



The Politics of Ecology in South Africa on the Radical Left*

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Abstract. The South African ecologist and political activist Edward Roux (1903–1966) used evolutionary biology to argue against racism. During the cold-war, he transformed his communist beliefs into advocacy for scientific rationalism, management, and protection of nature against advancing capitalism. These pleas for saving the environment served as a vehicle for questioning the more risky issue of evolution and racial order in society. The link between ecological and political order had long been an important theme among the country's ecologists and politicians alike. The statesman Jan Christian Smuts' holistic theory of evolution and racial order inspired the nation's ecologists to sanctify an ecologically informed racial policy. This idealist informed methodology stood in direct opposition to the materialist approach to ecology of Roux. These methodological debates reflected differing political support from within the Union Party and people on the radical left, respectively. Ecology was of concern to politicians because understandings of the order of nature had direct implications for the racial order of the South African society.

Key words: communism; Edward Roux, History of ecology, South Africa

South African science has a long tradition of being entangled in politics, particularly in the case of ecological research which often had direct implications for contested issues of racial politics and environmental management. The prime example of the importance of ecology in South African politics is perhaps the story of how the longtime leader of the Union Party, Jan Christian Smuts, based his politics of unification on an ecologically informed theory of holism and racial segregation. This

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history has already been published elsewhere.¹ What is less known is the history of competing views on human evolution and ecology. How the politics of ecology played out on the radical left may be illustrated by the views of the famous anti-apartheid activist Edward Roux. He has been portrayed both as a romantic revolutionary organizing political resistance to racism, and as a sleek raconteur who “knew the truth but was unwilling to tell” about his communist activities.²

Though most historians mention Roux in connection with politics, it is worth recalling that he spent most of his time doing scientific research in botany and ecology, and it is therefore reasonable to understand his political and social views in light of his chief activity. Evolutionary theories were, after all, at the heart of South African politics, not only on the question of race and the descent of mankind, but also on contested issues like creationism, holism, and agricultural politics. Thanks to new archival sources and published material by Roux largely ignored by historians, it is possible to untangle his scientific views on these matters and relate them to his environmental and political activities.³ What emerges is a portrait of Roux as a left-wing defender of scientific rationalism addressing problems of racial discrimination, environmental degradation, and exploitation of native communities. While trying to empower black communities through science education, he targeted what he saw as bourgeois beliefs in holistic ecology of Smuts and his allies, as well as creationist beliefs within the National Party. In the current literature about South Africa’s environmental history, there is a tendency to deemphasize the importance of race to ecological research, environmental debates, and understandings of the landscape.⁴ Similar to the days of Smuts, the environment today serves as a unifying and common historical ground for a racially and politically torn country. This article holds that different racial views and policies framed ecological research and that the environment consequently is an uncommon ground for historical reflection.

¹ Anker, 2001. In the following I have used material from the Smuts Archive at the Cambridge University Library (hereafter SACUL), Students Records at the Cambridge University Library (hereafter SRCUL), Monica and Godfrey Wilson Papers at the Manuscripts and Archives Department at University of Cape Town (hereafter WPUCT), Smart Memorial Research Grant Papers at the Manuscripts and Archives Department at University of Cape Town (hereafter SMUCT), Witwatersrand University Archives (hereafter WUA).

² Roth, 2000, p. 192. See also Campell, 1998.

³ A notable exception from this trend is an article by Khan, 1994. Ignored, for example, in Dubow, 1995.

⁴ Dovers, Edgecombe and Guest (eds.), 2002. Beinart and Coates, 1995. Beinart, 1989. Tilley, 2001.

The Politics of Ecology in the Inter-War Period

Born in 1903, Roux grew up in a turbulent period of South African politics with major conflicts between the Union Party, the National Party, and a small group of vocal socialists centered on the Labor Party. The National Party's main program was based upon the conservative and nationalist support for independence from the British Empire. The Union Party, on the other hand, advocated free trade and a liberal social system and argued for uniting Orange Free State, Transvaal, Natal and the Cape Province under the British Crown, a vision they realized with the establishment of the Union of South Africa in 1910. Each of these political parties had different perspectives on ecology and evolution that will frame the following discussion of Roux's scientific and political activities.

The Union, National and Labor parties were deeply concerned about how the order of society either could or should reflect the order of nature, especially in light of the emerging science of evolution. At the time of the unification of the country, there was little questioning among whites about their racial superiority. In the Nationalist constituency, Biblical interpretations of the origin of mankind supported moral superiority of whites, and many thought creationism an adequate approach to understanding and teaching biology. Their firm white-supremacy views appealed to many white workers, especially after Smuts' government in the early 1920s opened the door for cheap black labor for semiskilled jobs in the mining industry. This policy reflected a more ambiguous race policy within the Union Party, since their leader Smuts actively sought to found the party's policies of unification on a scientific rather than Biblical footing. He understood race in terms of a gradual evolution from primates, bushman, blacks to the white Nordic type and distributed social and political rights accordingly. To promote black workers in the mining industry was to him a progressive attempt to push the social evolution forward. White workers could not agree, and they fought the policy head-on with a massive three month strike at Rand in 1922 supported by the Labor Party. To them the white worker's monopoly on skilled jobs was a class privilege, and the inclusion of black labor was a sign of capitalist greed. As the nation's Prime Minister and Minister of Native Affairs, Smuts brutally crushed the strikes by use of the military. This angered white workers, and when the Labor Party and the National Party formed a coalition in 1924, they overthrew Smuts' government.

Edward (or Eddie among friends) was born as the son of Philip Roux, a pharmacist, botanist, and a leading figure in the Labor Party.

He followed in his father's footsteps both politically and intellectually; as he wrote in his autobiography "[m]y interest in biology had grown from my concern with politics."⁵ In 1922, he enrolled at Witwatersrand University where he studied botany and zoology, while also finding time to read Karl Marx's *Das Kapital* (1867), Lewis Morgan's *Ancient Society* (1877), Winwood Reade's *Martyrdom of Man* (1872), Charles Darwin's *Origin of Species* (1859) and *Descent of Man* (1874), and the writings of Ernst Haeckel, Thomas Huxley, and Herbert Spencer. His political views were reinforced by his biological studies as soon as he discovered that biology was compatible with Marxist theory. Indeed, the study of biology became a part of what he saw as a scientific approach to communism. According to this view, Darwin's theory of evolution was a basis for describing the unfolding material dialectics of history. The social evolution from slavery, feudalism, capitalism, to the classless society were stages of a necessary biological process, which in its last dialectical manifestation would come down to a conflict between humans and nature. Whether the unfolding of history in South Africa should be understood in terms of race, class, or a combination of both was, as this article will show, yet to be settled among Roux's radical comrades.

