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CREATING A 'NORTHERN MINERVA':

JOHN WILLIAM DAWSON AND THE ROYAL SOCIETY OF CANADA

Robert Daley* and Paul Dufour**

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... the lonely worker finds his energies flag, and is drawn away by the pressure of more popular pursuits, while his notions become one-sided and inaccurate through want of friendly conflict with men of like powers and pursuits. Even if this Society can meet but once a year, something may be done to remedy the evils of isolation.¹

Approaching its centenary in 1982, the Royal Society of Canada has defied attempts by historians to explain adequately its organizational difficulties in bringing together Canada's intellectual luminaries. In a survey of Canadian learned organizations Peter J. Bowler remarks that, from the outset, amateurs were excluded from membership in the Society.² Instead, an elite corporation of scientists, scholars and literary figures was created. Although Canada's local scientific societies did not discriminate against amateurs, they were unsuccessful in their pretensions to national status as organizations homologous to the democratic American or British Associations for the Advancement of Science. One of the principal reasons for this failure, according to Bowler, was that many Canadian scientists satisfied their needs for professional identity through membership in these foreign associations and therefore saw no need to achieve similar gratifications in a Canadian association. There was however an apparent desire to promote national excellence in science and literature and the Royal Society of Canada's founding was seen as the fulfillment of this objective. In Bowler's view, the spirit of nationalism governing the creation of the Society gave its elected members a sense of unity and purpose.³

A more recent analysis by Vittorio De Vecchi elaborates on this interpretation of the Royal Society's origins. De Vecchi emphasizes how the search among Canadian intellectuals for status and legitimation in the eyes of their British colleagues played a role in the birth of the Society. He observes that national Canadian status did not lead to a national function. The Society's institutional and the members' intellectual links with British science and its practitioners led to doubts by the Canadian

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government about the Royal Society's pragmatic objectives. The Society's scientists, like their British fellow workers, were perceived to be excessively theoretical. The colonial government in Canada, partial to utilitarian policies, found it difficult to support an organization primarily devoted to furthering intellectual visibility abroad.⁴

These two evaluations of the Royal Society's early years raise important points, but they ignore several issues in the Society's creation. From the beginning the Society was plagued with confusion of purpose and internal strife. The men who founded the Society could not resolve difficulties that became, over the next century, structural features of Canadian scholarly life. In this communication we re-examine the founding of the Royal Society of Canada in light of archival material recently catalogued at McGill University. This material, the science-related correspondence of John William Dawson, provides a more detailed picture of the motivations behind the Society's creation and of the unique mold in which the Society was cast. The correspondence also reveals how, by 1885, a web of professional scientists, working in private colleges and universities as well as in government geological surveys, had spread out across Canada. It became the ambitious task of the Society to galvanize these scattered professionals into a national scientific elite.

Before 1882, Canada claimed several local scientific and literary societies, but few had aspirations to national status. The Canadian Institute in Toronto did apply in 1859 for a charter to change its name to the 'Royal Society of Canada,' but this request was refused because of the Institute's predominantly Upper Canadian character.⁵ It remained for John Douglas Sutherland Campbell, Marquis of Lorne and Governor-General of Canada, to resurrect the notion of a national scientific society almost fifteen years later. He was a poet more prolific than proficient, and his blue-blooded and influential wife, Princess Louise, was an amateur painter and avid sponsor of artistic endeavour. Two years earlier, in 1880, the couple had supported the foundation of the Royal Canadian Academy of Art, and its success undoubtedly motivated the Governor-General to move on to the next phase of his cultural institution-building.

That Lorne borrowed the model of the *Institut de France* with its five independent academies is not surprising, given his admiration for French culture. He combined Canadian homologues of the French *Académie des Belles Lettres* and the *Académie des Sciences* into one single organization, the Royal Society of Canada. In place of academies, sections emerged: French Literature, History and

Allied Subjects; English Literature, History and Allied Subjects; Mathematical, Chemical and Physical Sciences; and Geological and Biological Sciences.⁶ Lorne served as founder and patron of the Society, leaving matters of title, membership, rules and procedures to the Canadian intelligentsia. The man selected by the Marquis to organize and direct the Society's provisional council and first meeting was the paleontologist, Principal of McGill University, John William Dawson.

