

THEILER – HIS PERSONAL  
SIGNIFICANCE TODAY

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DELIVERED ON THE OCCASION OF THE FIRST  
FACULTY DAY OF THE FACULTY OF VETERINARY  
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It may seem absurd that, in the light of a massive tome recording the life and times of Sir Arnold Theiler, there should be anything left to say about him. On the contrary, there is a great deal of information – of singular appropriateness today – which, on your kind invitation, I propose to impart. It is not the duty of a biographer to moralise or to speculate on possible sequelae of a great man's life; but the passage of time qualifies a keen observer for that role. May I add that when speaking of Arnold, I am also speaking of Lady Theiler without whom he could hardly have lived. It is a sober warning to all veterinarians to choose their life-mates carefully.

I saw Theiler only twice in my life – first when I was a very small child. He came to the Dynamite Factory near Somerset West (subsequently the Cape Explosive Works) of which my father was the manager. His mission was to discover whether the newly-erected Fertiliser Factory (still a feature of the landscape near Firgrove) could supply phosphates suitable for combatting Lam-siekte. All I remember about the visit was a shiny black-gloved hand and a stocky bearded man much admired by my father.

On the second occasion, I sat one seat away from him in the Jameson Hall of Cape Town University. I was

awaiting the awarding of my M.A.-degree subsequent to his being invested with his sixth honoris causa doctorate. Of that occasion I remember again the black-gloved hand and the short, stocky, quietly-dynamic man. His was definitely a presence. Today I know everything about him vividly and intimately; all his triumphs and failings and unfulfilled ideals.

In Switzerland, the Theiler family, led by Arnold's nephew Alfred (a most endearing man practising as a civil engineer who, to my great sorrow, died before my work was completed), went to extravagant lengths to impress upon me that Arnold had come of peasant stock. They took me to call on relatives living as small-holders, on perhaps, only an acre of land, in a simple wooden house of which the lower floor accommodated six cows. That was all. They lived virtually in poverty and had only cherries to offer us from their single tree. I was taken to his birthplace at Frick, his secondary school at Aarau, the first Veterinary College he attended at Berne University and the second at Zurich. They also showed me the village – Beromunster – where he first tried to practise in a hostile Canton. Other members of the family including his two nieces, accompanied us. There emerged in me a strong admiration for the courage and doggedness of this young man in a highly competitive and depressed community, who had sought salvation by emigration.

I remember too that he had been educated and had grown up in the aura generated by Pasteur, Robert

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Koch and others around the new science of Bacteriology. Theiler had served as an assistant in the Bacteriological Department of Berne University. Although he had hoped to emigrate to South America he acted on mistaken advice and in fact sailed for South Africa.

We all know what happened to Arnold Theiler when he landed at the Cape and lost his baggage together with his indispensable instruments. Later, in the Transvaal, he lost his left hand. It is an enduring memorial to perseverance that the only woman in his life, Emma Jegge who, on receiving his letter explaining about his accident and advising her not to join him, replied that now more than ever he needed her and she came out soon after.

From this unfortunate introduction to a foreign country whose language he did not understand, there emerged in Theiler a strong compassion for suffering animals. He could hardly bear to watch the barbarous treatment inflicted on them in the name of cures – bags of suffocating hot bran round their heads to deal with Horse Sickness, unhygienic inoculation against diseases administered by ignorant savages and resulting in valuable animals becoming infected and dying, or merely losing their tails – essential protection against flies. Nor could he bear the stolid indifference of the farmers (and even educated citizens) to the existence of Veterinary Science. The attitudes of both sections of the community were hostile – with one exception – the famous farmer and public servant, Danie Erasmus.

In time and in the name of Science, Theiler probably did worse things himself in treating animals but with good reason. By then, his compassion extended to the people of South Africa whose defective agrarian economy deprived them of the benefits of sound agricultural practice. This situation was to reach its apogee with the recurrent Riderpest epidemic.

Essentially a student with a limitless love of scientific literature and periodicals, Theiler ran up enormous bills with his Swiss bookseller. Coming from a competitive society, he had to keep up with the latest developments, particularly as he was confronted by a host of diseases unscientifically named and barbarously treated. He had made a preliminary investigation of them before his accident but without his microscope and instruments. After brooding for months in the old *Volkshospitaal* in Pretoria and by then assured of Emma's unflinching support, he resolved that research was his best road to success, though he would be compelled to practice in order to earn a living.

He became a free-lance veterinary surgeon in Johannesburg but spent much of his time testing his hypotheses with such animals and equipment as he could obtain. Suspecting the forthcoming Jameson Raid, he moved to the outskirts of Pretoria and in desperation started raising pigs and poultry to support his family. Providentially for him, the Rinderpest epidemic moved relentlessly southward and President Kruger sent him to the then Rhodesia to identify the disease and devise preventative measures. He thus became persona grata with the Transvaal Republican Government.