At the University, the young Roux would join demonstrations chanting slogans against Smuts' policy together with Sidney Bunting, who soon became a leading figure in the founding of the new Communist Party of South Africa in 1921 of which Roux was an early member.⁶ The communists initially saw the Rand conflict as a class and not as a race struggle, thought this would change thanks to Bunting who argued fiercely in favor of African workers after the Rand revolt. The Communist Party soon collaborated with the African National Congress, and grew through the 1920s from a tiny group of about 200 to a Party of over 3000 mostly African members. One agenda that generated steady support was the fight for the establishment of an independent Black Republic in South Africa, a fight which culminated with the founding of the League of African Rights in 1930. This was a controversial fight among the communists, many of whom believed the revolution would emerge from a class and not racial conflict. As will be argued, Roux's support of a Black Republic would eventually lead to his expulsion from the Party.

⁵ Roux and Roux, 1970, p. 18. Roux, 1944a, p. 102. Roux, 1942c, p. 7.

⁶ For a full review of the early history of the Communist Party in South Africa see Johns, 1995. Roux, 1944a, pp. 91–102. Roux and Roux, 1970, pp. 21–22, 38–40.

In the meantime, Roux pursued his study of botany and zoology under Charles Moss, from whom he got a municipal grant and some extra income from teaching first-year students. This enabled him to finish his bachelor honors degree in biology in 1925. Moss was indeed committed to his rebel student, once offering to bail him out of prison (after a politically motivated fight with rightwing hooligans). He also later secured him a crucial scholarship to attend Cambridge. This was against the advice of Bunting who thought Roux should study ecology at the more radically oriented University College, London.

Roux's biological studies should be understood in the context of one of the main scientific events in the year of his graduation, namely the congress of the South African Association for the Advancement of Science. The Association had elected Smuts, in political opposition since 1924, as their president for the year, and he took advantage of the opportunity to use his presidential address to launch a holistic theory of evolution. Later published as *Holism and Evolution* (1926), it soon captured the attention of much of the scientific community.⁷ Smuts was already known as a world expert on savanna grass, and he nurtured a keen interest in botany by maintaining one of the largest libraries in the country on the topic. He used to read botanical literature as "a sweet opiate" each night before he went to sleep.⁸ He collected his own herbarium, carried out his own botanical research, and botany was a topic about which political colleagues as well as foreign diplomats conversed in order to get on a personal footing with the statesman. He was in this respect only following his friend and predecessor Louis Botha, who, as a keen patron of botany, had had a leading journal in the field – *Bothalia* – named after him. Smuts saw the emerging science of ecology as a field which could explain how diverse environments and social groups within his country interrelated. His book was his attempt to set the Union Party on a secure scientific footing, and his theory of holism (a word Smuts coined) had its bearing on his statesmanship in establishing the Union of South Africa in 1910. Smuts' theory of ecological holism embodied the biological diversity of environments and peoples of his country, and served as a philosophical basis for a nation building process that sought to unite all white people in the county at the expense of the black population.⁹ This racist policy followed a theory he developed about of the evolution of personalities from lower black to

⁷ Smuts, 1925. Smuts, 1926.

⁸ Smuts to Margaret Gillett, 4 April, 1933, in van der Poel (ed.), 1973, vol. 5, pp. 555–556.

⁹ Anker, 2001. Marx, 1997, pp. 84–89. Compare with Beinart, 1989. Beinart and Coates, 1995.

higher white “wholes,” and he thought distribution of political rights and opportunities should follow each race’s standing in this hierarchy of being.¹⁰ He had already, in his law-school thesis from 1893 and a manuscript from 1895, outlined how evolutionary biology gave support to what he called the science of human *personology* (the science of historical evolution of high and low personalities), which explained racial differences and legitimized his policy of white leadership.

From the suppression of the Rand revolt in 1922 and Smuts’ racial policies, Roux knew all too well the oppressive policy of holism with its idea of gradual rights according to people’s personalities. He would have none of it. Holism was philosophically at odds with Roux’s Marxist interpretation of evolution, and it is likely that he read Smuts’ presidential speech with much skepticism, if he bothered reading it at all. Not so with most other South African ecologists at the time, who quickly adapted holism as their key to understanding the environment. This included the Natal ecologist John William Bews for whom Smuts would be both a personal friend and a mentor of his influential books and articles about human ecology.¹¹ His work clarified to Smuts the importance of maintaining the biotic diversity of cultures, peoples and races within the “whole” environment of South Africa.

Among those deeply impressed with Smuts’ presidential speech was the 26-year old John Phillips, an ecologist at the time working at the Knysna Forest Research Station in Deepwalls. After the speech, they went for a 10-mile walk together, a walk which had a lasting effect on Phillips, who from 1925 on would nurture a friendship, socialize and correspond with the statesman. He would remain a keen follower of holism, arguing for the theory’s scientific respectability among ecologists. Based on Smuts’ thinking and advice, Phillips developed his own theory of ecology for which he coined the term “the biotic community” as its key concept. He aspired, as he explained in a letter to Smuts, to “apply ecological concepts” to human politics so that Smuts’ ideas of racial segregation and management of social communities would have a scientific footing.¹² Phillips met Roux in Pretoria in 1926, and being only 4 years older than Roux he saw in him a potential friend and future colleague of ecological research.¹³ Roux, however, could not agree

¹⁰ Smuts, 1893. Smuts wrote the draft for the Preamble about the rights of “human personalities” for the 1945 Charter for the United Nations, quoted in Reynolds and Hughes, 1976, pp. 166–167.

¹¹ Bews, 1931, pp. 1–15. Bews, 1935. Bews, 1937.

¹² Phillips to Smuts, June 13, 1929, vol. 42, fol. 165, SACUL. Phillips, 1931, pp. 1–24.

¹³ Phillips, “Forward” to Roux, 1969, p. xii.

politically or philosophically with Phillips, and there was little or no contact between them until after the Second World War.

Shortly after his brief meeting with Phillips, Roux went to Downing College at Cambridge University. Here he studied with the London-educated ecologist Frederick Frost Blackman, who was known for his support of leftist students, as promoter of the National Union of Scientific Workers, and ridiculed as a “Botanical Bolshevik” by his foes.¹⁴ Having grown up in London in a family of 11 siblings, where his father practiced as a slum physician, he was a socially concerned scientist, who with the famous ecologist Arthur George Tansley, argued that science above all had to be useful for the poor. Blackman and his allies claimed that what society needed was a total reconstruction in science teaching, based on a practical and more socially responsible science.¹⁵

Roux could not agree more with his new teacher, though his communist sympathies sat him apart from Blackman. He soon found himself in the midst of the communist-based Labor Club in Cambridge where he argued that English workers were “the white aristocracy” in the British Empire repressing through white-only labor unions their black brothers in the South.¹⁶ In the Cambridge debating group, the Heretics, he argued similarly that it was time to establish a “Black Republic” in Africa, and he was in favor of starting an underground illegal party to pursue this cause.¹⁷ Such extremism was hard to swallow for most Cambridge communists who analyzed the world according to class rather than race struggle, and Roux consequently only played a marginal role among the University’s radicals. He had even less success as a delegate from the Communist Party of South Africa communicating the problem of race to the Sixth Congress of the Communist International in Moscow in the summer of 1928. The issue at stake was again whether the revolution was to come from oppressed workers or races, which bore upon the question of whether the socialist state would build upon an industrial or agricultural foundation (since most Africans were peasants).

