

Project Coast: eugenics in apartheid South Africa

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It is a decade since the exposure of Project Coast, apartheid South Africa's covert chemical and biological warfare program. In that time, attention has been focused on several aspects of the program, particularly the production of narcotics and poisons for use against anti-apartheid activists and the proliferation of both chemical and biological weapons. The eugenic dimension of Project Coast has, by contrast, received scant attention. It is time to revisit the testimony that brought the suggestion of eugenic motives to light, reflect on some of the Truth and Reconciliation Commission's findings and search for lessons that can be taken from this troubled chapter in South Africa's history.

Sting operation

In January 1997, the net closed on Wouter Basson, South African cardiologist and head of Project Coast, the country's secret chemical and biological warfare (CBW) program. The South African authorities had received a tip-off from the CIA that Basson might try to flee the country, so they set up a sting operation. Undercover narcotics police arrested him in a park near his Pretoria home for the possession and attempted sale of 1000 ecstasy tablets sourced from Project Coast. When they subsequently searched his car, they uncovered four trunks containing hundreds of secret documents about the program's covert operations, including lists of some of Project Coast's murder weapons and dubious contacts from around the world [1].

The following year, with Basson and others giving evidence before the country's landmark Truth and Reconciliation Commission (TRC), the details of Project Coast began to emerge: poisoned umbrellas, screwdrivers and secret stockpiles of lethal bacteria, chemicals and drugs had been produced and weaponized for use against enemies of the apartheid government [2]. Far less attention has been paid to allegations of a eugenic thrust to the program. A decade on, as new insights into the depths of Project Coast continue to emerge, are we any clearer about what actually went on between 1981 and 1995? And what lessons, if any, can be learned?

Genesis

In the course of the conflicts of the twentieth century, many countries began to invest heavily in chemical and biological

weapons. South Africa was no exception. During World War II, South Africa began producing mustard gas and was also party to Britain's CBW plans against the Germans [3]. This wartime experience revealed the potential of biology to deliver cheap and low-tech weapons that could, under the right circumstances, be effective in Africa.

Although South Africa dumped large quantities of mustard gas out to sea at the end of World War II, it did not tear up its literature on CBW research and development or shut down its CBW program altogether. Instead, the government maintained a small CBW military program and funded a modest number of basic research projects at Afrikaans universities and government-supported institutions, most of which fell under the remit of the Council for Scientific and Industrial Research (CSIR) [4]. During the 1940s and 1950s, the close wartime connections between South Africa and the Allies continued, with South African military officers being trained by both US and UK governments in the strategy and tactics of CBW [5]. By the 1960s, the country's Electrical, Mechanical, Agricultural and Chemical (EMAC) Department had several innovative weapons at different stages of development. And in spite of signing up to the Biological and Toxin Weapons Convention in 1972 [6], the South African Defense Force (SADF) continued to show an interest in obtaining 'aggressive' CBW agents [5].

It was only during the early 1980s that the South Africa's apartheid government reacted to its increasing international isolation and a perceived threat from communists and the Black majority by beginning to expand its CBW program. In 1981, with South African troops facing a risk of CBW from Cuban and Soviet-backed Angolan forces [7], defense minister DF Malan initiated Project Coast to sure up the country's defenses against such external threats.

Although Project Coast fell under the nominal control of the South Africa's surgeon-general, then State President PW Botha gave complete authority to Wouter Basson, a cardiologist and his personal physician. In the years ahead, Basson created a slew of companies to act as a front for Project Coast and recruited dozens of scientists and other personnel [8]. The clandestine nature of the operation, however, paved the way for severe financial irregularities and abuses of human rights [9].

In 1991, FW de Klerk, who succeeded PW Botha as President of South Africa, ordered the end of Project Coast's production of lethal chemical agents and South Africa signed the Chemical Weapons Convention late in

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Figure 1. Wouter Basson, right, former head of the army's chemical and biological weapons projects during the apartheid era, is seen during a Truth and Reconciliation Commission hearing in Cape Town, on Wednesday 10 June 1998 (AP Photo/Sasa Kralj).

1993 [10]. In April 1994 South Africa held its first multi-racial elections, installing its first democratically elected government. A year later Project Coast was officially shut down, although the public knew nothing about it until Basson's arrest in early 1997, which culminated in the TRC hearings on Project Coast in Cape Town in June and July 1998.

