

NO 23 Frank Pierce Jones

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1. Last time we had a heavy-duty life-long scientist Nikolaas Tinbergen. My next figure was not a scientist by formal training but an American professor of classical Greek and Latin, turned Alexander Teacher and scientist, and friend of Alexander called Frank Pierce Jones.
2. He gave a very interesting talk right here in this room in June 1973. He called it *Learning to learn: an operational definition of the Alexander Technique* which is reprinted in the book of his *Collected Writings on the Alexander Technique* and is well-worth looking at.
3. One of the points he makes in that talk is the AT is not concerned with three-dimensional posture but four dimensional posture – that it is not to do with static shape but with movement.
4. In the same talk, he quotes one of his own students, a jazz percussionist, who said

A good student even when operating under the auspices of a teacher must always fill in between the teacher's words of wisdom. You cannot teach anybody anything; but you can teach them how to learn.¹
5. My main sources for Jones are his own two books and a paper by the American AT teacher Missy Vineyard.
6. Jones' book on the AT was called *Body awareness in action* and was published in 1976, a year after his death. This book was reissued in 1997 under the title *Freedom to change: the development and science of the Alexander Technique* in a new addition by Jean Fischer's publishing company Mouritz.
7. Jones died before he wrote the 15th chapter of his book and this edition has an Appendix in which Jean Fischer has assembled, under the title Drafts and Notes, Jones' notes for the 15th chapter plus some journal entries.
8. The other Jones book is *Collected Writings on the Alexander Technique* which was published in 1998. This was edited by Ted Dimon, who is the President of the Alexander Technique Archives in Massachusetts where Jones' papers are stored.

¹ Jones (1998)p356

9. My other source is a long paper by Missy Vineyard entitled *Frank Pierce Jones: his life and work*. She has studied Jones work in detail and interviewed his widow.
10. Missy Vineyard's paper is available on the website of the Alexander Technique Center of New England which she runs – the address is <http://www.atcne.com/> - and the paper is well worth reading.
11. One of the particularly interesting things about this paper is that it draws heavily on the letters between Alexander and Jones. There are apparently 77 letters in all so this is an important resource.
12. Getting on to Jones himself, I was talking to Dilys about him and she recalled meeting him with Walter when they were both in Boston. She remembered him as a very pleasant and cultured man.
13. He was born in Wisconsin in 1905 as Frank Jones. The Pierce seems to have appeared later.
14. He was a bright but rather delicate boy, suffering from asthma and various allergies. He did his primary degree in English literature at Stanford University in Palo Alto in California and went on to get a masters.
15. He began his doctoral work in classical studies in 1929 in the University of Wisconsin. In the class on Homer, he got talking to a girl called Helen about her embroidered Norwegian gloves and they were married in 1931.
16. In 1932, he was diagnosed with tuberculosis, TB, and had to go to a sanatorium – which is what they used to call the special hospitals for TB patients – because in that time, before the discovery of antibiotics, there was no cure . You could only isolate people and hope they got better.
17. He made what they thought was a full recovery and resumed his studies for his doctorate as well as his teaching duties. But he suffered a relapse and had to go back into the sanatorium where he was put on total bed rest for the next year. The doctors told his wife, who had just had their second child that he might die.
18. He made a recovery but remained very weak and delicate and continued to suffer from breathing problems, fatigue and muscular aches, especially when he was working at his desk.

19. He got his PhD in classics in 1937 and in the same year he was appointed instructor in Greek and Latin in Brown University in Rhode Island. This was the same University in which Coghill had done his PhD on amblystoma but that was a long time earlier.
20. He first learned about the AT from reading Aldous Huxley's book *Ends and Means*. He was intrigued by what he read and when he learned that some of his colleagues at Brown University had had Alexander lessons, and in 1938 he had a lesson from A R Alexander who was working in Boston at the time.²
21. The effect was immediate and his wife said "*Whatever it is, you'll have to keep on with it.*"³ After a few lessons, his breathing became easier and he found he was able to work at his desk with much less pain and tiredness. He had his first lesson with FM in 1940 and continued having lessons from both FM and AR whenever he could.
22. The lessons gave him such relief that he discarded his allergy medications and for the first time since he had had tuberculosis he was able to live a normal life free of pain and tiredness. He said

*I was beginning to realise that the potential benefit of the Technique for my health and happiness was much greater than I had supposed at the start. I had also begun to realise the vast implications of the Technique (or of the principles it embodied) for education and the health sciences.*⁴
23. He was also becoming worried that the Technique was in danger of dying out since both Alexanders were in their seventies and very few teachers had been trained. So when FM offered to train him as teacher, he felt he should accept the offer but was quite worried whether he would be any good at it.
24. He consulted the President of Brown University who had heard about the Technique but he told Jones he did not think he was the sort of person who could work miracle cures and he would be better off if he stuck to Greek.

