Mapping Our History — Atlases in a Visual Age

There are many reasons why we might justifiably describe the present as a visual age. Television, cinema, and the graphic arts command huge consumer audiences. Photojournalism, slick wordless advertisements, and other message laden graphics have largely replaced print. As graphic modes increasingly capture our attention, we are faced with the prospect of a generation of spectators lacking in literary sensitivity and skill, incapable of abstract and imaginative intellect. Yet, while much more needs to be learned about the "perceptual" and "cognitive" impacts of graphic as opposed to literary forms of communication, the number of visual expressions continues to grow and the interpretation and presentation of history has not escaped this trend. During the past decade an unprecedented number of elaborate and expensive volumes of pictorial history have been published, in which old maps, illustrations, paintings, photographs, and artifacts have been richly displayed as the primary substance of the book. The emphasis on architectural reconstruction, industrial archeology, and living outdoor museums also reflects this interest in displaying the past, and of connecting a sense of the past to popular culture through essentially visual means. Historians have even begun showing slides in their classrooms, thereby adopting a teaching device that was once the preserve of art historians, anthropologists, and geographers.

There has also been a renewed interest in national and regional atlases. In the past twelve years volumes covering all of the provinces from Ontario to British Columbia have appeared and both the Canadian and American governments have produced major national atlases. Lester J. Cappon's, Atlas of Early American History: the Revolutionary Era (Princeton, N.J., Princeton University Press, 1976) has received wide acclaim and This Remarkable Continent — an Atlas of North American Society and Culture, edited by John E. Rooney, Jr., Wilbur Zelinsky and Dean R. Louder (College Station, Texas, Texas A and M University Press, 1981), expected to appear this spring, will draw together a wide array of new and existing maps and drawings that illustrate major cultural and social trends in both the United States and Canada. While maps and atlases are hardly a new phenomenon, the portrayal of past and present reality in a graphic form, capable of yielding a coherent interpretive message, poses special challenges and it is important that as contributors to, and consumers of, such graphic expressions, we become sensitive to some of their technical and interpretive limitations. The problems and opportunities implicit in atlases can be conveniently considered through an examination of two recent atlases that focus on parts of the Atlantic region and the early experience of the Historical

¹ Among the tantalizing list of content sections are such themes as architectural structures, language and place names, food ways, music and dance, sports and games, images of the mind.

Atlas of Canada project, the first volume of which is planned for 1983.

The Maine Bicentennial Atlas - an Historical Survey (Portland, Maine Historical Society, 1976), and Samuel P. Arsenault, Jean Daigle, Jacques Schroeder, and Jean Vernex, Atlas de l'Acadie — Petit Atlas des Francophones des Maritimes (Moncton, Editions d'Acadie, 1976) are both projects of limited scope, purpose, and budget. Both atlases seek to provide a pedagogical tool for students and teachers engaged in the study of history and geography at the secondary school level. Indeed, the Atlas de l'Acadie is part of a larger curriculum development programme designed to illuminate the nature and extent of Acadian life and history. Among the agencies giving impetus to the atlas were PROFAT (Projet des Francophones de l'Atlantique), the Canadian Studies Foundation, and l'Association des Enseignments Francophones du Nouveau Brunswick. Even though this sharper sense of mission presented the editors with the problem of how to map a space (Acadie) that has no precise bounds — in effect, a territory of the heart — it is evident that the volume profited from a clearer interpretive orientation than the Maine atlas. The latter, as its title suggests, was a project of the Maine Historical Society to celebrate the American bicentennial. However well meaning and laudable the intent, the atlas lacks direction and editorial rigor. Perhaps there is a lesson to be learned here by those who would honour the New Brunswick bicentennial by means of a publication.

The uncertain direction of the Maine atlas is evident from its scale and organization. The volume consists of sixty-nine plates. The first thirty-five are historical in content, the next twenty-six plates are "geographical", and the volume concludes with six facsimilie maps and an almost indecipherable satellite image of the state. This ordering is curious; one might have expected that the atlas would begin with a presentation of those more or less stable place facts such as geology, landform, climate, and drainage systems since they provide the stage upon which human history is carried out. Also, the insertion of the facsimilie maps, which begin with Lescarbot's map of 1609 and end with Moses Greenleaf's map of land grants to 1829, leaves the reader to puzzle why they were not integrated into the historical content of the atlas. In contrast, the Atlas de l'Acadie reveals no sharp delineation of past and present maps; the past is featured principally to establish the present geography of francophones within the region and to show the recent spread or change of a feature. The volume consists of thirty-one plates which are ordered in a general thematic sequence commencing with population characteristics (10 plates), physical geographic characteristics (5 plates), pre and post expulsion settlement, transportation and urbanization (3 plates), economy (6 plates), and cultural features (7 plates). That population should receive such pre-eminence reflects in part the strength of the demographic tradition in French historical geography and social history, but it also establishes at the outset the nature and location of the society emphasized in the atlas.