Dawson was no stranger to institution-building. Under his guiding hand, McGill University had emerged as the premier educational institution in Canada. Dawson possessed a remarkable ability to cajole Montreal's business community into donating large sums of money for the development of the university, particularly for its professional chairs and scientific facilities. This 'building up stone-by-stone' of McGill was a labour of love for Dawson, a task to which he unstintingly devoted himself despite appealing offers of professorships at other colleges, such as Princeton.⁷ Numerous publications, scientific as well as educational, issued from his hand, but Dawson still found time to promote and develop other scientific organizations. As president of the Natural History Society of Montreal, he was instrumental in inviting the American Association for the Advancement of Science to the city in 1857, and again in 1882. A number of Canadian scientific societies, such as the Nova Scotian Institute of Natural Science, the Natural History Society of New Brunswick, and the Historical and Scientific Society of Manitoba benefited from Dawson's ceaseless travail. His efforts did not go unrewarded. In 1881, Dawson was named to the Order of St. Michael and St. George.

The paleontologist's honour prompted his outspoken confidant at the University of Toronto, the archaeologist Daniel Wilson, to remark:

. . .when I saw your name coupled with that of (Sir Hector) Langevin, I confess it robbed it of all its grace. Royal favours to political leaders are, I suppose, necessary and reasonable. But to class (Sir William) Logan and Dawson indiscriminately with (Sir Charles) Tupper, (Sir Leonard) Tilly, Albert Smith, (Sir Hector) Langevin, etc. can only tend to make a D.C.L. or an FRS, a hundredfold more covetable than a K.C.B.

Like Wilson, Dawson distrusted politicians and their views on scientific organization. In contrast to Lorne's vision of an elitest national academy, Dawson entertained the notion of a democratic organization similar to the British and American Associations for the Advancement of Science.⁹ Dawson expressed skepticism, too, about Lorne's wishes to

include French and English literary sections. The Edinburgh-educated scientist would have been more comfortable with a society wholly devoted to the sciences not unlike the structure of the Royal Society of London.¹⁰ Overcoming his vacillation concerning an organizational model, Dawson was shrewd enough to accede to Lorne's wishes because of the need for the latter's patronage, without which no society could promote scientific and cultural development on a national scale. Dawson also recognized that the Royal Society could 'increase the visibility of Canadian researchers' through its publications.¹¹

Daniel Wilson, Dawson's counterpart at the University of Toronto, was even more critical of Lorne's formula for the Royal Society. His main complaint was that the literary sections would have no merit. Elected as first president of the English Literature section, Wilson wasted little time in relating to Dawson his displeasure with this 'Noble Order of Nobodies!'¹²

I do not see why I should march through country, at the head of a troop, not one of whom, would in England be thought otherwise than ridiculous, in such a body....I shall suggest to the Marquis to retain the French literary class, as the Quebec gentlemen seem so highly pleased with it, but otherwise to limit it at present to Science, where it will be respectable.¹³

In a later letter Wilson's attitude had not changed, and he once again complained to Dawson:

But what is it proposed or expected that the Section of English Literature do? Shall we write school-boy essays, or criticisms on the literature of the day; or theses on the want of literature? It is certain, looking to the material out of which such a section has to be formed, that it will either do nothing, - or a great deal worse.¹⁴

Like Dawson, Wilson eventually accepted membership in the society, largely as a favour to the Marquis, but Wilson never overcame his initial skepticism. At the Society's provisional council meeting in Dawson's Montreal home, Wilson cynically replied to Dawson's request for nominations to the literature section: 'I shall try to make out a list of illustrious nobodies; the more insignificant they may be, the higher will be their delight when such honours are thrust upon (them).'¹⁵

Many agreed with Wilson's views about the composition and function of the literary sections of the Royal Society, in contrast to their acceptance of the scientific ones. In

addition to disgruntled echoes from within the ranks of the Society itself, criticism came from two sources: intellectuals who were overlooked in the selection of members, and the press, particularly the *Toronto Globe*.¹⁶ The latter relentlessly attempted to drive a wedge into the English-French cleavage within the Society. For Daniel Wilson it was a sad business:

