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Missionaries, Agents of Empire, and Medical Educators:

Scottish Doctors in Late Nineteenth-century Southern and East-Central Africa\*

### MARKKU HOKKANEN

The 'Livingstone Effect': Scottish Medicine, Missions, and African Empire

The Scottish explorer, physician, and missionary David Livingstone appealed to so many others of his kind in Africa in the nineteenth century: For them he was the epitome of a heroic and multifaceted African explorer. Livingstone was variously a missionary, explorer, doctor, scientist, hunter, and adventurer. He seemed to contribute effortlessly not only to geography, but also to ethnography, zoology, botany, and medicine in Africa. Those who read of his exploits and achievements thrilled at how he heroically faced daunting obstacles in the forms of illness, harsh climate, and encounters with wild beasts and potentially dangerous, exotic 'natives.' His ultimate sacrifice and martyrdom for his causes made him, as historians have noted, a somewhat paradoxical kind of Protestant saint. He held a broad appeal for Americans and Europeans (his works were soon translated into many languages, including the obscure Finnish) but the 'Livingstone effect' was felt particularly strongly in Scotland, and markedly within the Scottish medical profession. This

<sup>\*</sup> I would like to thank the organizers and contributors to the *Africa in Scotland*, *Scotland in Africa* conference, Centre of African Studies, University of Edinburgh. Many thanks are due to the editors of this collection for all their help, Liz Eastcott, and the two anonymous readers for their useful comments. This contribution was funded by the Academy of Finland postdoctoral research project (no.121514) and the Department of History and Ethnology, University of Jyväskylä.

<sup>&</sup>lt;sup>1</sup> On Livingstone, see, for example, Mackenzie, John M., "David Livingstone and the Worldly After-Life: Imperialism and Nationalism in Africa", in *David Livingstone* and the Victorian Encounter with Africa. London, 1996. On Scottish medical missionaries in Africa, see Hokkanen, Markku, *Medicine and Scottish Missionaries in* 

chapter explores the roles and activities of late nineteenth-century Scottish doctors in Africa by focusing on four physicians who, in one way or another, can be seen as Livingstone's followers: John Kirk, Robert Laws, Jane Waterston, and Neil Macvicar.

Livingstone was not the first influential Scottish doctor to arrive in Southern Africa. Mission expeditions and appointments were not the only route to Africa for those with medical and surgical training. Medical men employed by the British Army and Navy, the colonial administration, and other non-mission organizations, enterprises, and associations were also able to take on multiple roles as doctors, explorers, and scientists, including Mungo Park (1771–1806) in West Africa and Andrew Smith (1797–1872) in Southern Africa. Smith, a military surgeon in the Cape Colony, explored the interior, pioneered natural history, zoology, and anthropology and established the South African Museum of Natural History in Cape Town in 1825.<sup>2</sup>

One of those inspired by Livingstone as a young man was James Stewart (1831–1905), who was principal of the Lovedale Seminary in the Cape Colony and founder of the Livingstonia Mission. He studied both medicine and theology, a combination that was particularly common among Scottish missionaries. Following Livingstone's call, Stewart developed a plan to launch a Free Church of Scotland mission in the region of present-day Malawi. Stewart was drawn to Livingstone's ability to fill so many roles successfully, and although he lost faith in his idol during the troubled Zambesi expedition of the 1860s, he returned to his idea of a Scottish mission on Lake Malawi (then Nyasa) after Livingstone's death.<sup>3</sup>

Livingstone appealed strongly to the young, and many of his most ardent followers were recruited during childhood. His *Missionary Travels and Researches in South Africa* contained rich tales of adventure alongside his ideas about spreading the Gospel, civilization, and science in Africa. Livingstone's books and the numerous

the Northern Malawi Region, 1875–1930: Quests for Health in a Colonial Society. Lewiston 2007; McCracken, John, "Scottish Medical Missionaries in Central Africa", The Scottish Society of the History of Medicine, XVII (2), 1973; Rennick, Agnes, Church and Medicine: The role of medical missionaries in Malawi 1875–1914. Ph.D. thesis, Department of History, University of Stirling, 2003; Ross, Andrew C., "The Scottish Missionary Doctor" in D.A. Dow (ed.), The Influence of Scottish Medicine: An Historical Assessment of its International Impact. London 1988.