It is an epic story which I will not retail. Suffice it to say that when in 1899, Theiler applied to the *Uitvoeringraad* for permission and a subsidy to attend the Seventh International Veterinary Conference in Baden Baden, Germany, he had sufficient standing with the government to have his request granted. In my opinion, this

was the most significant of turning points in his life. It was then that he became truly inspired and subsequently burnt with an unquenchable enthusiasm.

But here I must diverge for a moment to note a curious fact. International Veterinary Conferences had been inaugurated in 1863 (four years before Theiler was born) by a stubborn Scots veterinarian, John Gamgee who, at first vainly but later with extraordinary success, circularised his colleagues throughout Europe. A year or so ago, a Mrs D'Arcy Thompson published a book entitled "Forgotten Corners of the Cape" which included Montagu (where I live) and I wrote to her in furious remonstrance. It emerged that she was the grand-niece of John Gamgee and she later brought me the published history of the family "THE REMARKABLE GAMGEES – A Story of Achievement" written by a relative Ruth D'Arcy and published by the Ramsay Head Press in Edinburgh in 1974. I wish I had known about it during my research. If it is not in the Onderstepoort Library I hope it will be acquired soon.

John Gamgee and his followers brought his enterprise to the point where Conferences were started and attended by Royalty. It is regrettable that ours do not have the same significance today; but the situation can and will, I hope, be rectified. The life of the whole nation largely depends on the success of these conferences.

Theiler became inspired. He conferred with the most knowledgeable scientists of his day and was almost unique in his knowledge of tropical animal diseases. He associated with research scientists and distinguished bacteriologists from all over the world. His role among them became clear. He became a man with a mission and now he had similar and inspired men throughout the world to help him. From then on, they corresponded with one another until their deaths.

A most inevitable, misfortune dogged his return. He caught the last train to Pretoria before war was declared. As had happened once before, his baggage with all his new apparatus and literature, was lost. It only reached him long after the British occupied the Transvaal.

It had been popularly supposed at the time that Paul Kruger was nothing but a feeble-minded peasant. A man who had toured Europe three times as leader of Government deputations between 1877 and 1883 was hardly likely to fit that image. He and his Executive Council, under pressure from the dreadful Rinderpest and recurring animal diseases, had voted money to build Theiler a corrugated-iron laboratory with concomitant installations at Daspoort. Theiler staffed it with Swiss immigrants, the only knowledgeable men then available but they subsequently became a source of resentment. Here he continued his bacteriological and other investigations, particularly into Horse Sickness, which he and Emma had been conducting in the backyard of their small-holding (Emma continued work while he was overseas and kept his cultures alive).

It was neither appreciation nor high-mindedness that impelled the occupying British Army to seek him out and employ him. They were about to lose the guerilla war through animal diseases, particularly Horse Sickness which nullified any cavalry action. They gave him carte blanche. At last his day had dawned after a gloom-infused night – which, let it be emphatically stated, would have felled a lesser man unsupported by Emma.

What ensued has been recorded in the greatest detail

and I will not repeat these facts. But there are certain factors which, in my estimation, require re-emphasis. With some of the world's experts in his field in British Army uniform assisting him, Theiler instituted the multi-disciplinary approach to veterinary problems. First the British and then the Transvaal Colonial Government gave him full rein in securing the co-operation of imported specialists such as Burt-Davy the botanist, Pole Evans the plant pathologist, ecologists, agronomists, entomologists, zoologists, anyone who would cast light on animal diseases – even ignorant farmers. Together they made enormous advances in veterinary research under appalling working conditions.

Today the multi-disciplined technique is commonplace. Even I at this moment, am closely concerned in the work of the Department of Environmental Studies of the University of Cape Town in which there could hardly be a more widely-flung field nor more interesting results. The CSIR is of course a more heroic example of the practice of this technique, but in Theiler's early days, the idea was preposterous.

At the other end of the scale, he had the highest regard for the apparently fanciful and superstitious theories of the farmers, from the backveld, and he would sit for hours patiently discussing their ways of treating animal diseases and the sometimes ludicrous practices that were still maintained throughout South Africa. As much as he co-ordinated expert knowledge, he kept an open mind and had high respect for the sons of the soil.

Of this period, I would like to mention that another of Theiler's outstanding contributions to the status quo which we now enjoy and which brings us here today, was his relentless campaigning for a South African Veterinary Association. The ludicrous image of the "Horse Doctor" continued. It might interest you to know that after reading Theiler's biography, a friend in Germany informed me that when a veterinary surgeon was summoned to deal with the animals on the family estate in the late thirties (in, be it noted, the home of Koch and while Theiler was still alive), the veterinarian took his meals with the servants in the kitchen.

Theiler worked endlessly to elevate the profession to its proper level. He would have scorned the practice of cosmetic surgery, however rewarding it was financially. To him the veterinary scientists and practitioners basically upheld the health and subsistence of the nation and were deserving of the highest honour and repute. The view is unassailable but not yet fully acknowledged. I am happy to be here today on this distinguished occasion and to have the opportunity both to reiterate this fact and to express the hope that the popularly yclept "vet" holds his and her head high and gratefully bears the responsibility of enhancing the profession.

