The tranquillity that comes with orientation is profound. There is, for instance, no faster way to end panic upon entering a strange environment than to find a map. It will fix individual locations and bring them into clearly understood relations. We are then in a position to ascertain our own position, get our bearings, put ourselves in the right relation. Ultimately such definition provides us with a measure of control over our surroundings. We are now in a position to act in but also on our environment.

Maps can tell us, then, a great deal about the individuals and societies that produce them. Of course, we can examine the technical ability of others to map, perhaps even contemplate, their aesthetic sensibilities. But we can also analyze what they chose to map, what relationship they determined between man and environment, and what measure of control they presumed to exercise. We can do all this and more because maps are not of place so much as of ideas of place. In short, maps are an important source for the study of how others have viewed the world, their place in it, and often their future. Such an understanding of cartography informs two recently published collections of early maps.

In Theatre of Empire: Three Hundred Years of Maps of the Maritimes (Saint John, New Brunswick Museum Publications, 1987), Donald P. Lemon brought together 54 examples of how the region was perceived in the pre-Confederation era. Finely reproduced in colour and relatively large format, these specimens are intended to illustrate, as Alan D. McNairn states in the Foreword, that “As mankind mapped his world, so he saw his environment” (p. 15). Similarly, under the slightly misleading title of Ontario’s History in Maps (Toronto, University of Toronto Press, 1984), R. Louis Gentilcore and C. Grant Head brought together some 268 maps of their province and region (most published prior to 1900) on the assumption that these examples “reflect the understanding, not necessarily accurate, of the people of the period about their milieu” (p. xvi). Frankly sumptuous, this volume is a thing of beauty as well as scholarship.

Lemon makes clear in his introduction that the discovery of America presented Europeans with a fundamental epistemological problem to which maps were an important part of the solution. He therefore presents a representative selection of the work of those most influential in providing answers, from Samuel de Champlain to Joseph Frederick Wallet DesBarres. Arranged chronologically, the maps show clearly a progressive diminution of terra incognita and the accelerating movement of comprehension. According to Lemon, this expansion of geographical knowledge was driven and directed by European mercantile designs. Attention naturally focused sequentially on ways around or through America, on the location of staples, and on the distribution of land for settlement, as well as constantly on transportation, communication, and the territorial claims of the major competing powers. Lemon also comments
on the interesting parallels between advances in cartographic techniques and the expansion of exploration and exploitation.

Apart from these general introductory observations, however, Lemon is content to let the maps speak for themselves. The notes accompanying each plate are limited to matters of authorship, date and place of publication, and relative accuracy. An opportunity is missed to discuss what was going on in the minds of mapmakers. What were their intentions? What influence did they have on their audiences? Above all, what was their role in defining man's relationship to his environment? In freezing the New World into a set of lines and symbols to carry back to the Old, mapmakers did more than depict America, they also assimilated and civilized it. Draw an impassable trail as a solid line on a map and it is still impassable, but perceptions of a relationship between endpoints have been transformed. Call one hundred thousand acres of wilderness Kings County and it is still wilderness, but it is now conceptually tamed. One has only to consider the enormous practical and intangible consequences of Samuel Johannes Holland's survey of the Island of St. John (Plate No. 29) for the subsequent history of Prince Edward Island to understand the untapped potential of the images Lemon has collected. In short, no attempt is made to analyze the orientation of man to environment as portrayed in these maps, no attempt is made to "read" them.

Ontario's History in Maps is compiled according to the same basic criteria. While the larger number of specimens made it necessary to establish thematic chapters, these were based on subject-groupings the maps themselves suggested, and tend to confirm Lemon's formulation that geographical knowledge evolved in concert with European, then domestic, mercantile designs. Introductions are provided for each chapter, but unfortunately they focus almost exclusively on the historical context of the era and theme, not the larger consequences of cartography on the developing relationship between man and his environment. The notes accompanying individual maps are, if anything, even more curt than those supplied in Theatre of Empire. Once again the viewer is left on his own.