Roux engaged fellow South African students on religious matters. He became known for his agnostic views, arguing that the Christian religion was equally unfit as a basis of education and politics as Buddhism or Islam. This was heresy in the ears of most of his fellow countrymen, many of whom had strong beliefs in the moral authority of Biblical teaching.¹⁸ All education, Roux believed, should be based on science,

¹⁴ Briggs, 1948. Bower, 1918.

¹⁵ Blackman, Blackman, Keeble, Oliver and Tansley, 1917. Boney, 1991.

¹⁶ Roux and Roux, 1970, pp. 50–51.

¹⁷ Roux to Monica Hunter, 15 Feb. 1929, BC 880, WPUCT.

¹⁸ Roux to Monica Hunter, 14 March 1929, BC 880, WPUCT.

which meant that one had to teach evolution instead of creationism in biology classes. Smuts had a scientific approach to religion which he developed in his theory of holism and evolution. Many Christians of his country understood it as an acceptable Catholic interpretation of Darwin's theory.¹⁹ Roux was skeptical, and argued that the philosophy of holism was white chauvinism designed to legitimate the oppressive Native Administration Act of his government.²⁰ He would maintain such views on holism, religion, and creationism for the rest of his life.

Meanwhile, he finished his Ph.D. at Cambridge with a thesis on "Plant respiration and temperature" and published some of his findings before he left for Johannesburg in July 1929.²¹ Back in South Africa, he applied for a vacant lectureship in biology at Fort Hare, but his application was rejected probably due to the fact that members of the staff had to profess Christian and missionary sympathies.²² This was a blow to Roux, whose resentment against Christian orthodoxy would grow as a result. Roux soon ran out of money and begged his old teacher Moss for a research position in Johannesburg. Moss was not unsympathetic to leftist views and Roux's scholarly work, but was rather uneasy about his revolutionary activity. Moss negotiated with Smuts' close friend Ilyd Buller Pole-Evans (Director of the Division of Botany and Plant Pathology at the Department of Agriculture) about a position for the young Cambridge scholar, and the latter secured him a job researching fruit storage for the Low Temperature Research Laboratory in Cape Town. Roux's new job provided him with a decent salary, but the condition for keeping the position was that he could not take part in politics.

In July 1929, just weeks prior to Roux's arrival, the scientific debate about holism reached its peak in Cape Town at the meeting of the British Association for the Advancement of Science. This was a much anticipated event for the country's scientists, and the definite highlight of the meeting was a discussion on holism entitled "The Nature of Life" between Smuts and the newly appointed professor of zoology at the University of Cape Town, Lancelot Hogben. It was this debate that sparked a formative philosophical debate of the 1930s, namely the holism versus mechanism controversy. Though Roux had yet to arrive, he surely lent his support to the mechanist view on the nature of life as soon as he learned about the debate.

¹⁹ Kolbe, 1928.

²⁰ Roux to Monica Hunter, 12 Aug. 1929, BC 880, WPUCT.

²¹ UA Graduati 12, Roux, SRCUL. Roux, 1929.

²² Roux to Monica Hunter, 30 October 1929, BC 880, WPUCT.

Hogben had formerly worked as a professor of social biology at the Royal College in London, and was a well known supporter of communism and other radical ideas. His new Cape Town home soon became the social hub of the intellectual left, with daily meetings and lively discussions on all kinds of subjects from literature and philosophy to nature conservation and fruit storage, all with a focus on the welfare and the revolutionary potential of the poor. His house was a safe haven for black activists who resisted racial segregation; they participated in his social life and “a sizable number” of students of non-European descent attended his classes.²³

Pole Evans was in the audience listening to Smuts and Hogben debating, and as a key supporter of the Union Party and close friend of Smuts, he quickly came to detest mechanist views. They entailed a different social vision for the country than his own. As soon as he learned that Roux was a follower of Hogben, Pole Evans became concerned about Roux staying out of politics. As it happened, though, the African National Congress was unusually active in Cape Town in the fall of 1929, and Roux could not resist joining these demonstrations; he was consequently dismissed from his post by the Department of Agriculture. Fruit-storage researchers had to conform to Pole Evans’ policies of environmental and social holism, and the now unemployed Roux had to find a new patron.

Hogben was gladly willing to sponsor the unemployed Roux. The zoology professor was excited about the young rebellious communist, and Roux frequented the meetings at his home in what he describes as one of his happiest years. One source for his happiness was the fact that at Hogben’s house he met and fell in love with the socialist mathematician Winifred Lunt, whom he later married. Hogben offered him a hide-out – “If ever you are on the run” – in a secret room in his basement, and he raised money for him so that he could devote his time fully to the journal *The South African Worker*. Roux would now abandon botanical research for some time in favor of what he describes as “frightfully interesting” political activity and journalism.²⁴ When he later returned to continue ecological research, he would recognize the importance of Hogben’s patronage to his thinking about science, ecology, and environmental protection.

Soon Roux was asked to leave Cape Town by the Executive of the Communist Party to join the central leadership in Johannesburg.

²³ Wells, 1978, pp. 196–197. Hogben, 1930.

²⁴ Roux to Monica Hunter, 9 August 1930, BC 880, WPUCT. Roux and Roux, 1970, pp. 70–83, 88. Some of Roux’s political journalism is collected in Anonymous, 1981.

Starting December 1930, he was engaged in full-time political work as editor of the Communist weekly; *Umsebnzi* (Zulu and Xhosa for “The Worker”). For several years, he became obsessed with revolutionary activity and writings in a manner which led to several criminal investigations, legal proceedings, and even terms in jail. Yet it was internal Party disciplines which ultimately cracked Roux’s communist spirit. The story, briefly, follows. Moscow-trained Stalinists came to power in Johannesburg through a purge, and Roux was accused of “right-wing, liberal-reformist derivations” due to his support of the League of African Rights and the Black Republic.²⁵ Roux and his allies were expelled or politically isolated by 1936. The conflict was between intellectual Party-line in favor of a centralized Moscow-based movement, and Roux’s vision of a peasant revolution based on freedom for the black population from the oppressive politics of holism. Yet Roux was accused of advocating counter-revolutionary ideas. His campaign for a Black Republic was allegedly a campaign for “the Native bourgeoisie,” since such a republic would be based on race and not on class struggle. For such views, Roux became a pariah in all political camps, and he had to make a living cleaning municipal baths without any apparent hope of ever returning to the political or academic world.

