

## MEDICINE IN ART

# Surgery and anaesthesia in art: The contribution of Dorothy Kay

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Dorothy Kay, the acclaimed Irish-born Port Elizabeth artist, married Dr Hobart Kay, FRCSI, in Cape Town, South Africa, in 1910. She was an exceptional portrait painter, whose astute observation of detail and ability to empathise with her subject and convey character brought her much important work. Her traditional British realist-school style of painting, and ability to depict mechanical equipment accurately, led to several industrial commissions. In 1937 these skills combined to produce her largest painting, 'Surgery', which depicts a patient undergoing an abdominal operation in a Port Elizabeth hospital. The painting graphically captures the skill and care exhibited by the anaesthetist, together with the anaesthetic equipment used at that time. During the war Dorothy became an accredited war artist. Eight of her wartime paintings were purchased by the Union Government and are now housed in the Ditsong National Museum of Military History in Saxonwold, Johannesburg. Two of these paintings of medical interest are discussed. The first, entitled 'Operation in a Base Hospital', depicts surgery being performed in a base hospital and is very similar in composition to 'Surgery'. The second, entitled 'Blood to Save Lives', portrays a volunteer donating blood.

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Dorothy Kay (nee Elvery) was born in County Wicklow in Ireland in 1886, into a family richly endowed with artistic talent. She received formal training at the Metropolitan School of Art and the Royal Hibernian Academy School in Dublin.

Through her brother Phillip, a student at the Royal College of Surgeons in Dublin, she met and fell in love with South African William Hobart Ashburner Kay, a Pretoria-born medical student who was specialising in surgery at the college. In 1909, after becoming the youngest student to qualify with the RCSI, he sailed for Cape Town. Dorothy followed soon afterwards and they were married in Cape Town the following year. After unsuccessfully opening a surgical practice in Pretoria, Hobart accepted an appointment as Medical Officer (MO) of Health for the Northern Transvaal and Zoutpansberg district based in Nylstroom, where the couple had their first child. In 1914 Hobart was ordered to return to Pretoria to take over as MO of the prisoner-of-war (POW) camp at Roberts' Heights (later named Voortrekkerhoogte). He was later sent to Fort Napier in Pietermaritzburg when the POW camp was moved there. In 1915 Captain (Dr) Kay left for active service in German East Africa. Following his return in 1917, he was appointed District Surgeon and Port Health Officer of Port Elizabeth (as successor to a Dr Rees, who had died from typhus fever contracted while on duty).

Dorothy, who was by this time a mother of four, established herself as doyenne of the arts in Port Elizabeth and was a founder member of the Eastern Province Society of Arts and Crafts. She was an exceptional portrait painter, whose astute observation of detail and ability to empathise with her subject and convey character brought her many important commissions, including portraits of General Jan Smuts and several of Port Elizabeth's mayors. Her traditional British realist-school style of painting contrasted strongly with that of her

contemporary, expressionist painter Irma Stern. During the 1920s Dorothy began to etch, receiving international acclaim. One of her etchings, exhibited at the Dominion Artists' Exhibition in London in 1926 and entitled 'Romance', was purchased by Queen Mary.

## 'Surgery'

Dorothy's skill as a draughtswoman and her ability to draw technical, mechanical subjects led to her being commissioned by institutions such as General Motors, the Reserve Bank and Climax Rock Drills. Her ability to depict mechanical equipment accurately, as well as her gift for capturing her human subjects' likenesses and personalities, led to a large, technically experimental work in which she portrayed surgeons, an anaesthetist and nurses at work in an operating theatre in which the patient was undergoing a cholecystectomy. In 1937, she visited three hospitals and observed at least a cholecystectomy and an appendectomy. She then completed 27 pages of preparatory sketches, recording detailed information on the staff, instruments and technical equipment used before producing the large oil-on-canvas painting 'Surgery' (Fig. 1).

The painting graphically captures the care and vigilance exhibited by anaesthetists in their role as keeper of the bridge between life and death in the days before sophisticated monitoring. It also depicts in detail the anaesthetic equipment used in Port Elizabeth at the time. The anaesthetic consisted of oxygen, warm ether and chloroform, administered by means of a Shipway apparatus and a Schimmelbusch mask. The carbon dioxide canister was used to administer carbon dioxide to hasten the inhalational induction with ether. After Dorothy's death in 1964, the painting was donated to the University of Cape Town (UCT) Medical School by the artist's daughters and is now on display in the Department of Surgery. A high-resolution copy of the painting, together with examples of the anaesthetic apparatus used,

can be found in the Nagin Parbhoo History of Anaesthesia Museum in the Department of Anaesthesia at Groote Schuur Hospital, Cape Town.

