996)p39

<sup>12</sup> Bloch (2004)p207

<sup>13</sup> Barlow (1978)p37

its importance – was entirely based on his reading of Alexander's books.

39. Sherrington, in his wisdom, saw through their superficial flaws and found the quite profound truth beneath them. It is up to us to do the same.
40. The other point is that the more I read Sherrington the more I am struck by the power and scope of his intellect. I am increasingly reminded of Einstein in respect of both his intellectual capacity as well as his personal humility and general excellence as a human being.
41. I personally think that from the point of view of boosting the credibility of the AT in the scientific community, Sherrington's endorsement is one of our most valuable. I am also convinced that in the long march towards greater understanding of the neurological and general scientific underpinnings of the AT, there is an awful lot to be learned from Sherrington's work.

## References

- ALEXANDER, F. M. (1946) *The universal constant in living* - Mouritz, London (2000 edition)
- (1995) *Articles and lectures* - edited by J.M.O.Fischer - Mouritz, London
- BARLOW, W. (1978) *More talk of Alexander: aspects of the Alexander Technique* - Mouritz, London 2005
- BLOCH, M. (2004) *F.M. The Life of Frederick Matthias Alexander* - Little, Brown, London
- CARRINGTON, W. (1996) *A time to remember* - Sheildrake Press, London
- SHERRINGTON, C. (1933) *The brain and its mechanism* - Cambridge University Press, Cambridge
- (1946) *The endeavour of Jean Fernel* - Cambridge University Press, Cambridge