The Second World War and the Total War against Soil Erosion

Yet as a municipal bath attendant, Roux had the occasion to socialize with high-society bathers. Among them was the biochemist Izak Donen from the Chemistry Department at the University of Cape Town who happened to be looking for a researcher on fruit storage and vitamins. A special grant soon emerged through negotiation with the Principal and Roux was able to return to academic life at the University of Cape Town starting January 1937.²⁶ He adjusted quickly and soon published a couple of articles about fruit which he wrote with his new friend.²⁷ As a spin-off from the fruit storage research, Roux and a colleague discovered that certain South African fish liver oils had a higher content of vitamin A than the Nordic cod, and his capitalist colleague soon made a

²⁵ Roux to Monica Hunter, 21 Jan. and 5 Dec. 1931, BC 880, WPUCT. Bunting, 1975, pp. 76–80. Adams, 2001, pp. 20–39. Lerumo, 1971, 63–67. Cronin, 1991, pp. 7–20.

²⁶ I. Donen to A. D. Knott-Craig, 18 Jan. 1937. Payroll of SMUCT. Roux and Roux, 1970, p. 149.

²⁷ Donen and Roux, 1939. Roux, 1940. Roux, 1949a.

small fortune out of it.²⁸ It was enough for financially supporting laboratory research on types of fish oil, and Roux would work and publish on this topic throughout the war years.²⁹ It was while studying the dynamics of fish stock that he came to be aware of the significance of human population dynamics by transferring models for fluctuation of fish into human affairs.

For Roux, this research was a convenient cover for his continuing political activity in trying to mobilize the revolutionary potential of the black farming communities. Liberated from all kinds of Party work and controversy he could devote himself to spreading revolutionary literature chiefly among African peasants. He started to translate socialist terminology into Bantu languages by means “similar to that of the early missionaries” who translated the Bible.³⁰ His first step was to construct what he called a Basic English language of only 800 words, followed by an Easy English of 1000 words, designed to help non-English speaking comrades.³¹ Inspired by the work of Charles K. Ogden, he also made two unsuccessful attempts to publish a whole book about the importance of Easy English.³² Armed with a series of educational books with this limited vocabulary, Roux and friends from the African National Congress strolled around in native communities to teach and mobilize against segregation. The literature they carried with them included books that connected with leftist criticism, such as a heavily edited version of H. G. Wells’s *A Short History of the World*, some of Julian Huxley and Alexander Morris Carr-Saunders’s writings against racism,

²⁸ His friend had a better relationship with capitalism than Roux and formed a company called Vitamin Oils (Pty.) Ltd. to exploit the fish oil. The price for these oils skyrocketed when the war started and German submarines seriously hampered the possibility of fishing Nordic cod. The company made a fortune out of vitamin oils sold under the brand “Ocean Gold for Young and Old,” and could easily afford to hire Roux to research other possible fish oil resources. Roux and Roux, 1970, pp. 152–153. Molteno, Rapson, Roux, Schwartz and Rensburg, 1945.

²⁹ Roux, 1947a. Roux, 1949b. Roux, 1949c.

³⁰ Roux and Roux, 1970, pp. 84–85, 97. On the Party discipline in South Africa see pp. 84–150.

³¹ Roux, 1942b, pp. 261–265. Roux edited a series of books from the late 1930s through the 1940s in basic and easy English called “The Six Penny Library,” which for became the first introduction to English for many South Africans. Books by Roux not seen by the author include Roux, 1937b and 1944c. Other books in the same genera: Roux, 1942a, pamphlet 12 pages. Roux, 1949c, short story of 28 pages.

³² Edward Roux, “Why not Easy English?” (unpublished). Prof. J. Y. T. Greig to Roux, Dec. 18, 1941. Roux to Colonial Department at the University of London Institute of Education, Dec. 31 1945, with reply March 21 1946, AU8 1.1., WUA. Ogden, 1935.

and Harold C. Armstrong's bashing biography of the Prime Minister: *Grey Steel: J.C. Smuts: A Study in Arrogance* from 1937.³³

At the same time, he scrutinized his lifelong engagement in the Communist Party through a biography of his old friend Sidney Bunting, followed by his perhaps best known book *Time Longer than Rope: A History of the Black Man's Struggle for Freedom in South Africa*. These books were in effect an attack on Moscow-based intellectual dogmatism and at the same time a rebellious critique of all forms of racist policies in his country. The Bunting biography was published in a small edition with little circulation in 1944, while *Time Longer than Rope* remained unpublished until after the war.

As the European war gradually evolved into the Second World War, Roux's prime focus shifted toward science education in Easy English among the African population.³⁴ His articles in the *Bantu World* were the bases for his short book *Harvest and Health in Africa* from 1942.³⁵ Here he shows how the science of ecology supports the policy of farming cooperatives with self-sufficient land, schools, banks, and healthcare in the communities. The book was met with approval on the importance of educating farmers, though a reviewer doubted that the goal of "a self-supporting peasant population" was possible or desirable.³⁶

The point of *Harvest and Health in Africa* was to foster a spirit of comradeship in black communities through establishing a sense of independence and agricultural self-sufficiency that would enhance the power basis of resistance.³⁷ Ecological education and images served to establish a sense of having an independent economy – a possible future Black Republic – rooted in African soil and tradition which did not depend on white capitalism and the exploitation by mining companies. Indeed, Roux's slogan "SAVE THE SOIL AND SAVE SOUTH AFRICA!" was intrinsically linked to saving the agricultural economy of the black population from the burden of white capitalism.³⁸ This he argued in 1946 in his book *The Veld and the Future*, he stresses the urgent need of saving soil: "This threatening issue is poised in a Social Age. It is the direct concern of Everyman and Everywoman. The Conservation of our Soil calls for total planning; the prevention of the

³³ Wells, 1922. Huxley and Haddon with a contribution from Morris Carr-Saunders, 1935. Armstrong, 1937.

³⁴ Roux, 1945, pamphlet 19 pages.

³⁵ Roux, 1942d, pp. 17, 84–88.

³⁶ M., N. 1943, p. 221.

³⁷ Roux, 1944b, pamphlet 11 pages.

³⁸ Roux, 1946, p. 58.

erosion of our lands for total war” against environmental destruction.³⁹ This call for total war against soil erosion follows from Roux’s understanding of dialectical materialism: it was the task of revolutionary socialism to liberate those of non-European descent from the burden of capitalism, followed by total planned economy that could save the African soil from the equally oppressive industrial exploitation of the environment.

Yet this was not how the book was read, at least not by everyone. In an editorial of *The Natal Witness* it was praised as “A book which every South African should read,” and Roux was seen as a supporter of Smuts since they shared a common concern about soil erosion.⁴⁰ Smuts had for years spoken of environmental concern and soil erosion, and it is therefore not surprising that the reviewer of Roux’s *The Veld and the Future* associated the book with Smuts. After all, they did share a common concern for the environmental havoc of their nation. Roux had played down his philosophical and political views in order to foster a common concern for the importance of soil conservation; this also reflected the immediate post-war spirit of cooperation across political and racial divides.