<sup>&</sup>lt;sup>2</sup> For Smith, see Kirby, P.R., *Sir Andrew Smith, M.D., K.C.B.: His Life, Letters and Works.* Cape Town, 1965; Musselman, E.G., "Plant Knowledge at the Cape: A Study in African and European Collaboration", *The International Journal of African Historical Studies*, Vol. 36 (2), 2003.

<sup>&</sup>lt;sup>3</sup> Wells, James, Stewart of Lovedale. London, 1907.

stories about him were acceptable reading for children in many evangelical Scottish homes. Young Robert Laws, a cabinetmaker's son from Aberdeen, was particularly excited by stories of Livingstone's Makololo, his African allies. At one point he regularly prayed, "O God, send me to the Makololo."

Laws (1851–1934) also went on to study both medicine and theology. At this time, Scottish doctors had connections across the Empire, and as Douglas Haynes has illustrated in his biography of Patrick Manson, the Empire was crucial for the prospects of many late Victorian Scottish graduates. Of Manson's contemporaries, ten out of nineteen medical graduates at Aberdeen University went into imperial service. At this point, Africa was still a minor field, and the 'Livingstone effect' of the late nineteenth century was most keenly felt by the more religious Scots who chose mission service. Even Laws, himself, had initially expected to travel to China. But, instead, in 1875 he travelled to Malawi as a medical missionary in the pioneer party that founded the Livingstonia Mission.<sup>6</sup>

### Medical Advisors of Colonialism? Sir John Kirk and Robert Laws

Of the four medical followers of Livingstone who will be discussed here, only one, Dr John Kirk (1832–1922), never became a mission doctor. Like Stewart, Kirk attended Livingstone's funeral in 1874. By this time, Kirk was forging an impressive career for himself in East Africa. He had been the medical officer of Livingstone's ill-fated Zambesi Expedition (1858–1864), an ambitious undertaking with the stated aim of opening up the Central African interior for both commerce and Christianity (thus undermining the slave trade).

Disease continued to hinder European colonial conquest of Africa until the late nineteenth century. It has been argued that quinine (along with steam power and the Maxim gun) was one of the crucial innovations that enabled the 'Scramble for Africa' during the last two decades of the century. This, of course, is a simplification,

<sup>&</sup>lt;sup>4</sup> Livingstone, W.P., *Laws of Livingstonia*. London, 1921, 13–30; Macintosh, Hamish, *Robert Laws: Servant of Africa*. Carberry, 1993, 3–5; Hokkanen, *Medicine and Scottish Missionaries*, 127–130.

<sup>&</sup>lt;sup>5</sup> Haynes, Douglas M., *Imperial Medicine: Patrick Manson and the Conquest of Tropical Disease*. Philadelphia 2001, 14–20. Posts within the Army, the Navy, the Indian Medical Service, and, in Manson's case, the Imperial Chinese Maritime Customs Service opened up as a result of the Empire.

<sup>&</sup>lt;sup>6</sup> Livingstone, Laws; Macintosh, Robert Laws; Hokkanen, Medicine and Scottish Missionaries.

but issues of health were undoubtedly very pressing concerns for European colonialists in Africa. There was an ongoing debate about whether most of Africa could be colonized or whether it was even possible for Europeans to live there at all. Livingstone had been an early Scottish expert on health in Africa, but his reputation had been tarnished by several deaths from 'fever' among members of both the Zambesi Expedition and the Universities' Mission to Central Africa. Livingstone had earlier downplayed the dangers posed by African fevers.<sup>7</sup>

