

where—needed no clerical or hierarchical proscriptions to treat Masonry with suspicion and hostility. The Catholic Knights of Columbus, for example, did not begin—as Burt alleges—to counter Masonry as such; it began to counter anti-Catholicism, Masonic included. There was a sharp nativist edge to American Masonry. Burt knows that. Arguing that Freemasonry was a force for good—and Burt makes a decent argument that it was—is not reason enough for him to dull that edge.

The sections of Burt's book on Cornwall are informative and tell an important story. But that story does not play well in the context of America's mining regions; they were too "cosmopolitan." The American mining labor force was too ethnically and culturally mixed. That diversity and the nativism that accompanied it aroused what may always have been prejudice nascent in Freemasonry. Either way, the "Victorian network" in America took to the nativist cause with an unseemly eagerness. Burt minimizes, when he does not entirely ignore, the deep ethnic and cultural tensions in that labor force; he ignores as well the fact that the American Masons had at least something to do with those tensions.

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Franklin White. *Miner with a Heart of Gold: Biography of a Mineral Science and Engineering Educator*. Victoria, BC: Friesen Press: 2020; 252 pp., 21 b&w illus.; notes, 3 append., paper, \$15.99. ISBN: 9781525577666

Underappreciated, perhaps, in histories of mining, has been the role of formal education. As mineral development became an increasingly complex economic, technological, and social undertaking during the industrial era, so developed an academic infrastructure to advance it. First college mining programs were founded at

Freiberg, Saxony, in 1765, at London in 1851, and then throughout the British diaspora at New York in 1864, Ballarat in 1870, and Montreal in 1871. These institutions and those that followed would train the managers and provide much of the research that have supported the industry ever since.

In *Miner with a Heart of Gold*, author Franklin White recounts the life of his father, Frank Thomas Matthews White, "mineral science and engineering educator," born in Melbourne, Victoria, Australia, on 16 September 1909. After graduating with a bachelor's degree in metallurgical engineering from the University of Melbourne in 1931, White began his career in the industry with an appointment as metallurgical chemist at the Wiluna Gold Mines company in Western Australia. Among other notable developments while there, White met, and in 1935 married, Tessie Marian Nunn, a lifelong union that produced daughter Hilary and son Franklin.

After six years of holding various technical and managerial jobs in the western goldfields, in July 1937 White accepted an appointment in the British colonial service to Fiji to establish a department of mines in the colony and serve as mine inspector. White spent eight years there, including the tense early part of the Second World War, which compelled a fourteen-month evacuation of Tess and Hilary to New Zealand. With the war officially ended in September 1945, White was re-assigned to help revive the war-damaged tin-mining industry in Malaya, itself wracked with conflict due to the war itself and to the resulting erosion of the British Empire. This posting—which at its beginning entailed another nearly year-long separation from his family—lasted until White was granted an extended leave in mid-1949.

Although he worked nearly as long in and with the industry as he did at universities, the author emphasizes White's subsequent academic contributions. Not wishing to return to fraught post-war Malaya and having long considered becoming an educator, in February 1950 White accepted

an appointment as the sole professor and chair of the concurrently created Department of Mining Engineering at the University of Queensland in Brisbane. Over the next fifteen years he built that department, adding faculty and developing programs, including establishing the University of Queensland Experimental Mine for teaching and research in 1951.

Thanks to his success at the University of Queensland, White was pursued by McGill University in Montreal, Quebec, to revive its mining program. Hired initially as a visiting professor in the autumn of 1965, he accepted permanent appointment in March 1966 as Macdonald Professor and Chair of McGill's Department of Mining Engineering and Applied Geophysics. There he served the remaining six years of his career, reenergizing and reorienting McGill's program, before succumbing to cancer on 26 November 1971, aged 62.

Offering an interesting personal assessment of White to conclude his book, the author describes him as "a driving personality" and "not the best role model for work-life balance," while also acknowledging "a poignant family perspective" involved in relocating hemispheres away from Brisbane to Montreal. Throughout his narrative, however, the author also characterizes his father as sociable, a good listener, and a visionary leader. At his universities, the author classifies White as more "research manager" than researcher, arguing that his real strengths were in organizing, developing talent, and superintending the politics necessary to develop and sustain such programs.

As biographers often do, Franklin White has encountered the difficulties of trying to assess the life of someone not famous decades after his passing. The author describes his sources as "a modest trove of documents in a few box files that survived his passing," some books from his subject's library, and some press and professional publications. He relied upon Tessie's unpublished memoir, "Adventures with a Mining Engineer," to add color and detail to his narrative. The author also mentions

using "correspondence between my parents when separated due to war-related circumstances," but almost nothing of a personal nature is quoted in the text, perhaps an opportunity lost to illustrate part of the price paid by mining professionals because of the often remote and transient natures of their careers.

One solution to such dearth of information is the life-and-times approach often employed by biographers, in this case effectively. Much of the book considers the context in which Frank White operated as much as the man himself. The author casts White as a creature of the British Empire—born and raised in Australia, and employed for years there and in Fiji, Malaya, and Canada—but one who evolved over the course of his life, personally and professionally. The author believes that the widely traveled Frank and Tess developed more cosmopolitan and tolerant personalities than a more sedentary profession might have induced. The author also credits Frank, somewhat ahead of his time, with seeing and trying to address the whole scope of mining within society, what Frank T. M. White called the total environment of mining: technological, economic, occupational, social, environmental. A worthy life well described.

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Allison Margaret Bigelow. *Mining Language: Racial Thinking, Indigenous Knowledge, and Colonial Metallurgy in the Early Modern Iberian World*. Chapel Hill: University of North Carolina Press, 2020; 376 pp., 21 b&w illus., 5 maps, notes, 3 append., ind., cloth, \$39.95. ISBN: 9781469654386

Mining historians consistently center the mine in their examination of mining communities around the world. They describe daily life, the workplace, and the surrounding regions through various analytical lenses in order to understand