The New Ecological Left at Witwatersrand University

The favorable review of his book as a follower of Smuts and a polite reference John Phillips’ soil research may have prompted the latter to hire Roux as a lecturer at the Frankenwald Research Station at Witwatersrand University in 1948. They had last met in 1926, and Phillips had since attained a professorship in botany at Witwatersrand (starting in 1930) with his own ecological research station. This was all arranged by his patron Smuts, who took great interest and exercised his influence in the hiring of botany scholars at universities. The Research Station was opened with fanfare in 1935 by Smuts himself then serving as Minister of Justice in a coalition government. As newly appointed professor, Phillips was eager to make Frankenwald a center for ecological research that could support Smuts’ holistic theories about evolution. In the process of connecting a network of scholars to Frankenwald, he came to sponsor a whole series of scholars and papers, including a paper by Roux for the *South African Journal of Science* published in 1937.⁴¹ Throughout the war, Phillips nurtured his friend-

³⁹ Roux, 1946, p. 3.

⁴⁰ Anonymous, 1946.

⁴¹ Roux, 1937a, communicated by John Phillips.

ship with Smuts, and he also became a key supporter of his policies by mobilizing the scientific community for war research. This gave Phillips some clout among Witwatersrand academics. After the war, Smuts stood at the peak of his power as Prime Minister, Minister of External Affairs and Defense, and Field Marshal for the South African Army. When Smuts' government drafted the Soil Conservation Act, Phillips could thus put some weight behind the argument that what the University needed to do was to hire soil conservation teachers, and Roux became one of them thanks to his wartime books on the subject.

Roux had so far been a definite outsider in academic ecological debates and research. This would now change thanks to his new lectureship. The holistic approach to ecology would soon become a thing of the past thanks to Phillips' sudden departure, and the collapse of Smuts' government in 1948. In Phillips' attempt to create a holistic survey of soil erosion in Africa, he enrolled more students to carry it out and built larger buildings than the University could afford.⁴² He overspent his budget, and his relationship with the rest of the University became increasingly hostile. In a long emotional letter to his patron Smuts, he confessed that he had been unable to pass holism on to the next generation of ecologists at Witwatersrand, and that he had decided to take a job with the Overseas Food Cooperation managing groundnut production in Tanganyika.⁴³ At his new post, he discovered that the Cooperation was in an economic mess and under heavy criticism from the Conservative Party in Britain for wasting taxpayers' money. In a series of letters, he desperately tried to see Smuts "for my own soul's sake!" and to get advice on how "to introduce into the *idealism* –certain measure of *realism*" in both economy and human ecology.⁴⁴ Smuts must have been disappointed with Phillips because he replied only with formal letters denying Phillips his "repeated requests for an interview" (they had until then always had "conversations").⁴⁵ His failure at Witwatersrand and the move to Tanganyika meant an end to Smuts' patronage and friendship, and an end to holistic ecological research at Frankenwald.

The political scene in South Africa had changed with the establishment of a Nationalist apartheid regime and increasing cold-war tensions. Although no longer a member of the Communist Party, Roux's sympathies and connections became pertinent for academics at Wit-

⁴² Murray, 1997, pp. 67–71.

⁴³ Phillips to Smuts, Jan. 18 1948, vol. 87, fol. 34, SACUL. Smuts to Phillips, Jan. 22 1948, vol. 88, fol. 188, SACUL.

⁴⁴ Phillips to Smuts, April 15, 30, May 18 1948, vol. 87, folios 35–37, SACUL.

⁴⁵ Smuts to Phillips, May 4 1948, vol. 88 fol. 89, and Smuts's secretary to Phillips, May 29 1948, vol. 87, fol. 37, SACUL.

watersrand who moved to the left. His continued support of peoples of non-European descent caused uproar as well as support, and Frankewald became a place where resistance to apartheid went hand in hand with concern for various environmental problems, ecological research, and education. What caught the general interest was the publication of *Time Longer than Rope* in 1948 which was immediately understood as an attack on the Nationalist's policy of apartheid from the far left.⁴⁶ It was widely reviewed as an attempt to write political history "from the native point of view," which implied "treating the theme not as a group of 'problems' in white politics, but as a series of stages in black political evolution."⁴⁷ Most reviewers recognized Roux's Marxist leaning, but thought the book to be reasonably balanced, timely, and factually correct. One wrote typically of the book as "a patient, careful and scholarly record of the political history of Black man in South Africa."⁴⁸ Even those who struggled with Roux's views on apartheid read the book with interest and praised him for his scholarly approach to a difficult issue.⁴⁹ The praise of Roux as a scholar – and not agitator – was helpful in establishing his reputation at the University.

Yet his history of black struggle did not establish him as a scholar in biology. It was his previous botany papers, his articles on the dynamics of fish populations, as well as a series of papers on issues related to agriculture that won his acceptance among scientists. At Frankewald, he carried out research much in the spirit of his old Cambridge teacher Blackman, namely on practical topics useful to society such as vitamins, yeast, herbicides, antibiotics, and potato.⁵⁰ The fact that he gave the Presidential address to Section E (Botany and Agriculture) of the South African Association for the Advancement of Science in 1950 is surely evidence of Roux having gained acceptance within the science community.⁵¹ His papers on grassland succession were equally practical in their focus on relevance to agriculture and pasturage.⁵² He also wrote a whole series of popular educational articles in *Fighting talk* on how science works.⁵³ Though Roux was less engaged in political activities, he had not lost his belief in the importance of science to ordinary citizens and black communities.

⁴⁶ Roux, 1948. Divine, 1948. Anonymous, 1948a. Anonymous, 1948b.

⁴⁷ Anonymous, 1948c.

⁴⁸ O., P.T 1948. Similarly in Anonymous, 1948d. Anonymous, 1948e.

⁴⁹ W., O. 1948. Anonymous, 1948f. H., J.F. 1948.

⁵⁰ Paterson and Roux, 1949. Roux, 1951. Roux, 1953a. Roux, 1953b.

⁵¹ Roux, 1950.

⁵² Roux, 1954a. Jong and Roux, 1955. Roux, 1956.

⁵³ Roux, 1954b. Roux, 1959a. Roux, 1959b. Roux, 1959c. Roux, 1959d. Roux, 1959e. Roux, 1959f. Roux, 1959g.

Indeed, Roux's communist views would with the growing political oppression of the cold-war transform into a defense of Rationality (with a capital R) in a society he thought to be riddled with all kinds of superstitions. His previous debates about religion with fellow South African students from Cambridge would now resurface. As Chairman of the Rationalist Association and frequent contributor to the journal with the telling title *The Rationalist*, Roux argued that parapsychology was unscientific, that the Bible was a product of human imagination and filled with absurd contradictions, and that God was a product of anthropomorphism.⁵⁴ Typically, he argued that "the greatest obstacle" to evolutionary science was religion.⁵⁵ Scientific rationalism was the hope for mankind: "If only human affairs – politics if you like – could be discussed in the way that nonhuman affairs are usually discussed by trained scientists, then there would be hope for the human race."⁵⁶