Nevertheless, John Kirk emerged from the expedition as a recognized African explorer, physician, and botanist in his own right. On Livingstone's recommendation, Kirk obtained a triple position as surgeon, vice-consul, and assistant to the political officer in the Consulate of Zanzibar in 1866. Kirk's career advanced steadily: He went on to become the most important British official on the East African coast before he returned to Britain in 1887; he was awarded three knighthoods, a number of honorary titles, and awards; and he served as a director of the Imperial British East Africa Company, founded by William Mackinnon, Kirk's friend and a grand imperial Scottish magnate.<sup>8</sup>

Although Kirk's later career was predominantly political and diplomatic, his medical qualifications and experience ensured that he retained his authority as an expert on health in Africa. Furthermore, he played a significant part in disseminating knowledge about African natural resources and facilitating their appropriation. An outstanding example of this was the case of *strophanthus kombe*, a poisonous climbing plant that Kirk 'discovered' during the Zambesi expedition. *Kombe* was used as an arrow poison in South-Central Africa. It was thanks to Kirk, a network of Scottish missionaries and traders in the Malawi region, and, of course, local informants that Thomas Fraser, a medical scientist at Edinburgh University, was able to acquire *strophanthus kombe* seeds.

From *strophanthus* seeds, Fraser developed strophanthin, a cardiac drug resembling digitalis. Strophanthin drugs were first mass-produced by Burroughs

<sup>8</sup> On Kirk, see Coupland, Reginald, Kirk on the Zambezi, Oxford, 1928; Liebowitz, Daniel, The Physician and the Slave Trade: John Kirk, the Livingstone Expeditions, and the Crusade Against Slavery in East Africa. New York, 1999.

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<sup>&</sup>lt;sup>7</sup> Jeal, Tim, *Livingstone*. London, 1973; Headrick, Daniel, *Tools of Imperialism: Technology and European Imperialism in the Nineteenth Century*. New York, 1981. On the Zambesi expedition, see Dritsas, Lawrence, *Zambesi: David Livingstone and Expeditionary Science in Africa*. London, 2010.

Wellcome & Co. in London, who obtained the seeds with the help of Kirk and other Scots in Malawi. African medicinal and poisonous plants had been sent to Scotland for analysis and research before. One of Kirk's professors at Edinburgh University, Robert Christison, had experimented on poisonous beans obtained from Calabar in West Africa (also the site of a Scottish mission). Later, Fraser isolated the alkaloid eserine from the Calabar bean. In early nineteenth-century Southern Africa, Andrew Smith, like other naturalists, had relied heavily on local informants when locating and studying African plants.

As the 'Scramble for Africa' gathered momentum in the 1890s, Kirk was among the most prominent Scottish participants in discussions about the feasibility of colonization. He presented a paper, "The extent to which tropical Africa is suited for development by the white races, or under their superintendence," at the Sixth International Geographical Conference in London in 1895. The paper's title reveals the basic division that Kirk drew between "European colonies where families of white people may remain without marked deterioration of the race" and "settlements under European supervision" where whites could settle temporarily to rule or "to develop the country with the aid of the native races." For Kirk, like many other Victorians, a true colony was a permanent, self-sufficient, and predominantly white country such as Canada or Australia. Kirk doubted whether many such colonies could exist in tropical Africa (as opposed to South Africa or the Maghreb). He believed, however, that conditions for a permanent colony existed in the region of Matabeleland (in presentday Zimbabwe), which had been claimed a few years earlier by Cecil Rhodes's British South Africa Company. Kirk also took a favourable view of the possibility of settlement in the uplands of British East Africa (Kenya), so long as they could be linked to the coast by railways.

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<sup>&</sup>lt;sup>9</sup> Hokkanen, Markku, "Imperial Networks, Colonial Bioprospecting and Burroughs Wellcome & Co.: The Case of Strophanthus Kombe from Malawi (1859–1915)". *Social History of Medicine* 2012, Vol. 25 (3), 2012.

<sup>&</sup>lt;sup>10</sup> Musselman, "Plant Knowledge at the Cape".

<sup>&</sup>lt;sup>11</sup> Kirk, Sir John, "The extent to which tropical Africa is suited for development by the white races, or under their superintendence", *Report of the Sixth International Geographical Congress*, London 1896, 523. Kirk also outlined a third form of European influence in Africa which would extend beyond the immediate limits of the settlements for "conducting" Africans "in the path of progress, be taught to labour with the object of utilizing to the full the dormant resources of their country, and of exchanging them for the products of civilized countries."

