particularly when it begins with an "articles of agreement," continues with an "indenture," and follows with an "option to purchase." Not too exciting stuff, but creating a sensation was not its purpose. Taken in its entirety, the collection presents an all-inclusive overview of the grass-roots development of Alberta's oil wells. It includes correspondence, news articles, agreements, options, leases, maps, charts, but not photographs, all of which reveal the high risk economic straits of the early wildcatters. As Breen points out, "few people today realise that the oil industry of western Canada, now dominated by giant, multi-national corporations, began as the work of many small, independent entrepreneurs."

The compendium does much to substantiate Breen's depiction of Herron as the father of the oil industry in Alberta. Herron was a typical migrant fortune-seeker of this period in the West, anxious to get rich quick, willing to toil, and also to gamble. In 1911 he noticed a number of gas seepages near Sheep Creek, several miles from Turner Valley. With self-made equipment, he was able to verify that this was indeed petroleum. He thereupon set out to acquire properties and mineral rights surrounding this discovery from the federal government and the CPR. As he was not a wealthy man, his next task was the search for development capital. This quest, over the next couple of years, brought a host of other Western businessmen into the picture, including James A. Lougheed and R.B. Bennett. The upshot was the Turner Valley strike of 1914, the arrival of the big oil companies, and Alberta's first flirtation with a brief economic boom generated by oil. The proximity of Calgary made it the headquarters for oil companies in Canada.

Archivists will delight in the sensitivity which Breen, an historian, has shown to the principle of provenance. In his introduction, he maintains, "there is ... an inherent evidentiary value to such a collection in its original, undisturbed state which transcends the content of individual items. For this reason, rather than reorganize the collections into a single body, arranged and presented in a strict, chronological sequence, the author [sic] has kept the documents mainly in the grouping and sequence of their original filing systems." The point of course is gospel for the physical arrangement of archival collections and provides much ease in reproduction by the editor. But is it useful when attempting to reveal the various nuances of a particular historical theme? Perhaps, in this case, subject arrangement might have been in order. A good cross-reference index might have done much towards assisting the readers in their specific subject research of the book, but, unfortunately, the index is less than three pages long.

All in all, however, Breen's effort was very worthwhile. Our understanding of the development of the oil industry in Western Canada is greatly enhanced because of it.

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Few works on the history of the social sciences in Canada have given as much satisfaction as Gerald Killan's David Boyle, partly because there have been few such works of any quality whatever, but (more flattering to the author) because the present book is a model
of careful research and fluent exposition. This solid biography of one of Canada's earliest researchers in the history of man should encourage anthropological historians to greater effort in their as yet poorly documented field. At the same time, it introduces the historian painlessly to the further reaches of nineteenth-century anthropology. Indeed, the very word anthropology evolved only in Boyle's lifetime. In so doing, Killan convinces us that the developments of the discipline in this country were both interesting and unique.

Killan's previous writing (out of which the present volume evidently grew) includes *Preserving Ontario's Heritage*, a history of the Ontario Historical Society, and two impressive articles on nineteenth-century Ontario parks policy and on the history of the Canadian Institute (the first major English-language learned society in Canada). *David Boyle* is Killan's most ambitious work to date. It has earned a variety of commendations, including the first annual Floyd S. Chalmers Award, presented by the Ontario Historical Studies Series for outstanding works on Ontario history.

David Boyle (1842-1911), self-taught scholar, teacher, and father of what we now call archaeology in Canada, was a remarkable personality in his own right. Killan describes the world of Boyle's childhood as the son of a village blacksmith and foundryman in Greenock, Scotland, fleshing out the small amount of documentary evidence bearing on Boyle himself with a vivid picture of socio-economic change in his native country and class. The careful attention Killan gives to the technological revolution in the Scottish shipyards, and its effect on the Boyle family's social position and careers, is one of the most remarkable features of the book.

At the age of fourteen, in 1856, Boyle emigrated with his family to Wellington County in Canada West. His subsequent three-year apprenticeship as a blacksmith was a steppingstone, not a detour, in his intellectual development: Boyle absorbed the attitudes and interests of the rising craftsman of his time, becoming "the quintessential product of the British autodidact artisan culture out of which he sprang." Self-help, self-education, and wide reading, together with an optimistic temperament and a passion for what we now could call natural science and material culture, led after 1865 to a succession of posts as a teacher in local one-room schools in Wellington County and eventually to the principalship of Elora Public School in 1871. Boyle was no ordinary country schoolmaster: his remarkable interests and great energy led him to promote local interest in "natural science" by the formation of a substantial Mechanic's Institute, a museum, and a natural history society; his Pestalozzian teaching methods were humane and in advance of his time. Thanks to Killan's use of local school and newspaper sources, one is left with a picture of Elora as a little centre of intellectual ferment. It was eventually, in 1883, to spill Boyle out into Toronto's relatively bigger pool of educational and scientific thought.