Dr R A ('Pom') Moore-Dyke, the anaesthetist in 'Surgery', was born in Morija, Basutoland, in 1901, of missionary stock. Educated at Kingswood College, Grahamstown, he commenced his medical studies at UCT and qualified at Guy's Hospital, London, in 1926. After a brief stint practising in South Africa, he travelled to London to specialise in anaesthesia. Returning to this country in 1930, he practised as a specialist anaesthetist in Port Elizabeth. During World War II, while serving at Baragwanath Hospital, Johannesburg, he was instrumental in the formation of the South African Society of Anaesthetists (SASA) when, at a regular informal meeting of anaesthetists in the Johannesburg area, he proposed the formation of the society. He was offered the chair of the new society but declined in favour of his senior, Dr Benjamin Weinbren. At the inaugural meeting held at Johannesburg Hospital on 1 August 1943, Weinbren was elected President and Major Moore-Dyke Secretary/Treasurer of SASA. Moore-Dyke served his country with distinction in North Africa, the Western Desert and Italy and was mentioned in dispatches. He was elected President of SASA for 1956 - 1957 and represented the Union of South Africa at the first World Congress of Anaesthesiologists in Holland in 1956.

### War artist

In 1941 Dorothy Kay made contact with Major J Wright, who facilitated her acceptance as an accredited war artist. She recorded aspects of military activities on the home front, which included painting the searchlights and heavy guns of coastal and harbour defences, and sketching at military field hospitals. Eight of these paintings, purchased by the Union Government, are stored in the Ditsong National Museum of Military History in Saxonwold, Johannesburg. Two of the paintings are of medical interest. The first (Ditsong War Museum Catalogue 1191), entitled 'Operation in a Base Hospital' (Fig. 2), was enacted in a tent in a base hospital at the Zonderwater Military Camp near Cullinan in September 1941. In keeping with the equipment available in a field hospital at the time, the Shipway apparatus has been removed and anaesthesia is being administered with a Schimmelbusch mask and ether using the drop



Fig. 1. 'Surgery'. The surgery depicted in the painting was performed by Dr Bruce Macrae, assisted by Dr Tennyson Oates. The anaesthetist was Dr R A ('Pom') Moore-Dyke. In the finished work, Kay portrays members of her family. Her husband Hobart is clearly seen facing the viewer, the nurse on the left was posed by the artist's daughter Patricia, and the scrub sister on the right represents a portrait of the artist herself. Dorothy's inclusion of herself in 'Surgery' fits in with her philosophy that 'Everything you do is a portrait of yourself'.

method. An ethyl chloride container is present; ethyl chloride could have been used to speed up induction of anaesthesia. The syringe would have probably been used for administering morphine for analgesia or atropine to dry up secretions. An intravenous infusion is running. The patient's name is unknown, but according to notes in the Ditsong catalogue he was a perfectly fit member of the hospital staff who posed for the painting!

The second painting (Ditsong War Museum Catalogue 1546) is entitled 'Blood to Save Lives' (Fig. 3). The painting was bought by the Union Government during the war, presumably to encourage blood donation.

### Family life

To become a successful artist while bringing up four children (including twins) could not have been easy, and was only made



Fig. 2. 'Operation in a Base Hospital'. Although the background and details differ from 'Surgery' (Fig. 1), the composition of the central figures is very similar and the artist evidently drew heavily on her previous painting. The anaesthetist is Major R A Moore-Dyke. The surgeon facing the observer is Dr Hobart Kay, assisted by Dr Tennyson Oates. The nurse on the right is recorded on the back of the painting to be Patricia Riley, Dorothy Kay's daughter.



Fig. 3. 'Blood to Save Lives'. The artist used her daughters as models – Mrs Joan Wright, Voluntary Aid detachment, as the nurse and Mrs Patricia Riley as the donor.

possible with the support of Dorothy's husband Hobart and servant Annie Mavata. As her daughter Marjorie notes, 'Dorothy could never have taken up a career in art had it not been for the unceasing assistance that Hobart so happily gave her. From the mid-1920s it was Hobart who undertook the provisioning of the household and by so doing, left Dorothy free from the distractions she detested: the fragmentation of concentration consequent on the running of a household.'<sup>[1]</sup> Hobart died in Port Elizabeth in October 1948 after a long illness. Dorothy died in Port Elizabeth in May 1964 and is buried in the family grave with her mother and Hobart.

The history of medicine in South Africa is indebted to Dorothy Kay and artists like her, who bring the past to life in their paintings.

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