Both Theatre of Empire and Ontario's History in Maps are beautifully produced collections of conscientiously selected maps. But maps no more speak for themselves than do documents; Holland's survey of the Island of St. John is no more vocal than the Quebec Act. If historians wish to use visual materials, which is what maps are, then they must learn to interpret them. Until they do, whole realms of information will be closed to them, and it will remain impossible to make valuable connections between visual and literary sources of the kind, for instance, that Mary Sparling traced several years ago in her catalogue for Great Expectations: The European Vision in Nova Scotia, 1749-1848. In the case of
the two works under review here, neither fulfills its avowed purpose to make a significant statement about the way people ordered and perceived their world. Neither attempts to establish interpretative links with sources of a different kind.

The history of maps is not the same as maps of history: the former examines the way people in the past portrayed their present, the latter the way we in the present portray our past. One is a primary, the other a secondary, source. Charting the past for ourselves has several advantages. We are presumably more objective in our judgments than those mapping their present. We can exploit new technical advances in cartography as well as such associated visual aids as graphs, charts, and diagrams. The number and quality of sources of the past presently available to us collectively is often much greater than it was to individuals in the past, new questions can be put, and we are in a better position to co-ordinate the flow of information. Above all, we can break the barrier of time and depict the dynamic processes of history. Drawbacks of course exist. We lose the immediacy of the primary source and with it the ability to analyze individual reactions to environment. Moreover, following society in process over time runs the risk of abstracting society from time. Indeed, if burdened with enough detail and set with too many goals, our maps of the past can ultimately become disorienting.

The many rewards and several of the perils of mapping the past are realized in the *Historical Atlas of Canada*, Vol. I, *From the Beginning to 1800* (Toronto, University of Toronto Press, [1987]), edited by R. Cole Harris. This volume is itself the first fruit of an enormous project in collective scholarship difficult to conceive in an earlier era. Armed with over five million dollars from the Social Sciences and Research Council of Canada, Director William G. Dean and Cartographer/Designer Geoffrey J. Matthews assembled a team of editors and mapmakers and an army of contributors to exploit modern scholarship in order to map the history of Canada in three volumes (the 19th and the 20th centuries will each be treated on their own). For volume one alone, Harris had an eight-person editorial board to assist in co-ordinating almost 60 contributors, whose expertise ranged from Palaeobotany and Glacial Geology to Archaeology and Historical Geography. In short, the time, physical and financial resources, breath and quality of expertise all brought to bear is extraordinary.

The very quantity and quality of information and talent available to the editors was itself a problem, forcing them to make choices with regard to methods, subject matter, and overall focus. In order to exploit the potential of modern cartography to the full, the determination was made to examine processes over time rather than specific moments in time. Processes in turn have

Sparling's analysis and comparison with contemporary descriptions, pp. 10-11. For a superb example of how to make connections between visual and literary sources, see Wayne Franklin, *Discoverers, Explorers, Settlers: The Diligent Writers of Early America* (Chicago, 1979).
a tendency toward quantification and generalization best suited to analysis of
social and economic questions rather than, for instance, political or consitutional ones. In fact, in the early colonial period geopolitical events and their
territorial consequences were often secondary to social and economic developments. This being the case, the editors let social and economic processes rather
than present national boundaries or past territorial claims set the chronological
and spatial limits of their studies.

This crucial series of choices, of "intentional biases", follows the course first
set by Harold Adams Innis — to whom the first volume of the Atlas is in part
dedicated. Harris believes, in fact, that this volume confirms Innis's general
insight, namely, that the early Canadian economy was dominated by staple
trades in fish and furs, and that these and subsequent staples were crucial to the
development of a distinctive Canadian character and the determination of
national borders. The evidence of the Atlas is probably stronger, however, that
the staple trades were crucial in the development of regional identities, more
clearly reinforcing the insight of Andrew Hill Clark — the volume's other
dedicatee. Indeed, the only period for which the editors were able satisfactorily
to trace social and economic processes on a national or continental scale was the
era prior to the arrival of Europeans, to which the opening section entitled
"Prehistory" is devoted. Subsequent sections on "The Atlantic Realm", "Inland
Expansion", "The St. Lawrence Settlements", and "The Northwest" are regional
studies whose self-sufficiency highlight the almost autonomous relationships
individual colonies had with a succession of mother-countries. The very
divisions of analysis are themselves, then, important statements of historical
interpretation.