Although he concluded that European *colonization* was possible only in a few isolated African localities, Kirk argued that European *settlement* was feasible almost everywhere in Africa. Bases in low-lying areas could be maintained so long as white men could secure a furlough in Europe after a few years of continuous service. Drawing upon British experience in India, Kirk believed that in the future visits to African sanatoriums in the "salubrious uplands" could replace such trips back to Europe. He believed that in many healthy regions that were too small or too isolated for "a proper colony", Europeans could nevertheless bring their families and "reside on their own estates for prolonged periods."

Kirk also emphasized that in addition to securing adequate health, wealth, and logistics, European colonialists would have to form the majority of the population in such a colony. He pointed out that many of the healthy highlands were thinly populated because of raids by pastoralists and slavers (as well as the aftermath of waves of smallpox). Accordingly, he urged the British to secure both Matabeleland and Masailand and to ensure that African settlement in these areas would be encouraged only to the extent that it did not interfere with the plans of Europeans.<sup>13</sup>

Whilst Kirk considered European colonization in tropical Africa more generally, Dr Laws, who ran the Livingstonia Mission (arguably the best-known of the Livingstone memorial missions), struggled with the question of how Scottish missionaries were to survive in the Malawi region. Laws maintained his belief that the region was habitable for Europeans, but with a number of caveats. He acknowledged the dangers posed to Europeans by disease and was prepared to accept that some deaths were inevitable--especially during the pioneer phase of a settlement or colony. In fact, he viewed missionary graves as necessary "milestones for Christianity," and fever as a piece of the "Devil's artillery."

Although in his mind the evangelization of Africa was comparable to war and would require its own martyrs, Laws firmly believed that the dangers and the likely number of casualties ought to be minimized and that the task of the missionary doctor was do his utmost to achieve that end. Livingstonia had among the highest ratio of qualified medics to patients, yet it lost almost a quarter of its Scottish staff between 1875 and 1915 to illness, and a number of others were invalided home. To combat

<sup>&</sup>lt;sup>12</sup> Ibid., 529–531.

<sup>&</sup>lt;sup>13</sup> Ibid., 533.

<sup>&</sup>lt;sup>14</sup> Hokkanen, Medicine and Scottish Missionaries, 240–243.

disease Laws devised a holistic programme of hygiene that stressed Christian morality, careful but hard work, and abstinence from alcohol. Laws remained in Malawi for fifty years and became a respected missionary statesman in the Nyasaland Protectorate. As the most senior doctor and missionary in the Protectorate, he had important connections to the colonial administration, particularly in the Northern Province, and he served for a time in the Legislative Council of the Protectorate. <sup>15</sup>

Missionary Mavericks? Jane Waterston and Neil Macvicar

Both Jane Waterston (1843–1932) and Neil Macvicar (1871–1949) first went to

Malawi as missionaries, ran into difficulties there, and were forced to start anew in

South Africa, where both doctors enjoyed long and distinguished careers. They could
both be called 'missionary mavericks,' because their personalities and views did not
fit easily into Scottish missions in Malawi.

When Jane Waterston travelled to Livingstonia in 1879, she was thirty-six years old and had spent eight years teaching at the Lovedale Mission in the Cape Colony. As Caroline Knowles has argued, Waterston effectively used the social space provided by the British Empire to transform herself: first by leaving a middle-class home in Inverness, then by becoming a missionary teacher in Lovedale, and then using her status as a missionary to gain access to a medical education in Britain. (She was one of the first British women to become a doctor.)<sup>16</sup> Curiously, Knowles's study of Waterston overlooks her brief period at Livingstonia, even though this would have highlighted the limitations that Waterston met with in the missionary terrain of healing because of her gender.