When being accused of denying morality, Roux replied by emphasizing that industrialism was the chief moral problem both politically and for the environment. A serious ecological crisis, he argued, was imminent: "... twentieth century man is heading for disaster. We foresee as a result of man's unrestrained multiplication and his failure to conserve the resources of the planet the collapse of civilization in the not too distant future."⁵⁷ These doomsday scenarios for humankind were in effect an integral part of his political beliefs in the collapse of capitalism, revolution, and praise of a classless society. In a lecture on material dialectics, Roux explained, "Under communism, with the disappearance of class struggles (after the state has withered away) the dialectic appears again on a higher level. There has always been an opposition between man and nature. After the proletarian revolution this opposition – society over against the rest of Nature – becomes the main driving force for future development."⁵⁸ This "driving force" could take the form of destructive

⁵⁴ Edward Roux, "Parapsychology and Scientific Integrity," MS. 4 pages, May 27 1959, AU8 2.3g, WUA; "Freud and telepathy," MS. 4 pages, undated, AU8 2.3.f, WUA; "Parapsychology," MS. 5 pages, undated, AU8 2.3 g, WUA; "The Bible is a Human Product and Contains Many Contradictions and Absurdities," MS. 6 pages, undated, AU8 2.3t, WUA; "There is a supreme, intelligent being who has created and governs the universe," MS. 6 pages, undated, AU8 2.3s, WUA; "Miracles," MS. 5 pages, 1958, AU8 2.3m, WUA.

⁵⁵ Roux, 1958, p. 225.

⁵⁶ Edward Roux, "Biological invention and social advance," MS. 15 pages, undated, AU8 2.3d, WUA, pp. 8–9.

⁵⁷ Edward Roux, "Pessimism is a logical consequence of atheism," MS. 5 pages, undated, AU8 2.3r, WUA.

⁵⁸ Edward Roux, "What is materialism?" MS. 11 pages, undated, AU 8 2.3c, WUA, p. 8.

exploitation leading to environmental disaster or wise scientific management guided by rational reasoning by the scientific elite. Where the Communist Party envisioned a state guarded by revolutionary leaders, Roux saw ecological harmony guarded by the elite of rational scientists.

The South African nation's ruling elite, however, had a different view of humanity's place in nature than that of Roux. Within the National Party creationism and Biblical interpretations of nature were the accepted views, at least according to Roux who used much ink arguing against it. As he saw it, the outdated Christian dogmas taught by the Dutch Reformed Churches stood in the way of progressive and liberating evolutionary thinking, especially on the question of race. It is important to recall that in the late 1950s, evolution was not in the curriculum of South African schools and Afrikaans universities. Anti-evolutionists, such as Senator Jan de Klerk, were in a position to stop museum exhibits demonstrating data in support of evolution. Even extraordinary evidence found in South Africa, such as the *Australopithecus* skull, was kept from public display. To Roux, the teaching of creationism and rejection of evolutionary theory was intrinsically linked with legitimating the apartheid regime, since the literal interpretation of the Bible according to the Nationalists supported fixed boundaries between races and the moral superiority of whites.⁵⁹ Evolutionary biology, on the other hand, Roux argued, did not provide any scientific "justification for treating them [the blacks] differently from any other racial group."⁶⁰

Another superstition Roux argued against was the holistic approach in biology of his former colleague Phillips. With the loss of his patron Smuts, Phillips became a vagabond scientist in search of research grants and opportunities. Smuts' death in 1950 and the economic collapse of the groundnut enterprise the same year made his situation rather bleak, and he was happy to accept a job as Dean of a new Faculty of Agriculture at the University of Ghana in 1951. Here he tried to start afresh by publishing a thick book on the potential of the biotic community concept for developing landscapes south of the Sahara; it opened with a foreword by Ghana's Prime Minister Kwame Nkrumah.⁶¹ Phillips knew from his friendship with Smuts that a good relationship with the country's statesman was crucial for success in ecological research. Consequently, he devoted an entire book to investigating Nkrumah's personality according to Smuts's theory of *personology*. In this curious book, he tries to place Nkrumah among the most advanced black

⁵⁹ Edward Roux, "Anti-Evolution controversy in South Africa," MS. 5 pages, undated, AU8 2.3.1, WUA. Roux, 1957.

⁶⁰ Roux, 1954c.

⁶¹ Phillips, 1959.

Africans on the gradual holistic scale of human beings, with Smuts at a safe distance at the top of the scale. The result had unmistakable racist undertones, and several phrases were hardly complimentary and certainly unlikely to establish bonds of patronage: “Nkrumah is not unlike Hitler: an orator born to draw from great concourses almost whatever will,” and “[he has] the chameleon quality characteristic of many Africans.”⁶² Nkrumah was not pleased. In July 1960, he required all resident citizens from South Africa to “solemnly and sincerely” declare that they opposed the apartheid regime in order to maintain their visas. Phillips promptly refused to sign.⁶³ The creation of Bantustans by the South African government was a policy he endorsed through his biotic community research, and declaring opposition to apartheid would in effect mean admitting scientific failure. Within weeks, he was expelled from Ghana on the direct order of Nkrumah.

These racist implications of holistic ecology were Roux’s target in his critique of Smuts and Phillips. What also concerned Roux was the idealist foundation of their ecological views.⁶⁴ Using his Marxist platform he thought their version of ecology to have a spiritual instead of material basis, and as a consequence reiterated the Christian orthodoxy on the issue of race. To Roux it was thus important to dismiss such holistic philosophical systems as “of little value unless they help us solve problems, which in general they do not, [since] ... we learn nothing by describing any of these systems as a ‘whole’, or by saying that the larger wholes are made up of smaller wholes.”⁶⁵ In other words, holism was of no practical value in the process of achieving material knowledge and thus worthless as a foundation for science and future scientific management of society.

The World Bank was more favorable to Phillips, who after being expelled from Ghana, worked as a consultant for them as well as for the Ministry of Agriculture in Southern Rhodesia, trying out a new holistic agriculture based on the principles of the biotic community.⁶⁶ In 1961, he published a book in defense of biotic community research and applied holism to agriculture and forestry in the tropics.⁶⁷ Smuts’ politics of holism were again his main theoretical point of departure. He spent the end of his career, from 1963 to his retirement in the mid seventies, at the

⁶² Phillips, 1960, p. 38, 39.

⁶³ “A Personal Statement by the Author,” Aug. 1960, attached by Phillips, 1960, Widener Library, Harvard University, Afr 6176.20.

⁶⁴ Edward Roux, “The Dialectic in Hegel and Marx,” MS. 4 pages (notes), undated, AU8 2.3a, WUA.

⁶⁵ Roux and Roux, 1970, p. 63, 64.

⁶⁶ Phillips, Hammond, Samuels and Swynnerton, 1962.

⁶⁷ Phillips, 1961. A second revised edition was published by Faber & Faber in London in 1966.

Town and Regional Planning Commission at the University of Natal, advising the government on how to order nature and segregate society.

