

## No 22 NIKOLAAS TINBERGEN (II)

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CTC

30 April 2013

1. The last time I told you about the life of Nikolaas (Niko) Tinbergen. He was the joint winner of a Nobel Prize in 1973 for his contribution to the development of the new science of animal behaviour or “ethology”.
2. I also told you about how he had used half his acceptance speech to sing the praises of the Alexander Technique.
3. As for the Nobel speech, there was a certain amount of disapproval from the scientific community. His biographer Hans Kruuk, said:

*For an animal behaviour expert to devote almost half a Nobel lecture, when the world’s finest were listening, to some minimal experience with an ‘alternative’, non-scientific technique to improve human body posture and movement, was totally out of order. Afterwards, he was made to realize this in no uncertain manner.<sup>1</sup>*

4. I have no doubt that at the time, many of the scientists in the audience and the wider scientific community would have agreed that Tinbergen had misused this important scientific occasion to publicise his ideas on subjects outside his area of scientific expertise. But there were no riots by scientists in Stockholm.
5. The criticism of Tinbergen to which Kruuk refers came from a completely unexpected source. It was by a prominent supporter of the AT, a man called Edward Maisel.
6. Edward Maisel who died in 2008 was born in New York in 1937. He was a prominent writer on Tai Chi, and on American music. He was a director of the American Physical Fitness Research Institute and a consultant to the President’s Council on Physical Fitness.
7. He was also a big fan of the Alexander Technique and studied it intensively though he never became a teacher. Ruth Murray met him in New York and told me he was certainly well-informed and devoted to the Technique.
8. He published a book about it called *The resurrection of the body* in 1967. This was republished as *The Alexander Technique* in 1995.<sup>2</sup>

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<sup>1</sup> Kruuk (2003) p280

<sup>2</sup> Maisel (1967)

9. It has a long and well-thought-out Introduction by Maisel which provides a biography of Alexander and an account of the Technique. It takes a refreshingly non-hero-worshipping tone in some of its accounts of Alexander and his little ways.
10. In addition to the Introduction, the book has long extracts from Alexander's books selected by Maisel. It has the *Teaching Aphorisms* that Ethel Webb copied down from listening to Alexander teaching during the 1930s. It reprints Dewey and Coghill's prefaces and probably the best technical paper on the Technique written by Frank Pierce Jones. It is as good an introductory book as any for a serious student of the Technique.
11. The surprising thing is that it was Maisel, the strong supporter of the Technique, rather than one of the scientists at the Nobel ceremony, who was the most upset by Tinbergen's Nobel speech. He was so annoyed that he contacted the *New Scientist* magazine and gave an interview to a very reputable science author and journalist called Roger Lewin.
12. Lewin's article based on the interview was published in the *New Scientist* on 31 October 1974, almost a year after the Nobel ceremony. It was called *Did Nobelist go too far in Advocating Alexander Technique?*
13. The article begins by saying:

*Professor Nikolaas Tinbergen used his Nobel Prize speech last year in an apparently unique attempt to promote an obscure body and mind improvement method. But Tinbergen has now backed down somewhat and is involved in a row with another advocate of the technique. Edward Maisel author of a recent book on the subject, **The Alexander Technique**, alleged to New Scientist that Tinbergen had failed to apply the same critical thinking to the Alexander technique as he had to the work that won him the prize.<sup>3</sup>*
14. The article quotes Maisel as saying of Tinbergen's enthusiasm for the Technique that:

*These dramatic public conversions have unfortunately always been part of the history of the technique, and they have always damaged sober consideration of its merits.*

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<sup>3</sup> Lewin (1974)p344