² Jones (1976)pxi

³ Missy Vineyard ms p3

⁴ Jones (1976)p73

25. His wife, Helen, was in favour of the idea as was one of his colleagues – an experimental psychologist, called Harold Schlosberg – who had been subject to such severe muscle spasm that he had to wear a corset but found after lessons from the Alexanders that he could dispense with the corset.
26. He also wrote to Dewey who was in favour of the idea. So he took leave of absence from his academic post to train as an AT teacher. He began his training with FM in 1941 on a one-to-one basis in Massachusetts where his wife Helen joined him. He continued his training with AR after FM came back to England and he got his certificate in 1944.
27. During the following ten years, he carried on a correspondence with FM. The seventy seven letters to Jones from FM, which of course he saved, are a major source of information on FM's thinking in his later years.
28. After he qualified as a teacher, Jones came back to Boston and set up a teaching practice in 1945. He also began teaching regularly in New York where he became friendly with John Dewey. Both were very keen to identify a scientific basis for the Technique to get it more widely accepted and they had many discussions about this.
29. Jones says
My own attitude at this time coincided with Dewey's. It was increasingly frustrating for me that I was unable to produce any objective evidence for a principle that my senses told me was true and my experience convinced me was of fundamental importance. I did not consider myself qualified by temperament or training to undertake a scientific investigation, but no one else seemed prepared to undertake one and I found myself gradually propelled in that direction.⁵
30. The question was where and how to carry out this research. As Jones said himself, his only research experience up to that time had been into Greek grammar.
31. He was lucky in that one of his pupils was an experimental psychologist and an experienced researcher into sensory-motor phenomena. Another of his pupils was a Dr Grayson McCouch who was professor of neurophysiology at the University of

⁵ Ibid. p105

Pennsylvania Medical College who had worked with both Sherrington and Magnus.

32. Neither of these was interested in researching the Technique themselves but were happy to advise him, introduce him to people and suggest what he should read. He began sitting in on lectures and demonstrations on anatomy and physiology in the Harvard Medical School.
33. He became familiar with the work of Sherrington, whom he appears to have studied particularly deeply. You will also find plenty of references to Magnus and Coghill in his book and in his scientific papers. He refers to the German version of Magnus' big book and to papers in Dutch published by Magnus and his associates.
34. For a while it looked as if he was going to be able to carry out a major research project under the general direction of Dr Stanley Cobb, chief of psychiatry at Massachusetts General Hospital. Dr Cobb was interested and had proposed fifteen questions which he felt were probably answerable by a not too complicated investigation. But the study was vetoed by someone in the hospital administration at the last moment. ⁶
35. But a pupil of his who had recovered from a serious heart condition gave him \$500 for research and he decided to spend it on some preliminary research at the Institute for Applied Experimental Psychology in Tufts University in Massachusetts. Despite its rather odd name, Tufts is actually one of the top universities in the US. So getting the opportunity to do research there was quite a coup for him.
36. The project, which was carried out in 1949, was a fairly modest piece of work using the technique of electromyography – the measurement of electrical impulses in muscles – to examine muscle activity when people sat in their “habitual slouch”, when “sitting straight up” and when “guided” into a new sitting posture.
37. In a letter to Alexander in 1952, he says he was looking for some way of recording “*the total pattern of response*” – a very Coghillian phrase. He said their results showed that in the startle pattern, the initial tension appears in the trapezius

⁶ Jones (1976)p107

muscle in the neck and proceeds through the rest of the musculature.⁷

38. He then got another gift of \$500 for research from a pupil whose blood pressure, after thirty years of hypertension, had come down to normal. He used this to experiment with the use of various kinds of multiple-image photography to record patterns of movement in people.
39. These pilot projects led to him being appointed as a Research Associate at Tufts. A little later he was also appointed Lecturer in Classics at Tufts. He then managed to get a grant from the Carnegie Corporation which, in turn, led to support from the US Public Health Service for seven years.
40. When that came to an end, as he put it himself, he “accepted” a professorship in classics at Tufts and continued his research through government contracts and gifts from pupils.⁸
41. In approaching the science of the Technique, Jones felt he had a choice between two basic approaches. One is to do “before and after” studies, using two groups. One group gets lessons and the other, the control group does not and you see what is the difference between the two groups after a certain number of lessons. This is a perfectly reasonable approach and in a rather more sophisticated form has been used in a variety of studies on the AT.
42. While Jones did not dismiss this kind of study, he felt that it left too many loopholes for critics and sceptics. He quotes an experience of his own in which he taught a badly crippled girl of seventeen to walk.⁹ She had suffered from Still’s disease at nine months – it’s a form of juvenile rheumatoid arthritis. Her legs were desperately thin and she could only swing herself around on crutches.
43. Jones gave her lessons and she learned how to walk, first with the crutches and then without them. It happened in a large hospital and the process was observed by four doctors and several nurses. Everyone was delighted with the girl’s progress but they couldn’t accept that the Technique, as such, was making a physiological difference. They said that Jones had used suggestion to restore the girl’s confidence in herself.