At Witwatersrand, Roux at the same time told his students that holism was an inapt research tool and that the spiritual and religious thinking were incompatible with evolutionary biology. He published in the period scholarly articles, as well as two textbooks *Botany for Medical Students* (1951) and *A First Year Plant Physiology* (1961).⁶⁸ These publications were important steps toward a professorship, which he received in 1962. He also continued to write popular articles designed to promote science and ecology as the solution to managing population growth and the environmental crisis.⁶⁹ While targeting holism in ecological research, he also focused his attention on fighting creationism. He carried on an extensive correspondence with key creationists in South Africa, arguing fiercely in favor of evolutionary theory.⁷⁰ As an alternative to Genesis, Roux told his students about the socialist J. B. S. Haldane's material speculations on the origins of life, which he had learned during his student years in Cambridge.⁷¹ At the Rationalist Association or other debating scenes Roux soon became known as an outspoken opponent of Biblical teaching in general and creationism in particular.⁷² He would typically burst out that it was "amazing that in this year of grace, 1964, it should be thought necessary before an audience of university students [at Witwatersrand] to defend the theory of evolution."⁷³ Yet, this was the case. Though evolution was taken as a fact among students at Frankenwald, it was a contested theory for other students and in society at large. Roux fought the superstition head on.

The Banning of Roux

To Roux creationism was the ideological foundation for racism, and his argument against it should be understood in the context of his attempt

⁶⁸ Roux and Warren, 1963. Roux, 1951b. Roux, 1961a.

⁶⁹ Roux, 1962.

⁷⁰ Correspondence between Edward Roux and Ivan W Bezuidenhout, 40 pages, incomplete, April through December 1962, AU8 1.1., WUA; Correspondence between G. Wilsenach and Edward Roux, fall 1963, 18 pages, incomplete, AU8 1.1., WUA.

⁷¹ Roux, 1959h. Haldane, 1929.

⁷² Edward Roux, "Superstition, immortality and pessimism are the logical consequences of atheism," MS. 4 pages, undated, AU8 2.3p, WUA; "Evolution and the Bible," remarks at the Rationalist Association, MS. 2 pages, undated, AU8 2.3o, WUA; "Rationalism and the existence of God," MS. 4 pages, Nov. 7 1963, AU8 2.3n, WUA; "The Origin of Flowering Plants," MS. 4 pages, undated, AU8 2.3i, WUA.

⁷³ Edward Roux, "Evolution," MS. 4 pages, March 31 1964, AU 8 2.3k, WUA, p. 1.

to publish a new updated version of *Time Longer than Rope*. By 1959, he approached Witwatersrand University Press about it, but the extended manuscript was initially rejected thanks to a critical peer review by Ronald B. Ballinger who thought it lacked footnotes and generally bore “the mark of haste.”⁷⁴ When the manuscript came up for review at the Publication Committee they thought Roux, in addition to adding footnotes, should remove “emotive phrases” from the entire book, a suggestion he found particularly upsetting. Apparently, there had been much wrangling about the manuscript behind the scenes or “much trouble and misunderstandings” as Roux put it in his answer to the Committee, before he continued: “The idea of the removal of ‘emotive phrases’ does not appeal to me. The very title of the book is an ‘emotive phrase’ and if that stands, why not the others? We also face the probability of the passage of the new Censorship Bill which may make things very difficult.”⁷⁵

In anger, Roux withdrew the manuscript for *Time Longer than Rope* from Witwatersrand University Press and sent it instead to the University of Wisconsin Press. Their peer reviewer, Jeffrey Butler at Boston University, acknowledged that its chief value was not its scholarly rigor but instead that “the book’s fire and attractiveness come from the sense of involvement.”⁷⁶ It was thus the sense of emotional involvement, which hindered publication in South Africa, that argued for its publication in the United States. It appeared in the bookstores in South Africa in June 1964, exactly a half year before Roux and his work were officially banned on December 15, 1964.

The Suppression of Communism Bill of 1950 was not new to Roux. In 1959, he was refused a passport to visit Portuguese East Africa thanks to his communist sympathies.⁷⁷ Roux had also been warned by the Minister of Justice, Balthazar J. Vorster, back in September 1964, that he would be in trouble if he did not publicly denounce the Communist Party and name party members. Roux refused to do so, arguing that his expulsion from the Party in 1936 was evidence enough of him not being a Party member. Indeed, Roux had between 1957 and 1962 been a member of the anti-apartheid Liberal Party and thought it unnecessary to name former or current Party members. It was not enough for Vorster, who issued a comprehensive ban, which included entering any educational institution

⁷⁴ Peer-review by R. B. Ballinger, Aug. 3 1959, AU8 1.1., WUA.

⁷⁵ Roux to A. de V. Herholdt, draft, Apr. 23 1960. See also A. de V. Herholdt to Roux, Apr. 20 1960, AU8 1.1., WUA.

⁷⁶ Roux, 1964a. Jeffrey Butler to John Solon at University of Wisconsin Press, Dec. 17 1962, AU8 1.1., WUA.

⁷⁷ Anonymous, 1959.

or any location reserved for Asians or African people, teaching, traveling, attending public meetings, publishing, and talking or writing to other banned people. His published books and articles were also banned. This comprehensive ban took Roux by surprise in its scale and exceeded his worst fears. His former membership in the Communist Party must have been Vorster's excuse for silencing an activist and scholar whose views on religion, creationism, evolution, and race challenged the National Party's policy and constituency.⁷⁸

The immediate result of the ban was an outcry from the scientific community. Numerous newspaper articles show how students, intellectuals, scientists, and university administrators rushed to defend the liberty of a scholar whom they knew as a science educator and public defender of evolutionary theory, and hardly as a revolutionary.⁷⁹ There was also some fear that the banning would scare off new students and recruits to the university.⁸⁰ Roux was suddenly raised to the pantheon of "South Africa's leading scientists," an opinion which led him to comment dryly that "Since I was banned I grew ever more distinguished."⁸¹ He had over the past years published papers in *South African Journal of Science* on the distribution of exotic acacias, articles which the South African Association for the Advancement of Science pointed to as absurd to ban from the public.⁸² Their President, R. H. Marloth, urged the Minister of Justice to permit further publication of Roux's "monumental work" on acacias, and after some behind the door negotiations, a one page article on their salt tolerance by Roux appeared in the Association's journal.⁸³

Around the world, scholars also found ways of expressing their opposition to limiting Roux's academic freedom. The fact that 113 Irish professors signed a protest and that 243 academic employees at Birmingham University delivered a complaint to the South African Embassy may serve as examples of voices of disapproval which caught the news.⁸⁴

⁷⁸ Roux to Helen Suzman, Oct. 3 1965, AU8 1.1., WUA. Vigne, 1997, pp. 58, 192–193. Roux and Roux, 1970, pp. 251–267.

⁷⁹ Pogrud, 1964. Anonymous, 1964a. Anonymous, 1964b. Anonymous, 1964c. Anonymous, 1964d. Anonymous, 1964e. Anonymous, 1964f. Anonymous, 1964g. Sapa, undated.

⁸⁰ Anonymous, 1964h.

⁸¹ Anonymous, 1964i. Roux and Roux, 1970, pp. 197–279, quote on p. 258. Shear, 1996, p. 38. Murray, 1997, p. 272, 289, 326.