15. And rather than providing useful publicity, Maisel said he felt Tinbergen's claims were "...a sad blow to the future of the technique."
16. The article goes on to quote Maisel as particularly disagreeing with Wilfred Barlow's book *The Alexander Principle* and said that Maisel had accused Barlow of serious inaccuracies and exaggerated claims for the health benefits of the Technique.
17. It was quite a fierce critique and led to an acrimonious correspondence which went on for several weeks in the *New Scientist*. There was also a similar argument in the American scientific magazine *Science*.
18. Tinbergen himself wrote to the *New Scientist* to say he was not backing down on his praise of the Technique and that his experience over the year since his speech had, if anything, strengthened his opinion that the AT often has beneficial effects.
19. Patrick Macdonald wrote a letter that was very critical of Tinbergen. He said that he, as "*the present senior practising teacher of the technique in this country, cannot allow Professor Tinbergen's ludicrous description of it in his Nobel address to pass without comment.*"<sup>4</sup>
20. Wilfred Barlow, who had apparently been given Tinbergen's Nobel speech to check through before it was delivered, was unsurprisingly quite put out by all of this. He joined in on the other side and wrote a couple of letters of his own to the *New Scientist*.
21. He defended what he wrote in his own book and said in one of his letters that

*It is difficult to understand why any Alexander teacher should not be delighted by Professor Tinbergen's interest in their work. It can only be that they have not read his seminal study, **Study of Instinct**, and do not appreciate the subtlety of an approach that is so obviously "up their street".*<sup>5</sup>
22. It was all good polemical fun and makes interesting reading but nothing, of course, was resolved. But it did have a beneficial effect.
23. As I mentioned in the last talk, the AT was going through a very low phase with some people talking of it fading away

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<sup>4</sup> Letter to *New Scientist* 14 November 1974

<sup>5</sup> Letter to *New Scientist* 12 December 1974

completely. But Tinbergen's Nobel lecture, as well as the publicity surrounding it, together with Barlow's book which was published in 1973, gave it a lot of publicity. Looking back over the history of the Technique, Michael Bloch, who wrote the biography of Alexander in 2004, called it a turning point <sup>6</sup>.

24. The next chapter in the Tinbergen saga was when he gave the 1976 Alexander Memorial Lecture which was entitled *Use and Misuse in Evolutionary Perspective*. This is published in Barlow's book *More Talk of Alexander*.<sup>7</sup>

25. In this lecture, Tinbergen is very modest about his knowledge of the Technique. He says that having been

*...a pupil for no more than three years, it would be presumptuous if I were to pronounce on the Technique itself, how it works and why it works. That it can have strikingly beneficial effects I can, like many others before me, testify on the basis of changes I have observed in quite a number of my acquaintances and in myself.*<sup>8</sup>

26. Having disclaimed any expertise on the workings of the Technique itself, he looks at the whole question of misuse and how it arises. He says there are two basic views on this. One is that humans have still not fully evolved into the upright position.

27. People who hold this view

*...assume that man's evolution as an upright walking, bipedal primate has not yet been completed and that, as Alexander himself suggested, conscious, rational education of our minds and bodies must "take over" from the genetic evolution which has moulded us until now.*<sup>9</sup>

28. The question of upright walking or bipedalism has long been of interest to AT people. A good discussion on its evolution, can be found in a little book called *Man, the tottering biped: the evolution of his posture, poise and skill*<sup>10</sup> by Philip Tobias which was in 1992 published by the University of New South Wales.

29. Tobias, incidentally, worked with Raymond Dart in Witwatersrand University in Johannesburg and succeeded him as Dean of the Faculty of Medicine. I will be having plenty to say about Dart in later talks.

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<sup>6</sup> Bloch (2004)242

<sup>7</sup> Barlow (1978)

<sup>8</sup> Ibid.234

<sup>9</sup> Ibid.234

<sup>10</sup> Tobias (1992)

