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During the latter half of the nineteenth century, the American government adopted legislation that established land-grant colleges to teach practical arts, such as agriculture, mechanical arts, military tactics, and home economics, while not excluding other scientific or classical studies; thereby adding a new dimension to the mission of the university.

Harold Shapiro summarized this complex mix that shaped the American university:

The particular institutional structure of the modern American university emerged from the Colonial colleges, from landgrant colleges, and from a set of new private universities, as well as from a complex set of influences. These influences included not only different European models . . . but also some distinctly American needs and traditions such as the rather universalistic outlook of liberal Protestantism; a cultural preference for meritocracy; a commitment to increasing our material welfare; a certain kind of egalitarianism; immigration; industrialization; and the economic forces emanating from a rapidly industrializing nation whose economy was organized around private markets.³

Over the first sixty years of the twentieth century, Canadian universities increasingly were influenced by the patterns developing in the United States. Although Robin Harris points to some distinctive characteristics of Canadian universities, the growing similarities with their American counterparts are more notable.⁴

Despite this mixed brew of traditions and influences, North American universities are remarkably similar in characterizing their fundamental purpose as serving the public good by preserving, transmitting, and advancing knowledge. For the most part, they recognize that this requires institutional autonomy so that their educational and scholarly work cannot be redirected or halted because it offends powerful interests, be they state, religious, ideological, or corporate. Also, universities widely acknowledge that academic staff must have academic freedom: that is, the right to teach, undertake scholarly work, publish, and participate in the work of the institution and the community without restriction by prescribed doctrine or institutional censorship.⁵

There has, however, been a growing concern over past twenty years that universities and their mission to serve the public good are being compromised by commercialization. Lawrence C. Soley, in his 1995 book *Leasing the Ivory Tower*, argued that "corporate foundation and tycoon money has had a major, deleterious impact on universities. Financial considerations have altered academic priorities, reduced the importance of teaching, degraded the integrity of academic journals, and determined what research is conducted at universities."⁶ A decade later and a bit more colourfully, Jennifer Washburn wrote: "Since 1980 . . . a foul wind has blown over the campuses of our nation's universities. Its source is . . . the growing role that commercial values have assumed in academic life."⁷ In *Universities in the Marketplace*, Harvard's former president Derek Bok reflected on how the trend to commercialization developed, the dangers it poses for universities, and what academic leaders could do to limit the risk to their institutions.⁸

Similar concerns were first seriously addressed in the Canadian context in Janice Newson and Howard Buchbinder's thoughtful 1988 analysis *The University Means Business*, and subsequently by others.⁹

While the quantity of writing on this subject may be relatively recent, the concern has a long history. Clyde Barrow reminded us of Marx and Engels's observation that "the class which has the means of material production at its disposal has control at the same time over the means of mental production."¹⁰ In reflecting on American higher education in the late nineteenth and early twentieth centuries, Barrow argues: "The corporate ideal as applied to the university was actually a class-political program designed to conquer ideological power. . . . In this respect, the emergence of American universities is best understood as a cultural component of the Industrial Revolution, related transformations of class structure, and the culmination of these upheavals in the social rationalization of the progressive era."¹¹

Thorsten Veblen, in his 1918 critique, The Higher Learning in America,

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observed that "the intrusion of business principles in the universities goes to weaken and retard the pursuit of learning, and therefore to defeat the ends for which a university is maintained."¹² Writing during the ascendancy of the anti–Vietnam War movement, Theodore Roszak argued that "the academy has very rarely been a place of daring. One might perhaps count on the fingers of one hand the eras in which the university has been anything better than the handmaiden of official society: the social club of the ruling elites, the training schools of whatever functionaries the status quo required."¹³

The reality of universities is more complex. While their failures to be places that honour and protect the human quest to advance, transmit and preserve knowledge are notable, they remain the one institution in contemporary society that explicitly claims as its mission (in the words of the University of Toronto's statement of purpose) a dedication to be a place:

in which the learning and scholarship of every member may flourish, with vigilant protection for individual human rights, and a resolute commitment to the principles of equal opportunity, equity and justice . . . [including the right] to raise deeply disturbing questions and provocative challenges to the cherished beliefs of society at large and of the university itself. It is this human right to radical, critical teaching and research with which the University has the duty above all to be concerned; for there is no one else, no other institution and no other office in our modern liberal democracy, which is the custodian of this most precious and vulnerable right of the liberated human spirit.¹⁴

This book provides a more intimate look at the reality of today's universities where the idealism expressed in statements like the University of Toronto's is at risk — living uncomfortably with the realpolitik of coping with underfunding, a society dominated by a market mentality, an increasingly interventionist state, and aggressive special interests determined to shape what the university is and does.

