Richard White. The Skule Story: The University of Toronto Faculty of Applied Science and Engineering 1873–2000. Toronto: University of Toronto Press, 2000. Pp. 336.

Faculty members and graduates of the University of Toronto's Faculty of Applied Science and Engineering may well enjoy Richard White's account of their alma mater. *The Skule Story* describes the origins of the government-sponsored School of Practical Science (SPS) in late 19th century Ontario and its evolution into a Faculty of the University of Toronto, the rise of student enrollment, the creation and demise of various departments, the appointment of faculty members and their changing duties, and the succession of Deans and other notables. White also touches on student culture, showing the long history behind contemporary activities. Readers with a personal tie to the Faculty are likely to get a better sense of how their institution has grown and changed since its inception. Perhaps some will feel vindication, as the story is one of progress and success marred only by the occasional set-back.

Other readers not already committed to the glories of "the Skule" may balk at the book's whiggish flavour, questioning whether the SPS did in fact herald new and better innovations in curriculum, pedagogy, and student discipline, and that by being "practical" the school improved upon the increasingly anachronistic, unreformed University that served simply to protect "the great intellectual traditions of western culture." (6–9, 13, 54) A skeptical reader may not be entirely satisfied with White's argument that the University of Toronto wanted affiliation primarily to dip into the stable government funding enjoyed by the "practical" SPS, while the School (obviously of more value to the government and the public it represented) was not particularly interested in the University. (48–50, 52) Money evidently played a role, but there must have been more. White often justifies the work of the Faculty over the years through vague appeals to utility, implying an inherent uselessness of other Faculties. (109, 135, 231)

It is not difficult to find further examples of this pervasive boosterism. For example, although the reader gains little insight into the intellectual life of John Galbraith, the first Professor of Engineering and later Faculty Dean, Chapter 1 is nonetheless entitled "Galbraith's Vision." White attributes to Galbraith an epistemological perspective on "practical science" but offers no evidence of Galbraith's ideas. (83) Did he really have a vision? Galbraith's successor, Dean Mitchell, is praised for his

"professionalism"—complimentary but effectively meaningless rhetoric. (143) In regard to student culture, Engineering students are said to have always had a "socially conscious side," but White spends more time describing roughhouse activities and controversial stunts. (187) What, then, was that social conscience? (The accompanying photograph of students cleaning a beach loses its "social conscience" when revealed as a reformed hazing activity.) Change was at times "progressive" without any explanation of what that might mean. (205) Near the end of the book, White glosses over the political debate surrounding contemporary funding of university science and engineering research. Criticism is reduced to vague fears about the future held by older professors asking such bland questions as "how long will political consensus remain around the belief that university-based research brings economic growth that benefits all?" (266) The book concludes with the optimistic prediction that "[T]he Faculty, through its distinctive blend of caution and progress, will flourish for many years to come." (267) Critical-minded readers may find such comments a little dubious.

The booster rhetoric is easily identified and rejected, if the reader is so inclined. What remains is quite a detailed overview of the events within the Faculty. White carefully identifies those involved in creating (or opposing) new institutional arrangements and suggests some of their motives, making use of an extensive institutional archive. He carefully examines the initiatives of the Ontario government in establishing the SPS, the School's humble academic beginnings, and the Faculty's status as an undergraduate school until after the Second World War. White identifies resistance to the rise of research during the 1960s by some faculty members, and considers some student activities to have been juvenile, dangerous, and, at times, even malicious. Although White understandably avoids taking sides when considering research funding, he does acknowledge military and industrial sources of money and lets the reader draw conclusions about whose interests were served. The Skule Story, then, is not an entirely celebratory account, and will be of great comparative use to historians interested in universities or engineering education.

What *The Skule Story* sorely misses are explanatory themes requiring additional circumstantial or contextual consideration. White notes such obvious influences as world wars, Sputnik and the space-race, NRC and private funding initiatives, the student movement, and changes in the gender and cultural composition of the student body, but overlooks some of the less obvious (and arguably more revealing) forces that may have influenced the Faculty. Not much is said about how professors in the wider University, particularly natural sciences, considered or treated

the Faculty. Little is said about the relationship between the Faculty and the University's central administration. Presidents played a role in Faculty hiring, but one wonders how university affairs more broadly influenced decisions made about Applied Science. President Cody, for example, initiated an external review of the Faculty in 1939, but White offers no explanation why and merely claims "the full story of why Jackson [the external reviewer] was brought in appears to have escaped documentation." (139) White provides information on Jackson's background and the contents of his review, but readers may wish to know what Cody had had in mind.

The influence of university outsiders is likewise under-represented. Large sums of money flowed into the Faculty from public and private sources, but reasons are often ambiguous. A large Ford Foundation grant in 1963 "oddly enough... came to to the Faculty nearly unsolicited." (196) This is odd—one would like to know why, yet little is revealed. Stating that the Faculty "deserved public funds" because its research had become more scientific is likewise uninformative. (199) Nor will the reader find much about the decline of the apprenticeship system in early Canada (noted in a 1913 Royal Commission), the employers of graduates, the class backgrounds of students and professors, the ideology of meritocracy and nation-building, or other features of Ontario society that shaped the Faculty.

A greater omission in *The Skule Story* is any conceptual or empirical treatment of the engineering profession. The word "profession" is used often, but without clarification or definition. White cites standard works on the topic, but does not discuss the identity, status, education, and governance of nineteenth and early twentieth century engineers. The establishment of the Canadian Society of Civil Engineering (CSCE) in 1887, the legislation governing the Association of Ontario Land Surveyors enacted in 1892, the passage of the Ontario Professional Engineering Act in 1922 (and subsequent legislation to "close" the profession), and the introduction of accreditation by the Canadian Engineering Accreditation Board in 1965 surely had implications for the Faculty. Yet White barely mentions them. Did Faculty professors join the professional fraternity and encourage graduates to do likewise? Galbraith and Haultain were two influential Faculty members also active with the CSCE. What action did they take in the debates surrounding the regulation and education of professional engineers? What did these men think and do about the early dominance of McGill University in preparing engineers and controlling the CSCE? The reader never learns what role the Faculty played in defining, creating, or sustaining the "profession" of

engineering, or, on the other hand, what use "professional" engineers made of the Faculty.

The Skule Story will probably appeal to former students, faculty members, and staff who are curious about the origins of familiar traditions or who wonder about significant changes in the Faculty. For general readers of history, it provides a comprehensive and consistent narrative of the Faculty's growth, although one might exercise caution in accepting the author's value judgments at face value. Historians, particularly those specializing in university history, may be disappointed that significant explanatory questions are omitted and that the explanations offered for consideration often do not reach very far into either the lives of individuals or the circumstances in which they acted. In deciding the relative weight of evidence and argument, White has chosen to emphasize the former. The Skule Story provides a plethora of carefully researched information and a good introduction to the long history of a significant contemporary institution, but leaves plenty of room for additional explanation and critical analysis.

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