

### **GENOCIDE:** From the Second Empire's Namibia, to the Third Reich's Birkenau

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Affiliation: University of New England and University of New South Wales,

Australia

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#### Abstract:

The concept of the Empire (Reich) of the German Nations was first established by Otto I in the year 962. It was revived from the defunct Holy Roman Medieval one at a post war conference in Versailles, in 1871. This revival became a reality by the unification of the dispersed German states, with Otto v. Bismarck named as chancellor and William I, as emperor.(1871-88). It was however, in 1884 at a meeting in Berlin, that the European states divided the potential African colonies. Consequently, Germany was granted a colony on the South/Western African coast, in today's Namibia, the land of Hehero and Nama. Starting as an economic enterprise (tobacco, metals, diamonds, and cattle), this soon became a racially driven Genocide, which included medical experiments. The similarities of the Second Reich with the coming Third Reich were described by many historians. Given were various epitaphs such as the Second Reich being a 'blueprint or "precursor" of the Third one, or better yet a "rehearsal" and that the Vandalism in Namibia was an inspiration for the Barbarity in Birkenau. Historians of the Third Reich could have been surprised to learn that the Nazi terminology already existed in the previous Reich. The history was outlined in detail by



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### GENOCIDE: From the Second Empire's Namibia, to the Third Reich's Birkenau

George M.Weisz, MD, FRACS, FAMLC. MA. gmweisz1@aol.com

School of Humanities University of New South Wales, Sydney and University of New England Armidale, Australia





Hereros Jews

#### **Abstract**

The concept of the Empire (Reich) of the German Nations was first established by Otto I in the year 962. It was revived from the defunct Holy Roman Medieval one at a post-war conference in Versailles, in 1871. This revival became a reality by the unification of the dispersed German states, with Otto v. Bismarck named as





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Historians of the Third Reich could have been surprised to learn that the Nazi terminology already existed in the previous Reich. The history was outlined in detail by several writers [1-10]. It was in exemplary summaries by Madley, by Faber-Jonker and Erichsen on which this review is resting. There was one challenge to the thesis, asserting that German colonial behaviour was shaped by specific local conditions [3]. However, this theory would not be able to negate the impression of a direct connection between the Empires on political, military, anthropological and medical/scientific grounds. What was similar? What was the precursor??





# From the Second Empire to the Third Reich: The political terminology connection: [1-14]:

The African Hehero and Nama people lived in the harsh climate of the Southwest coast of Africa, a narrow strip between the Kalahari Desert and the coast of the Indian Ocean. They cultivated their land, and herded their cattle, at times being nomads. At the start, there was cooperation with the new settlers. This, even though the invading German authorities had from the start a predominantly White New Africa policy wherein the native populations would be put onto reserves and their land distributed among settlers and companies. A term came to be introduced for living, namely the "Lebensraum", well known to historians of the Third Reich and used as justification for invasions in WWII. This term was taken from Darwinian philosophy by Oskar Peschel in 1888 [11] and applied in political science by Friedrich Ratzel in 1901 [12].

Progressively, the peaceful Hereros were subjugated, with the intention that males would be used as slave labourers and women used as house servants in the daytime and leisure objects at night time. The victorious General Lothar v. Throta stated "The Herero nation must leave the country, if it refuses, I shall compel it to do so with cannon" [2,8]

It was within "Vernichtungslager"),(a term used in the Reichstag in 1904), or extermination lager, first established on the Shark (or Death) coastal rock Island, that the detainees were exposed to the harshness of the sea in the daytime and to the cold wind at night. They settled in tents and were connected with the mainland via a rocky causeway. The Africans wore name tags on metal plates around their necks, not dissimilar to the tattoos on the forearms of detainees in Birkenau.

On arrival, General v. Trotha, with the instruction from Chancellor Bullow and subscribed by Emperor Wilhelm II,(1888-1918), the Herero prisoners were herded in labour camps "Konzentrationlager" concentration camp, (yet another term familiar to future historians). It was a clear racial Struggle, the principle published in the official paper "Der Kampf" (The struggle, a name to become very familiar to later historians): This bold enterprise shows up in the most brilliant light the ruthless energy of the German command...The arid desert is to complete what the German Army had begun: the extermination of the Herero nation: But the troops will remain conscious of the good reputation of the German soldier. [2,8,11].