Part I, "Corporate Sponsorship and the Loss of Integrity," begins with a look at the relationship between the university and two industries that have sparked considerable concern in the academic world tobacco and pharmaceuticals. Joanna Cohen asks if the academic world can retain its integrity and credibility when it associates with the tobacco industry — an industry responsible for so much suffering and death and for manipulation of scientific research. She explores how the tobacco companies benefit from their association with universities and the inadequacy of conflict of interest and disclosure policies that are put in place to protect the integrity of academic research supported by the tobacco industry. She ends by posing key questions that the university community should be asking before accepting tobacco industry research money.

Arthur Schafer looks at the implications of the extensive funding for scientific research from the pharmaceutical industry, noting that university partnerships with industry have grown significantly as academics are under increasing pressure to bring in research funding. Schafer suggests that university researchers put themselves in a conflict of interest when they accept corporate research funding. He is careful to say that this does not mean they will consciously allow their work to be corrupted, but argues that there is a real danger of an unconscious bias. His provocative essay suggests that the most promising solution to this problem is an outright ban on corporate funding for university research.

Some universities have responded to issues raised by Schafer and Cohen by refusing to accept research money from certain funders, such as the tobacco industry. This has been welcomed by some as long overdue and rejected by others as a gross violation of the academic freedom of researchers at those universities.¹⁵ Sheldon Krimsky looks the conflict between the broader university community setting funding policies that apply to all researchers and the academic freedom of individual academics to research and teach as they wish. He proposes a novel framework that identifies two types of normative standards — those that should be common across all universities and a second set that are university specific, enabling each institution to set additional standards that reflect its own traditions and its own academic culture and values. He tests this framework by looking at tobacco research and weapons research.

In Part II, the focus shifts to the experiences of individual scholars who challenge powerful interests. David Healy, a leading authority on psychopharmacology, has long raised questions about how the pharmaceutical industry influences medical research — suppressing unfavourable research findings, ghost writing articles for leading medical journals, and blocking funding for research that questions the industry's claims about its products. He provides a riveting autobiographical account of the challenges he has faced from colleagues, scientific journals, and the industry, especially after raising questions about the efficacy of antidepressants and about whether, for some patients, antidepressants can induce suicidality. He contemplates how academics become part of the marketing operations of the pharmaceutical industry, and what can be done to recapture scientific integrity.

Brenda Gallie provides another autobiographical view into the experience of an eminent researcher who upheld her ethical principles in the face of institutional opposition. As a distinguished professor of medicine at the University of Toronto and head of the Cancer and Blood Research Program at the Hospital for Sick Children's Research Institute, Gallie became aware of the problems being faced by one of her staff, Dr. Nancy Olivieri, whose own case subsequently became international news.¹⁶ Assuming the Hospital administration had misunderstood what was at issue in Olivieri's case, Gallie spoke with her administrative colleagues, only to have her own position put in jeopardy when the institute's head wrote her that her accountability to him required her to put aside what she saw as her moral duty. Subsequently, families requiring testing for a rare cancer gene (a test Gallie's lab had developed — and one of two places in the world where the test could be reliably done) were told that the Ontario Government would no longer fund the test. Over the next five years, Gallie had to borrow more than half a million dollars to personally cover the costs of testing, so that Ontario families could have the same access to care as others across North America. She reflects on these experiences, how they

were resolved and what lessons can be learned.

In a very different context at the First Nations University of Canada, Blair Stonechild, then the head of indigenous studies at the university and a leading authority on aboriginal post-secondary education in Canada, relates an incident following his criticism of the unprecedented actions of the university's board chair. Created by the Federation of Saskatchewan Indian Nations (FSIN), the First Nations University was thrown into disarray when the board chair, who was first vice-president of the FSIN, arbitrarily suspended three senior administrators and seized and copied the university's computer records. Learning that Stonechild was to be keynote speaker at Canada's Assembly of First Nations' National Symposium on Post-secondary Education, the FSIN intervened to have him removed as the speaker. Because of a strong union contract, his post at the university was secure and his faculty union was able to take the matter to arbitration as a violation of Stonechild's academic freedom.

