The next group of papers comprises writings on the philosophy of geometry associated with his dissertation for a Cambridge fellowship. Trinity College awarded him the fellowship in 1895. The dissertation itself is lost, but parts were published in various forms. The final group of papers in this volume deals with topics in political economy and reflects some uncertainty on Russell's part in the mid-1890s as to whether he should pursue a practical career or the life of the mind. As he later explained, he decided, after choosing non-Euclidean geometry for the subject of his dissertation, that "if my dissertation were thought sufficiently well of I would become a philosopher: if not, an economist with a view to politics." Lastly, printed as appendices, are outlines of two papers appearing earlier in the volume (to show Russell's working methods: "The crucial moment for me is when I make a brief synopsis"), a syllabus and published reports of a series of lectures at American universities in 1896, and a list of books read which Russell kept from February 1891 to March 1902.

Editing and production of this volume achieve a high standard. The editorial apparatus includes background information in the headnotes to each item or group of items, meticulous notes at the end identifying persons mentioned, explaining allusions, and discussing textual variants, and a chronology of Russell's life and writings to 1899. There is a commendable absence of misprints, something which deserves praise in days when too many works of scholarship are disfigured by sloppy proofreading. On page 247 the citation of the minutes of the Cambridge Moral Sciences Club should read "Cambridge University Archives," not "University Library": the Archives are housed in the Library building, but are separately administered.

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Ontario's History in Maps. R. LOUIS GENTILCORE and C. GRANT HEAD with a cartobibliographical essay by JOAN WINEARLS. Toronto: University of Toronto Press, 1984. Ontario Historical Studies Series. xvii, 284 p. ISBN 0-8020-3400-4 \$65.00.

Everyone with an interest in Ontario's history and cartography has reason to celebrate the publication of *Ontario's History in Maps*. The most imposing member of the burgeoning Ontario Historical Studies Series, it is, as the authors suggest, a fitting tribute to "the aspirations and achievements of the people of Ontario" and should promote interest in historical cartography. It is the finest provincial atlas of historical facsimiles and amply demonstrates that maps are more than a scientific record of observation and measurement. They often are works of art replete with the hope and imagination of past generations.

The authors have chosen to provide a topical framework for their presentation. In seven chapters, each with an historical introduction, the maps show "The Land Revealed," "Making a Province," "The Grand Design," "Taking up the Land," "Geology and Forests," "Circulation," and "Urban Places." This arrangement makes cross-referencing very important, and a system using

section and map number performs the task adequately. The system sometimes, however, does break down. When military posts are depicted in 1840 (p. 36) reference could also be made to Lieutenant P.J. Bainbrigge's manuscript "Roads along the Frontiers in Upper Canada," 1838-39 (p. 155), a contemporary document of similar military intent and importance. During his boundary surveys in 1817-21 (pp. 40-1), David Thompson consulted Lieutenant H.W. Bayfield, who was then working on his hydrographic surveys (pp. 167-71), but no allusion is made to that connection, nor does a cross-reference exist.

The maps selected for inclusion in this lavish collection are generally well chosen. The authors have had to make tough decisions based on their desires to show the geographical evolution of the province historically, to bring maps out of obscurity as an historical source, and to show all parts of the province and all types of cartographic production: manuscript in pencil, manuscript in ink, manuscript in colour, engraved, lithographed, photolithographed, and photographic. Within such constraints the reader is treated to maps from what may be less familiar repositories such as The Filson Club, Louisville, Kentucky (p. 35), Brown University, Providence, Rhode Island (pp. 8-9), and the Hydrographic Department, Taunton, Somerset, U.K. (pp. 167-70, 174), as well as subsidiary collections represented at the National Map Collection in Ottawa. Historical material from at least one source, the Ontario Ministry of Natural Resources, is still in use as part of the ministry's regular operations. Beauty abounds. The reader can feast his eyes on the carefully drawn and eloquently coloured nine plan depiction of Colonel By's two-year battle with the Rideau River during the construction of the Hogsback dam (pp. 178-79); the Plan of York by Lieutenant George Philpotts in 1818 (p. 252) where sensitive colouring brings geography and the imposed geometry of the town site into peaceful coexistence; and Nesfield's Map of the Niagara District in 1815 (pp. 152-54) which shows roads conforming to early trails and the topography rather than to an artificial cadastral grid. The authors have surmounted the considerable problems involved in the accurate photographic reproduction of maps, and the publisher has generally succeeded in matching the coloured reproduction with the current appearance of the original document. In at least one case, however, the attention to this detail has flagged. Some of the aged colourful delicacy of the 1853 Toronto Verification Plan (p. 256) has been lost, perhaps due to the extreme reduction in size. But then even the accurate full-scale coloured reproduction of this plan has previously proved less than completely successful. The blurred and highly reduced black and white bird's-eye view of Toronto in 1876 (pp. 262-63) is a greater failure. However, the bird's-eye views of London (pp. 239-40), Hamilton (pp. 242-43), Kingston (p. 245), and Ottawa (pp. 246-47) are superb.