30. The other view of our misuse is that it is a fairly recent phenomenon, a result of the pressures that modern society places upon us. In this perspective, we are nicely adapted to our bipedal life as hunter gatherers and it is the habits and pressures of modern life that are leading us to misuse ourselves.
31. In order to assess which of these views is the most plausible, Tinbergen does a quick tour of our evolutionary history. He says that, in his view, the common belief that "*our evolution towards uprightiness and bipedalism has not yet completed*"<sup>11</sup> is wrong. As he says, we have had five million years to learn how to walk properly.
32. He comes very firmly down on the side that our misuse is a feature of our changing society rather than unfinished genetic evolution.
33. The important conclusion he draws from this is that our patterns of misuse have been acquired personally by each of us in our own lifetimes rather than being genetically inherited. As Alexander teachers, we are not pushing evolution forward, as Alexander sometimes suggests, but are engaged in the more practical and immediate business of undoing acquired habits of misuse.
34. Tinbergen finishes by saying
- From what I have said it will be obvious that, once I began to pay attention to the problem of the origin of misuse, I became even more convinced than I had been on purely empirical grounds, not only of the great potential of the Alexander Technique, but also of its biological soundness and plausibility.*<sup>12</sup>
35. That sounds reasonable and pleasingly quotable to AT people but unfortunately, some of those present at the lecture were still thinking of the Nobel Lecture and the *New Scientist* correspondence. I gather that Tinbergen was strongly attacked for talking about the AT as treatment or therapy rather than education in his Nobel speech.
36. Others who were there felt this was a very rude way to treat such a distinguished guest. Wilfred Barlow who chaired the meeting, apparently lost his temper completely. A couple of people, including Dilys Carrington, who were there told me they remembered it as a very awkward evening.

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<sup>11</sup> Barlow (1978)p248

<sup>12</sup> Barlow (1978)248

37. That seems to have been the end of any formal or scientific , aged involvement by Tinbergen in the AT and I do not think he gave any other talks or published anything further about it.
38. He had a stroke in 1983 and became quite feeble. He died in 1988 at the age of eighty-one.
39. In his biography, published in 2003, Tinbergen's biographer Hans Kruuk, despite being quite a hero-worshipper, was extremely critical of his involvement with the Technique.
40. This chapter in Kruuk's book concludes with the remark that "*All in all, perhaps the Nobel lecture would be best forgotten.*"<sup>13</sup> A review of the biography which was published in January 2004 in the leading scientific journal *Nature* refers to Tinbergen's involvement in the "*rather wacky Alexander technique for improving body posture.*"<sup>14</sup>
41. When I read Kruuk's biography of Tinbergen I was quite disappointed by all of this and decided to find out what I could about it. I was particularly curious about whether Tinbergen had been upset by the reaction to his Alexander Memorial lecture and whether this had led to him losing interest in the AT.
42. I managed to track down his daughter Helen in Oxford and wrote to her and asked her if it was true that he had been upset by the reaction to his Alexander Lecture and had lost interest in the Technique as a result.
43. In her reply, she said
- My father certainly stayed interested in the technique at least until he had a stroke about 5 years before his death...I don't think that my father was particularly upset by the reception by teachers of his lecture.*
44. I had also asked her if she thought the AT fitted in with Tinbergen's work as an ethologist and she said
- "As for fitting in with my father's earlier work I'm afraid I haven't a clue. I'm a musician not a scientist and have no knowledge of my father's work."*
45. I had also mentioned Kruuk's negative assessment of his involvement with the Technique and she said

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<sup>13</sup> Ibid.283

<sup>14</sup> John Krebs *Nature* Vol 427, 22 January 2004

*I don't think Hans understood about the technique – indeed it is very hard to do so unless one has experienced it.*

46. Elisabeth Walker also says in her autobiography that far from losing interest in the AT, Tinbergen continued with it. She said that after he got the Nobel Prize

*Niko continued to have lessons for another nine years, finding it of use for a time to relieve depression, from which he suffered for some time. In 1980 we stayed with them in their idyllic holiday cottage...in Westmoreland.<sup>15</sup>*

47. As AT professionals are very happy to testify publicly to the beneficial effects it has whenever we can get people to listen to us. But having it said in a Nobel Prize lecture carries a lot more weight and a much wider readership than we can normally manage on our websites. So we can be very grateful to Niko Tinbergen that he was prepared to use the most important public occasion in his life to tell the world about the Technique.

48. But our inheritance from Tinbergen is not just the publicity he gained for us a crucial time in our history. In the Nobel speech he gave us some hints at how he thought the AT works at a neurophysiological level.

49. This is an element in his legacy which does not receive the attention and the follow-up it deserves. I think he had more to offer us than we have generally realised.

50. I will try to tell about those ideas of Tinbergen's the next time.

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<sup>15</sup> Walker (2009)p138