In the German Reichstag (Parliament) the topic of "Endlosung", (Final solution) of Africans first surfaced in 1904, a well-known and most unfortunate terminology





of the Third Reich. Indeed, at the end of the African conquest, there was the extermination of 45-70% of the Herero and of some 20-40% of the Nama (figures varying from different sources). There would be no better connection than the comparison between Trotha in the Second Empire and Heydrich in the Third Reich. [1,2,14].

# From the Second Empire to the Third Reich: The military connections [1-8]:

The first Governor of the African territory, Heinrich Goering, was the father of the future Marshal of the Third Reich, Herman Goering, brought up with a fanatic ideology.

von **T**he second governor was General Epp, who unleashed the "Vernichtungskrieg",(extermination wars) conducted accord with the in "Vernichtungsbefehl" (Extermination order), a term well known in the future Third Reich. At the end of his colonial duties, Epp was back in Bavaria, taking part in the Freikorps revolution of 1919, as a member of the brown-shirted colonial Schutztruppe or ST. Soon, the group becomes the black-shirted Schutzstaffel, the SS in the Third Reich. General v. Epp's career reached the Governorship of the State during the Third Reich, making Bavaria "Juden und Zigeuner frei" (free of Jews and Sinti) and establishing the Dachau concentration camp.



The comparison is best imaged in a photo of the two: V. Epp sitting next to Goering at Nuremberg in 1946[1,4,5].





### **Connections between the Empires:**

Terminology	2 <sup>nd</sup> Reich	3 <sup>rd</sup> Reich
Years	1884-1919	1933-45
Head of State	Kaiser	Fuehrer
Governors	Friedrich Goering, Lothar; v. Epp	Herman Goering, H. Frank; R. Heydrich.
Reason for war	Lebensraum 1904	Lebensraum. 1939
Ideology: Racism:	"Der Kamp" official	"Mein Kampf" book
People occupied	Herero, Nama (hotentots, Baboons)	Subhuman: Slavs Inhuman Jews, Sinti
Detention reserves	Konzentrationslager, Vermichtungs lager: Shark Island	Konzentrationslager, Vermichtungs lager: Birkenau
Security storm troupes	Schutztruppe, ST	Schutzstaffel, SS
Vernichtungskrieg:	Gen. Trotha: 1904: annihilation	Gen. Rundstedt,1939: siege, starvation
Extermination	well poisoning, dysentery, lung disease, scurvy	gas: monoxide, cyanide, TB, Starvation
Endlosung	75% Herero; 45-70% Nama	50% Jews(6 mil). Sinti ??
Nutrition	gradual caloric and qualitative reduction	Starvation is a progressive policy of death
Medical Experiments	Tuberculosis, Scurvy, syphilis,	Infections, low oxygen, transplants, freeze,





# From the Second Reich to the Third Reich: The Anthropological Connections.[7-10,13-17]:

During the early years of the century, extensive research was conducted with the intention of proving racial differences. They described the risk of racial contamination, the study of the mixed origin, The Mischlinge. The studies were conducted by several "scientists" of the Rassenkunde (racial) studies. These "scientific "studies were conducted on some 3000 skulls sent to Berlin in the early years of the 20th century, as were various other organs of the human body, brain, facial muscles and larynx.[9]

The order for the collection of human organs originated from the Chancellery of v. Bethamn-Hoollweg in 1911, sent to the Governor of Namibia; "My request is to have the opportunity to subject two or perhaps three brains for scientific study. If possible, to include Bushman, Nama, and Austral-Negros, it would be of immense value..."[9,14,16].

The chief scientist Eugen Fischer was an anthropologist and a racial researcher. He was in Namibia on a research post, just before WW1 [2]. In 1914, he requested an "acquisition of body parts: " a consignment of Bushman penises and ears" to be sent to Freiburg University where he was the head of the Racial Research Institute. In the 1930s, once becoming a member of the Nazi Party, his eugenic racial theories were publicised, and Fischer made a direct connection with the Third Reich. Indeed, Fischer moved from Freiburg University and became the Head of the Berlin University Institute for Anthropology, Human Heredity and Eugenics. There, he collaborates with Othmar v. Vershauer, the teacher and supervisor of Joseph Mengele.[8,9].