Slowly Boyle made a place for himself in Toronto: he was eventually to create there the first Canadian government office solely concerned with any branch of ethnology. (The National Museum of Man's Anthropological Division did not come into being until 1910.) His first work in the city was as a representative of a local textbook firm, work which involved him in an interesting but abortive attempt to place Canadian-produced school readers in Ontario schools. He then set himself up as a bookseller and natural science supply dealer. He was never to enjoy commercial prosperity, but (more to his advantage) became acquainted with Toronto's amateur ethnological and scientific scholars. His bookstore became a "forum" for interested browsers and debaters; he thus came into contact with those University of Toronto faculty members who were in the process of developing curricula in what we now know as the disciplines of Canadian
history, anthropology, and natural science. Partly as a result of these contacts, Boyle in 1884 secured the post of volunteer curator of the substantial but neglected museum of the Canadian Institute. This move committed him to archaeology to the general exclusion of his other interests. His next five years were spent in fieldwork, adroit publicity (which included the establishment of what appears to be the first governmental "historic site," a memorial at Toronto's Fort Rouillé), the founding editorship of the Ontario government's remarkable and still consulted Annual Archaeological Reports (AAR), contacts with American archaeologists who, to his surprise, were professionally no better trained or equipped than himself, and some hard political slogging to obtain provincial funding for the Institute. Finally, in 1888, he became the first full-time professional archaeologist in Canada when he sold his bookshop and fell back on the small sum paid him out of the Canadian Institute's provincial archaeology grant.

With characteristic energy he devoted himself the year after to archaeological fieldwork throughout southern Ontario: his reports in the AAR on these explorations are still read. Boyle's research on and promotion of local history was exceptionally vigorous but very much of its time. This aspect of his life will be of special interest to Canadian historians. His geological responsibilities in the Institute's museum obtained him an assignment to create a spectacular promotional/scientific display of Ontario minerals at the World's Columbian Exhibition in Chicago in 1893, a coup which demonstrated his political as well as his educational talents. At last, in 1896, the province created the Ontario Provincial Museum within the Toronto Normal School, redirected its archaeological grant so that Boyle's position became that of a provincial civil servant, and (after some delay) appointed Boyle as the first curator.

From this time to his death, he continued to expand his work in archaeology and local history. He acted as moving spirit and founding secretary of the Ontario Historical Society and published pioneering fieldwork reports by himself and a small band of other local archaeologists, such as George Laidlaw, the troublesome A.F. Hunter, Will Wintemberg, and F.W. Waugh. Killan's analysis of the contents of the AAR, supplemented with associated private correspondence, provides fascinating background to the study of Ontario and Iroquoian prehistory. He puts Boyle's archaeological achievements, and his blind spots, firmly in their historical context, giving clear and thorough accounts of the limitations of the available evidence (and therefore of theory) in Boyle's time: for example, the persisting weakness of stratigraphic knowledge, the lack of glacial-period autochthonous remains, and contemporary Canadian scholars' failure to confront the implications of Darwin's discoveries. Even so, some of the questions then debated are, Killan points out, still relevant to current research. Likewise, any aspiring professional today might profitably meditate upon the sometimes difficult personal and political interrelationships of the principals.

Boyle's invitation to become a founding member of the American Anthropological Association was only one of numerous marks of favour from his foreign colleagues. At home, historian George Wrong attempted unsuccessfully to attract him and his museum collection into the University of Toronto; had he done so, we can speculate that he would have taken up the ethnological lectureship established by Daniel Wilson (and indifferently continued by Wrong) and so would have maintained a continuous Canadian university tradition in ethnology. In fact nothing further was done in this line until the
establishment in 1926 at Toronto of the first Canadian university department of anthropology — based at the Royal Ontario Museum, created in 1914 in part to house Boyle's Ontario Provincial Museum collections.

