Refining Poison, Defining Power:
Medical authority and the creation of Canadian drug prohibition laws, 1800-1908

by

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Abstract

This dissertation examines the medical context of Canadian drug prohibition laws. Since opiate use was the target of the 1908 Opium Act, and since opiates were also valuable medicines, we cannot adequately understand the creation of drug restriction laws without examining medical attitudes towards opiates and addiction. Key issues include doctors' drive for social and cultural authority, the professional and economic relationship between doctors and druggists, how the concept of professional transcendency strengthened arguments about control of drug use, and the emergence of the idea of drug addiction as a condition requiring medical and state intervention. These arguments fit into a broader discourse of nation building and national integrity, which sought to ensure the vitality of the developing Canadian nation as defined by class, ethnicity, race and health.

Opium was both a valuable medicine and a dangerous poison, and doctors argued that they should have control over its administration. They felt general public access to drugs like opium negatively affected doctors ability to heal, and their claims of social leadership, and saw the mis-use of emerging technology--notably the hypodermic syringe--as challenges to their authority and danger to society. To define public availability of drugs, doctors debated with pharmacists how best to control the distribution of opium and other "poisons." These debates resulted in the creation of provincial pharmacy incorporation acts and poison control laws.

The concept of drugs as poisons informed early ideas about addiction. Using Canadian and non-Canadian sources, I examine the development of concepts about addiction, and emerging ideas about alcohol and drugs. The growing power of scientific authority informed doctors' efforts to define addiction, and strengthened Canadian doctors' claims to social leadership. At the public asylum, medical power and political ideas, especially about alcohol use, operated to define issues of mental health and social deviance. Using a comparative case study of several public lunatic asylums, I consider how ideas of scientific ascendancy and the disease theory of addiction affected broader diagnostic categories. These changes emerged after the turn of the century.

I conclude by considering how ideas of addiction, medical power and national integrity affected the debates over the regulation of the patent medicine trade in Canada. In their efforts to control patent medicines, doctors and druggists again disagreed about who should have the power to control these dangerous substances. Unlike the debates over poison laws, doctors and druggists allowed their authority to be modified by the federal government. Certain forms of drug use fell under the purview of the Canadian state. The conclusion discusses how ideas of the dangers of drug use fit into a broader, fundamentally racial, discourse of national integrity.

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Introduction
The historiography of drug prohibition and medical power in Canada

As the story goes, the creation of prohibitory drug laws in Canada emerged directly out of racial violence. In 1907, news of the imminent arrival of a boatload of Japanese labourers in Vancouver caused a group of white residents to riot through that city's Chinatown. The Dominion government dispatched deputy minister of labour William Lyon Mackenzie King to consider the damages to Japanese and Chinese businesses, and advise on reparation payments.[1] In the process of his investigation, King received applications from two opium manufacturers for compensation for damages to their property and stock. His interest piqued, King investigated the issue of opium smoking in the city. He found that, contrary to provincial ordinance, he could purchase opium "over the counter" from local retailers without any sort of documentation.[2] In his report King observed that the opium industry was "inimical to our national welfare," its "baneful influences are too well known to require comment," and urged "the enactment of such measures as will render impossible, save in so far as may be necessary for medicinal purposes, the continuance of such an industry within the confines of the Dominion."[3] The resulting "Act to Prohibit the

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[1]King's mandate focussed primarily upon Japanese businesses, but he included both Chinese and Japanese in his report. See W. Peter Ward, White Canada Forever: Popular Attitudes and Public Policy Toward Orientals in British Columbia Second Edition (Montreal and Kingston: McGill-Queen's Press, 1990), p. 74.

[2]Shirley Small, "Canadian Narcotics Legislation, 1908-1923: A Conflict Model Interpretation," Canadian Review of Sociology and Anthropology 6 (1968), pp. 36-46.

[3]W. L. M. King, Report on the Losses Sustained by the Chinese Population of Vancouver, B.C. (Ottawa: S. E. Dawson, 1908), p. 15.

Importation, Manufacture and Sale of Opium for other than Medicinal Purposes," of 1908, commonly called the "Opium Act," invoked penalties of up to $1000.00 or three years imprisonment for violating the law.[4] It passed through the House of Commons with little discussion, and encouraged minimal debate in the Senate. In 1911, the Opium and Narcotic Drug Act, restricting the sale and non-medical use of opium, morphine and cocaine, replaced the 1908 legislation. Subsequent additions to this legislation throughout the 1920s broadened the lists of restricted drugs and penalties for transgression.

The study of Canadian narcotics laws

With few exceptions, historians, sociologists and criminologists have been concerned with the forces contributing directly to the 1908 Act and subsequent modifications.[5] Most studies on the topic have focussed upon the years leading up to and the decades immediately following 1908. These works make valuable contributions to our understanding of the formation of prohibitory laws as a legislative and criminological

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[4]Melvyn Green, "A History of Canadian Narcotics Control: The Formative Years," University of Toronto Faculty of Law Review, 42 (1979), p. 47.