The success of any atlas depends upon the marriage of sound research and clear, coherent cartographic design. It is no longer sufficient that atlas plates record static distribution patterns or place facts; the emphasis should be on an innovative presentation of dynamic processes. Typically, a plate may indicate the rate of change in a particular characteristic as derived from statistical analysis, or it might represent the magnitude and direction of flow of a population, or commodity, using a scaled line. Moreover, cartographers are now more aware of the "perceptual" impact of such matters as colour and pattern combinations, the shape and calibration of symbols, and the use of other graphics in conjunction with maps. In this important cartographic design component, the Atlas de l'Acadie succeeds better than the Maine atlas, but both atlases are flawed.

The Maine atlas lacks consistency of cartographic design because the historical part was drafted by a professional cartographer, while the geographical maps were produced by six geography undergraduates. As a result there are noticeable differences in type-face, quality of line, symbolization, and map scale between the two halves of the atlas. Surprisingly, the student maps did not adopt a common base map; consequently, Maine's already ragged coast line appears as twenty-two different variations in the section. Too many of the Maine maps are descriptive rather than interpretive, or have questionable interpretive value. For example, while there are maps tracing the routes of explorers on the Maine coast there is no attempt to establish points where contact was made with Indians or where encampments might have taken place. Nor is there evidence of the duration or pace of movement along the coast. It is frustrating that while the direction of the voyage is indicated, the continuation of the voyage is not; the explorers appear to fade in and out of a fog bank lying some twenty miles off the coast. Perhaps a more serious error is the way in which population is mapped. In a series of five plates, the editors chose to map population density rather than distribution. The resulting choropleth maps (maps depicting classes of data by area using a colour or pattern) spread or average the real distribution of population over areal units when the real pattern is likely to be clustered, or linear in its distribution along river courses, colonization roads, or coastlines. A sequence of such maps prevents an easy reading of absolute population increase. Adoption of the dot distribution technique would have been far more successful.

In other instances, very weak or crude measures are used to depict an activity, while some maps are highly impressionistic or lack perspective. One of the historical plates purports to show agricultural types by region. However, the map was based on current evidence; no attempt was made to account for volume of production, employment in agriculture, or the importance of agriculture in the overall state economy. Another map entitled "Manufacturing by Economic Region in 1974" fails to show the economic regions. This is followed by a map which shows volume of taxable retail sales for unspecified areal units without

reference to the population of the units. Hence, there is no opportunity to evaluate the relative scale of retail activity. The section concludes with a series of urban plates which consist of no more than the outline of principal streets, and one is left to wonder why matters of urban land use, suburban growth, and so on, were not considered. Finally, the explanatory and bibliographic notes for each map are frustrating. Not only are they located in another section of the atlas, but little attempt is made to explain the basis for analysis. Too often the notes serve to provide in tabular form data that might more properly have been conveyed on the map.

Sadly, the Maine atlas misses the mark by a considerable distance. Undoubtedly, the editors were constrained by time and money but one also has a sense that there was a failure to grasp the potential of an atlas to portray the drama and texture of the past in an exciting graphic way. We learn little of the people of Maine, their livelihood or their social institutions for the emphasis is placed on very traditional themes such as military campaigns, boundary disputes, and civil and electoral district boundaries. While these maps may serve as a useful reference, they are unlikely to excite the average reader. By now there is sufficient historical research completed to enable a detailed mapping and portrayal of the structure, layout, seasonality and marketing procedures in a typical lumbering settlement, fishing village, or agricultural community of the nineteenth century. Is it not possible to reconstruct something of the movement of Quebec and Acadian francophones into the state, or to plot the proliferation of shoe factories, and textile mills?