The authors have generally struck a good balance between subregions in the province. Readers outside of the Toronto area may feel that the treatment of that city in "Urban Places" (pp. 248-73) continues a long-perceived metropolitan bias. This bias is, however, inherent in the extant mapping that has been done since the eighteenth century, lessening only somewhat as we approach the present. This section does demonstrate the effectiveness with which cartography can show processes such as urbanization, by using portions of Goad's *Atlas*

from 1884, 1890, and 1910. (p. 265) Part of the topographic sheet for Brampton in 1929, 1942, 1960, and 1976 illustrates more recent developments around an airport. (p. 204) Such demonstrations require an extensive cartographic heritage, something that is not uniform throughout the province. But the sense of a balanced treatment is greatest where geographical, not historical, concerns predominate.

In the section on "Circulation" a Q series transcript of a sketch from 1785 is used (p. 166) to show early regional water routes. Given the considerable scholarship applied to the book, the least one should expect is the use of the original map. Neither really belongs here. Instead, William Alexander's coloured manuscript of water routes used by the French in 1755 (PRO MPG 331) would better demonstrate the extent of this important network. This would also serve to offset the book's tendency to underrepresent the French era, most particularly in the section on "Making a Province." The addition of some of Joseph Gaspard Chaussegros de Lèry's sketches of Detroit, Lake Erie, or of a variety of forts in the late 1740s (in addition to his plan of the Niagara River in 1726, shown on p. 32) would be an improvement. But given the already large size of this volume, the immense expense of such high quality printing, and the vast number of available maps (estimated at about 6,800 for the period 1780 to 1867). only a very limited selection could be used. Many of the maps were reproduced because they have not been published before. The reader is treated to nineteen examples of enlarged details from otherwise hard to read small-scale reproductions. Thus a compromise is struck between the inclusion of more maps and the more complete treatment of those present.

The authors have successfully exploited the opportunity to educate the general reader about the cartographic process. In section 5, "Geology and Forests," the process of geological and forest resource mapping is well explained. Here, as in "Urban Places," the geographer's skills are shown to advantage. We see manuscript sources (pp. 126, 141), a wood ranger's field book (pp. 136, 139), an exploration diary (pp. 141-42), aerial photographs (pp. 146-47), and satellite imagery (p. 148). In the case of the exploration diary, the sense of the original document has been lost through the typeset transcription of an edited portion. This is a rare lapse in a book that otherwise pays homage to the original documents through careful reproduction of the original. Elsewhere, we are given an opportunity to compare a manuscript drawing with the printed version of that area, using part of Bayfield's survey of Lake Huron. (pp. 170-71) The authors have also taken care to present some of the cartographic scholars' concerns. Good examples of maps with manuscript additions are shown in "Taking up the Land" (pp. 86, 93) and in "Urban Places." (pp. 250-51) Joan Winearls cautions the reader about transcripts of maps (p. 277) and about the predominance of transcripts in the large John Ross Robertson collection. (p. 281) With relatively few additions, the cartographic process could be further demonstrated. The reproduction of some formal survey field notes would help. Where the text associated with the 1791 McNiff map (p. 66) mentions some sources consulted by the surveyor, the reproduction of one of the sketches in Ford's journal from 1789 would have graphically demonstrated McNiff's considerable

original contribution to the plan. There is even space on the page to have done so. But most of the explanatory process occurs in the text which introduces each of the seven sections.

The concluding cartobibliographical essay by Joan Winearls is the last of a series of triumphs scored by Ontario's History in Maps. With the aid of 106 references, Winearls organizes her encyclopaedic knowledge of the sources by major archival collections and then, parallel to the book's arrangement, by topic. However it is here that one could hope to see mention of surveys and the resultant maps that did not meet the criteria for reproduction in this atlas. Three major elements of the process of "Delimination" escape mention: the almost geodetic survey of the north shore of Lake Erie from the Grand River to Kingsville by O.J. Klotz in 1896; the surveys of the high water mark on the shores of the Great Lakes contracted out by the Department of Lands and Forests (now the Ontario Ministry of Natural Resources) starting in 1934; and the Ontario Basic Mapping programme initiated in 1978 and continuing to date. Nor is there any mention of the considerable volume of original field notes preserved by survey firms throughout the province, an integral part of the documentation of most cartographic exercises. These comments aside, this essay is a major contribution to the cartographic literature on Ontario and should not only encourage greater use of cartography by researchers but also help improve the quality with which cartography becomes incorporated into our understanding of Ontario's history.

Ontario's History in Maps deserves to be a success. Running as it does on the coat-tails of the province's bicentennial, its future seems assured. Get yours while they last. With printing costs running around \$1,000 a page, the public and private financial subsidies may not be available for a well-deserved second, and revised, edition.

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Les instruments de recherche pour les archives. LOUIS CARDINAL, VICTORIN CHABOT, JACQUES DUCHARME, GILLES JANSON, and GEORGES LAPOINTE. La Pocatière, Quebec: Documentor Inc., 1984. 123 p., illus. ISBN 2-89123-102-3. (Available from Documentor Inc., 100, Avenue Painchaud, La Pocatière, Quebec. GOR 1Z0.)

This book is the product of a special working group headed by Victorin Chabot and set up by L'Association des archivistes du Québec to report on the preparation of archival finding aids for research purposes. The authors begin their introduction with the familiar lament that the literature on the subject is limited and offers no single systematization as a model; the result contributes to isolated and eccentric practice. They believe that archives must systematize the preparation of finding aids so that their users may understand the programmes of description established within single repositories and from repository to repository. Quite so. A measure of uniformity is surely the sine