[5]Shirley J. Cook, "Ideology and Canadian Narcotics Legislation, 1908-1923," (M.A. Dissertation, University of Toronto, 1964); Shirley J. Cook, "Canadian Narcotics Legislation, 1908-1923"; R. Solomon and T. Madison, "The Evolution of Non-Medical Opiate Use in Canada, Part 1, 1870-1929" Drug Forum 5 (1976), p. 239; Melvyn Green, "A History of Canadian Narcotics Control: The Formative Years, 1870-1908," University of Toronto Faculty of Law Review 37 (1979), p. 42-79; A. Elizabeth Comack, "The Origins of Canadian Drug Legislation: Labelling versus class analysis," in Thomas Fleming, ed., The New Criminologies in Canada: State, Crime and Control (Toronto: Oxford University Press, 1985), pp. 65-86; Neil Boyd, "The Origins of Canadian Narcotics Legislation: The Process of Criminalization in Historical Context" Dalhousie Law Review 8 (1983), pp. 102-136.

process, and shed new light on the effect of the labelling of deviant behaviour as it fell under the purview of the Canadian legal system. However, these works contain the underlying assumption that Canadians saw non-medical opiate use as wrong; and they do not critically examine the forces that forged the idea that the "misuse" of drugs should be a problem in the first place. When King stated that the opium industry's "baneful influences are too well known to require comment," he was not speaking exclusively about Chinese opium smoking. His words suggested a broader awareness of the perceived dangers of drug use in the Anglo-American social consciousness. He invoked a broader discourse of social fear of societal collapse, which embraced ethnocentricity, eugenic initiatives, and class-based moral panic; all of these themes informed a growing debate about the meaning and importance of Canadian nationhood. This dissertation explores how concerns about non-medical drug use emerged, and where they fit within this broader discourse of building a strong nation.

While illustrating the construction of deviance with respect to emerging legislation, many studies of Canadian drug legislation minimize the importance of some key precedents of the 1908 and 1911 drug legislation. Shirley Cook's work in the 1960s demonstrated that several "myths" contributed to the construction of the narcotic addict as evil, but her starting point was the 1908 legislation.[6] Cook used the "labelling theory" of deviance to show how dominant elites labelled certain activities as socially deviant--in this case narcotic consumption. The labelling theory posits that legislation defines certain behaviours to be illegal: erstwhile legal citizens become members of a criminal class. The

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[6]Shirley J. Cook, "Ideology and Canadian Narcotics Legislation."

implications of this theory to the study of drug prohibition are clear. Driven by concern over Chinese opium smoking, the 1908 legislation subsequently labelled all drug users as lawbreakers. This labelling was unfortunate to addicts, who were obliged to turn to the black market for their drugs, further compounding their now criminal condition. Opiates are physically addictive; ceasing to use them was difficult without help, but once the individual was labelled a deviant, that help was harder to obtain. This labelling in turn fostered a subculture and subversive image of the narcotic user. Once the user was an outlaw, further legislation to increase punitive measures against the individuals selling and using narcotics passed easily. In another work, Cook discussed the conflict model of deviance construction, as posited by Howard Becker in The Outsiders: Studies in the Sociology of Deviance (1963), which challenged the functionalist or equilibrium theories of the sociology of deviance. Whereas earlier sociological theorists looked to investigate what it was that made people indulge in deviant behaviour, Becker initiated the interest in what structural conditions in society determined that some behaviours should be interpreted as deviant.[7]

Several historians and sociologists built upon the foundation of Cook's work. R. Solomon and T. Madison discussed how "licit and illicit patterns of non-medical opiate use are largely shaped by the law."[8] They discussed the nature of the illicit subculture which developed around the continued use of narcotics after 1908, and its roots in the pre-

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[7]Howard S. Becker Outsiders: Studies in the Sociology of Deviance (New York: Free Press, 1963). Shirley J. Cook, "Canadian Narcotics Legislation," pp. 36-38.

[8]Solomon and Madison, "The Evolution of Non-Medical Opiate Use in Canada, Part 1," p. 239.

1908 drug usage. These writers also suggested that the negative attitudes towards drug use only solidified after the 1908 and subsequent legislation. Melvyn Green made this thesis his principal focus, suggesting that prior to 1908, drug use was not a social problem but merely a private vice.[9] Such contentions challenge the notion that law is formed in reaction to public attitudes toward a certain behaviour. While this approach is attractive, if only for its contrary notion of the process of legislation formulation, it rests upon certain questionable assumptions. Green asserted that prior to 1908, the import duties upon opium and its derivatives legitimized the individual use of narcotics. Yet the example of the liquor prohibition debates shows us that many who argued in favour of "high license" suggested that to tax a substance was to attempt to control, not legitimise, a certain behaviour by legislation. Hence Green's assertion that to tax is to legitimise can be disputed. Furthermore, Green made these statements about how legislation shaped public opinion without attempting to gauge opinion towards narcotics before the 1908 legislation. Taken together, Cook, Solomon and Madison, and Green presented what Neil Boyd called a pluralist approach to narcotic legislation, asserting that a series of factors (racial, political, social) combined to create the laws.

This approach has been contested by an instrumentalist Marxist interpretation of the creation of the 1908 Act. A. Elizabeth Comack challenged Cook's use of the labelling theory of criminology, claiming it does not consider the historical process surrounding the emergence of the 1908 law.[10] Marxist theory of the state contends that in a capitalist

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[9]Melvyn Green, "A History of Canadian Narcotics Control" p. 44.

[10]A. Elizabeth Comack, "The Origins of Canadian Drug Legislation," p. 65.

system, the state facilitates accumulation of capital and fulfils the function of legitimizing the capitalist system. Basing her study upon the assertion that the 1908 law must be interpreted as a reaction against the Chinese in Canada, Comack then asked why this reaction manifested itself only in 1908, when as early as the mid-1880s anti-Chinese agitation was strong. Comack notes that the 1884 Royal Commission on Chinese Immigration to British Columbia concluded that the Chinese labour, employed in menial tasks in mines and on the railway, fulfilled an important role in the material prosperity of the nation. Here the state was facilitating capitalist accumulation. By 1908, however, enough white labour existed in British Columbia that Chinese "coolie" labour was no longer necessary. That economic change, combined with the violence of the 1907 riot, presented the need to discourage and eliminate Chinese immigration to Canada. Here, the government legitimized the capitalist state by reacting to the needs of the masses or face violent uprising. This desire to restrict Chinese entry into Canada manifested itself in the 1908 Opium Act, an act directed at the Chinese habit of opium smoking, which included harsh punitive measures.