By training SS doctors in Eugenics and 'racial hygiene', Fischer would indoctrinate many future Nazi physicians. His further studies were on the size and perimeter of skulls and extremities, and the study on the origin of mixed children, The Rehoboter Bastards, namely of mixed African and European origin. His conclusion was identical to the future study of mixed children, namely on the "Rein Bastards", originating from French and African unions. "The result of all racial crossing is lowering of the level of the higher race; and physical and intellectual regression" [9].

Fischer hinted that once exhausting their benefits, these people ought to be executed. From 1913 onwards, there was a clear connection between the anthropological "scientific" ideas of the Second Reich and the ideology of 1933.





These ideas were adopted by the Fuehrer of the Third Reich in his book "My Kampf".

# From the Second Reich to the Third Reich: The Medical and "Scientific" Connections.[2,17-28]:

The story of the forefathers of the Third Reich was investigated only a century after the events but was extensive. Indeed, the "Angel of Death " in Birkenau had a forefather in Namibia, also called by the locals the "Angel of Death". [2].

This review presents a precursor to the Nazi physicians, a German colonial officer, between March 1905 and July 1907. These included unethical, criminal research studies and quasi-therapeutics on Africans in Shark Island, just off Namibia's capital.[15].

a. The food supply: A general lack of nutrition was one of the many factors that resulted in high mortality on the island. Coupled with insufficient shelter from the cold ocean climates, the lack of proper nutrition gave prisoners few chances to build up their resistance to diseases.

Quite dominant in the mortality line was the diminishing quantity of food, with 1190 calories a day (insufficient for long-term survival). Equally, it was the change from the usual African diet of milk and meat to a high-fibre diet of grains, rice, and flour, unknown to the tribes and inappropriately processed.[2,3].

b. The medical service: **HUGO Bofinger**, born in 1876 in Germany, studied medicine at the Military Academy in Berlin at the time when German Science surpassed the standard of even the great French and British institutions[16]. His doctoral thesis was on "Movements of the lower extremities in various diseases" a commentary on the movements in tuberculous and arthritic knees. This study was below the standard of any tertiary institution and would not be acceptable in our time. [18].

Dr Bofinger spent some time in variously located medical services in Germany, eventually being sent in 1905 to S/West Africa. Soon he became the chief in the concentration camp on Shark Island, with the position of Stabtartz. (Staff physician in the Army) [17].

Bofinger's activities were such that he was feared by all, deserving the given name of "Angel of Death". It was rumoured that anyone who entered the camp alive would not leave the same way. How much does this story remind us of the one in Birkenau?





His activities protected the German settlers, whilst experimenting on the local Africans. This occurred until July 1907, when he returned to Germany for medical services in the country. Subsequently, Dr Bofinger took part in WWI as a military officer, then during the Weimar interwar period as an Army officer(Garnisonarzt) in Stuttgart. During WWII, Bofinger worked in a Medical Insurance company, whilst his son became a leader in the Nazi Youth movement.

Dr Bofinger published a total of three journal articles, one on TB in chicken, one on appendicitis and one praiseworthy booklet, probably based on his experience in WWI.

Entitled "Medical School for Instruction and Self-instruction in first aid for Injuries, accidents and Damage to health caused by chemical warfare agents, in Addition to Instruction for dressing technology, patient transport, nursing and Disinfection" the book is difficult to read because of the old styled High German language and being printed within the gothic alphabet. It is useful in mass casualty and preparation in schools[19].

It was noted that Dr. Bofinger died of natural causes in 1946.

His major publication however was "Notes on Scurvy", namely his study on Africans:



It had an extensive description of this "still rather obscure disease" on which the textbooks are "very brief", as stated by Bofinger in 1910.[20]. This statement was given at the time when the world had the Virchoffs and Koch in Germany; Pasteur and Mantoux in Paris and Jenner and Lister in the British Islands. One must return to Naval and Medical history to evaluate the statements made by Hugo Bofinger on Scurvy, a devastating disease of Avitaminosis C.





The cause of this fatal hemorrhagic, debilitating, and painful disease, namely the lack of vitamin C, (or ascorbic acid), was yet to be recognised by the Nobel Committee on Szentgyorgyi in 1926. The history of the discovery is long [21-23].

It was in the 15 Century that Portuguese navigators toward the West African coast reported the signs of an unknown disease and treated their haemorrhagic mouth, intestine, and legs with oranges, bought by Vasco de Gama from the locals in 1477.