The hearings focused on the apparently offensive (as opposed to defensive) aspects of the program. The investigation began with a single application for amnesty and very little concrete evidence but soon expanded into a 'comprehensive exposé, based on more than 150 documents, affidavits, amnesty applications and interviews' [11]. Among those who testified at the TRC hearings were South Africa's apartheid-era surgeon-general and Project Coast scientists. Basson, who openly called into question the legitimacy of the TRC but lost a court bid to resist testifying at the hearings, eventually appeared before the commission on 31 July 1998 and gave evidence for 12 h [8] (Figure 1). Although his testimony was frequently interrupted by technical objections from his defense counsel, it did offer an insight into Project Coast's governance. Admant he had done nothing wrong, Basson saw no need to request amnesty from the commission authorities.

Testimony at the TRC

Several allegations concerning the eugenic agenda of Project Coast came from the testimony of Dr Adriaan Goosen, a scientist who had founded the front company Roodeplaat Research Laboratory (RRL) in 1983. Research undertaken at RRL aimed to develop a bacterial agent that would selectively kill Black people, he told the commission [12]. This initiative, according to Goosen, had been described by South Africa's then surgeon-general Dr Niel Knobel as 'the most important project for the country' [13].

Goosen firmly believed in the power of science to create this weapon [14]. An unknown European scientist, he told

the commission, claimed to have developed a strain of bacteria in the early 1980s capable of 'only affecting, making sick and killing pigmented people' [13]. Under oath, Goosen went on to state that the government could have used such a weapon as a 'negotiation back-up' (to stay in power) and to 'maintain peace' (between local Whites and Blacks) [15]. He further revealed that while plans to meet with the mysterious European scientist were abandoned because of fears it could have been a trap, South African scientists continued their work on the project [15]. Goosen also alleged that Project Coast was 'far advanced' in developing an anti-fertility vaccine that would selectively target the Black majority [16,17]. A crucial aspect of such a vaccine, he stated, was that it should not be detectable and if detectable then not traceable to clandestine application [18]. Following an extensive literature search, Goosen concluded that production of this kind of drug was 'definitely possible' [19].

On top of this, Goosen's evidence portrayed Basson as the orchestrator of these eugenic plans [19]. According to his testimony, Basson told researchers that the government had been forced to lie about the census figures because it did not want people to know there were so many Blacks in the country. Goosen also stated that Basson had expressed fears that if the birth rate were not slowed, the country would run out of water [19]. Goosen further testified that when asked what motivated him, Basson had replied that 'although we do not have any doubt that Black people will take over the country one day, when my daughter asks me what I did to prevent this, at least my conscience will be clean [20]'.

Dr Schalk van Rensburg, another Project Coast scientist, confirmed that the development of an anti-fertility vaccine had been a major aim of the program and had comprised 18% of all projects undertaken at RRL [21,22]. According to van Rensburg, Basson had argued that such a vaccine would be used to prevent female soldiers getting

pregnant and to contain the birth rate in refugee camps [23,24]. Although van Rensburg testified that Blacks were physiologically, biochemically and endocrinologically identical to Whites so it would not be possible to develop a vaccine that worked on one ethnic group and not the other [25], it might be possible to skew the delivery of the vaccine along racial lines. He further testified that while he had warned that such a vaccine could not be racially based, covertly administered and would be reversible, Basson had insisted the laboratory proceed with the research [26].

There also seems to have been a discussion about the most appropriate strategy for such a vaccine. Since there were certain antigens found only on sperm, it would be easier to make males sterile, argued van Rensburg [27]. Basson, however, was keener to develop a female infertility vaccine, he told the commission. However, he stated that although they worked toward this aim, the leadership of Project Coast was keener to develop a female infertility vaccine [28].

The TRC also heard from Dr Jan Lourens, the head of Protechnik (another Project Coast front organization), who testified that before starting the company, he had designed equipment for animal experiments taking place at RRL. These included a 'restraint chair' into which baboons were strapped for experiments, a transparent 'gas chamber' into which the chair and baboon were fitted for tests and a 'stimulator and extractor' to obtain semen from baboons [22]. Lourens named Dr Riana Borman as the scientist in charge of the baboon experiments 'to control virility and fertility' with a view to reducing the birth rate among Blacks [22].