While intriguing, Comack's and other Marxist interpretations of the reasons for criminalization overlook several key aspects of the years prior to the 1908 legislation. The agitation in 1907 was against Asian immigration, but the resulting law was only against opium smoking. Not until the middle of the 1920s did Canada pass a law restricting Chinese immigration. Furthermore, while W.L.M. King's statements on the need to restrict Chinese labour cannot be disputed, Comack's focus on labour can be. In his report, King specifically referred to white opium use (not necessarily smoking), and the

national market for narcotics. Rather than a class-based legitimization, such utterances suggest a broader racial concern over potential dangers to the white nation. In the 1880s, such racist concern was not as firmly entrenched in social policy as in the early 1900s. Finally, although Comack wrote her work as a contrast to Cook, Green, Solomon and Madison and other students of the sociology of deviance in narcotic prohibition, she parallels those earlier studies by emphasizing the legislative process and neglecting broader social factors which contributed to that legislation.

Criminologist Neil Boyd has discussed the tension between the pluralist model and the materialist/Marxist interpretation of the narcotics legislation in an attempt to demonstrate how the two perspectives are not, in fact, contradictory. The pluralist approach--an "ideational" model of conflict, since it envisions a struggle between various ideas of what is and is not legitimate behaviour--and the materialist approach, are complementary and not competing constructions of criminological behaviour: "while material life created contradictions that required political decisions, it was ideational life that attempted this resolution of capital's contradictions."[11] King, Boyd explains, saw that the impetus of white Canadian fears of Asian domination were rooted in economics but that certain aspects of Chinese behaviour challenged Canadian culture and gave rise to a socio-cultural backlash against the Chinese. Boyd further discusses how the nature of opiate consumption, which permitted a "present-centred" view of life in contrast to the Protestant concern with the future life and the denial of present-centred indulgences,

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[11]Neil Boyd, "The Origins of Canadian Narcotics Legislation," p. 104.

further exacerbated the tension between Canadian and Asian cultures.[12]

A recent addition to the literature examining the emergence of drug laws in Canada is Panic and Indifference, by P. J. Griffen, Shirley Endicott and Sylvia Lambert.[13] This book is an extensive sociological and historical study of the evolution of drug law prohibition and the social and legislative reactions to the laws. Since their main focus is the process of law formation after 1908, these writers spend only a small part of their study examining the pre-1908 context of the act. They contend that the main focus of studies of drug laws should be the 1911 Opium and Narcotic Drug Act, because this legislation set the groundwork for more substantial drug legislation. That perspective notwithstanding, they do consider how the 1908 Act drove opinions of drug use as deviance. In their examination, Griffin et al. consider the two major approaches to understanding the criminalization of drugs in Canada, the conflict perspective--which characterized both the Marxist interpretation and the labelling theory--and the "moral entrepreneurial" perspective--which credited King with singlehandedly championing the legislation. These were not necessarily contradictory approaches, but rather indicate two means of explaining drug prohibition.[14] Griffin et al. and conclude that a more adequate

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[12]Boyd, p. 132

[13]P. J. Griffen, Shirley Endicott and Sylvia Lambert, Panic and Indifference: The Politics of Canada's Drug Laws (Ottawa: Canadian Centre on Substance Abuse, 1991).

[14]Griffin et al. p. 33.

explanation rests upon a pluralist approach to drug prohibition.[15] By examining the precedents in other national contexts, they challenge the notion that either class-based labour conflict or anti-Chinese sentiment alone drove drug prohibition. They further contest the assertion by earlier Canadian writers that William Lyon Mackenzie King's influence amounted to a form of moral entrepreneurship. Griffin et al. argue that the prior explanations of the emergence of drug prohibition in Canada require "a more thorough examination of the evidence from the period." They emphasize the importance of considering the use of drugs by whites across Canada, not just focussing upon Chinese drug use. Furthermore, they note that this use of drugs by whites suggests that the 1911 act "appears ... to be a general public health measure rather than an expression of hostility against a minority group."[16]

While offering a useful critical examination of the gaps and weaknesses in the Canadian historiography of drug prohibition, Griffin, Endicott and Lambert only partly fill in those gaps. Their study focusses upon social precedents to the 1908 and 1911 legislation, including a discussion of the activities by the Woman's Christian Temperance Union and other moral agencies like the evangelical churches in Canada, before turning to a substantial consideration of the issue of "racial hostility." After arguing that a pluralist model best explains the creation of drug laws, Griffin et al. concentrate on "the social

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[15]The comprehensiveness of their study is suspect, since they argue that the only theoretically grounded account of Canadian drug laws was that of Small (who is Endicott), while not mentioning significant works by Boyd and Comack, both of whom make concerted discussions of the theoretical explanations of Canadian drug laws.

[16]Griffin, et al., p. 38.

origins of narcotic drug prohibition" considering anti-Chinese sentiment. This emphasis seems to contradict their own assertions that a broader examination of the issues beyond the role of anti-Chinese feeling is necessary. Furthermore, they recognize that physicians and pharmacists in other countries played a significant role in pushing for restrictive drug laws, but note that they were "unable to find evidence that the health professions played a major role in the origins of Canadian narcotic drug prohibition."[17] This statement was based on their examination of Index Medicus, which yielded only three articles on drug addiction, results, given the evidence in this current dissertation, that seem to understate extant sources.

The role of doctors in driving prohibitory drug laws may not always have been direct, but it should not be excluded from examinations of the construction of drug illegality. The very term "non-medical drug use" indicates a relationship to medical use that legitimizes the latter and demonizes the former. How did medical use become the only legitimate application of drugs, and how did doctors gain the ability to determine what constituted "legitimate" drug use? Within the 1908 and 1911 Acts lay provisions that allowed doctors the sole position of authority in administering drugs and determining who would be able to take drugs, gave pharmacists rights over distribution, and made forms of non-medical drug use a federal offence. How did this situation come about?