It was Columbus in the Indies in 1493, that left bleeding servicemen on a deserted Island and on a return voyage, he found them to be totally recovered after consuming local fruits (citrus and cabbages). It was then Captain Cook, on his voyage to the Antipodes in 1768, that returned with servicemen sick with haemorrhages, but were saved with oranges and lemons.

It was even more surprising that two German physicians landed in Scandinavian lands, Ambrosius Rhodius from Kemberg, Sachsen in 1593 and Henryk Hoyer, from Stralsund, in 1635. Both presented the Norwegian *cloudberry* as a cure for the scurvy. Next was the evidence of another German scientist Johann Friedrich Bachstrom in 1734, who treated scurvy victims with "scurvy grass, cabbage, and swede turnip".

However, it was with the British that navigation with appropriate food for the prevention of scurvy became a rule. It was Francis Drake in 1578 who noted that they were saved in Cape Horn by eating "beech tree", followed by Hawkins in 1662 with "oranges and lemon". Finally in 1753, Lind, with "oranges and lemons' proved the preventive value of Scurvy.

How could a physician who studied Medicine in Berlin, be ignorant of such a history? Today, no physician of the post-WWII period would have encountered a case of Scorbut, not even in a remote and underdeveloped country, simply because the remedy is well-known and readily available. Surprising was therefore the condition being so extreme in S/W Afrika in the early 20<sup>th</sup> Century.

Dr Bofinger experimented on Shark Island with hundreds of Africans, but no exact numbers were specified. He conducted unnecessarily repeated studies, despite failure in previous studies.

It is indeed a precursor to the experiments done in 1944 in Hamburg's Neuengamme School on 20 Jewish children by Dr Heissmeyer. In these tests, like in previous experiments done some 4 decades earlier by Dr Bofinger, the results were known, needing no repetition. They were not tested first on animals, they were performed without consent, and they led to no new discovery. When asked why not





to test the virulent TB bacteria first on animals, Heissmeyer stated at Nuremberg that: "I could see no difference between Jewish children and guinea pigs" [24].

The research and the treatment of Dr. Bofinger: Bofinger published a thesis written in the old-styled, high-standard German language, difficult and time-consuming to translate. His description of the scurvy in the African German colony is not a comprehensive objective analysis. There is a need to organise the communication ("mitteilungen") of these observations ("beobachtungen")[24-27].

The text for a scientific publication is extended over 14 full pages and is inappropriately organised. It has no protocol, no grouping of subjects, no control studies, and no reference list. It is indeed a presentation of observations over a long period, on a population with difficulty in adjusting to the European rules, with different nutrition and forced into new living practices. An alternative presentation to the published one would be:

- **1. The clinical observations**: The population developed an epidemic of scurvy, avitaminosis C, a metabolic, haematological, kidney and liver illness. The observations should have been organised as follows:
- -- The description of the symptomatology in **oral** swelling, bleeding, gingival necrosis, loss of teeth, and the presence of large tonsils.
- -- The description of the depressed **chest bone** (sternum) into the chest cavity, with prominent rib edges.
  - -- Pleural effusion in the **thorax and cardiac** insufficiency were reported.
  - -- Extensive petechiae, namely **skin** haemorrhages and wounds not healing.
  - -- Intestinal wall haemorrhages, explaining **abdominal** symptoms.
- -- Extensive leg deformities: **The bones** were swollen and painful, unstable, and breaking under pressure.
- **2**. **The autopsy observations**: Parallel to the macroscopic clinical observations, the results of hundreds **of autopsies** resulting from the scurvy or the added treatment were also described.
- -- Internal **abdominal** (liver, spleen, and kidney) haemorrhages; uterine, ovarian, and testicular changes.





- The **bones** in the lower extremities were with subperiosteal (bone sheath) bleeding, some detached from the collapsing bones.