Our Toronto Canadian papers got hold of a story about a quarrel between Pêre Hamel and Dr. Sterry Hunt, and that the whole of the Quebec clergy left Ottawa in a huff on Friday. In vain I have assured Mr. Gordon Browne that I never heard of such a thing till his paper gave currency to it...Our Toronto press has not been so friendly to the CRS, as your Montreal papers.¹⁷

James MacPherson Lemoine, head of the French Literature section and amateur ornithologist, also complained to Dawson about efforts by the press to besmirch the Society, but reminded the Society's first president that the British Association for the Advancement of Science had likewise been obliged to endure criticism during its formative years.¹⁸ Fortunately, the wide press coverage given to the federal election of 1882 spared the Royal Society from further attacks.¹⁹

Literary aspirants assailed the society when they were passed by for membership. The social historian and journalist Nicholas Flood Davin savagely attacked John George Bourinot, the Society's honorary secretary and a noted constitutional historian, for an article that the latter published in the *Canadian Monthly* entitled 'The Intellectual Development of Canada.' Davin's critique of Bourinot and, by implication, of the Society's literary sections was contained in a pamphlet entitled *The Secretary of the Royal Society - A Literary Fraud*. Contending that Bourinot was 'a man who could not at this moment pass an examination for a third class clerkship,' Davin's publication was widely circulated but did not evoke much response.²⁰ The journalist and parliamentary librarian Alfred Duclos DeCelles -- rejected because he had not written a book -- also belligerently opposed the Society.²¹

Compounding the setbacks sustained by the Society from external attacks was chronic absenteeism. During the first four years average attendance at the Society's annual meeting never exceeded forty-five out of a total membership of eighty. Canadian geography and lack of adequate transportation were evident excuses, yet several members lacked interest in the Society's functions and disapproved of its organizational structure.²²

In spite of such annoyances, the Royal Society became the most prestigious intellectual body in Canada. It persevered

largely because of the political and organizational skills of its active founding members, whatever their initial misgivings about such an exclusive society. At no time during its early years was the Royal Society's status jeopardized by the jealousies of the regional literary and scientific societies in Canada. The founding members of the Royal Society recognized this potential threat and quickly granted the regional societies affiliate status.²³ Representatives to the annual meeting in May were invited to give progress reports on their respective organizations. The practice has endured to the present day in the annual convocation of the Canadian Learned Societies.

All of the members of the Royal Society recognized the need to obtain government support, both political and financial. This necessity raised problems for the Society's executive council, particularly when they had to deal with 'provincial politicians (who) are not sympathetic in literary and scientific pursuits.'²⁴ To augment the skillful lobbying of secretary Bourinot, the Royal Society secured several powerful allies in the capital. One Society member, Joseph Tassé, sitting for the City of Ottawa in Parliament, stressed the Society's utilitarian role:

Let us not forget that science alone can enable us to discover, to explore all the vast treasures which are concealed in the lands of our vast country. Let us not forget that science and literature united can do much to attract to our shores the vast flood of European immigration in search of homes, of bread and liberty.²⁵

Sir John A. Macdonald, a personal friend of Dawson's, supported the bill to incorporate the Society, as did Sir Charles Tupper.²⁶ Bourinot also requested Tupper's aid in obtaining a grant for publication. As he remarked to Dawson:

My personal friend Sir C. Tupper has taken much interest in it, and I hope that there will be no slip yet between the cup and the lip. But my long experience in politics leads me to take nothing for granted.²⁷

In the end, the combination of political influence and institutional commitment meant that the Society's incorporation passed easily through Parliament on 6 April 1883.