A few studies in Canada reinforce the importance of considering the role of medical definitions of "legitimate" drug use. Terry Chapman's articles on drug use in Western Canada present an impressionistic account of the late nineteenth and early

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[17]Griffin, et al., p. 46.

twentieth century use and attitudes towards such substances as opium, morphine and cocaine.[18] In contrast to much of the work done by the sociologists and criminologists, Chapman presented evidence of a widespread use of narcotics among white Canadians before the legislative period. A more substantial examination is provided by Cheryl Krasnick Warsh in her work on the Homewood Retreat's addiction treatment programme. Warsh reinforces conclusions about the nature of upper-class drug addiction while demonstrating the strategies of treatment adopted by a Canadian addiction specialist, Stephen Lett. Noting how some considered drug addiction "an aristocratic vice," Warsh offers an analysis of the treatment of drug use among the wealthier classes of Canadians at the end of the century. While offering a starting place for discussions of drug use, addiction and treatment, Warsh demonstrates that more needs to be done to understand the broader context of addiction in Canada.[19]

With the paucity of work on the influence of the medical professions in defining proper narcotic use in Canada before the 1908 Act, we must look beyond the national border for a template of analysis. Fortunately, several studies in Britain and America provide valuable assistance. The work of Virginia Berridge and Griffith Edwards, Opium and the People (1981), Terry Parssinen's Secret Passions, Secret Remedies (1983) and

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[18]Terry L. Chapman, "Drug Use in Western Canada," Alberta History 24 (Fall, 1976), pp. 18-27; Chapman, "The Anti-Drug Crusade in Western Canada, 1885-1925," in D. J. Bercuson and L. A. Knafler, eds, Law and Society in Canada in Historical Perspective (Calgary: University of Calgary Press, 1979), pp. 89-115.

[19]Cheryl Krasnick Warsh, "The Aristocratic Vice" in Warsh, Moments of Unreason: The Practice of Canadian Psychiatry and the Homewood Retreat, 1883-1923 (Montreal and Kingston: McGill-Queen's Press, 1989), pp. 155-170.

Geoffrey Harding's Opiate Addiction, Medicine and Morality (1988) present multifaceted analyses of opiate consumption and prohibition in Britain, while David Musto, The American Disease (1973) and David Courtwright, Dark Paradise (1985) do the same for the United States.[20]

Berridge and Edwards argue that "the problem of opium use was... the outcome of the class basis of Victorian society."[21] Concerns about lower class opiate consumption, combined with emerging ideas of Chinese opium smoking (a relatively minor concern in Britain) "was at certain stages in the nineteenth century a clear aim of the formulation of legislation."[22] Class and race were not the only causes, though, and Berridge and Edwards' study is centered around the importance of recognizing the role of the emerging medical professions, specifically physicians and pharmacists, in defining the problems that restriction of the trade in drugs would alleviate. The 1868 Poisons and Pharmacy Act had the effect of creating a "professional élite."[23] Arguing that "the medical dimensions to the 'problem' of opium use was more than a case of professional strategy," the authors insist

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[20]Virginia Berridge and Griffith Edwards, Opium and the People: Opiate Use in Nineteenth Century England (London: Allen Lane, 1981); Terry Parssinen, Secret Passions Secret Remedies: Narcotic Drugs in British Society, 1820-1940 (Philadelphia: The Institute for the Study of Human Issues, 1983); Geoffrey Harding, Opiate Addiction, Morality and Medicine: From Moral Illness to Pathological Disease (London: Macmillan, 1988); David Musto, The American Disease: Origins of Narcotic Control (New Haven and London: Yale University Press, 1973) which had a second edition in 1987 with a new introduction and a discussion on the rise of crack; David Courtwright, Dark Paradise: Opiate Addiction in America Before 1940 (Cambridge, Mass.: Harvard Press, 1982).

[21]Berridge and Edwards, p. xxviii.

[22]Ibid.

[23]Berridge and Edwards, p. xxix.

that the emergence of the disease theory of addiction was part of a process through which "the medical profession merely reflected and mediated the structure of the society of which it was the product."[24] The actions of the medical professionals shifted the class-based nature of definitions of drug use. No longer was the concern over "lower class" consumption; as doctors secured their higher social status, their discussions began to focus upon their clients. Middle-class opium use drove definitions of the addict that were "peculiarly attuned to the characteristics of addicts of the same [middle] class."[25] The process of defining legitimate and illegitimate (ie: medical and non-medical) definitions of opiate use was part of a broader trend towards the ascendancy of supposedly objective science as an explanatory framework. Physicians and other addiction specialists "established an apparently objective system of ideas which in reality had its foundation in social relations."[26] This "objective" viewpoint encouraged a bifurcated idea of drug addiction: middle class users were "sick" while lower-class indulgences were "deviant."[27]

Terry Parssinen offered a work similar in scope to that of Berridge and Edwards, while challenging some of the assertions of Opium and the People. Parssinen disagreed about the professionalisation thesis presented by Berridge and Edwards, arguing instead

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[24]Ibid, xxix.

[25]Ibid, pp. xxix-xxx.

[26]Ibid.