- -- Bacterial cultures were collected as the disease of Scurvy was considered an "infectious disease", but there was no document on any bacterial presence.
- -- No mention of histology, it is unclear whether a microscope was available.
- **3. The pharmacological experiments:** [25-27]: In accordance with this etiological concept of Scurvy being an "infectious disease" and of nutritional variations, Dr Bofinger experimented with various therapeutic approaches.
- -- Trial of improved **nutrition**, with meat supply, a source of proteins; with a chocolate source of glucose; with legume mash, none with any proven benefit.
- --- Trial with added cow **milk** to the diet was reported as beneficial. This is however questionable, as cow milk has a minuscule quantity of ascorbic acid (vitamin C).
- -- Trials of improved **hygiene** with soap supply were unsuccessful in preventing the scurvy
- --The numbers of experienced people were never presented, and the dosage of each treatment was not given.
- --The trial with **bismuth:** no description of the format of the medication (powder, tablets, or liquid?) and no dosage of this administered metal is given. There is no proof of any literature consultation, as indeed Bismuth toxicity starts with gingivitis, the very same condition that it was intended to cure. It is also neurotoxic, and unlikely to be effective in avitaminosis.
- -- Trials of therapy with **arsenic acid combined** with opium. There is no mention of whether organic or nonorganic substances were used. Being a component of food, the arsenic compound has only recently been used in gastric diseases, it was found to promote skin and lung cancer.

The supply of **crystalline citric acid** to the drinking water, but no dosage was indicated, and no duration or number of people subjected to therapy. It was not effective, even though it was rather close to vitamin C. Dr Bofinger could not have known the slight, but the essential difference between the given inactive citric acid, containing one extra atom "**C6H8O7**" in the molecule, as opposed to the therapeutic ascorbic acid (vit C) of "**C6H8O6**"

In summary: Dr Hugo Bofinger performed unethical experiments and practised unscientific medicine (just as future colleagues in the Third Reich) and did





unconsented and illogical experiments (just as future Nazi colleagues did). His therapeutic attempts (just as the future 98 types of similar attempts during the Third Reich), were proven unscientific and led to no benefit whatsoever.

In 1910, nearly 3 years after his return from Africa to Berlin, still, the centre of the scientific world, Dr Bofinger consulted one paediatric book on scorbut. In fact, held the clue of therapy in his hand: He stated that lack of hygiene, the climate and infection were the cause of scorbut, but also suggested that the supply of sufficient fresh milk or even just condensed milk would be the cure.

Indeed, it was noted that there was a change in the type of nutrition of Africans under the German occupation: there were no more cattle (for meat) and no more goats (for milk). It was also noted that the white inhabitants and the Africans on the mainland did not have scorbut, and neither did the German occupiers on Death Island.

Indeed, it is goat milk that contains 1 mg of Vitamin C in each millilitre, reaching 90 ml of the required daily vitamin needs [28]. The irony of this tragic death was the possibility of a **cure for each person with one lemon a day** and preventing scurvy with one cup of goat milk a day.





#### References

- 1. Olusoga D, W. Erichsen, C. W.: The Keiser's Holocaust. Germany's Forgotten Genocide and Colonial Roots of Nazism. Faber Faber 2010.
- 2. Erichsen CW: "The Angel of Death" . has descended violently among them" Leiden: African Studies Centre. 2005 pg 87-88. https://hdl.handle.net/1887/4646.
- 3. Kuss S.: German Colonial Wars. Harvard Uni. Press 2017. Pg. 54
- 4. Messa D. "The Peace of the Graveyard". Remembrance and Memorialization of Crimes Against Humanity in Colonial Southwest Africa and East Africa 2018. <a href="https://scholar.umw.edu/student\_research/224">https://scholar.umw.edu/student\_research/224</a>.
- 5. Lusane C. Hitler's black victims: the historical experiences of Afro-Germans, European Black, Africans, and African Americans in the Nazi era. 2003. Routledge NY.
- 6. Mamdani, M,: When Victims Become Killers: Colonialism, Nativism, and the Genocide in Rwanda. 2001. Princeton Uni. Press. NJ:
- 7. Fetzer C: Rassenanatomische Untersuchungen an 17 Hottentotenkopfen. Zeitschrift fur Morphologie and Anthropologie 1913;16(1): 95-156
- 8. Madley B: From Africa to Auschwitz: How German Southwest Africa Incubated Ideas and Methods adopted and developed by the Nazis in Eastern Europe. Europ. Hist. Quarterly. 2005; 35.429-32.
- 9. Faber-Jonker, L.: More than just an object: a material analysis of the return and retention of Namibian skulls from Germany. 2018. Publ. Leiden: African Studies Centre.
- 10. Eugen Fischer: Request to German-colonial readers for human and animal skulls from the former colonies. Kolonialzeitung (DKZ) organ of German Colonial Society,1921;1(1).

https://www.freiburg-postkolonial.de/Seiten/DKZ1921-Nr01-S9.html

- 11. Peschel F: The races of man and their geopolitical distribution. 1888. Appleton NY.
- 12. Smith W D: Friedrich Ratzel and the Origins of Lebensraum. German Studies Review. 1980; vol. 3( (1): 51-68, Johns Hopkins University Press.