In the third part, attention turns to threats to the integrity of academics and academic work that come from special interests that infiltrate the academy and use it to give credence to their ideas. Canadians frequently are bemused and troubled by the foothold creationism and its progeny, intelligent design, have gained in the United States through the efforts of pseudo-scientific initiatives like the Discovery Institute¹⁷ with its stable of scientific "fellows."¹⁸ Gary Bauslaugh, Pat Walden, and Brian Alters tell the embarrassing story of how Canada's national research funding agency for social sciences and humanities responded to Alters's research proposal to examine the detrimental effects of popularizing intelligent design theory. In rejecting the proposal, the granting agency's peer-review committee said it did not feel "there was adequate justification for the assumption in the proposal that the theory of Evolution, and not Intelligent Design theory, was correct." Through the exchange of correspondence that followed this decision, the authors explore the steadfast refusal of the funding agency to retract or explain the committee's position in regard to intelligent design. The authors question the wisdom of decisions about funding for scientific education being in the control of those who may know little science.

Donald Gutstein examines how well-funded libertarian and neoconservative think tanks are financing the work of sympathetic intellectuals who are changing the face of universities in the United States and Canada. He examines the pioneering ideas of former US Supreme Court Justice Lewis Powell who, in 1971, called on the business community to establish a staff of highly qualified scholars to counter the criticism of capitalism and write and speak for the business community. Gutstein traces the aftermath — right-wing charitable foundations giving hundreds of millions of dollars to create libertarian and neoconservative think tanks in the United Kingdom, the United States, and Canada. He details the work of key think tanks and major donors and their efforts to transform the academic world.

Shadia Drury drills deeper into this changing character of academia by looking at the work and influence of Leo Strauss, the University of Chicago's legendary neoconservative guru, and his students. She examines how Strauss cultivated an ideological elite who challenged the embrace of other cultures and values within higher education and who became key players for the right wing in the administration of George W. Bush in the United States and Stephen Harper in Canada.

Marcus Harvey opens Part IV with an examination of how Middle Eastern politics is playing out in the university world. Against a background of the efforts of David Horowitz¹⁹ and the American Council of Trustees and Alumni to challenge what they perceive to be the anti-Americanism on US campuses, Harvey explores the concerted (and often successful) efforts to attack leading academic critics of American Middle Eastern policy, including Norman Finkelstein, John J. Mearsheimer, Stephen M. Walt, and Joseph Massad. He considers the damaging effects of these culture wars on the university community and how academics should respond.

Broadening the focus, Kevin Mattson puts into historical perspective David Horowitz's current attack on the university. Taking the reader on a brief trip through the relationship between American conservatives and the academic world, Mattson shows how Horowitz has abandoned the conservative traditions of William F. Buckley and Allan Bloom, with their disdain for what they perceived as the pervasive relativism of the left. He argues that Horowitz sounds a note of postmodernism, stressing the indeterminacy of knowledge, while carrying over the older conservative distrust of intellectuals and the professoriate into his efforts to get state legislatures across the United States to adopt his academic bill of rights, which empowers the state to monitor classrooms. Mattson concludes with his own ideas on how to deal with this challenge to the future of higher education and the future of democracy.

Challenges to the integrity of academic work come not only from outside the academic world but also from within the academy. The most notable example is the production-driven research culture that the academic community has created and maintains, often to its own detriment. Sometimes a truly horrific event is required to cause selfreflection. After Concordia University engineering professor Valery Fabrikant, feeling thwarted and deeply angry at the failure of all his legitimate and illegitimate efforts to secure a tenured professorship, killed four colleagues and gravely injured a fifth, a University-commissioned report examined the circumstances of this tragedy. While making clear that nothing in their findings diminishes Dr. Fabrikant's responsibility for the murders, the report usefully shines a light on the production-driven research culture, common across North American universities, that was an important part of the context at Concordia. In fields like physical sciences and engineering, where research is highly specialized and very expensive and access to funding is limited and highly competitive, success depends on the ability to produce results. As noted in the independent committee's report for Concordia:

"Production" . . . can come to be measured primarily in terms of the quantity of units of output, rather than their quality, and to be maximized for its own sake, without regard to externalities — which it generates. . . . Too often university honours, research grants and industrial contracts are awarded on the basis of numbers of publications, rather than on their quality and significance.

