

BOOK REVIEW

Abena Dove Osseo-Asare. *Atomic Junction: Nuclear Power in Africa after Independence*. Cambridge: Cambridge University Press, 2019. xix + 278 pp. Photographs. Bibliography. Index. £24.99. Cloth. ISBN: 978-1108471244.

Over six chapters and an epilogue, *Atomic Junction: Nuclear Power in Africa after Independence* by Abena Osseo-Asare takes us on an interesting journey through the nuclear history of post-colonial Ghana. Owing to a decade of astute research predominantly in Ghana, the author also produced a documentary which serves as an illuminating companion to the book (www.atomicjunction.com). Making extensive use of archives on four continents and a rich collection of personal interviews, memoirs, and extensive fieldwork, Osseo-Asare convincingly highlights the entangled nature of decolonization and scientific progress in the Ghanaian context.

At the heart of the book is the trajectory of how Ghana's nuclear scientists strived to secure a reactor to bring the perceived benefits of nuclear research to the newly independent nation. Set against a Cold War background, the author offers an intriguing account of how the small circle of researchers appropriated the "promise and perils of nuclear technology" (4). Osseo-Asare also includes in her elucidation those who were expropriated from their ancestral lands and remain to this day deeply discomfited and engaged in the continuous contestation over the area on which Ghana's first research reactor was erected.

Following the introduction, Osseo-Asare shows how French nuclear tests in the Sahara and the resulting fallout over West Africa created opposition to the colonial power, which Ghanaian president Nkrumah in particular used to promote his stance against nuclear proliferation. In the next two chapters, Osseo-Asare takes the reader to the Soviet Union, where several Ghanaians studied in the 1960s, recounting how nuclear physics was introduced in academic curricula in Ghana. The emerging ties between Accra and Moscow led Soviet leaders to supply the nascent Ghana Atomic Energy Commission (GAEC) with the necessary parts for a reactor, which was almost completely assembled by the time Nkrumah's government was toppled in a coup in 1966. However, Osseo-Asare shows that despite domestic political upheavals over two decades, nuclear scientists in Ghana did not give up the goal of obtaining a functional reactor. Ultimately, in the early

1990s, the Chinese supplied them with a small 30kW reactor, allowing Ghana's nuclear scientists to come closer to fulfilling Nkrumah's vision of bringing science to the masses (52).

The author also traces the career paths of several Ghanaian nuclear experts who took up leadership roles in the International Atomic Energy Agency, to emphasize how the Agency in Vienna benefitted over decades from Ghanaian scientific prowess. Lastly, the author cleverly highlights through ethnographic fieldwork that not all people benefitted from nuclear energy in Ghana. Through careful research in local royal contexts, Osseo-Asare illuminates how the nuclear energy community to this day undergoes threats to its authority and resistance by the disenfranchised in the immediate vicinity of the GAEC premises, who were marginalized on account of the ambitious postcolonial nuclear agenda.

The book provides interesting insights into how a small independent state might obtain a small research reactor, but it also gives information which can inform non-proliferation studies more generally. Importantly, in the 1960s, Ghana became a hub for non-proliferation activists, upon the founding of the Council for Nuclear Disarmament, which hosted major "Anti-Bomb" conferences. For the first time, the world saw an independent African state taking the lead in curbing the spread of nuclear weapons. As Osseo-Asare nicely demonstrates, this "provided an African narrative of nuclear activism" (46). However, Nkrumah's approach displayed a high degree of ambivalence; despite his strong stance against nuclear testing in Africa, he was quick to congratulate Mao Zedong on a successful Chinese nuclear weapons test (85). Additionally, Osseo-Asare shows how Ghanaian leaders in the 1960s could not escape the logic of Cold War alliances, when they decided against cooperation with Canadian scientists in order not to risk jeopardizing continued Soviet assistance (61).

Although this work is generally a very detailed narrative, the reader does not learn much about the actual acquisition of the research reactor in the early 1990s from China, besides that the domestic political climate had improved after successive military coups, which coincided with international progress in the development of smaller and safer reactors at a lower price. In addition to that, the book's title seems a bit misleading, as there is not much written about the nuclear ambitions of other African countries. While the book really is about Ghana, Osseo-Asare rightly points out that it is exactly the lack of understanding regarding other nuclear energy projects in Africa that warrants further scholarly engagement.

These two aspects aside, what has emerged is a well-rounded account of an independent African country's nuclear past. Given the author's family ties to Ghana and particularly to the Ghanaian community of nuclear scientists, the story reflects a very personal engagement with the subject. Osseo-Asare has most likely produced the authoritative account of Ghana's nuclear

endeavor, including its achievements and setbacks, in a clear and balanced manner.

Robin Möser
University of Leipzig
Leipzig, Germany
robin.moeser@gmx.net

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For additional reading on this subject, the ASR recommends:

- Green, Nathaniel, Benjamin K. Sovacool, and Kathleen Hancock. 2015. "Grand Designs: Assessing the African Energy Security Implications of the Grand Inga Dam." *African Studies Review* 58 (1): 133–58. doi: [10.1017/asr.2015.7](https://doi.org/10.1017/asr.2015.7)
- Rupp, Stephanie. 2013. "Ghana, China, and the Politics of Energy." *African Studies Review* 56 (1): 103–30. doi: [10.1017/asr.2013.8](https://doi.org/10.1017/asr.2013.8)