⁸² Anonymous, 1965a. Roux, 1961b. Roux, 1963. Roux, 1964b. Roux and Middlemiss, 1963.

⁸³ Anonymous, 1965b. Roux, 1965.

⁸⁴ Anonymous, 1965c; L., F. 1966.

The Lecturer's Association, the Academic Staff Association, and the Student Representative Council at Witwatersrand condemned the banning in vivid terms, arguing that the University had been deprived from the freedom to decide on who should be members of their academic staff. There was, however, a tradition from Smuts down to the present regarding political approval of teachers of evolution, so this plea for freedom was more of a signal of a need to establish academic independence. The students rushed to set up a bursary in Roux's name for studying bio-ecology.⁸⁵ They also arranged a huge demonstration, and on March 13, about 2000 scholars and students marched in favor of lifting the ban. The right to read Roux's *Botany for Medical Students* and *A First Year Plant Physiology*, as well as his "classic on the subject" *The Veld and the Future*, became a rhetorical vehicle for the growing counterculture at Witwatersrand.⁸⁶ In the end, students were allowed to read these books, though it was quite clear that the book demonstrators were actually concerned about was the distribution of *Time Longer than Rope*.⁸⁷ In these protests, the academic freedom to study botany and address environmental concerns served as a cover for anti-governmental opinions.

In the months before Roux was banned, *Time Longer than Rope* was reviewed as "written with great objectivity" from "the other side of the mirror," and Roux was depicted as expressing views within the movement against apartheid.⁸⁸ The prohibition of a book caught the interest of reviewers, who would praise it and voice sympathy with Roux and the anti-racist cause. Although similar books such as Gwendolen M. Carter's *The Politics of Inequality* of 1958 may arguably be judged as better, Roux's work had the sting of taboo which caught attention. Amnesty International recommended it to South African prisoners and victims of segregation. *African Affairs* thought of it as an arresting communist view on black history, and *The Historian* recognized Roux as a key figure in the anti-apartheid movement.⁸⁹ The *American Historical Review* thought the narrative particularly interesting since it put "the blacker guilt upon Smuts" with his oppressive politics of holism. Other reviewers expressed similar and for the most part favorable opinions.⁹⁰ A paperback edition of the book, published in 1968, kept up

⁸⁵ Anonymous, 1965d.

⁸⁶ Anonymous, 1964j. Anonymous, 1965e. Anonymous, 1965f. Anonymous, 1965g. Anonymous, 1965h.

⁸⁷ Schirmer, 1964.

⁸⁸ F., P.M. 1964. Tulloch, 1964. Anonymous, 1964k. Anonymous, 1964l; Anonymous, 1964m.

⁸⁹ Anonymous, 1966. Blood, 1965. Curry, 1965.

⁹⁰ Lovell, 1965. Anonymous, 1965i, Anonymous, 1965j, Anonymous, 1965k. Anonymous, 1965l. Anonymous, 1967. Anonymous, 1968. N., 1970.

with the demand for what many outside South Africa saw as an important insider's account of the struggle against racism in the country.

The favorable reviews and all the support did not help to lift the ban. On the contrary, Roux became isolated and was soon living "in intellectual limbo," like an academic hermit, with his wife.⁹¹ He made attempts to do some research in his tiny garden and at a nearby nature sanctuary he could visit without violating his travel restrictions, work which led to a posthumously published article.⁹² Yet what absorbed most of his time was writing his autobiography and an environmental and social history of his old research station. These were eventually published, respectively, as *Rebel Pity: The Life of Eddie Roux* (1970) and *Grass: The Story of Frankenwald* (1969).

Roux had just finished the manuscript for *Grass* when he died suddenly in February 1966. It was thus up to his wife Winifred to write the humiliating letter to the Minister of Justice asking for permission to publish the book. "I state that there is no political matter nor political flavour" in the manuscript, she wrote, "[t]he story is exclusively of grass succession research."⁹³ Her claim is not without merit. The book is free of polemics, and it is hard to spot claims that could upset a sensitive reader. Yet, as the historian Douglas Weiner has demonstrated, writing about nature may under a totalitarian regime serve as a cover for addressing more risky social issues.⁹⁴ Writing about grass and ecology thus served Roux as a little corner of freedom on which he could establish a common ground with the rest of the political and scientific community. This tension in the politics of pure science was what several of the reviewers brought up when the book was released – with formal permission by the Minister of Justice – by Oxford University Press in 1969. The reviewer in *Journal of Ecology*, for example, quoted Roux's critique of Phillips, and pointed out the "great difference" in the methodological approaches between them.⁹⁵ Those who got to know the tension personally put it in less subtle terms: Roux allegedly thought of holism as the "serpent" in the Frankenwald garden, Phillips was "the highest priest of ecology inspired by holism," and Roux was on a lifetime "crusade" against it.⁹⁶ His radical friends praised the book, and almost all commentators on the book pointed to the fact that it was

⁹¹ Mader, 1965. Lewin, 1965.

⁹² Roux, 1970.

⁹³ Winifred Roux to Minister of Justice, Aug. 8 1966, AU8 1.4, WUA.

⁹⁴ Weiner, 1999.

⁹⁵ Oxley, 1971. Similarly in Sharp, 1972.

⁹⁶ R., T.C. 1970. Similarly in B., H. 1969.

written by a banned scientist on a lifelong campaign against the oppressive politics of holism.⁹⁷

In the last pages of *Grass, The Story of Frankenwald* Roux makes a strong plea to the reader to save the environment and the hungry from the advancing world of capitalism with its exploitation of both nature and human resources.⁹⁸ This was one of the main topics of his later popular and scientific writings, and the above discussion has set this environmental and social agenda in its left political setting. During the cold-war, Roux transformed his communist beliefs into advocacy for scientific rationalism, management, and protection of nature against advancing capitalism. Though these pleas for saving nature had their own legitimate reasons, they also served as a vehicle for questioning the more risky issue of evolution and racial order in society. The link between ecological and political order had long been an important theme among the country's ecologists and politicians alike. Ever since Smuts' time, grass research has been a topic with intriguing social and political undertones and implications. His holistic theory of evolution and racial social order inspired several ecologists, including Phillips, who used his entire scientific career to sanctify the ecologically informed racial policy of his patron. The holistic and idealist informed methodology of Phillips stood in direct opposition to the material and Marxist informed approach to ecology of Roux. They both enjoyed political support from respectively the Union Party and the Communist Party, while they shared a common antagonist in the National Party who promoted creationism. The rise and fall of two of the country's leading ecologists was due to their political views and engagement. The banning of Roux by the Nationalist Minister of Justice should be understood in view of this politics of ecology and evolution in South Africa, rather than as a result of Roux's communist sympathies alone. In the politics of ecology in South Africa, there was no common environmental ground on which historical or social analyses could emerge.

⁹⁷ Anonymous, 1969; Eybers, 1969. D'Ewes, 1969; S., J.D. 1969; Wilde, (radio), undated.

⁹⁸ Roux and Roux, 1970, pp. 190–196.

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