- 13. Madu MR: Shark Island Concentration Camp: how Germany ran the World's First Death Camp in Namibia /https://en.wikipedia.org/wiki/Shark Island\_concentration camp.
- 14. Patin N: The massacre of the Hehero and Nama: a colonial laboratory for genocide. Encyclopedie d'Histoire numerique de l'Europe (on line 18.2.22) ISSN 28=677-6588
- 15. https://www.freiburg-postkolonial.de/Seiten/Adelhauser-Duerrenberger3.html
- 16. Zimmerman A: Anthropology and Antihumanism in Imperial Germany 2001. Uni of Chicago Press
- 17. Hugo Bofinger: .The personnel files II, B, in the Landesarchiv Baden-Württemberg, Hauptstaatsarchiv S[10]tuttgart, archive signature M 430/2 Bü 188
- 18. Bofinger H: Ueber Verbiegungen der unteren Extremitat nach entzundlichen Prozessen.1898 https://archive.org/details/ueberverbiegunge00bofi/page/8/mode/2up
- 19. Bofinger H: Sanitats-schule fur den Unterricht. J. F. Lehmanns Verlag: Berlin 1937
- 20. Bofinger H: "Einige Mitteilungen Über Skorbut" Deustche militäer-arztliche Zeitschrift 1910; 39, (15):570-583
- 21. <u>Luigi M. De Luca</u>, <u>Kaare R. Norum</u>: Scurvy and Cloudberries: A Chapter in the History of Nutritional Sciences. *The J. of Nutrition*, 2011; 141(12): 2011, 2101–5:
- 22. Norton L A: Maritime Occupational Disease: "Scurvy". The Northern Mariner 2010; 20(1):57-70.
- 23. Crimmin P: The Sick and Hurt Board and the problem of scurvy. J. Maritime Research. 2013; 15:1-6.
- 24. Weisz GM, Gal A: Research on Tuberculosis in Nazi Germany and the Cruellest Medical Experiments on Jewish Children. IMAJ (Isr. Med. Assoc. J) 2011:23(3):160-4.





25. <u>Juan Du, Joseph J. Cullen, Garry R. Buettner:</u> Ascorbic acid: Chemistry, biology and the treatment of cancer.- <u>Biochim. Biophys. Acta. 2012; 1826 (2):</u> 443–457.

- 26. Public Health Statement for Arsenic <a href="http://www.atsdr.cdc.gov/toxprofiles/phs2.html">http://www.atsdr.cdc.gov/toxprofiles/phs2.html</a>.
- 27. A Bruinink<sup>1</sup>, P Reiser, M Müller, B H Gähwiler, G Zbinden. Neurotoxic effects of bismuth in vitro. Toxicol In Vitro. 1992; 6(4):285-93.
- 28. Harvard. T H Chan School of Publ. Health: Nutritional Source: Recommended Dietary allowance. http://www.hsph.harvard.edu/nutritionsource/vit C





#### **About the Author**

George M. Weisz, MD, FRACS, MA School of the Humanities University of New England and University of New South Wales, Sydney, Australia. Born in Romania just before the war, with painful memories, he was allowed to leave in 1958.

He is a doctor in Medicine and has graduated from Hebrew Uni. Jerusalem and trained as an orthopaedic surgeon. He has been practising in Australia since 1975. After cessation of active surgical practice, he obtained a BA degree in European history at the University of New South Wales in Sydney and an MA degree in Italian Renaissance at Sydney University.

Whilst continuing consulting in medicine, he has been interested in the medical aspects of the Holocaust, with numerous publications. At present on retirement from active surgery, he is a Professor at the School of Humanities, University of New England. Armidale and Senior Lecturer, School of Humanities, University of New South Wales, Sydney Australia. His main interest is in the History of Medicine and Medicine in Arts. Additionally, he is the Editor in Chief, Annals of the Australian Medico-Legal College.