The Atlas de l'Acadie achieves greater success in the conceptual and technical rendering of its maps. For one thing, the format of the atlas is larger; each plate is cast upon a 46 cm. x 62.5 cm. page which is twice the size of the Maine atlas. The cartographer is thus able to be more bold and experimental in the depiction of data. For example, some choropleth maps are given greater visual impact by adding a third dimension so that high value areas stand up like blocks of a wooden puzzle. The population maps incorporate an attractive form of bar graph symbol in the likeness of a human figure. And, while some might be dismayed by the highly generalized nature of the base map, it does emphasize the concern with thematic content rather than geographical precision. Indeed, the maps are rendered in such simple and bold outline that they could undoubtedly be shown effectively in front of a class. As a further concession to the teaching utility of the atlas, the accompanying notes are placed adjacent to the map and they include a full explanation and critique of the research procedures used, as well as providing leading questions designed to enable the student to derive insights from the map. Finally, a liberal integration of graphs and tables permits an ample opportunity to show trends.

Only a few inconsistencies and weaknesses detract from the Atlas de l'Acadie. The map of roads and railroads might have shown more detail, especially in noting junction points, key towns, and cities. Similarly, the map of primary

economic activity is highly generalized with the result that one might be misled into believing that the only species of marine life caught by inshore fishermen is lobster and that offshore fishermen catch only cod. Since almost all maps focus on the present rather than the past, historical scholars will find little to excite them. Nevertheless, the plates on the spread of the Caisses Populaires, 1947-73, and of Acadian cooperatives, and the maps of linguistic assimilation make the atlas a commendable addition worthy of examination by all students of the region.

It is clear however, that much more needs to be done before the Atlantic region is well represented by thematic maps. The Historical Atlas of Canada project promises to go some distance toward filling this need. In contrast to the two atlases reviewed here, the Historical Atlas has substantial financial resources, and can command the advice and research services of leading cartographers, and scholars in several disciplines, over a period of five to six years. It is intended that the resulting work will be a "state of the art" production both technically and conceptually. But an undertaking of such scope and ambition is more easily conceived in the abstract than effected in reality, and the editors of the atlas have already had to confront a series of significant interpretive and practical challenges.

An atlas in three chronological volumes (Volume I — Prehistory to 1800; Volume II — 1800-1891; Volume III — 1891-1951), with separate editorial boards, faces problems of overlapping coverage, interpretive continuity, and compatibility of mapping approach and emphasis. The danger is that one volume may impose a conflicting interpretive thrust upon an adjacent volume. For example, one of the significant points of debate for the editors of Volume II has been whether to map themes on a national or regional basis. It was argued that to map on a national scale, while it might provide an useful overview, denied the fact that British North America was essentially a loosely integrated collection of colonial regions, each with its own economic and social design. While a more closely knit national consciousness and economy probably emerged by the period covered in Volume III, there is no reason to imply that this was an inevitable teleological process in Volume II. At another level, the debate over this issue raised squeals of a "centralist" view of Canada, and the editors advocating a regional representation were quick to note that much of the most intriguing detail and character of a region like the Maritimes might easily be left unexposed if national plates were to dominate.

Most of these major interpretive issues have now been resolved and a general cartographic design concept has been proposed. Essentially, the atlas will provide maps examining the emergence of Canada's society, economy, and landscape at varying scales of magnification. At the microscale it will be possible to depict the life and landscape of a typical farmer, or fisherman; at another scale, we will be able to note larger production and trade régimes related to agriculture and fishing. In doing this, it is hoped to respond to a wide

audience — academics, as well as general readers.

Each volume will consist of seventy plates on which one to as many as six or more maps might appear. Graphs or other illustrative devices, such as building types or streetscapes, will be included on the plate, which will be unified by a common theme. To accomplish this will require all of the graphic ingenuity that the cartographer can muster. Given that the Cartographic Editor, Geoffrey Matthews, has already achieved distinction for innovative design in The Economic Atlas of Ontario (Toronto, University of Toronto Press, 1969), which was awarded two successive gold medals at the Leipzig International Book Fair as "the most beautiful book in the world", there is cause for optimism. However, there is a great deal of work to be completed, much of it new research. The editors, particularly of Volume II and III, are quickly becoming aware of the serious gaps that exist in our understanding of Canada's social and economic history. Comparatively little is known about the historical demography of early society, about rural life and economy, or about urban growth and development in the Maritimes. Whether the project can serve as an effective catalyst to fill these gaps remains to be seen.

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