Later in 1883 the government granted an annual sum of \$5000 for the Society's *Proceedings and Transactions*.²⁸ Science seeks public recognition, of course, and ever since the seventeenth century any serious scientific society would have sought to issue at least one periodical

publication. Yet scientists, at times, are motivated by other than strictly professional aims. In Canada personal reasons seem to have sped the creation of the Royal Society's journal. President William Dawson had seen his Bakerian lecture of 1870 rejected for publication in the Royal Society of London's *Philosophical Transactions*. Ever since, he had refused to submit papers there, vowing to the British paleobotanist William Williamson: 'After my experience of last year, I shall certainly throw no more of my pearls before the swine in that quarter, but shall publish exclusively in this country.'²⁹ In Dawson's view, the creation of the Canadian Society's *Proceedings and Transactions* provided a means for demonstrating the intellectual stature of Canadian science at home and abroad.³⁰

Canada's scientific practitioners were most eager to exploit new avenues for publication, and scientific papers in the *Transactions* far outnumbered those from the literary sections. To some it seemed odd that the two kinds of contributions appeared in the same journal. Daniel Wilson, for example, persisted with his arguments regarding the worthlessness of publishing scientific and literary papers together. As he remarked to Dawson, Wilson worried about potential damage to the Society's reputation abroad: 'A geological or Archaeological paper placed between a poem of Father Dawson and a French ode, will be an odd publication to forward to European Savants.'³¹ For Wilson, it was clear that the publishing needs of the literary and scientific sections could not be accommodated within one corporate organization:

In truth, the literary men must take a very different view of matters from the men of science. Magazines, Reviews, and periodical Literature of all sorts affords a legitimate vehicle for literary essays. We have reason to fear the publication in the C.R.S. of literary papers that will do us little credit. It is otherwise with the physicists, geologists etc.³²

Despite these organizational difficulties, William Dawson felt obliged to support such an opportunity to further national expression. He was dedicated to any endeavour which would enhance the reputation and increase the exposure of Canadian science. His role in bringing to Montreal the AAAS in 1882 and its British counterpart two years later, as well as his ceaseless travail in aiding the scientific representation of Canada in England at the Colonial and Indian Exhibition of 1886 and the Fisheries Exhibitions of 1883-85, speaks eloquently of this interest. In the end, the greatest strength of the Royal Society of Canada lay with the determination of the Society's active founding

members like Dawson, to strengthen the voice of Canadian science abroad. Henry Bovey, McGill University's professor of applied science and future fellow of the Society, wrote in 1886:

... although it may be well ... to look at science from a *national* point of view, yet it must never be forgotten that the true significance of the life work of such men as we have been considering lies, not in their representation of this country or that, but in the fact that they form one detachment of the great army, which in every country of the world is endeavouring, with more or less success, to hold the citadels of truth and push ever farther back the confines of ignorance and error.³³

There can be no doubt that many Society members believed in Bovey's rhetoric as they saw in the Royal Society of Canada a much awaited mechanism which would aid in alleviating intellectual isolation and which provided a means whereby Canadian scholarly work could be added to the reservoir of world knowledge.

The early years of the Royal Society of Canada were not easy for the offspring of an unlikely union between nationalistic aspirations and professional ambition. The Society was an artificial creation, established by a statesman for political ends and nurtured by an intellectual elite for their own purposes. The organizational obstacles which had to be overcome in minimizing the friction between literary men and scientists, with their different professional norms,³⁴ and in establishing a vehicle which would allow for the greater visibility of Canadian science meant that nationalism and professionalism overshadowed the advancement of knowledge.

