Science and Society in the Maritimes

PETER LATTA

Report on a conference organized by the Technology and Humanity Research Programme and the Centre for Canadian Studies, Mount Allison University, Sackville, New Brunswick, 22–24 September 1988.

Promoted as a forum for current research in the "historical development of science and the impact of technology on society in the Maritime Provinces," "Science and Society" was designed as the annual conference sponsored by Mount Allison on some aspect of Maritime life. The original intention of the organizers was severely limited, however, by the response to their early call for papers. Consequently most of the sessions were dominated by historians of science, as opposed to technology, with few contributions from those with a concern for the contemporary. While the conference developed a strong but unintentional historical bias, it nonetheless provided an excellent series of papers by leading scholars. Only the opening session given by two economists, and a panel discussion which betrayed the participants own interests at the expense of the topic, could be said to have had any real reference to contemporary themes.

The first historical paper of the conference, presented by Bertrum MacDonald of Dalhousie University, clearly set the context for papers which followed. Drawing on resources found in *Science and Technology in Canadian History: A Bibliography of Primary Sources to 1914* (Thornhill: HSTC Publications, 1987) and the Canadian Institute for Historical Microreproductions, two excellent but apparently underused sources for early material, MacDonald outlined the disposition of scientists and engineers in the region and reviewed their concerns as reflected by their publications to 1914.

Three discernible themes emerged from the conference papers. First, several presenters highlighted the importance of biography to the historians of science. This in itself is not a bad thing, otherwise how will we be able to know where to start as interests in the subject develop? What was perhaps unexpected was the emphasis on those scientists and teachers who have been well known to regional historians for some time. A quick review of the records of regional achievement, scientific or otherwise, will quickly bring to the forefront names like Dawson, Lawson and Gesner. Our understanding of these great men may indeed be underdeveloped, but hopefully we will soon begin to delve into the lives of the near-great as well. These are people who have played significant roles in the development of science in the Maritimes but of whom little has been heard—such as C.T. Jackson, Titus Smith, Francis Bain and Henry Y. Hind.

The biographical theme leads to a second observation about this body of current work. In order to understand the history of science, it is clear we must be prepared to take a multi-disciplinary approach to the matter, and tackle such subjects as the law, philosophy, economics, education and cultural studies. In her book *Inventing Canada*, Suzanne Zeller quotes George Eliot. "I went into science a great deal myself one time; but I saw it would not do. It leads to everything, you can let nothing alone." In the expanse and depth of these conference papers it is easy to see the truth in this statement.

A third apparent theme was that science has not always been undertaken to discover a universal truth, or for reasons related to altruistic enquiry. The effect of commerce and the state has been consistent and strong in the region, and from them science has not been immune. These conference papers touched on scientists working in agriculture and the fisheries as well as geologists and astronomers, whose work has had an undeniable reference and importance to the development of commercial and military activity. Obviously the creation of a scientific body of knowledge to help people exploit a resource in a more effective way is a highly practical use of a discipline. While one would presume the rise of available information based on solid research would be welcome, this was, however, not always the case. A good example of this was given by Hugh Grant as he outlined the refusal of prospectors and developers to listen to current scientific opinion regarding oil deposits in the Maritimes. Consequently several dry wells were sunk in a vain effort to prove that the practical experience of prospectors would profitably contradict "scientific guesswork." Regrettably no presentations were offered on the specific relationship of scientific research to industry. This theme of sponsored research, particularly in the chemical and metallurgical industries, would no doubt be revealing and should prove to be an exciting field of enquiry in the future.

As any conference, this one was not without its shortcomings. The lack of organized commentary or a review session may have left participants vaguely wondering what, in the end, had developed out of the conference. The lack of a formal critique, however, did not prevent a lively discussion and question period following each session. In part, the role of commentator was fulfilled by Robert Bruce, an American scholar whose book *The Launching of Modern American Science* won him the 1988 Pulitzer Prize in history. In his banquet address, Dr. Bruce spoke about the differences he perceived between Canadian and American approaches to the history of science. Drawing upon the conference papers as a guide, he outlined in a broad way some of the different national directions and interpretations each was embarked upon.