[27]Mariana Valverde demonstrates this point with respect to drinking, when she examines the treatment of middle class and working class alcoholics in treatment programmes. See Valverde, "'Slavery from within': The Invention of Alcoholism and the Freedom of the Will," Social History 22 (Autumn, 1997), pp. 251-268.

that doctors and moral reformers' genuine concern over the health of the people was the central principle that drove their efforts to see opiates restricted. He called the Poisons and Pharmacy Act (1868) a compromise that failed to secure the professional privilege envisioned by pharmacists. Parssinen explained doctors' concern about addiction to hypodermic morphine as an outcome of their genuine worry over their patients' condition, not from any broader professional agenda.[28] Yet such an interpretation presupposes the existence of the idea that addiction was a problem; why else would addiction merit the concern of doctors only when hypodermic morphine users began to show signs of addiction? Parssinen did not offer a satisfying explanation to this concern, beyond reiterating the altruistic approach of doctors towards their patients. He suggested a class-based argument, agreeing with Berridge and Edwards that doctors increasingly identified with their middle-classed patients. Parssinen did recognize that socially-visible addicts were middle and upper middle class individuals, yet he concluded his discussion of the emergence of the concerns over drug addiction by contending that drug use began to be conceived as a threat because "the *types* of persons who were using drugs changed."[29] In effect, drugs became problematized because of the "Chinese smokers in Limehouse, Soho drug hustlers, and cocaine-sniffing young bohemians in West end night clubs... People no longer took narcotic drugs, it seemed, because they were sick, but because they were

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[28]See also Irvine Loudon, Medical Care and the General Practitioner, 1750-1850 (Oxford: Clarendon Press, 1986) for a discussion of the importance of the legislation to the professional status of the general practitioner, and George Weisz, "Medical directories and medical specialization in France, Britain, and the United States," Bulletin of the History of Medicine 71 (Spring, 1997), pp. 23-68 on medical specialization.

[29]Parssinen, p. 104.

seeking kicks... that was a cause for concern."[30] Here Parssinen seemed to contradict his own critiques of Berridge and Edwards's use of the social control theory: while arguing that altruistic ideas about public health drove concerns over drug addiction, Parssinen claimed that social control was ultimately the motivating force behind restrictive legislation.

The histories of Berridge and Edwards and Parssinen focus upon the social and legislative trends, but understate the roots of moral concerns over narcotic use; one is left to ask what role religion and morality played in the emergence of ideas of drug addiction. Into that gap stepped Geoffrey Harding, with his Opiate Addiction, Morality and Medicine (1987). Harding offered an interpretation of the emergence of drug laws in Britain that suggested a fundamental interconnection of moral, social, medical and political interests. Incorporating some of the methodological precedents of Michel Foucault, Harding outlined "the social relations which made possible these descriptions and the way in which they could be taken seriously." He based his argument upon the demographics of such organizations as the Society for the Suppression of the Opium Trade (SSOT), the pre-eminent opponents of the continued British opium trade in the East Indies. SSOT had a strong Quaker leadership, a demographic, Harding argued, that shaped society's ideas about domestic opium use. Quaker theology placed the soul within the physical body, thereby positing that opiate addiction created a "pathologically debilitated will" by creating a real change in the soul. Harding contended that the process of developing this conception within the SSOT was a form of reification, and he offered the dubious

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[30]Parssinen, p. 105.

metaphor that "the idea [of debilitated will] was used by others as if it were an object, in the same way that the idea of gravity, for example, has become used as an object which we refer to today when unblocking sinks, irrigating fields, distributing domestic water supplies, and so forth."[31] While the medical and pharmaceutical professionals achieved the 1868 Poisons and Pharmacy Act, the ability to redefine addiction as a physical disease, and impose upon that disease a "moral pathology" was the success of the SSOT's Quaker leadership. The organization's "achievement in raising public concern over opium use rested instead on the ability of its founder members to use a technical language to examine the *cause* of opium dependence, instead of an everyday language which could just *describe* its observed effects."[32] Harding's idea of the reified will became a universal trope with which he attempted to explain medical, religious and literary reactions to opiate addiction. He concluded that the objectified, debilitated will disappeared in the 1920s, when doctors gained the ability "to cast a new and distinctly medical judgement on addiction."[33]

The complexity of interpretations of the origins of the British drug laws were reiterated in the significantly different political and social climate of the United States. Studies of the American experience with opiate use, addiction and prohibition have

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[31]Harding, p. 46.

[32]Harding, p. 33. Emphasis in original.

[33]Harding, p. 68. In their introduction to Opium and the People, Berridge and Edwards offer a brief discussion of the contemporary ideas about the actions of drugs, prefaced by the recognition that "although more is known about these scientific issues than a century ago, it must of course be borne in mind that current concepts are no more final than the nineteenth-century ideas which were their predecessors" (p. xvi).

embraced the pluralist explanatory model, but not without contention. David Musto offered a multifaceted examination of several factors that instigated the criminalization of drugs in the United States. This process began ostensibly in the early part of the century, with the adoption of key pharmacy laws (notably the District of Columbia Pharmacy Act of 1906), and the Pure Food and Drug Act (1906), before encompassing the Opium Smoking Restriction Act (1909) and the Harrison Act (1914). Musto rightly eschewed a specific theoretical approach, contending instead that a conjunction of forces drove the process of criminalization. The American interest in convening the first International Opium Commission (1909) emerged from "a mixture of moral leadership, protection of U.S. domestic welfare, and a desire to soften up Chinese resistance to American financial investments."[34] The "domestic welfare" was partly a concern over the opium smoking by Chinese residents, primarily of the west coast. Musto recognized the strong racial impetus for drug prohibition, illustrating concern over cocaine use by African Americans, and marijuana use amongst Mexicans. Yet Musto's was not an essentialist perspective; the racial element was but one of a series of themes that drove the prohibition of drugs. He also demonstrated how pharmacists used images of danger to public health to press for state pharmacy acts, a movement that saw its greatest success in a nearly ideal District of Columbia Pharmacy Act. Musto also considered the importance of medical concepts of drug addiction, and the preponderance of iatrogenic drug addiction in non-Chinese individuals. It does not appear coincidental, given Musto's discussions, that the first significant forms of drug controlling legislation in the United States considered the sale of

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[34]Musto, American Disease, p. 4.

medical narcotics, not the sale and use of opium for smoking. Concern over minority drug use, including but not restricted to Chinese opium smoking, then, was part of a broader constellation of arguments and themes that informed the drive for comprehensive national drug laws. Two and a half decades later, few of Musto's underlying assumptions have been challenged.