Waterston's position and status as a medical professional within the mission was weak--both because she was a woman and because she had obtained her medical education in an unorthodox manner. The mission authorities in Scotland claimed that there was not enough medical practice in Livingstonia for two medical missionaries and decreed that she should take on the additional task of educating African women and girls. This seems to have been a move on the part of the male mission establishment to ensure that the medical side of the mission remained in the hands of Robert Laws. The lack of medical practice was not seen as a problem at this time,

15 Hokkanen, Medicine and Scottish Missionaries; Livingstone, Laws.

<sup>16</sup> Knowles, Caroline, "Home and Away: Maps of Territorial and Personal Expansion 1860–97", *The European Journal of Women's Studies*, Vol. 7, 2000, 263–280.

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because it was taken for granted that in pioneer conditions all missionaries would undertake a number of different tasks. In recognition of Waterston's medical qualifications, it was agreed that her medical practice should take precedence over her work as a teacher; nevertheless, in official mission sources, she is consistently referred to as "Miss Waterston," not "Dr. Waterston." For many late Victorians, doctor, like missionary, was a male noun: in this sense Waterston was doubly disturbing to her colleagues.

Waterston's sphere of work was described as "the female, and the female medical department." However, it seems that during her brief spell at Livingstonia, she treated both African men and women. Limitations were clearly placed on her European practice, though. As a rule, Laws treated all European patients and Waterston could take on European patients only with Laws's permission or in his absence. In some cases she was not allowed to see European patients at all. Unlike African patients, who seemed to accept both male and female healers with little difficulty, many missionaries were reluctant to be treated by a woman.

Waterston resigned after only six months of service in Livingstonia. She described her feelings of professional frustration, her disagreements with mission policy towards Africans (which at this point included corporal punishment and imprisonment of Africans regarded as being under the mission's judicial authority), her disillusionment with mission reality at Livingstonia, and her personal conflicts with Robert Laws. She was particularly bitter that her medical experience and qualifications had been ignored.<sup>17</sup>

In the letter to Laws informing him of her resignation, Waterston emphasized, writing as one doctor to another, her absolute need to maintain her medical status. She argued that this would be lost if she had to continue in Livingstonia as a teacher: It had "cost [her] everything to get," and it was "all [she had] . . . to fall back on if invalided home." Choosing to ignore the fact that there were plenty of African patients coming to the mission dispensary, she now agreed with the official mission line that there was sufficient work for only one doctor at Livingstonia.

Waterston to Laws 19 February 1880. Bean, L. & van Heyningen, E. (eds.), *The Letters of Jane Elizabeth Waterston*, 1866–1905. Cape Town, 1983, 171.

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<sup>&</sup>lt;sup>17</sup> Waterston to Stewart 11 December 1879 and 14 February 1880. Bean, L. & van Heyningen, E. (eds.), *The Letters of Jane Elizabeth Waterston*, 1866–1905. Cape Town, 1983, 151–152, 162, 168; Hokkanen, *Medicine and Scottish Missionaries*, 152–156.

Waterston's resignation had lasting repercussions for mission recruitment policy. It would be fourteen years before the next single woman missionary (of any kind) was appointed to Livingstonia, and I would argue that the case of Waterston and the concomitant rise of Laws to the status of eminent Livingstonia leader and medical authority in the field were important reasons for this. Livingstonia certainly had no difficulty accepting medical men into the field in the intervening period.<sup>19</sup>

While Waterston's difficulties in Livingstonia stemmed largely from her controversial position as a single woman missionary doctor, Neil Macvicar's problems--in the neighbouring Blantyre Mission (Established Church of Scotland), twenty years later--were mainly theological. Macvicar, a son of the manse, was also inspired by Livingstone to become a doctor in Africa. At Edinburgh University he proved to be a brilliant medical student, and some time after graduating he applied for a position at the Blantyre Mission. He successfully secured an appointment as a mission doctor, even though some members of the Mission Committee thought that Macvicar himself was actually in need of a missionary's care. Because Macvicar did not accept the doctrine of the Trinity and the Resurrection, and would not waver in his personal beliefs, he was appointed on the peculiar condition that he would not be involved in religious teaching at Blantyre. Thus, Macvicar was probably the first purely secular doctor to work in a Scottish mission hospital. Macvicar's secular status helped to make him a particularly effective doctor. Most of his medical missionary colleagues worked on many fronts (evangelical, educational and administrative) and were therefore only part-time doctors.<sup>20</sup>