. . . Strong pressures to be prolific . . . may in turn lead to the adoption of strategies for being as prolific as possible, and . . . some of these strategies may promote undesirable behaviour.²⁰

The authors provide a thoughtful discussion of undesirable behaviours generated in such a culture.²¹

Mary Burgan brings these issues to Part V of this volume by addressing how they apply in the humanities. In her article, Burgan notes that the risk-averse, quantity-driven culture of many university humanities departments has led to reliance on outside opinion and tabulation of numbers rather than internal evaluation of content and quality. She suggests that faculty hustle to show their wares like car salespeople vying for Seller of the Month, and departments compete for superstars, making the university more like the National Football League in its approach — meaning there is no longer room for merely good faculty. She examines the various inquiries into these issues by the Modern Languages Association and finds them wanting. Burgan encourages consideration of Ernest Boyer's work as pointing in the right direction. She concludes with a number of suggestions for changing the production culture.

Part VI turns attention to the university being run in a corporate manner. Rosemary Deem reports on her ongoing research on the new managerialism in British universities, rightly noting that many aspects will be familiar in higher education elsewhere. According to Deem, the new managerialism brings private sector organizational practices into the public sector, including the primacy of management over other functions and a concentration on doing more with less. This approach, as she notes, is very different from the collegial self-governance that has been traditional among academics. She explores the implications for teachers and researchers of the managerialist focus on efficiency, performance, targets, outcomes, markets, and rankings. Her findings show that the integrity of academic work is being threatened, as creative aspects of teaching and research are being subordinated to other considerations, and as workloads are increasing with the growth of both internal and external audit systems. Deem concludes with recommendations of what can be done by both academics and those in administrative positions to maintain academic integrity in the current climate.

From the perspective of a Canadian university president, Michael Higgins issues a clarion call for the university to recover earlier notions of collegiality and subsidiarity, the latter meaning appropriate independence, institutional integrity, and freedom of choice, so that the university is neither subservient to nor wholly disengaged from a larger accountability. He thoughtfully points to John Henry Newman's conceptions of a university, including that management should not be in the sole hands of the rector, but shared with the professoriate. He also notes Newman's view that the purpose of the university is the enlargement of sensibility, cultivation of the mind, and uncompromised pursuit of excellence, not to be held hostage to the demands of economic pragmatism or political whims. Higgins calls for meeting the challenges of higher education in the twenty-first century by looking to those essential elements of the past that can be revitalized and put into the present context.

In the final chapter of that part, I examine the restructuring of academic work as universities and colleges are redefined (and redefine themselves) as servants of the market and commerce. In this context, public funding declines, and senior administrations turn increasingly to private-sector managerial models that prize lower labour costs and greater managerial "flexibility." The chapter reports on the dramatic transformation of academics from tenured and tenure-track staff to contingent workers, with low pay, few benefits, no tenure, compromised assurance of academic freedom, and no voice in the governance of their institutions. I argue that universities and colleges cannot fulfill their role in democratic society — offering high-quality education to their students and undertaking valuable scholarship for the benefit of their communities and society — when academic staff are reduced to closely managed production workers. Options are explored.

The book concludes with Jon Thompson's broad-ranging consideration of the growing threats to scholarly integrity, the reasons for that growth, and what can be done. While considering some high-profile

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examples of ethical misconduct, Thomson notes that, however spectacular they may be, these individual cases are less damaging to the public interest than the wider systemic corrosion of scientific integrity. He cites examples of the latter, such as decades of use of public money to channel cancer research strategies into directions favourable to certain business interests and the state-orchestrated anti-communist hysteria of the Cold War years, which caused the effective disappearance of academic freedom and the arbitrary and improper destruction of academic careers and reorientation of scientific work in line with official ideology, not unlike pressures on some Middle Eastern scholars today. He argues that much can be attributed to the complex of inducements to individuals and their institutions by government agencies and private corporations, while pointing out that these inducements do not absolve individual academics from responsibility. He then examines how we can meet the challenge to reorient universities and colleges to serving the broader public interest.

