

South Africa — Astronomy and Sharks decline Title 174

After my memorable 3-km descent to the deepest laboratory on earth, 80 km south of Johannesburg, I visited the Research Laboratory of the Consolidated Diamond Mines. There another science fiction forecast had come true. As H.G. Wells had predicted in his short story "The Diamond Maker" at the beginning of the 20th century, artificial diamonds were shown to me, made at a temperature of 1500°C and at a pressure of 80000 atmospheres. They were small, yellow and destined for the industrial market.

My next visit was to the Royal Observatory in Cape Town, which in 1969 was almost 150 years old and had been Britain's major contribution to astronomy in the Southern Hemisphere. There I learnt the sad fact that Britain had switched support for astronomy in the Southern Hemisphere from South Africa to Australia and that in consequence both the Astronomer Royal at the Cape and his Chief Assistant had left. I was sorry that I had to report the end of this long tradition, and my story was promptly published in London.

My next port of call was Durban on the east coast where I interviewed Dr Christiaan Barnard, the pioneer of heart transplant surgery in his exceptionally sparsely furnished office. He had been working lately on an electrically driven artificial heart and he told me: "I don't believe that in 1969 we can go to the Moon (before Apollo 11 had succeeded) and not make an artificial heart". I was pleased that my interview was not only published in the *Daily Telegraph* but also in the *Daily News*, Durban.

As a result, a reporter from the *Daily News* came to see me and it was I who was interviewed, above all, about television in South Africa. My answer was simple: "Nobody can stop the progress of science, and television used for education is perhaps one of its best contributions to the progress of all mankind". The interview was published in the City late extra Edition of the *Daily News*.

My main reason for flying to Durban had been to learn and report about South Africa's oceanography, but I did not expect the story I did in fact discover. I was introduced to Mrs Bela Davis, the director of the Natal Anti-shark Measures Bureau, who had succeeded to free 20 km of popular holiday beaches from the ever-present shark menace. Australia's defence, I knew, was to use steel nets, and in the USA chemical shark repellents are favoured. Mrs Davis used tough polyethylene ropes in which more than a 1000 sharks drown each year. As sharks get oxygen — rich water into their gills by forward swimming, she explained, but once they are stopped, they suffocate and drown. Every three days the nets are emptied of dead sharks, and every three months the nets are removed and repaired. Why the number of dead sharks had decreased from 1440 in 1966 to 1128 in 1968 was unknown to her. But if the trend continued, the answer seems obvious.