Macvicar arrived in Blantyre in 1896 and soon founded the first permanent hospital--which he ran with a Scottish nurse, Jessie Samuels, the former acting matron of the Glasgow Western Infirmary. (They later married.) He also began the systematic training of African medical assistants, a pioneering scheme for African medical

<sup>&</sup>lt;sup>19</sup> Hokkanen, *Medicine and Scottish Missionaries*. Towards the end of his long career, Robert Laws became more sympathetic to female doctors and in the 1910s, he discussed his medical cases in most detail with Agnes Fraser, the second female doctor in Livingstonia (who was not officially employed by the mission, but the wife of leading missionary Donald Fraser). Perhaps this was because at the time at least some of the younger missionary physicians considered Laws and his medical ideas to be obsolete. It is possible, however, that Laws may have had some sense of guilt about what happened between him and Waterston.

<sup>&</sup>lt;sup>20</sup> Shepherd, R.H.W., *A South African Medical Pioneer: The Life of Neil Macvicar.* Lovedale, 1952; Rennick, Church and Medicine; Ross, "The Scottish Missionary Doctor".

education that was in part inspired by his experiences as a medical student in Edinburgh. He was convinced that Africans were fully capable of studying medical science: One of the best medical students he had known in Edinburgh was a West African. In this Macvicar-- who in 1897 already envisioned a University of Blantyre comparable to the universities of Tokyo or Berlin--was way ahead of most of his contemporaries (and later colonial doctors), who doubted that Africans had the capacity to study medicine, insisted on keeping such African medical assistants as they had under close white supervision, and would often prevent them from treating white patients. Although Robert Laws, for example, shared Macvicar's enthusiasm for higher education for Africans, and himself planned a University of Livingstonia, he was determined to keep African medical assistants under close moral and physical scrutiny. Both Livingstonia and Blantyre missions had turned down offers of service from black doctors (who had graduated in West Indies and the US) in the 1880s. 22

Macvicar's activities in Blantyre inspired other Scottish medical missionaries in Malawi: His example contributed to both the establishment of several permanent hospitals and the development of systematic medical education for African medical assistants and nurses at Blantyre and Livingstonia. His time at Blantyre was cut short, however, by continuing unease among other missionaries about his unconventional religious views. At the end of the 1890s, the leadership of Blantyre Mission passed from David Clement Scott (Macvicar's protector), to Alexander Hetherwick, a more conservative missionary, and Macvicar's position was weakened. In 1899 he left for a furlough and never returned. Instead, he took up a post in Lovedale, which had provided refuge for Waterston twenty years earlier. James Stewart, old now, took Macvicar under his wing, and he was appointed medical officer of the new Victoria Hospital at Lovedale, remaining there for thirty-five years. With Matron Mary Balmer he continued to develop African medical education. The focus was now on female African nurses, who were trained at the Victoria Hospital from 1903 onwards. Cecilia Makiwane, the first fully certified African nurse in South Africa, trained at Lovedale and was registered by the Cape Colony Medical Council in 1908. Macvicar also undertook serious medical research into both scurvy and tuberculosis. His daughter

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<sup>&</sup>lt;sup>21</sup> Life and Work in British Central Africa, May-July 1897.

<sup>&</sup>lt;sup>22</sup> Hokkanen, *Medicine and Scottish Missionaries*, 414–418; Lyons, Maryinez, "The Power to Heal: African Medical Auxiliaries in Colonial Belgian Congo and Uganda" in Engels, D., and Marks, S. (eds.), *Contesting Colonial Hegemony: State and Society in Africa and India*. London, 1994; Rennick, Church and Medicine, 70–71.