Acknowledgements

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NOTES

1. J. W. Dawson, 'Presidential Address,' *Proceedings and Transactions of the Royal Society of Canada*, I, 1882, viii.

2. P. J. Bowler, 'The Early History of Scientific Societies in Canada,' in A. Oleson and S. Brown, eds., *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War* (Baltimore, 1978), 334.
3. *Ibid.*
4. V. M. G. De Vecchi, 'Science and Government in Nineteenth Century Canada' (PhD Dissertation, University of Toronto, 1978), 105.
5. Bowler, 'Scientific Societies in Canada,' 331.
6. The Royal Society recognized a need for reorganization in 1974, and, in fact, more closely modeled itself after this original French influence. The sections of the Society were rationalized and restructured into three academies. Claude Fortier, 'The Royal Society of Canada as a Federation of Three National Academies,' *Transactions and Proceedings of the Royal Society of Canada*, Series IV, XIII, 1975. Lorne also proposed a fifth section - a Mechanical Section - for engineers. Marquis of Lorne to John William Dawson, 19 January 1882, McGill University Archives, Accession 2211. (All further manuscript material cited is from the same source.)
7. James McCosh to Dawson, 23 August 1878.
8. Daniel Wilson to Dawson, 30 May 1881.
9. Dawson to Lorne, 1881.
10. J. W. Dawson, *Fifty Years of Scientific and Educational Work in Canada* (Montreal, 1901), 178-9.
11. *Proceedings and Transactions of the Royal Society of Canada*, I, 1882, xiii-ix.
12. Wilson to Dawson, 4 February 1882.
13. Wilson to Dawson, 6 January 1882.
14. Wilson to Dawson, 12 January 1882.
15. Wilson to Dawson, 8 December 1881.
16. W. S. MacNutt, *Days of Lorne* (Fredericton, 1955), 139.
17. Wilson to Dawson, 6 June 1882.
18. James Lemoine to Dawson, 10 June 1882.

19. De Vecchi, 'Science and Government,' 93-5.
20. Nicholas Flood Davin, *The Secretary of the Royal Society - A Literary Fraud* (Ottawa, 1882), 20.
21. Lemoine to Dawson, 10 June 1882. De Celles was subsequently elected FRSC in 1885.
22. Goldwin Smith, for example, though elected Vice-President of the English Literature section, never attended meetings. Other members of this section who never attended included Reverend William Lyall of Halifax, professor of philosophy at Queen's University, John Watson, and George Paxton Young of the University of Toronto. Among the original members of the French Literature section, historian Louis-Edouard Bois, painter, writer and member of the Royal Canadian Academy of Art, Napoléon Bourassa, journalist Hector Fabre, and Québec judge and writer Adolphe-Basile Routhier, were conspicuous by their absence. Fabre's absence was legitimate. In 1882, he was appointed agent general for the Government of Canada in Paris.
23. There were initially fourteen of these: the Literary and Historical Society of Quebec, the Natural History Society of Montreal, the Canadian Institute of Toronto, the Natural History Society of New Brunswick, the Nova Scotian Institute of Natural Science, the Literary and Scientific Society of Ottawa, the Historical and Scientific Society of Manitoba, the Entomological Society of Ontario, l'Institut Canadien de Québec, the Historical Society of Montreal, the Numismatic Society of Montreal, the Historical Society of Halifax, the Geographic Society of Quebec and l'Institut Canadien-français d'Ottawa. *Proceedings and Transactions of the Royal Society of Canada*, I, 1882, xx.
24. John George Bourinot to Dawson, 4 April 1882.
25. Canada, House of Commons, *Debates*, 19 March 1883, 264.
26. Sir John A. Macdonald confused the organization of the Royal Society of Canada with that of the Royal Society of London, equating the mandate of the former solely with the promotion of science. Canada, House of Commons, *Debates*, 14 May 1883, 1194.
27. Bourinot to Dawson, 31 March 1883.
28. House of Commons, *Debates*, 14 May 1883.
29. Dawson to William Williamson, 11 September 1871.

30. In Dawson's view, Canadian work in some fields of geology and paleontology was superior to that in Britain. As he wrote to his mentor Charles Lyell on 5 November 1870, Dawson complained:

These things are I confess very discouraging to me; showing that however well and carefully work may be done here, no value is attached to it in England. I fear it will soon come to this that both in chemical geology and fossils we shall in America have to cut off all connection with England; all your work is becoming so thoroughly shallow....and we are too far off to correct it or even defend ourselves.

31. Wilson to Dawson, 27 May 1882.
32. Wilson to Dawson, 13 February 1883.
33. Henry T. Bovey, *The Progress of Science in Canada: A Lecture Delivered to the St. Paul's Y.M.C.A., Montreal, February 22, 1886* (Montreal, 1886).
34. A recent comment on French Canada's scientific heritage has suggested that the motivations of professionalization and international recognition were not expressed by the francophone representatives of the Society's scientific sections. Raymond Duchesne, "Problèmes d'histoire des sciences au Canada français," in Richard A. Jarrell and Norman R. Ball, eds., *Science, Technology, and Canadian History* (Waterloo, 1980), 30.