

No 41 The AT and science

Gerald Foley

CTC

12 January 2016

1. Today I am going to talk about the general question of the AT and science and why I think it is an important and generally neglected area in discussions within the profession.
2. As teachers of the Technique, one of our big frustrations is that we feel that we could benefit a large number of the people we meet in our daily life. They have all kinds of perfectly obvious twists and distortions in the way they hold themselves.
3. But they blank out if you suggest that the aches, pains, headaches, tensions, insomnia and so on are related in any way to how they misuse themselves.
4. Instead they take their symptoms to the doctor or the pharmacy and wind up swallowing paracetemols, sleeping pills, and various kinds of so-called remedies for what ails them.
5. We think we are relevant, but most people have never of us. Among those who have heard of us, but never had a lesson, most people we think we are about posture. If you tell someone you are an Alexander Technique teacher, they straighten themselves up stiffly and say *“Must watch my posture when I’m with you.”* That is certainly not what the Technique is about.
6. Others, including many teachers, see the Technique as fitting I alternative and complementary therapy area. For them it is some kind of package of New Age therapies as you will see by surfing through the various Alexander Technique web-sites on the internet.
7. STAT has contributed to this by affiliating itself to the Complementary and Natural Healthcare Council (CNHC), a UK government sponsored body which is charged with regulating complementary health-care practitioners.
8. According to its website (www.cnhc.org.uk) the CNCH has responsibility for regulating Alexander Technique teachers, aromatherapists, Bowen therapists, massage therapists, nutritional therapists, reflexology therapists, shiatsu therapists sports injury therapists, and yoga therapists.
9. Seeing the Technique included in such list would have been deeply disconcerting to Alexander or John Dewey.

10. Dewey saw the Technique as “*scientific in the strictest sense*”. Alexander devotes Chapter 5 of *The use of the self* to the need to include training in the AT in the medical curriculum.
11. So as things stand, we are stuck on the fringe rather than being part of the main stream. It is going to take time and work to get us where we want to be and think we should be.
12. One thing we need to think about, is our use of our own rather peculiar and inconsistent technical jargon.
13. “*The primary control*” and the different ways in which Alexander used it – sometimes as a description of a configuration of the head-neck area, and sometimes as though it were an instrument that can be deployed – is a prime example.
14. Alexander also thought it was something that the neuroscientist Rudolph Magnus had discovered but that was a total misunderstanding of Magnus’ work.
15. We also have terms like “*directing*” or “*directing the use of the self*” or “*allowing standing to happen*” and other terms that have their own particular meaning in our work.
16. This is fine as long as we are working with our pupils and talking among ourselves and everyone is clear about what we mean but it leaves us in our own ghetto with no way of communicating reliably with the wider world.
17. So our first job in communicating with the outside world is to be clear in our own minds about the Technique and see it clearly and distinctly as itself.
18. It is not an amalgam of disciplines. It is itself in its own particular way. You cannot combine Pilates with the AT for example. Pilates is a system of exercises. It is about doing things.
19. The central point of the AT is that it is about stopping, about inhibiting. They are complete opposites.
20. This is when we can begin to see why it would be a good idea to aim towards a scientific way of talking about the Technique.
21. This is not to say one has to be a scientist to be a good AT teacher. Far from it.
22. The AT is primarily an empirical discipline. Like Alexander himself, it is rooted in the performing arts, music, voice and

drama. Teachers are judged by the effect they have on their pupils rather than their scientific understanding of what is happening.

23. In order to be clear about what I mean, I am going to make a distinction here between what are called clinical trials and scientific analysis. A clinical trial looks at the effect of a procedure without necessarily analysing how it is achieved. We have various trials of the AT in which it is compared with other approaches.
24. The best known one is that in which Bristol and Southampton universities collaborated on a comparison between the AT exercise and massage in the treatment of low back pain. The results were published in the British Medical Journal for 19 August 2009.
25. This is not looking at how the results are achieved but whether there are any differences in the results when different treatments are used. This is the way most treatments are evaluated.
26. So we know that having AT lessons can a beneficial effect, the scientific question I want to ask is what are the why do these beneficial effects occur.
27. This requires that we have a scientific description of the Technique and how, at a neurophysiological level, it achieves its effects. If we had that we would be able to discuss it with people who are experts in the relevant disciplines. Instead of being stuck in our own ghetto, we would be opening ourselves to a wider world.
28. Having a scientific description of how the Technique achieves its results would not make our a skills redundant, it would open them to a much wider audience. It would integrate them into a wider range of physiological and neurological disciplines. It would enable us to refine and develop them.
29. It would also help us to fulfil Alexander's dream of educating the medical profession. Instead of being diagnosed purely on their symptoms and provided with painkillers and sleeping pills, a person going to the doctor would be told their problems were largely because of the way they were misusing themselves. They would be advised to have some AT lessons.
30. This is the ideal, but we are still a long way from where we want to be.