Each section begins with an unsigned introduction, which, in addition to
being a substantial essay in its own right, provides an important gloss on the
visual material to come. The heart of each section — and the raison d'etre of the
Atlas — is contained in the plates which follow. Each plate is a double-page
presentation of self-contained subject matter: for example, "Iroquoian Agricul-
tural Settlement" (Prehistory, Plate 12) or "The French Origins of the Canadian
Population, 1608-1759" (The St. Lawrence Settlements, Plate 45). Such plates
are composed of one or more maps, usually accompanied by an array of charts,
graphs, diagrams, and illustrations, which together yield a coherent and
intelligible message. The expert "author" or "authors" of the argument
presented sign the plate and provide a bibliography. But the real heroes of the
day are the cartographers and designers who devised the visual means to present
research and interpretations in clear and meaningful ways. The range of their
experimentation is marvelous and has rightly been called a new adventure in
communication.

The Atlas's ability to display the latest research is nowhere clearer than in the
opening section devoted to Prehistory. "The timing of the atlas coincided", as
Harris notes, "with the development of Canadian archaeology to the point that
an empirically based synthesis of the distribution of cultures in prehistoric Canada had become possible" (Preface). Maps and their allied visual aids seem ideally suited to convey these new findings because of the extent to which native cultures reacted to and with changes in climate and environment. Indeed the plates devoted to this subject are a lesson in how we know (or how we think we know) what we know about native life prior to contact with European civilization. In particular, they make us aware of the shifting standards of identification employed by archaeologists, anthropologists, ethnologists, and their associates in defining native cultures, from manufactured items (especially the ubiquitous stone projectile points), to subsistence practices, to the distribution and nature of archaeological sites, to rock art, and so on. The section as a whole is a revelation and should substantially change the nature of opening lectures in many a survey course of Canadian history. The only likely disappointment for readers of Acadiensis is the sad reality that much of what we would really like to know about pre-contact cultures in the Atlantic region is now submerged under the ocean.

But what readers of this journal will most want to know is how our region fared in the second section, The Atlantic Realm. The short answer is that Newfoundland did very well, the Maritimes less so. That this should be the case is largely attributable to the overriding importance given to the fish staple and the ease with which that industry can be depicted visually. The migratory fisheries of the North Atlantic were, for instance, intimately tied to the physical facts of current and bank, to the mobilization of numerous fishermen from many nations, and to a web of international trade. The location and structure of this staple's development therefore can be and are clearly and neatly mapped, charted, and illustrated, with separated plates following the pattern of development over each of the 16th, 17th, and 18th centuries (Plates 22, 23, and 25), and a summary plate depicting the fishery in Atlantic commerce as a whole (Plate 28). Primarily the work of John Mannion and C. Grant Head, these plates will now be central "texts" for historians.

More exciting even than these overviews is the way in which the actual processes of the green and dry fishery are depicted in Plate 21. The designers of this plate, arguably the single most inventive and informative in the volume, use the 18th century illustrations of Duhamel du Monceau to fashion a diagram that resembles nothing so much as a modern factory assembly-line. Not only are variations of technique clearly exhibited, but, rare in this atlas, so too is a taste of life as experienced by individuals. These messages are then reinforced in detailed plates of the harbours of Trinity and St. John's (Plates 26 and 27), as well as a beautiful portrayal of Ile Royale and Louisbourg (Plate 24).

Against the nine plates primarily devoted to the fishery, the Atlas offers only four dealing with the agricultural Maritime settlements which grew up in the staple's shadow. The most disappointing of these is Jean Daigle's on Acadian marshland settlement (Plate 29). In contrast to most plates in volume one, this
on Acadia depicts a moment in time, 1707, rather than a process of development over time. As a result, an opportunity to exhibit the peculiar and important way in which Acadian settlement expanded to escape the attention of enemies, avoid the oversight of Port Royal, and take advantage of illicit trade with New England is lost. Moreover, such important elements of Acadian life as relations with the indigenous native tribes and trade links with New England are neglected. These lacuna are all the harder to understand given the importance accorded them in the work on Acadia of one of the volume's dedicatees, Andrew Hill Clark. Fortunately Daigle and Robert LeBlanc's subsequent plate on the Acadian deportation and return (Plate 30) is much more informative and comprehensive, and highlights the way in which a people were pushed to the margins of their homeland.