Shena followed in his footsteps, studying medicine in Edinburgh, and then joining him in Lovedale in 1927.<sup>23</sup>

#### Conclusion

These case studies have illustrated how Scottish medical men and women made their careers in Southern and Central Africa, acting in various roles as missionaries, agents of empire, experts on medicine and health, and pioneers of Western medical education in Africa. Taken together, the four studies of Livingstone's 'followers' illustrate key themes of nineteenth-century connections between Scotland and Africa: exploration, colonization, and education. Quests for knowledge about places, people, materials, and health were common to all these themes. As a group, Scottish doctors were particularly well placed within imperial networks that connected Scotland with Africa (and the rest of the British Empire), and many made their names as producers and disseminators of imperial knowledge.<sup>24</sup>

At least two generations of Scots before the First World War felt the 'Livingstone effect' keenly: Some travelled to Africa as doctors--particularly missionary doctors, directly inspired by Livingstone. The case of Jane Waterston shows that although in the late nineteenth century it was still very difficult for Scottish women to pursue careers as independent missionaries and doctors, the African mission field was among the first arenas in which it was possible to do so. The career of Robert Laws illustrates how, despite appalling morbidity and mortality rates, it was possible to establish an expanding mission in Central Africa and develop a doctrine of healthy living based on a holistic conception of hygiene that combined Christianity and medicine. Laws succeeded in this and established himself as a respected mission statesman who advised the colonial authorities on numerous issues. For his part, John Kirk combined medicine and science with politics and business, and become an authority in matters of health in Africa during the 'Scramble.'

Neil Macvicar was at the forefront of modern Western medical education for African men and especially women: While in South Africa he pressed for official recognition of black nurses' qualifications. In Malawi, however, African medical

<sup>23</sup> Shepherd, A South African Medical Pioneer; Digby, Anne, Diversity and Division in Medicine: Health Care in South Africa from the 1800s. Oxford, 2006.

<sup>&</sup>lt;sup>24</sup> For a recent study of transnational networks and colonial medicine, see Neill, Deborah J., *Networks in Tropical Medicine: Internationalism, Colonialism, and the Rise of a Medical Speciality 1890–1930.* Stanford, 2012.

assistants did not find a route to full medical education and equality with white physicians. Whereas African pastors gradually obtained more independence in Protestant churches, African practitioners of Western medicine in colonial Malawi (as elsewhere) remained under the control of white doctors.<sup>25</sup>

Malawians who wished to become doctors had to study abroad--the best-known early example being Hastings Banda, who graduated in the United States and pursued further studies in Edinburgh in late 1930s and early 1940s, but whose recruitment as a doctor for both mission and government service failed. It could even be argued that this illustration of the racial and gendered structures of the colonial mission and government hospitals had lasting consequences for Malawian history. If Macvicar had stayed at Blantyre, would he have created openings for African doctors in colonial Malawi? This kind of speculation about history is problematic. Nevertheless, Macvicar's respect for a West African medical student (possibly Richard Akiwande Savage) he met at Edinburgh University in the 1890s certainly seems to have had a real influence and impact on African medical education in both Malawi and South Africa.

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<sup>&</sup>lt;sup>25</sup> For the limitations of African involvement in missionary medicine in the colonial era, see, for example, Good, Charles, *The Steamer Parish: The Rise and Fall of Missionary Medicine on an African Frontier*. London, 2004; Kumwenda, Linda, *The Development of UMCA Medical Work in Northern Rhodesia*, 1910–50, with Special Reference to the African Medical Personnel. Basel, 2000; Rennick, Church and Medicine.

<sup>&</sup>lt;sup>26</sup> Short, Phillip, *Banda*. London, 1974. According to Short, Banda's aspiration to become a missionary doctor with Livingstonia was thwarted by missionary nurses' reluctance to serve under a black doctor. Colonial Office sources suggest, however, that the reasons why Banda--whose services were, for a period, considered by both the colonial administration and the missionaries-- was not recruited were more complex. Hokkanen, Markku, "Mobile Medical Experts from Colonial Malawi: from medical 'middles' to Dr Hastings Banda", paper presented at the African Studies Association UK Conference, University of Leeds, 7 September 2012.