Confronted with these accusations, Basson denied such science was even possible: '[T]here is no biological, no genetic, no physical base on which one can develop an ethnic weapon', he told the TRC.

There is no scientific basis on which this sort of vaccine could have been applied, to suggest that it could clandestinely be used to use it in drinking water [sic]. How can you do it with a protein because a protein is an antibody? It can only be done by means of injections. How do you control such a thing? It's ridiculous to think that we would have been able to distribute such a vaccine so it hits the specific target group. I can only say that the allegations of both Dr van Rensburg and Dr Goosen, as well as the scientific and operational basis which they suggest, is absolutely laughable [29].

While Basson may have been technically correct in dismissing the scientific and technical validity of successfully pursuing an 'infertility vaccine' the testimony of Goosen, van Rensburg and Lourens strongly suggests that malevolent and potentially genocidal motives were behind some of Project Coast's operations.

The TRC report

In October 1998, the TRC released its report on violations of human rights and abuses of power during the apartheid era. Amidst the 3500 pages of testimony gathered over the course of its three-year inquiry, there is a damning chapter dedicated to Project Coast [30]. The TRC found

that scientists, professors, doctors, dentists, veterinarians, laboratories, universities and front companies propped up the apartheid CBW program with the support of an extensive international network. Project Coast, it judged, was 'evidence of science being subverted to cause disease and undermine the health of communities'. Specifically, the TRC found that 'cholera, botulism, anthrax, chemical poisoning and the large-scale manufacture of drugs of abuse, allegedly for purposes of crowd control, were among the projects of the program' and that 'chemicals, poisons and lethal micro-organisms were produced for use against individuals and 'applicators' (murder weapons) developed for their administration'.

The report concluded that the scientific research undertaken by Project Coast was 'pedestrian, misdirected, ineffectual and unproductive'. It was also exorbitantly expensive. It resulted in the substantial self-enrichment of several of the individuals involved. Most media attention focused on the poisoned umbrellas and screwdrivers, the lethal bacteria, chemicals and drugs that had been stockpiled for use against enemies of the apartheid government. But the TRC also found that Project Coast pursued 'substances to reduce the fertility and virility of people'. Despite this, no publicly disclosed investigations have been undertaken by authorities to shed more light on this aspect of Project Coast.

Although Project Coast fell under the nominal control of the surgeon-general of the armed forces, the TRC found Wouter Basson had been calling the shots and not Niel Knobel and his coordinating committee. Nevertheless, none of the many charges subsequently brought against Basson pertained to the apparent eugenics program he directed.

Basson's trial

Following the exposure of Project Coast, Wouter Basson stepped into the dock in October 1999 to face trial for 67 crimes, including drug possession and trafficking, fraud, embezzlement, conspiracy to murder and the murder of 229 people in Namibia (during the period that South Africa occupied what was then South West Africa).

Controversially, the judge dismissed the six most serious charges against Basson on legal technicalities (including the 229 murder charges), ruling that Basson could not be prosecuted for crimes committed out of South Africa's borders. The judge eventually reduced the number of charges against Basson to 46. The state called 153 witnesses to bolster their case. In July 2001, Basson began his defense. He was his only witness.

He claimed that he had learned about weapons of mass destruction from, among others, Saddam Hussein and provided explanations for all the allegations leveled at him. On 22 April 2002, some 30 months after the trial began, the judge found Basson not guilty of all the remaining charges. There was widespread disbelief: the ruling ANC labeled the verdict 'outrageously bad' [31] while Nobel peace laureate and Chair of the TRC, Desmond Tutu, proclaimed it 'a sad day for the credibility of the South African judicial process, which has still to redeem and rehabilitate itself in the eyes of Blacks' [32].



Figure 2. South Africa's Former law and order Minister Adriaan Vlok addresses journalists after appearing at the High Court in Pretoria in August 2007. Vlok pleaded guilty to the attempted murder of Frank Chikane, then secretary general of the South African Council of Churches (AP Photo/Themba Hadebe).

The state took the case to the Supreme Court of Appeals (SCA), but the SCA found in Basson's favor [33]. The matter was taken on appeal to the Constitutional Court, which overturned aspects of the SCA's judgment, ruling (among other things) that Basson could be tried for crimes committed outside South Africa [34]. Although this opened the door for the National Prosecuting Authority to institute fresh proceedings against Basson for the alleged crimes he committed outside South Africa, including his alleged participation in the murder of 229 SWAPO activists, it has, as yet, failed to do so.