Two maps are devoted to settlement in the Maritime region from the founding of Halifax to the end of the century. Both authored by Graeme Wynn, they cover the pre-Loyalist and Loyalist periods respectively (Plates 31 and 32). Clearly determined to fit in as much information as possible, Wynn maps the source, size, and distribution of major migrations, the type, origin, and destination of imports and exports, and the ethnic origin and religion of residents in 1767. Detail maps of Halifax in 1755 and 1784 (the latter by Larry McCann), and Sydney in 1795, as well as a wonderful little map of Horton Township contributed by Debra McNabb are also included. As if this were not enough, there are also bar graphs of Halifax Shipping, of population and Loyalist Land Grants in Nova Scotia, and of population, marsh, and cleared land in 1761, a diagram of the yearly round on a coastal subsistence farm, and illustrations of three common forms of domestic architecture. In short, these are among the more complex plates to be found in the volume. They are, however, worth the effort it takes to read them, containing as they do a significant amount of new research — some of it apparently directly inspired by the Atlas project. They are a testament to Wynn's diligence.

If there is a problem with these plates, it is that regional maps of the Maritimes are inappropriate vehicles, even as early as the close of the 18th century, for fair treatment of settlement processes and patterns. With scale and chronology set primarily by peninsular Nova Scotia and Halifax, the handling of New Brunswick, Prince Edward Island, and even Cape Breton suffers. An inset map of Sydney does not do justice to the attempt to create a separate establishment on Cape Breton, nor does it set up the tale, hopefully to be included in volume two, of that colony's demise. One would have thought, too, that change wrought by Loyalists on the Saint John River Valley and on the towns of Fredericton and Saint John were worthy of separate treatment. Had different choices been made, both of these issues might have been settled within the context of Wynn's two plates. Prince Edward Island, on the other hand, clearly deserved a plate of its own. For all intents and purposes, the 19th century history of that island was set, as Jack Bumsted has demonstrated, by the origins of the land question in the
Furthermore, the land question is one whose complexities could easily be reduced by visual presentation based on Holland’s initial survey. The failure to deal with this issue is the major disappointment regional Maritime historians will have with this volume, and it is difficult to see how it can be rectified in the next. It is extraordinary to think that yet again Andrew Hill Clark’s work, this time on Prince Edward Island, is ignored in a volume in part dedicated to him.

Beyond these specific problems, the section on the Atlantic region highlights some of the general difficulties the Atlas has when it turns its attention to European settlement. As settlement matures, for instance, political and constitutional questions begin to loom larger, and the Atlas’s avoidance of these issues becomes more difficult to justify. In the case of the Atlantic Realm, there is simply no reference to such matters. Indeed one must go to another section altogether to find a plate that even outlines territorial boundaries (Inland Expansion, Plate 44). At the same time, it becomes harder and harder for plates to keep up with the increasing complexity of social and economic development without sacrificing clarity and coherence or risking an ultimately ahistorical degree of abstraction. Certainly editors of subsequent volumes will have to make difficult choices if they wish to enlighten rather than confuse readers and stay in close contact with the past.

The remaining sections of the Atlas seek their own accommodation with the potential benefits and hazards of modern cartography. While all are on balance quite effective, in relative terms the least successful is the section Inland Expansion. Here Conrad Heidenreich uses seven plates (Nos. 34-35, 37-41) in an attempt to present an integrated picture of the developing pattern of French and Indian trade, settlement, and military conflict down to 1755. Innovative in conception, they are extraordinarily complex in execution. One can barely see the underlying geography for all the arrows, let alone believe they portray the activity of humans. In fact, the cartographers and designers of this volume appear to find the fur trade staple surprisingly intractable. In any event, it is a relief to reach the three plates by W.J. Eccles (Plates 42-44), which clearly and simply outline the events of the Seven Years’ War and the American Revolution. On the whole the section on the Northwest more effectively handles difficult problem of representing the fur trade and European and native contact. Particularly unusual and valuable are the Indian maps presented and analyzed by D. Wayne Moodie in Plate 59. Still, one must take one’s time working through plates devoted to the rivalry of the Hudson’s Bay Company and the Northwest Company (Plates 61-63), if they are to be fully understood.