One of the most significant reconsiderations of the emergence of drug laws came from David Courtwright's Dark Paradise. Courtwright's project scrutinized the major facets of the labelling theory of deviance in drug addiction. He began by reiterating the theory presented by a variety of "liberal critics of American narcotic policy":

> During the nineteenth century,... opiate addiction, although socially stigmatized, was perfectly legal. Then, beginning in 1909... a series of laws was passed that made legal access to opiates increasingly difficult....As the legitimate narcotic supply dried up, addicts were forced to turn to the burgeoning black market; since black-market prices were exorbitant, they were also forced into petty crime to raise the large amounts of cash they needed.[35]

Courtwright claimed that this approach was only partly accurate. Especially significant for the present work, Courtwright grounded his arguments in assertions about the distinctly medical character of drug use before 1909. Contending that the rates of opiate addiction plateaued in the 1890s, and declined thereafter, Courtwright attributed this demographic shift to "the prevailing medical practices of the day." Doctors were prescribing fewer opiates, and creating fewer iatrogenic addicts.[36] Conversely, Courtwright argued about the relatively low numbers of non-medical addicts, characterised by, but not restricted to,

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[35]Courtwright, Dark Paradise, p. 2.

[36]Ibid, pp. 2-3.

Chinese and non-Chinese opium smokers. Around the turn of the century, "heroin and morphine supplanted smoking opium and became the underworld drug of choice."[37]

Courtwright's concern, however, was not just to correct earlier policy analysts' perception of the role of drug laws in driving definitions of deviance. He further argued that his reinterpretation was important to understand "a series of important theoretical and attitudinal changes that took place within the medical profession." Associating drug addiction with a group "beyond the pale, an unstable and compulsive personality better left to the management of the police or other authorities," doctors and reformers were less tolerant of addiction than they had been when the addicts were primarily middle and upper class people, often with iatrogenic addictions.[38] In this assertion, Courtwright emphasised the interconnection between ideas about disease and attitudes towards those suffering from a disease. "Pronounced changes in the pattern of a disease entail corresponding changes in attitudes--or, as Susan Sontag would put it, the creation of a new set of illness metaphors."[39] Courtwright was quick to assert that he eschewed the use of his thesis to argue in favour of the then current system of American narcotic prohibition. He was not arguing "that the whole edifice of laws, rulings, and court decisions upon which the anti-maintenance approach was predicated was itself a reaction to the relative increase in non-medical addiction." Such an approach, he contended, is "too tidy," and ignores the

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[37]Ibid, p. 2.

[38]Ibid, pp. 3-4.

[39]Ibid, p. 4.

complexity of the issues as presented by writers like Musto.[40] Courtwright concluded with a prolonged examination about how the underlying theme of his work, that ideas about addiction are affected by whom is addicted, emerged in the prevailing medical literature on addiction from the 1870s to the 1940s.

Medical power and the expansion of professional cultural authority.

Berridge and Edwards, Parssinen, Harding, Courtwright and Musto all present important perspectives of how medical ideas of drug use and misuse shaped and were shaped by the broader social climate surrounding drug addiction. Comparing these works with the Canadian historiography of drug use, we find that the Canadian studies, while valuable in outlining criminological perspectives on drug laws, have not considered the medical side of the question. These ideas lead to a prominent theme of the current work: the nature of medical ability to define "fact and value" with respect to drug use; what Paul Starr has called "cultural authority."[41] This dissertation considers specifically doctors' attempts to secure cultural authority over drugs, and is centred upon the ideas of the "regular" or allopathic physicians in Canada.[42] The role of the medical profession, both doctors and

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[40]Ibid, p. 4.

[41]Paul Starr, "The Social Origins of Professional Sovereignty" in Starr, The Social Transformation of Medical Power (New York: Basic Books, 1984), pp. 3-29.

[42]Allopathy was one of several medical philosophies vying for authoratative status in Canada. Connor, in "Minority Medicine in Ontario," elucidates the varieties of medical options for nineteenth century Ontarians, while Gidney and Millar, in Professional Gentlemen detail the political struggles for authority between the various medical "sects." This dissertation centres upon the debates primarily of allopaths.

druggists, was important to the construction of the idea of the impropriety of non-medical drug use, and the legislative response to that idea. Legislation was informed by medical ideas, but a fundamental tension between doctors and druggists resulted in a limited authority over drugs. To understand the rise of medical power, we must consider where drugs fit in medical professional cosmology, and how professionalism shaped the ideational life of Victorian Canada.

Before drugs like opium, morphine, heroin, cocaine and cannabis became indicators of deviance and criminality, they were significant components of the materia medica. Opium, especially, had been a key substance in medical therapeutics for millennia. Chemical investigation led to the isolation of morphine (1806), codeine (1832) and other components throughout the century, including heroin in 1898.[43] Cocaine and cannabis indica entered western pharmacopoeias during the nineteenth century, although they had been part of therapeutics of non-Western cultures for centuries.[44] Both were used at times to replace opiate therapy, or even to alleviate the symptoms of withdrawal from opiate addiction.[45] With the expansion of the pharmaceutical industry, refinement processes

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[43]J. Worth Estes, A Dictionary of Protopharmacology: Therapeutic Practices, 1700-1850 (United States: Science History Publications, 1990) p. 142.

[44]On Cannabis, see Estes, Dictionary of Protopharmacology p. 36; On Cocaine, see Morgan, Drugs in America, pp 15-18.