31. When Dewey said the Technique was truly scientific, this was the direction in which he was heading. He was distinguishing the Technique from the “cure-alls” and general fashionable nonsense that he saw around him. He was saying we can be rational about the Technique.
32. But he was very keen to go a lot further and carry out a scientific study of the Technique. He discussed this with Frank Pierce Jones and they managed to get a commitment to fund this kind of study from the Rockefeller Foundation.
33. But after welcoming the project initially, Alexander withdrew his support and the idea went nowhere.
34. Lulie Westfeldt, who had severe polio as a child, was a teacher who trained on Alexander’s first training course in 1931 and qualified in 1934. Thirty years later, she published a memoir about the course and what it was like to work with Alexander.
35. She had no doubts about the efficacy of the Technique and the benefits it brought her. She was astonished at how much Alexander had been able to do for her. She thought he was a genius but she said he seemed incapable of any kind of collaborative exercise.
36. Discussing how he turned down or undermined opportunities to let his work be promoted on a wider basis, she wrote:

...an opportunity presented itself and he welcomed it as it increased his prestige and importance. Then gradually he commenced to sense where it would lead. It would lead to the necessity for cooperation and give-and-take with other people; other people might even criticize him; he might be forced to adopt some of their ways; he would no longer be monarch of all he surveyed....as this picture took shape in his mind F.M. must have felt that the opportunity would have to be killed.¹
37. After the failure to get the Rockefeller study approved by Alexander, Frank Pierce decided that since no one else was prepared to carry out a scientific study of the Technique, he would have to do it himself. So he trained himself in scientific research, with advice from two scientific Nobel Prize winners,

¹¹ (Stevens 1995)p

got himself a research fellowship in Tufts University and got on with it.

38. He used multiple image photography to record people getting in and out of the chair in an Alexandrian way – that is guided by an AT teacher – and compared this with the way they moved without AT guidance. He also used x-rays to show what was going on in the two cases.
39. Given that Jones was a professor of classics, Latin and Greek, it was a remarkable achievement. The results showed there were identifiable differences in the relationship between the neck vertebrae when the movements were guided and when they were not.
40. Jones found that these physiological changes were correlated with the feeling of ease and lightness that people felt when they moved in and out of the chair under AT guidance.
41. This was a very good start even if it was a long time coming – almost a hundred years from the time that Alexander claimed to have discovered the Technique.
42. Unfortunately, by this stage, Jones was a very ill man and he died in 1975. He did not have time to finish his book *Freedom to change*² that was published in 1976. But despite not having the final revision from Jones, it is full of good material and really worth studying.
43. Round the same time as Jones was doing his research, Wilfred Barlow was writing his book *The Alexander Principle*³.
44. Barlow was a major figure in the AT. Initially he trained to be a medical doctor but after he read Aldous Huxley's book *Ends and means* he decided he wanted to be an AT teacher as well.
45. He joined Alexander's training course in 1938 and qualified just as the war was breaking out. At the same time, he finished his medical training and was drafted into the Royal Army Medical Corps where he remained until 1946.
46. He said in *The Alexander Principle*:
I myself spent a few boring years as a Regimental medical officer seeing little of either the enemy or medicine. It did, however, give me the opportunity to carry out research on large groups of young men and women who were under great emotional and physical

² Jones (1976)

³ Barlow (1973)p23

*stress: and in the process to confirm many of Alexander's observations...*⁴

47. This research was based on quite simple experiments in which he attached a tape measure to the back of people's heads and measured how much they pulled their head back when they sat into and got out of a chair.
48. These experiments are to the best of my knowledge the first attempt to investigate the AT in a scientific way.
49. He later did a variety of other experiments and published the results in medical journals because he was very keen on medical doctors learning about the Technique and understanding the role it could play in medical practice.
50. These articles were long forgotten but they were collected and republished by Jean Fischer's Mouritz publishing house under the title *Postural Homeostasis* in 2014.⁵
51. Barlow's book, *The Alexander Principle* was published in 1973 and had a major impact on recruitment to the profession.
52. I bought it at a time in the 1990s when I was experiencing serious doubts about whether I should get any further involved in the Technique which was being portrayed in highly unscientific terms by my teacher at the time. Barlow's book was decisive in convincing me that it was worth persisting with it.
53. Barlow was a pragmatic doctor and he placed a major emphasis on what he called "use". He said:

*Use means the way we use our bodies as we live from moment to moment. Not only when we are moving but when we are keeping still. Not only when we are speaking but when we are thinking....Not only when we are searching and manipulating our surroundings but when we are letting our surroundings manipulate us like puppets...*⁶
54. In this sense, we are "using" ourselves every moment of our lives, whether we are healthy or ill, aware of ourselves or oblivious to what we are doing; even asleep, we are using ourselves in the way we lie and breathe.