Of all the early staples, the wheat economy seems to succumb most easily to the cartographer's art. Certainly the section on the St. Lawrence Settlements represents the happiest marriage of form and content. Not only is the sedentary agricultural economy of Quebec inherently simpler to portray, it has also attracted the attention of some of Canada's best historians, geographers, and economists. However, this section does not limit itself to the relatively familiar subjects of the seigniorial system and the agricultural economy, it also provides interesting plates on less familiar themes of native resettlement (Plate 47), the growth of towns (Plate 49), the colony's exploitation of the Gulf of St. Lawrence (Plate 54), and Canada's role in North Atlantic Trade (Plate 48). More unusual still are the two plates (Nos. 55-56) by Georges-Pierre Léonidoff devoted to domestic architecture, a subject which has proved particularly attractive to French-Canadian scholars.

Léonidoff's plates flag the interesting bifurcation in the way the Atlas handles subjects which might be broadly defined as cultural. Whereas the material history or cultural artifacts of native society are central to the analysis provided in the section on Prehistory and elsewhere, such matters are largely incidental to the portrayal of European activities. Léonidoff's plates excepted, European cultural artifacts appear only as marginal illustrations. But even when comprehensively displayed by Léonidoff, it is not apparent what significance we are to attach to the information conveyed, certainly not as apparent as it is in the portrayal of shifting patterns of settlement and trade. The odd result is that we often learn more about the way natives perceived their world and lived their daily lives than about the way Europeans did. In short, the editors, authors, and designers of the Atlas have difficulty moving from the white man's physical location and activities to establishing links with his state of mind.

They have similar problems handling the activities of individuals, particularly discoverers and explorers. Unable to quantify the achievements of the likes of Samuel de Champlain or to generalize from the trials of La Salle, the designers of this volume invariably compress the findings of several explorers onto a single map which resembles nothing so much as an aerial view of the Los Angeles freeway system (Plates 19, 36, and 58). In one instance, an odd attempt is made to categorize expeditions on the basis of presumed motive (Plate 36). A more considered experiment is made to convey something of the way in which European knowledge of the size and shape of the land increased in accuracy over time by presenting a series of early exploration maps. Yet in order to make them easily comprehensible to modern audiences, they were redrafted to a uniform style, thereby depriving them of their original personality (Plate 58).

The mixed results of the scattered attempts to represent individual endeavour, cultural habits, or political and constitutional arrangements are in part due to the editors' conscious decision to emphasize social and economic processes. This conscious decision was itself in part based on the realization that such processes are of a kind modern cartography is well suited to handle. It may well be, for
example, that a thorough understanding of early exploration is best achieved through the sensitive interpretation of original maps. Nevertheless, one must accept that the first volume of this Atlas is not and was not intended to be a complete survey of Canadian history prior to 1800. We should be thankful for the extraordinary range of what was accomplished.

It now remains to be seen what influence the Atlas will have on scholarship and in the classroom. Will it, like that other grand project of collective scholarship, the Dictionary of Canadian Biography, prove too complex, almost too large, for easy and quick assimilation? Certainly the principles behind the craft of the modern cartographer are not always self-evident, and many of the plates included in this volume will require patience and attention from the uninitiated. One also suspects that undergraduate students will find it difficult to incorporate the visual lessons of the Atlas into their written assignments. These problems might have been anticipated and perhaps alleviated by, for instance, making slides of the plates available for classroom use, providing a modest manual on techniques, or simply recommending sample assignments based on the Atlas. Contributors to this project have given us so much that we greedily ask for a little more.

In asking more from others, historians must also ask more from themselves. A determined effort must be made to acquire the skills necessary to take advantage of modern cartography and a conscious decision made to exploit maps in the classroom. Indeed, the same could be said for visual materials of all kinds, from portrait miniatures to daguerreotypes. If some subjects can be explained more clearly with maps, others can be with paintings or photographs. The challenge is to start from visual evidence: structure a seminar around a painting rather than an article, or build a lecture from explorers’ maps rather than their written accounts. Not to do so is to close rather than open avenues to a better understanding of the past.

M. BROOK TAYLOR

3 One might note the strange fact that the Atlas does not always adopt the standard spelling for personal names established by the DCB.

Reflections on the State of Canadian Army History in the Two World Wars

A GENERATION AGO THERE WAS CONSIDERABLE consensus among Canadian historians about what was important and what was not. It helped that the