⁷ Vineyard p9

⁸ Ibid. p108

⁹ Jones (1976)p95

44. So even strong positive results are not necessarily persuasive since they might be explained by improved motivation or the placebo effect or something else the person was doing.
45. Similarly, negative results, or the fact that no change occurred, may not be a reflection on the Technique as such but on how well it had been taught or how well the person learned to apply it.
46. Given these problems, Jones felt it would be scientifically more convincing if he could find a way of identifying the immediate physiological effects of the Technique in practice.
47. He decided to see if he could devise a way of correlating the feelings of ease and lightness people experience when having a lesson with objective measurements of what is happening in the neuromuscular system at the same time.¹⁰ He summed it up as studying *“the physiological correlates of the kinaesthetic effects that can be produced in a single lesson.”*¹¹
48. This is much more difficult than before-and-after studies. But Jones felt that it would take him to the heart of the issue. It was what Chris Stevens was trying to do in his work in Surrey University up to the time of his death some years ago.
49. One of the main investigatory methods used by Jones and his assistants was multiple image photography. They attached small lights to people and as they did things like getting in and out of a chair, in their normal way and under Alexandrian guidance, the camera recorded the successive stages of the actions.
50. For the technically minded among you, they worked in a darkened room and used a camera which instead of a shutter had a disc with slots in it rotating in front of the lens.
51. Jones found that the feelings of ease and lightness experienced when actions were carried out with Alexandrian guidance could be correlated with changes in way the body carried out the actions. You can see examples of these multiple image photographs in Jones’ book.
52. They also used electromyography – measurements of the electrical activity in muscles – to compare levels of muscular

¹⁰ Ibid. pp 107-109

¹¹ Ibid. p108

activity, when people were carrying out simple activities in their normal manner and under Alexander guidance.

53. One of these experiments was measuring the activity of the sternocleidomastoids and other shoulder-neck muscles of people sitting in a chair. They found that asking people to sit in their “best” posture involved increased muscular activity, whereas the “guided Alexandrian” posture involved no increase in muscle activity.

54. They also used x-ray photos of people’s necks to examine the difference between the habitual relationship between the neck and head and how it was when the head was guided into a freer Alexandrian relationship. This is getting to the heart of Alexander’s ideas about the head neck relationship and *the primary control*.

55. Jones says

*The experimental (ie Alexandrian) posture is again distinguished by greater intervertebral distance, forward movement of sella turcica and greater distance between the markers indicating the length of the sternocleidomastoid muscle.*¹²

56. The *sella turcica* is a little depression in the base of the skull just forward of where the spinal cord enters the skull. What Jones’ x-ray photos were showing was a less compressed neck and less tightened sternocleidomastoids.

57. In other experiments they used a force platform – a sophisticated type of bathroom scales – to compare the force people exerted on the ground when getting up from a chair in their habitual way and in a guided Alexandrian way. With one subject, they found that when the movement was guided, the force exerted was 25 lbs (about 11 kg) less than when the person heaved themselves out in their habitual way.

58. Jones published a stream of scientific papers as a result of all this work most of which are in his *Collected Writings*. Missy Vineyard says his best was the one that was first published in the *Psychological Review* in 1965 under the riveting title of *Method for Changing Stereotyped Response Patterns by the Inhibition of Certain Postural Sets*.

59. I fully agree. It is an excellent paper.

¹² Ibid. p119

60. In *Freedom to Change*, Jones more or less pulls all his research work together in a chapter entitled *What is the mechanism?* There is a paragraph which summarises where he had reached

In malposture, muscles in various combinations and degrees of tension have shortened, displacing the head or holding it in a fixed position. Head displacement would have an adverse effect on the rest of the body partly because of the added weight and strain put on muscles and ligaments, but largely, I believe, because of interference in the righting reflexes by abnormal pressure on the joints of the neck...The procedures used in the Alexander Technique establish a new dynamic balance among the forces acting on the head so as to allow more of the postural work to be done by disks and ligaments and by muscles acting at their optimal length.¹³

61. This takes us back again to Magnus and Sherrington's discoveries about the postural reflexes. If we get the head-neck relationship wrong by pulling back and down, we find our whole muscular mechanism is distorted. We wind up tightening and twisting all over the place instead of allowing the system to work as it should.
62. Jones died as he was putting the finishing touches to his book so we will never know how much further he would have been able to take things had he lived.
63. I remember when I first read his books that I felt rather disappointed that they did not deliver the scientific knock-out blow for which I was looking. But going back over them for these talks, I was considerably more impressed. There is a lot of very good stuff there and I have only begun to get the true measure of it. I will certainly be going back to it.
64. Like some of the other people who have been attracted to the Alexander Technique, Frank Pierce Jones really does seem to have been quite a remarkable man.
65. When he died of brain cancer in 1975, at the age of 70, he had become a full professor of psychology at Tufts, he was emeritus professor of classics, he could speak Greek and Latin fluently, he had a thriving Alexander teaching practice and he

¹³ Ibid. p148

had published twenty four scientific papers as well as numerous articles and a book on the AT.

References

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

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

--- (1998) *Frank Pierce Jones: collected writings on the Alexander Technique* - Alexander Technique Archives, Cambridge, Mass.