[45]On cocaine, see Morgan, Drugs in America pp.18-19; Berridge and Edwards, Opium and the People, p. 162; Parssinen, Secret Passions, Secret Remedies pp. 96-97; on cannabis, Morgan, p. 71; Berridge and Edwards, p. 162; Parssinen, pp. 96-97.

made it possible to isolate and strengthen drugs further.[46] These innovations expanded the potential curative properties of drugs, and subsequently increased the ability of doctors to insist on their authority to guide the health of the population. The role of drugs in medicine was therefore not just one of potential cure; as John Harley Warner has demonstrated, effective drug therapy affected broader issues of medical power and professional identity and privilege.[47] Many of these drugs were poisonous when taken in excess, and doctors debated each other's therapeutic perspectives. As pharmaceutical discoveries enabled doctors to utilize drugs with more specific therapeutic effects, the issues of dominance over access to drugs increased. Poisonous drugs, which enhanced doctors' authority, and which druggists compounded and sold, increased agitation for professional pharmaceutical bodies to recognize the unique status of druggists, and their role as protectors of the public. Hence, the process of refining poisons--both chemically and metaphorically--and debates over the use, misuse and sale of these drugs, informed a broader debate over medical and pharmaceutical professional power.

The importance to the expansion of medical power of biomedical innovation and science as an explanatory ontological framework has been the topic of several key studies. Michel Foucault's The Birth of the Clinic offered an interpretation of the rise of medical

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[46]John Parascandola, The Development of American Pharmacology: John J. Abel and the Shaping of a Discipline (Baltimore and London: Johns Hopkins University Press, 1992). See especially Chapter 5, "Pharmacologists in Government and Industry."

[47]Warner, Therapeutic Perspective, pp. 4-7. See also Morris Vogel, "Introduction" in Morris Vogel and Charles Rosenberg, eds., Therapeutic Revolution: Essays in the Social History of American Medicine (Philadelphia: University of Pennsylvania, 1979), pp. vii-xiii.

power in the late eighteenth and early nineteenth century in France.[48] Science may have informed the gaze, but Foucault's focus upon the discourse of authority does not consider the growing social faith in science as a means of defining life. S. E. D. Shortt, N. D. Jewson, and Charles E. Rosenberg have explored separately how an expanding emphasis upon science as an explanatory framework strengthened doctors' claims upon social and cultural power.[49] Growing public confidence in medical science strengthened both the validity of the claims doctors made to authority. Employing medical scientific jargon that increasingly alienated the public from medical knowledge, doctors were able to secure their power of the "definition of fact and value."

Paul Starr's exploration of the growth of the medical profession in the United States, with his emphasis upon the medical community's ability to gain cultural authority, provides this dissertation with a central organizing principle. Starr distinguished cultural authority from social authority; the latter, as Max Weber defined it, was a form of coercive authority, "the control of action through the giving of commands," which "belongs to social actors." Cultural authority, meanwhile, can belong to social actors (like doctors or pharmacists) or "cultural objects, including products of past intellectual activity

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[48]Michel Foucault, The Birth of the Clinic: An Archaeology of Medical Perception (New York: Pantheon, 1973).

[49]S. E. D. Shortt,"Physicians, Science, and Status: Issues in the Professionalization of Anglo-American Medicine in the Nineteenth Century," Medical History, 27 (1983), pp. 51-68; Charles E. Rosenberg, No Other Gods: On Science and American Social Thought (Boston: Johns Hopkins Press, 1976); Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning and Social Change in Nineteenth Century America," in Vogel and Rosenberg, eds., Therapeutic Revolution, pp. 3-25; N. D. Jewson, "The Disappearance of the Sick-man from Medical Cosmology, 1770-1870" Sociology, 10 (1976), pp. 225-244.

such as religious texts... recognized standards of reference... scholarly or scientific works, or the law." Another key difference between social and cultural authority is the degree to which the latter is accepted implicitly by society. Social authority *demands* obedience, yet the subject may privately reject the validity of the claim to authority. Cultural authority, on the other hand, is recognized tacitly. At the same time, cultural authority may not entail "authority over conduct." Priests or scientists "may be restricted by convention from addressing, much less regulating, specific choices and actions."[50] Starr's definitions are valuable for this study, but not without modification. I do not believe that we can find a clear distinction between cultural and social authority in the medical debates on drug laws. Doctors and druggists both sought state involvement in the control over drugs from the 1870s onward, a process that blurred the lines between social and cultural authority. This state validation of doctors' concerns came at a price: doctors and druggists were limited in their ability to distribute drugs, and they had to co-operate when their perspectives and interests often clashed. In the early 1900s, that limitation became more distinct.

The power of defining fact and value was a key process in the distinction between medical and non-medical drug use, and the demonization of the latter. This dissertation explores how doctors and druggists made this distinction both to reinforce their own political and economic power, and to protect the public from its mis-use of potentially dangerous drugs. This protection was from the negative health effects of misuse of drugs, and the negative social consequences of addiction. By defining drugs as dangerous

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[50]Starr, Social Transformation of American Medicine, pp. 13-14.

poisons requiring state control, doctors and druggists--often contradictorily--attempted to convince legislators to enact a system whereby the doctors would determine who could have access to certain drugs, and druggists would have the nearly exclusive power to compound and retail certain dangerous substances. To achieve this form of professional closure, doctors and druggists had to present themselves as protectors of the public weal, and identified cases of abuse from the unregulated sale of poisons. Doctors and druggists sought to expand their power, by limiting the public's ability to resort to self-medication through patent medicines, in the early part of the twentieth century. However, this legislative achievement should not be seen exclusively as a victory for either group. While it demonstrates the effectiveness of doctors and druggists' definitions of proper (medical) and improper (non-medical) applications of drugs, it also began a process of removing some of their authority over the definition and legitimate use of drugs.