Many interesting comparisons can be made between David Boyle and Daniel Wilson, two of the three (with John William Dawson) most important Canadian ethnological scholars of their century. Both were immigrants brought up in the Scots Protestant intellectual tradition. We cannot go here into their contrasting class backgrounds and personalities, but we can note that Boyle's dedication to teaching and local history manifested itself in fieldwork and museum work, while Wilson's like interests were modified and diffused by the responsibilities of university administration. Boyle's cheerful and enterprising (even entrepreneurial) attitude to his museum and its activities matched Wilson's battling spirit in the cause of science teaching and educational reform at the tertiary level. Unlike Wilson, Boyle and his family accepted financial instability as the price of success in his field; but, like Wilson, he responded to public demand with a spontaneous outpouring of publications and speeches, stoutly adopting a Canadian perspective in a scholarly field reputed to be centred abroad. (Both men, incidentally, vented their more private and political views journalistically under assumed names, and both wrote children's verse — Boyle in a manner familiar to fans of Dennis Lee today:

Tell me, Tommy Tattlewell, come tell me now I beg
How far I take the C.P.R. from here to Winnipeg?

Boyle created a local museum and archaeological establishment, Wilson a local synthesis of international ethnological thought. Neither man, however, left what anthropologists fondly seek today — a tradition, composed of a line of students or followers, a continuing educational programme, or a publicly recognized profession able to shape the layman's ideas on the history of man. Killan links Boyle's work to international developments, suggesting reasons for the lack of such a tradition that will be of interest to historians of Canadian social science.

Throughout, Killan devotes close attention to both the scientific and the political context of Boyle's works. Careful disquisitions on the tangled history of the "Mound-Builder" concept — point of departure for so many theoreticians of cultural development among New World peoples — and a brisk recounting of some of the murkier confusions in Ontario Iroquoian archaeology, are interwoven with equally confident expositions of the politics of museum and educational funding at Queen's Park. The erudition of this work would be dismaying to the average reader were it not so well expressed and well laid out. Killan's style is clear and, for so dense an exposition, very readable. The family and personal photographs used to illustrate Boyle's life and official career are well reproduced; a selection of archaeological maps and illustrations, produced by himself or his collaborators, give one the flavour of their makeshift but conscientious archaeological documentation. The agreeable physical design of David Boyle, characteristic of the University of Toronto Press, makes this an attractive book overall.

From an archival point of view, Killan has given what appears to be exhaustive attention to both local and general primary sources. Perhaps in this light the relative scarcity of personal records created on or by Boyle and his family has been productive; it is evident that the book's richness arises in part from the author's diligent progression through the private papers of provincial amateur scientists (such as Charles Clarke and A.F. Hunter), the various records created by or deposited at the Royal Ontario Museum,
records of the Ontario government, local historical records and newspapers for Elora and Wellington County, and the work of a good variety of local and family historians and librarians both in Ontario and Scotland. Especially gratifying is Killan’s use of American ethnological archives (such as those of the Smithsonian Institution and Harvard’s Peabody Museum) which hold rich but frequently overlooked documentation on early Canadian anthropological research. Also well covered in Killan’s sources are the academic, governmental, and popular periodical literature of the time. One complaint might be that Killan’s Scottish sources, and in particular those for the early history of Boyle’s family, are not clearly defined. He acknowledges having received from a family historian what is obviously detailed genealogical information on Boyle’s family back to the eighteenth century, but no specific archival references are cited. Readers who may wish to pursue similar lines of research or (unlikely as it might be) to verify his facts, are thus frustrated. This aside, the main body of Killan’s references are admirably clear and complete.

David Boyle is an outstanding example of what social/cultural anthropologists may still call (in what I remember as a tone of disparagement) “interdisciplinary” social science. In fact it is good history, good anthropology, and an encouragement to both disciplines to understand one another. We still have no adequate history of our national ethnological service (the National Museum of Man) and its notable officers, nor indeed of any other major Canadian ethnological museum. Aside from Morris Zaslow’s useful historical roundup in Reading the Rocks (1975), there is no evaluation of the remarkable nineteenth-century anthropological researches of the Geological Survey of Canada; no published review of the history of evolutionary theory in Canada (although interesting thesis work exists); no analysis of the social theories of the missionaries who were the closest and earliest European students of the native peoples of Canada; no history of anthropological instruction in the universities — the list could go on. It is to be hoped that Killan’s careful research and admirable writing will guide and encourage other scholars in both history and anthropology on the ground where the two overlap.

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’Twas in the moon of winter time,  
when all the birds had fled,  
that mighty Gitchi Manitou  
sent angel choirs instead....

Most home-grown Canadian readers will be quick to recognize the derivation of the title of Professor Grant’s study of missionary-Indian encounters in J.E. Middleton’s rendering of the carol attributed to Brébeuf. It is intended to “call attention to the significant circumstance that when most Indians were introduced to Christianity, the bird and animal spirits to which they had looked for illumination were no longer readily found in their