In a surprising development, in August 2006, Adrian Vlok, South Africa's former minister of law and order in the 1980s, apologized for this part in the attempted assassination of the Reverend Frank Chikane, a prominent anti-apartheid activist and current director-general in the office of South Africa's Presidency [35]. Chikane, who was almost killed in 1989 when his underwear was laced with poisons allegedly sourced from Project Coast, accepted the apology and allowed Vlok to wash his feet in an act of contrition [36]. Nevertheless, in August 2007, Vlok stood trial for the attempted murder, pleaded guilty and was sentenced to 10 years imprisonment, suspended for five years [37] (Figure 2).

Lessons from Project Coast

One of the stated purposes of the TRC Report was to ensure that aberrations such as Project Coast in national policy

and individual behavior were chronicled and prevented from happening again. Disappointingly, none of the TRC recommendations on uncovering more details of Project Coast has, to date, been acted on by the South African government. This, in itself, is a lesson for the international community. In the interests of transparency, the recommendations of a statutory body must be acted upon or the reasons for not doing so should be made known.

The Project Coast report concluded that there might also be lessons for the international community. Chandre Gould, who conducted a detailed investigation on Project Coast and has published several works on it, notes the exposure of Project Coast:

'... has pointed to some of the serious dangers involved in conducting a military project secretly without proper lines of control and accounting. It has provided us with an understanding of how and why a country isolated by sanctions can and will pursue programs to produce or procure unconventional weapons. Placed in relation to publicly accessible information about other chemical and biological warfare program[s], social scientists are able to begin to identify the factors that result in a decision by a country to proliferate ... [U]ltimately this may serve as some kind of early warning system [38].'

For Gould, Project Coast offers an insight into why scientists get involved in questionable research endeavors:

professional ambition, the desire to do interesting science, patriotism and financial gain [8]. It also highlights the potential dangers of exposing a covert CBW program without putting in place measures to protect the identities and privacy of those involved: scientists caught in the media glare are sought out by proliferating countries. Many of the scientists that Gould interviewed claimed they would not have become involved with Project Coast had they been aware of the international anti-proliferation legal instruments that were in place. Clearly, scientists need to show greater awareness of the ethical and legal implications of their actions.

Project Coast also speaks for the need for those involved in scientific research and practice to be sensitized to appreciate the social circumstances and particular factors that precipitate a loss of moral perspective on one's actions [39]. As in the case of South Africa, these may have colonial and imperial roots. Moral disengagement has been described as the process wherein subordinates of a labeling group regard the interests of the labeled group as less relevant because of the political culture under which they live [40]. The negative labeling and devaluing of non-Whites and anti-apartheid activists by the government of South Africa bred a culture of ideological totalism, moral disengagement and blind patriotism based on national security interests among many of Project Coast's agents and scientists. These factors encouraged disregard for the interests of opponents of the apartheid government and engagement in ethically questionable practices. Scientists serving elsewhere should be cautious not to be caught up in similar rhetoric and propaganda engineered by their governments, regardless of the political culture of their country's alleged enemies.

Governments and scientists involved in CBW proliferation or contemplating doing so should learn from Project Coast's lessons. Their failure to do so could result in history someday likewise judging their ill-considered actions unfavorably.