NOTES

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- 1 Robin S. Harris, A History of Higher Education in Canada, 1663–1960 (Toronto: University of Toronto Press, 1976), 27.
- 2 Johann Gottlieb Fichte, the first vice-chancellor of Humboldt University, expressed one crucial aspect of the new German university, ". . . The University exists not to teach information but to inculcate the exercise of critical judgment." Translated by Bill Readings and quoted in Bill Readings, *The University in Ruins* (Cambridge: Harvard University Press, 1996), 6.
- 3 Harold T. Shapiro, *A Larger Sense of Purpose: Higher Education and Society* (Princeton: Princeton University Press, 2005), 72.
- ⁴ The distinctive characteristics of Canadian universities noted by Harris are the existence of general and honours degrees, inclusion of professional courses in the arts and science curriculum, the lack of a American junior college system to provide the first two years of a university degree, and the involvement of almost all small universities in some aspects of professional education (594–7). Harris does note that by 1960 graduate studies in Canada closely resembled the American practice, albeit the development of PhD programs and the pace and range of programs lagged by about twenty years because of Canadian universities not being given similar financial resources (599).
- 5 The importance of institutional autonomy and academic freedom was affirmed by the overwhelming majority of countries in the world when the 1997 General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted the "Recommendation concerning the Status of Higher Education Teaching Personnel," http://unesdoc.unesco.org/images/ 0011/001102/110220e.pdf#page=32.
- 6 Lawrence J. Soley, *Leasing the Ivory Tower: The Corporate Takeover of Academia* (Boston: South End Press, 1995), 145.
- 7 Jennifer Washburn, University Inc.: *The Corporate Corruption of American Higher Education* (New York: Basic Books, 2005), ix.
- 8 Derek Bok, Universities in the Marketplace: The Commercialization of Higher Education (Princeton: Princeton University Press, 2003).
- 9 Janice Newson and Howard Buchbinder, The University Means Business: Universities, Corporations and Academic Work (Toronto: Garamond Press, 1988). See also James L. Turk ed., The Corporate Campus: Commercialization and the Dangers to Canada's Colleges and Universities (Toronto: James Lorimer, 2000).
- 10 Karl Marx and Friedrich Engels, *The German Ideology*, quoted in Clyde W. Barrow, Universities and the Capitalist State: Corporate Liberalism and the Reconstruction of American Higher Education, 1894–1928 (Madison: University of Wisconsin Press, 1990), 13.

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- 11 Barrow, Universities and the Capitalist State, 14.
- 12 Thorsten Veblen, *The Higher Learning in America* (New York: Sagamore Press, 1957; originally published 1918), 165.
- 13 Theodore Roszak, "On Academic Delinquency" in Theodore Roszak, ed., *The Dissenting Academy* (New York: Vintage Books, 1968), 4.
- 14 University of Toronto, "Purpose of the University," http://www.utoronto.ca/aboutuoft/missionandpurpose.htm.
- 15 See, for example, Scott Jaschik, "New Plan to Limit Tobacco-Funded Research," Inside Higher Education, September 18, 2007, http://www.insidehighered. com/news/2007/09/18/tobacco.
- 16 See Jon Thompson, Patricia Baird, and Jocelyn Downie, *The Olivieri Report* (Toronto: James Lorimer, 2001); A.M. Viens and J. Savulescu, eds., "The Olivieri Symposium," Special Issue of the *Journal of Medical Ethics* 30, no. 1 (February 2004). Olivieri's story helped inspired John Le Carré's *The Constant Gardener*.
- 17 http://www.discovery.org/.
- 18 http://www.discovery.org/fellows/.
- 19 See Horowtiz's *The Professors: The 101 Most Dangerous Academics in America* (Washington: Regnery, 2006); the David Horowitz Freedom Center Web site http://www.horowitzfreedomcenter.org/ and the ACTA Web site http://www.goacta.org/.
- 20 H.W. Arthurs, Roger A. Blais, and Jon Thompson, Integrity in Scholarship: A Report to Concordia University by the Independent Committee of Inquiry into Academic and Scientific Integrity, April, 1994, 4, http://archives3.concordia.ca/timeline/histories/Arthurs_report.pdf.
- 21 Ibid., 5–8. Jon Thompson discusses key aspects of the Fabrikant case on pages 312-314 in the final article in this volume.

CHAPTER 1: PRINCIPLES AND INTEREST: IS THE ACADEMY AN ACCOMPLICE IN A CORPORATE-CAUSED PANDEMIC?

- 22 R. Peto, A. Lopez, J. Boreham, et al., *Mortality from Smoking in Developed Countries*, 1950–2000 (Oxford: Oxford University Press, 1994).
- 23 Canadian Tobacco Use Monitoring Survey (CTUMS), Trends in Smoking, 1999 (Ottawa: Health Canada, 1999), http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/ research-recherche/stat/_ctums-esutc_fs-if/1999-trends_e.html.
- 24 Canadian Tobacco Use Monitoring Survey (CTUMS), *Results for 2005* (Ottawa: Health Canada, 2005, http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recher che/stat/ctums-esutc_2005_e.html.
- 25 Canadian Tobacco Use Monitoring Survey (CTUMS) *Result Highlights* (Ottawa: Health Canada, 2007, http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recher che/stat/ctums-esutc_2007_e.html.