

part of England. The market value of knowledge, especially knowledge in science, as an important component of the professionalisation of the intellectual, affected both the direction in which science developed as well as the relationships among those few who formed the initial cadre of professionals.

Two major figures in the accomplishment of that change were Julius Haast and James Hector, both of whom in their complex and sometimes antagonistic relationship laid the foundation of a New Zealand scientific establishment which pulled away from its dependence upon the authority of the mother country.

Julius Haast came to science suddenly, accidentally and with the force of a conversionary experience. Widowed, he left a son to be raised by his wife's family and arrived at Auckland on 21 December 1858, the farthest stop in a decade's wandering as a commercial traveller at the margins of science. The day after his arrival, the Austrian exploration vessel, the *Novara*, arrived bringing with it the expedition's geologist Ferdinand Hochstetter who was to be on loan to the New Zealand government to examine the Drury coalfields. Haast accompanied the brief excursion which went out a week later; and he returned committed to the science he was to serve for the rest of his life. When Hochstetter was asked to stay on to make a geological survey of the Colony, Haast became his assistant for the nine months during which Hochstetter accomplished the first professional geological survey of New Zealand.⁵⁶

Although Haast had had some training in geology and mineralogy, it was as Hochstetter's assistant and companion that he became a geologist with the complex geology of New Zealand as his field laboratory. If, however, it was Hochstetter who schooled him, it was the Nelson Survey⁵⁷ that he conducted on Hochstetter's recommendation which made him the field geologist that he rapidly became; and it was his report of the survey which put him in touch with the international community of scientists. Early on Haast was aware of the fact that if he were to make a career as a scientist, his peer group would exist outside of New Zealand. Despite the attempts of a decade, there was still no scientific base in New Zealand; the few collectors there were were engaged almost exclusively in providing specimens for the savants in England—as the case of the Moa amply demonstrates. If knowledge was a product to be marketed, there was no market in New Zealand. It was only the search first for coal and then for gold that stimulated the development of a localised geology; and for that the necessary knowledge had to be imported.⁵⁸

James Hector was another import. Formally trained at the University of Edinburgh, Hector had just completed an arduous but successful participation as geologist and naturalist on the Palliser