References

- Gould, C. and Folb, P. (2002) *Project Coast: Apartheid's Chemical and Biological Warfare Programme*. UNIDIR, pp. 4
- Burger, M. and Gould, C. (2002) Secrets and lies: Wouter Basson and South Africa's chemical and biological warfare programme. Zebra, (Cape Town, South Africa); Gould C. and Folb P (2002); Gould C. (31 July 2002) Unwrapping Project Coast: lessons to be learnt from the exposure of South Africa's chemical and biological warfare programme. (http://www.saha.org.za/research/publications/FOIP_contrib_gould.pdf, last accessed 7 September 2007)
- Burgess, S. and Purkitt, H. (April 2001) The rollback of South Africa's chemical and biological warfare program. (<http://www.globalsecurity.org/wmd/library/report/2001/southafrica.pdf>, last accessed 11 December 2007)
- Burgess, S. and Purkitt, H. (February 2001), pp. 4
- Burgess, S. and Purkitt, H. (February 2001), pp. 5–6
- South Africa signed the 1925 Geneva Protocol on 17 June 1925 and ratified the instrument on January 22 1930. South Africa also signed the 1972 Biological and Toxin Weapons Convention on 10 April 1972 and ratified the instrument on 3 November 1975
- Gould, C. and Folb, P. (2002)
- Gould, C. (31 July 2002)
- Singh, J.A. (2002) *The biological manipulation of the human species in Southern Africa by means of chemical and biological weaponry: medico-legal implications*. Ph.D. thesis. University of Natal, Durban; Burger M. and Gould C. (2002); Gould C. and Folb P (2002); Gould C. (31 July 2002); Gould, C. (2006) *South Africa's Chemical and Biological Warfare programme 1981–1995*, PhD thesis. Rhodes University, Grahamstown
- Gould, C. and Folb, P. (2002), pp. 4
- Truth and Reconciliation Commission (1998)
- Transcript of the TRC hearings into South Africa's chemical and biological warfare program (hereinafter TRC transcript) (1998). Cape Town, pp. 723–724. All TRC transcript pages references in this work denote electronic page numbers
- TRC transcript (1998), pp. 723
- TRC transcript (1998), pp. 726
- TRC transcript (1998), pp. 725–726
- TRC transcript (1998), pp. 730–732
- TRC transcript (1998), pp. 766
- TRC transcript (1998), pp. 718
- TRC transcript (1998), pp. 719
- TRC transcript (1998), pp. 722
- TRC transcript (1998), pp. 378–383
- TRC transcript (1998), pp. 331
- TRC transcript (1998), pp. 318–319
- TRC transcript (1998), pp. 319
- TRC transcript (1998), pp. 378
- TRC transcript (1998), pp. 320
- TRC transcript (1998), pp. 379–380
- TRC transcript (1998), pp. 380
- TRC transcript (1998), pp. 1828
- The following few paragraphs are a summary of paragraphs 1, 2, 3, 4 and 40 of Truth and Reconciliation Commission (1998). *Special Investigation into Project Coast: South Africa's Chemical and Biological Warfare Programme. Truth and Reconciliation Commission Final Report*. Vol. 2, Chapter 6 (<http://www.fas.org/nuke/guide/rsa/cbw/2chap6c.htm>, last accessed 7 September 2007)
- BBC (11 April 2002) 'Dr Death' acquitted in South Africa (<http://news.bbc.co.uk/2/low/africa/1923000.stm>, last accessed 11 December 2007)
- Boyle, B. (12 April 2002) Tutu slams Basson acquittal (http://www.iol.co.za/index.php?sf=2813&set_id=&sf=2813&click_id=13&art_id=qw1018635841188B216&set_id=1, last accessed 11 December 2007)
- The State v Wouter Basson (3 June 2003) [404/2002 & 293/2002] (<http://www.legalinfo.co.za/data/supremec/0306031.html>, last accessed 8 September 2007)
- S vs. Basson* 2005 (12) BCLR 1192 (CC)
- Office of the Presidency, South Africa (26 August 2006) Mr Adrian Vlok extends gesture of penance to Rev Frank Chikane, Director-General in the Presidency. (<http://www.info.gov.za/speeches/2006/06082811151003.htm>, last accessed 7 September 2007)
- BBC (28 August 2006) Feet washed in apartheid apology. (<http://news.bbc.co.uk/2/hi/africa/5292302.stm>, last accessed 7 September 2007)
- Jacobson, C. (17 August 2007) Apartheid official pleads guilty in plot. (<http://abcnews.go.com/International/wireStory?id=3491392>, last accessed 7 September 2007)
- Gould, C. (31 July 2002) Unwrapping Project Coast: lessons to be learnt from the exposure of South Africa's chemical and biological warfare programme. (http://www.saha.org.za/research/publications/FOIP_contrib_gould.pdf, last accessed 7 September 2007)
- Weinstein, H. (1988) *Psychiatry and the CIA: victims of mind control*. American Psychiatric Press Inc. (Washington, USA)
- British Medical Association (2001). *The medical profession and human rights: handbook for a changing agenda*. Zed Books (London, U.K.)