⁴ Ibid.p29

⁵ Barlow (2014)

⁶ Barlow (1973)p17

55. For Barlow, the way we use ourselves has a decisive influence on our well-being. He said:

There are many alternative possibilities in the mechanical use of the body at any given time, but there is, for any given situation, a way of using the body which makes for the best functioning, for the least wear and tear, and for the sweetest running engine, just as there is a USE which leads to waste of energy and undue fatigue.⁷

56. Reading Barlow's book is like having a discussion with an experienced and highly opinionated medical doctor. As you go through it, you will not agree with everything you read, but Barlow's observations are rooted in his attempt to be scientifically objective and they are always interesting.

57. I also like the fact that he did not see the AT as an already-defined dogma. Like Walter Carrington, he saw it as an increasing and developing body of scientific knowledge. For him it was work in progress.

58. He said:

It remains for a new generation of scientists and educationalists to refine what we have been doing, and to see to it that the subtle basic training skills do not get lost.⁸

59. Christopher Stevens (1943-2003) is another scientist who trained as an AT teacher. He graduated in physics from the University of Reading and did post-graduate studies in biophysics at Chelsea College.

60. He trained as an AT teacher at the CTC. He went on to carry out research into the AT the University of Copenhagen and Kings College London. He set up a AT teacher training school in Copenhagen.

61. His short book *Towards a physiology of the F.M. Alexander Technique*⁹ was published by STAT in 1995 and describes his research work.

62. This was very much a continuation of that by Frank Pierce Jones. Stevens attached small reflective pads to various body-parts (knees, hips, head and so on) of his research subjects.

⁷ Ibid.p67

⁸ Ibid.p14

⁹ (Stevens 1995)p

He then filmed them under ultraviolet light as they went through stand-to sit and other movements.

63. This provided him with the trajectories of the various body parts as they performed their movements. The subjects were in two groups: those who had no experience of the AT and those who performed their movements under AT guidance.
64. Stevens recorded various differences between his two groups of subjects. But apart from noticing these differences, his analysis was limited and in did contribute significantly to deeper scientific understanding of the AT
65. David Garlick (1933-2002) was an Australian sports medicine scientist who trained as an AT teacher. His published work is fairly thin but of high quality. The on-line AT periodical *Direction Journal* produced a special edition devoted to his work which can be accessed at <http://www.directionjournal.com> and is well worth reading.
66. He was by all accounts a very pleasant and intelligent person and a good friend of the Carringtons. His death from cancer at the age of 69 was a major loss to the AT.
67. An American researcher called Tim Cacciatore is currently the only one I know of who is carrying out scientific investigations into the AT. He trained as a teacher with the late Shoshana Kaminitz and has published a number of scientific papers on the Technique.
68. You can access his papers on the internet as abstracts or if you have access to an academic institution you can download them in their full versions. These are perfect examples of what is called the peer-reviewed scientific literature and illustrate the long slog that will be required to put the Technique on a proper scientific basis.
69. These papers are for serious scientific researchers in the AT. You can see how detailed and carefully referenced these papers are. They are there if you want them but are more detailed than we need for these brief fortnightly talks.
70. Apart from these examples of people working on developing a scientific view of the Technique, there is not a great available.
71. We are still a long way short of the scientific overview of our work that would immediately attract the attention of working neuroscientists and convince them that the AT is something worth going through the hassle of getting a grant to study.

72. But I like to think we are getting there.

References

W. BARLOW (1973) *The Alexander Principle* - Vista London 1988

W. BARLOW (2014) *Postural Homeostasis: Papers and letters on the Alexander Technique* - Mouritz,

F. P. JONES (1976) *Freedom to change: the development and science of the Alexander Technique* - Schocken Books, New York (3rd edition, Mouritz Books, London, 1997)

C. STEVENS (1995) *Towards a physiology of the F. M. Alexander Technique: a record of work in progress* - STAT Books, London