When I read veterinary scientific publications and the agricultural supplements of various newspapers today, I am wryly amazed to note the wholehearted acceptance of scientific method and application by farmers in every field of agriculture. It was perhaps Theiler's greatest battle to convince people of this fact. When he retired from Onderstepoort in 1918, Gilles de Kock spoke at the farewell ceremony of his stiff-necked Arikaner brethren, remarking that in the distant districts, farmers still talked of *daardie ou kèrel Taylor*.

He got on with almost everyone – from Her Royal Highness Princess Alice, Countess of Athlone (who found him infinitely diverting and admired his

dynamism and thereby hangs an amusing tale not to be told now) to his African labourers. But these personal relationships were marred by myopia and certain faults of character often found in dedicated men.

With the possible exception of his younger daughter Gertrud who acceded to his ambitions for her and became a world-famous parasitologist, he never understood his children. His younger son Max, South Africa's first Nobel Prize winner, went his own way. Theiler was incapable of accepting human beings as having frailties and limitations and respected only their capabilities. Empathy was beyond him. He was authoritarian to the point of being bullying and pathetic private letters attest to his bafflement in failing to understand the psychological and other difficulties of his offspring. He saw and experienced only – as well he might – the glory of Onderstepoort which was now acknowledged throughout the world.

The same attitude deeply afflicted his multi-national staff. Theiler had a clear and vivid vision of the necessity for rigidly disciplined research by men devoted to benefitting humanity. If, on his regular morning inspections, he noted that a student had written "N.U." on the report of the animal case in his case, he would immediately question him. "Nothing Unusual" was not to be expected in a sick animal.

He was authoritarian in his methods, failing entirely to recognise that with his staff, he was dealing with sentient human beings. I think it was Professor Bisschop who told me how Theiler had driven from Onderstepoort to the Pretoria station to fetch his latest recruit, W.H. Andrews after a scorching journey from the Cape. Fresh from England, Andrews was laid very low; but Theiler occupied the entire journey back to Onderstepoort instructing him in his new duties which were to begin at dawn the next day. He could descend to browbeating and haranguing (known among the personnel as "barking") and there were indeed weaklings among the staff who, projected into a situation demanding super-human achievement, might have benefitted from power-play and risen to the occasion. On the whole however, Theiler was a hard but rewarding task-master, his eye ever upon the sanctity of scientific method and the unique reputation of Onderstepoort throughout the world.

In the same manner, practitioners in every field of Science were brow-beaten by Theiler into delivering papers at the meeting of the Transvaal Biology Society of which he was a co-founder. Some were very bad but that is neither here nor there. What was significant was that he encouraged women to attend and experts among them to contribute lectures. The Society later burgeoned into a significant force.

He never became reconciled with Government procedures and, like many men of humble birth, easily took offence. He was always a thorn in the flesh of the Union Government, often with every justification. The crowning glory that he craved was that his Veterinary Research Laboratory be named for him like The Pasteur Institute, the Koch Institute and other tributes to renowned scientists; but it was never even mooted and Onderstepoort it had become and ever would remain.

When the Prime Minister, General Smuts unveiled Theiler's statue at Onderstepoort in 1939 (immediately after commencement of the War), he generously eulogised the man with whom he had been long and closely associated. "I have sometimes felt", he said, "that in the years past, I did not do my duty and give his

name to this place. It is now too late for that. This could have been 'The Arnold Theiler Institute'". In my opinion, it is not too late to alter a meaningless name, virtually unpronounceable outside South Africa, to "The Theiler Institute" in deference to its founder who was certainly equal to and perhaps surpassed his peers. The year 1986 in which the fiftieth anniversary of his death will be commemorated, would be a fitting time to rename the Institute and so justice would be done. Perhaps thought could be given to such a step.

It is not appropriate for me to enter into Theiler's scientific achievements. They are widely recorded in official Annual Reports, in scientific journals and elsewhere. However I feel qualified to emphasise that here was a man of talent, vision and application who inaugurated a profession of infinite value in this country and who by his example, inspired its immediate exponents to unparalleled achievements. Few survive (I

had the honour of consulting some of the most distinguished); but now, to those who care, his vision endures and should be the inspiration for further advances and achievements. The existence of his Faculty, founded by Theiler, is the vehicle for continuing his inspired work.

It behoves us all – not to try to emulate great men and women but to acknowledge and practice their values: their integrity, their determination to progress, to go forward and not to rest on the achievements of others; their dedication to thorough investigation and their pride in their studies and their profession.

Mr Chairman, I venture to offer my humble good wishes to all those – academics and students – charged with preserving and enhancing the heritage conferred on us by this exceptional visionary, Arnold Theiler. Thank you for allowing me to do so.