James Hector, Explorer, Scientist, Leader. By Simon Nathan, Geoscience Society of New Zealand (2015) ISBN 978-1-877480-46-1 Reviewed By Michael Roche

The publication of Simon Nathan's biography of Sir James Hector coincides with the 150th anniversary of Hector's appointment as head of the New Zealand Geological Survey. However, Hector had a still larger place in nineteenth-century New Zealand science; his responsibilities at times spanned from the Colonial Museum, to the Colonial Botanical Gardens, to the Colonial Observatory and to weather forecasting. Nathan's stated aim was to write a 'relatively short, illustrated biography concentrating on the main events in Hector's life and his place in nineteenth century New Zealand' (12). In this regard, he has succeeded admirably and in 264 pages manages to weave together some not unfamiliar threads of Hector's career with other episodes, including his early life in Edinburgh, his time in Canada on the Palliser expedition (typically acknowledged in accounts of Hector's life but here given attention beyond mention of Kicking Horse Pass) and his family life. Nathan also assesses changing views of Hector as a scientist and scientific manager. Written as a series of essentially chronological chapters, Nathan reconstructs and interprets Hector's time as Otago Provincial Geologist (1862-1865). He was the organiser of government science through the 1860s and 1870s founding and consolidation phases, an establishment figure of the 1880s and 1890s, and of declining influence in the 1890s and early 1900s. The biography makes clear the breadth of Hector's interests and expertise, considerable, even in nineteenth-century terms where disciplinary boundaries were more fluid and easily crossed. The main text is skilfully supplemented with some text boxes and a selection of sketches, maps, photographs and cartoons, and includes some of Hector's own sketches of landscapes and specimens. Reproduction of period photographs strikingly highlight the rawness of the environment, even of colonial Wellington in the 1870s when Hector was engaged in his major scientific work. Two of Hector's own geological maps, of Otago and New Zealand, are reproduced and are themselves important artefacts of nineteenth-century scientific inquiry in New Zealand.

Nathan notes that although some of Hector's specific roles, for instance in the geological survey, have been written about, the understanding of his professional responsibilities has been somewhat 'siloed'. If anything, as a geologist himself, Nathan has pared back his discussion of Hector's geological work to a minimum. Accordingly, the biography is especially useful in exploring the way in which Hector created a number of interlocking agencies from the 1860s to 1880s, and indeed how he was able to use the web of budgetary cross subsidisation to prevent retrenchment.

Reading *James Hector, Explorer, Scientist, Leader* prompted me to return to Michael Hoare's Cook lectures from 1976, 'Beyond the filial Piety' and 'Reform in New Zealand Science 1880-1926'. In the first of these, Hoare writes of 'Hectorian centralism circa 1865-1905' and 'Hector's hegemony' where he seems to equate hegemony with dominance, while making the point that a 'profound study of Hector and his organisation' was badly needed. In 'Reform in New Zealand Science 1880-1926' Hoare again has recourse to use the term 'Hector's hegemony' and discusses in some detail G.M. Thomson's efforts to reform science in New Zealand, to overcome what Hoare sees as somewhat complacent centralism. Hoare's phrase 'Hector's hegemony' is one that has tended to shape my view of Hector, yet on my rereading of Hoare's lectures, I would now argue that the lack of a biography actually helped Hoare to reduce Hector to a shadowy but controlling background figure. Nathan's biography provides a somewhat different periodisation of Hector's career than does Hoare and is able to delve rather further into the manner in which Hector's responsibilities were both accumulated

and later reduced and devolved under the Liberal government. This is not, however, to downplay Hector's gate keeper role, particularly through his position as manager of the *Transactions and Proceedings of the New Zealand Institute*. Nathan's biography shows that the period of Hector's 'hegemony' was always more contested than Hoare would allow. This leads on to a point that Nathan makes in his Foreword that undeniably there were controversies in Hector's career, but that some of these occurred because Hector encouraged rather than stifled debate.

Whereas Hoare, the historian writing science history, has coined some telling phrases ('Hectorian hegemony' and 'Hectorian centralism'), Nathan, the geologist writing science history, is more restrained in language and his judgement. For example, he leaves it to the reader to make the final decision whether Hector had completed his contractual obligations to the Otago Province before leaving in 1865, or the geological map of Otago was insufficient. Hoare's depiction of Hector as having 'enjoyed for over twenty years a formal at first unchallenged hegemony over science's in New Zealand for two decades, contrasts with Nathan's chapter six entitled 'An Establishment Figure 1879-1890', which hints at Hector's status but does not imply that his was the only voice. Nathan indeed addresses some of the controversy that Hector found himself embroiled in, for instance, with Haast over excavations by Haast and McKay at Sumner Cave. Hoare's 'hegemony' seems to suggest Hector occupied an incontestable position, while Nathan is describing a situation perhaps more in keeping with notions of hegemony as something that could be challenged and disputed (as G.M. Thomson did). In any case, Hector was not entirely a one-man band but had some extremely loyal staff, several of whom followed him from Otago Provincial employment to Wellington. This is not the biography of Hector that Hoare was calling for in 1976 [and in fairness his own ideas would doubtless have changed overtime], but nor was it really intended to be. Neither was it intended to mimic the biography of fellow geologist Julius von Haast. Instead, it provides a rich account of Hector's life that brings him out of the shadows where Hoare had left him, to be enjoyed by the interested and specialist reader alike. Hector the individual who emerges from these pages is a not unlikeable character. He is certainly not without blemishes, interested in too many things so that some tasks were never properly completed (and this is over and above the multitudinous official demands on his time) and not always succeeding in exercising his best judgement when dealing with his contemporaries. Never-the-less, his considerable organisational ability and leadership, matched by a capacity for sustained hard work and wide interests were crucial to the development of science in mid to late nineteenth-century New Zealand.

Given Hector's role at the centre of government science for over two decades, it is unsurprising that he has left a considerable amount of correspondence and memoranda; his archival foot print is comparatively large but his handwriting is execrable, which in itself has no doubt acted as a barrier to more detailed systematic treatment of Hector and his work. Nathan's allied projects in transcribing Hector's letters as a prelude to the biography is in its own right a valuable resource for understanding science in nineteenth-century New Zealand.

While this volume consolidates and extends the understanding of Hector's many roles in science and education in New Zealand, it does not necessarily mean that Hector has now been dealt with once and for all. Hector featured regularly on the programme of a science history conference held at Victoria University in 2015 out of which a special issue of the *Journal of the Royal Society of New Zealand* is forthcoming and the Royal Society of New Zealand itself has a history planned for its 150th anniversary. It will be interesting to see how Hector's role is viewed in these forthcoming publications.

¹ Michael Hoare, *'Beyond the filial Piety' Science History in New Zealand, A Critical Review of the Art.* (Melbourne: Hawthorn, 1976), 22, 28, 25.

² Michael Hoare, *Reform in New Zealand Science 1880-1926.* (Melbourne: Hawthorn, 1976), 5.

³ Hoare, *Beyond the filial Piety*, 24-25.