While the conference was weak in terms of contemporary issues and while no synthesis of the proceedings was drawn at its conclusion, attendants nonetheless heard a variety of perspectives which could not fail to reveal much about Maritime society–and probably the rest of Canada. The cultural influence of education and religion on the work of many scientists in the nineteenth century showed itself many times and was a common thread between the subjects. Science was felt in the very hearts of people as Maritime preachers attempted to reconcile a gospel-based theology with a dispassionate and sometimes apparently antagonistic scientific point of view. Read with hindsight, as George Rawlyk did so dramatically for the assembled, the effort that some ministers made in their sermons to reconcile these two points of view was genuinely heroic. Likewise the use of science as a reforming implement, either in the hands of professional physicians, or as a means of popular entertainment in the guise of mass edification by mechanics institutes, was revealed as a genuine force in society.

For the material historian, the proceedings would be tremendously helpful in providing the kind of contextual information required to effectively translate scientific collections to the public. Otherwise, and probably because of the lack of technological papers, virtually no discussion took place on the implements which carried scientific thought into practice. The closest the conference came to this was a field trip to Albert Mines, the site of one of Abraham Gesner's many disappointments. This abandoned mining village was interpreted by guides from the New Brunswick Museum largely in terms of the geological and palaeontological features of the place. But it was the interest of local people in the history of the site and their openness in sharing their knowledge of it with the conference that solidified our understanding of the impact of science on society. Discovered by science and developed by disputatious capital, the mineral and human resources of Albert Mines were sapped so completely that today little of either is left.

Paul Bogaard and Larry McCann, the conference organizers, deserve great credit for having the insight to bring together this collection of speakers. The relaxed but well run organization contributed to the undoubted success of this first such conference in the Maritimes. While another regional meeting on the topic is not planned for the future, a publication of the proceedings as part of the Anchorage Series of Mount Allison's Centre for Canadian Studies will be forthcoming. Like the conference itself, the published papers will be a welcome addition to a growing field.

Presentations

Sadequl Islam, "Technology and Employment in the Manufacturing Sector of New Brunswick, 1961–1987"

Marcel Leroy, "Information Technologies, Quality of Life and Economic Activity in Peripheral Regions"

Bertrum MacDonald, "'Just a Little Better Than Other Sorts of Brains': Scientists and Engineers in the Maritimes Prior to 1914"

Richard Jarrell, "Nova Scotia Discovers Agriculture: Science and the State in the 19th Century"

Donald Macleod, "Faith, Hope and Geology: Practical Geology in 19th Century Nova Scotia"

Jennifer Hubbard, "Home Sweet Home? A.G. Huntsman and the Question of Canadian Research on Atlantic Salmon Homing Behaviour"

Suzanne Zeller, "George Lawson, Botany and Science in the Maritimes"

Martin Hewitt, "Science as Spectacle: Popular Scientific Culture in Saint John, 1830–50"

Colin Howell, "Medical Science or Social Science?: the Social Vision of the Medical Profession in the Late Victorian Maritimes"

Michael Smith, "Maritime Physicians, Scientism, and the Victorian School House: 1890–1910"

Leslie Armour, "McCulloch, Lyall, Schurman and Keirstead: Science, Religion and the Unity of Knowledge"

Susan Sheets-Pyenson, "The Nova Scotia Roots of Sir William Dawson's Scientific Worldview"

Roy Bishop, "An 18th Century Maritime Observatory and Its Remarkable Founder—J.F.W. DesBarres"

Randall Brooks, "Time and Longitude: Early Observatories in the Maritimes"

Steven Clayden and Randy Miller, "Exploring Albert Mines"

Elizabeth Haigh, "The Law and Abraham Gesner: Why the Developer of Kerosene Died a Poor Man"

Hugh Grant, "Petroleum Exploration in the Maritimes during the 19th Century"

George Rawlyk, "A Reading of Sermons"