The importance of professionalism in defining fact and value was not merely a social control project by status- or money-hungry doctors and druggists. In Victorian Canadian cosmology, as Gidney and Millar have recently demonstrated, professions reiterated and reinforced a social value system.[51] Other writers have discussed the broader importance of the idea of professions to Victorians.[52] A professional, this perspective

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[51]R. D. Gidney and W. P. J. Millar, Professional Gentlemen: The Professions in Nineteenth-Century Ontario (Toronto: University of Toronto Press, 1994).

[52]See Haskell, "Professionalism *versus* Capitalism: R. H. Tawney, Emile Durkheim, and C. S. Peirce on the Disinterestedness of Professional Communities," in Thomas Haskell, ed., The Authority of Experts: Studies in History and Theory (Bloomington: Indiana University Press, 1984), pp. 180-225; David A. Hollinger, "Inquiry and Uplift: Late Nineteenth-Century American Academics and the Moral Efficacy of Scientific Practice," in Haskell, ed., The Authority of Experts, pp. 142-156; Eliot

argued, was situated above the petty bickering and competition of base capitalism; professions, therefore, protected by their privileged status from the need to dirty their hands in the pursuit of money, could offer some sort of objective perspective on social issues within their purview. In this interpretation, doctors and druggists, once they had achieved professional closure, were able to interpret with credibility issues such as the use and misuse of drugs. In the field of medicine, more so than law, for example, professional credibility was bolstered by the growth in the faith in science as a defining framework. Compared to the ministry, which witnessed a decline in its ability to define social value systems over the course of the nineteenth century, medicine's power grew as an interpretive force in social policy. Moreover, as Wendy Mitchinson explains, "[b]ecause Canadians often looked to physicians for advice and information, doctors could influence the way in which Canadians looked at their own bodies and those of others."[53] This power of definition imbued in emerging scientific expertise affected a broader conceptualization of Canadian society. As Suzanne Zeller notes in her discussion of the place of "inventory" sciences in shaping Canadians' sense of nation, expanding knowledge of the natural world contributed to the concept of what Canada was and could become. "The tasks of identification, inventory, and mapmaking gave form to the idea of a transcontinental existence; they imparted to Canadians a sense of direction, stability, and

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Freidson, Profession of Medicine: A Study in the Sociology of Applied Knowledge (New York: Dodd, Mead & Company, 1970).

[53]Wendy Mitchinson, The Nature of their Bodies: Women and their Doctors in Victorian Canada (Toronto: University of Toronto Press, 1991), p. 8.

certainty for the future."[54] Mitchinson's statements about doctors informing Canadians' idea about their and others' bodies suggests a similar process of science defining the healthy body. This idea of the ontological power of scientific knowledge fit a broader concept of nation building and national integrity.

In Canada, as in the United State and Britain, doctors and druggists employed a language of national integrity to support their claims to social power and professional privilege; the idea of nation was a key aspect of the broader topic of drug prohibition. I use the term "national integrity" because integral to the process of nation building was the need to ensure the vitality of that nation, a vitality defined by specific ideas of race, gender, class, health and morality. Formed out of a collection of colonies, Canada during the nineteenth century originally had few social institutions in common. The British connection with English-speaking Canada was one significant factor in the formation of a distinct nation, but there were several others. Mariana Valverde has discussed how Canadian moral reformers sought to impart values based upon a "common subjectivity" on those they saw as deviating from proper, nation-strengthening behaviour Valverde uses the idea of "collectivity" in place of nation, because there were people within the nation that the reformers did not consider part of the "collective," but we can draw a solid connection between strengthening the collective and building the nation.[55] The common subjectivity was part of a process of envisioning Canada. Drawing upon the work of

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[54]Suzanne Zeller, Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation (Toronto: University of Toronto, 1987), p. 9.

[55]Mariana Valverde, The Age of Light, Soap and Water: Moral Reform in English Canada, 1885-1925 (Toronto: MacClelland And Stewart, 1991), p. 33.

Benedict Anderson, Michael Dawson has recently illustrated how the "mountie myth" of the Northwest/Royal Canadian Mounted Police was a significant aspect in the formation of the "imagined community" that was Canada.[56] Less tangible myths and images were also significant in forging this identity. Doctors claims of ascendancy over the ability to heal and ensure a healthy community drew upon an imagined community of healthy, white, moral, mentally sound, Anglo-Saxons of the strong, northern stock.[57] Their scientific definitions contributed to a discourse that encapsulated more distinctly racist approaches to policy formation and social action.

While some have argued that the medical profession's claims were distinctly personal and self serving, I question this narrowly-focussed and dehumanized perspective of the medical profession.[58] Nineteenth century doctors generally engaged in health care at a front-line level, and the intimacy of their connection with human suffering likely

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[56]Michael Dawson, The Mountie: From Dime Novel to Disney (Toronto: Between the Lines, 1998). Benedict Anderson, Imagined Communities: Reflections on the Origins and Spread of Nationalism second edition (London: Verso Press, 1991).

[57]On race and reform, see Angus McLaren, Our Own Master Race; Mariana Valverde, "Racial Purity, Sexual Purity, and Immigration Policy," in Valverde, The Age of Light, Soap and Water, pp. 104-128 . Several authors have explored the white Canadian reaction to Asians in British Columbia, including W. Peter Ward, White Canada Forever; Kay Anderson Vancouver's Chinatown: Racial Discourse in Canada, 1875-1980 (Montreal and Kingston: McGill-Queen's University Press, 1991) and Patricia Roy, A White Man's Province: British Columbia Politicians and Chinese and Japanese Immigrants, 1858-1914 (Vancouver: University of British Columbia Press, 1989). On broader racial exclusion issues in Canadian history, see Howard Palmer, Patterns of Prejudice: A History of Nativism in Alberta (Toronto: McClelland and Stewart, 1982); Barbara Roberts, Whence They Came: Deportation from Canada, 1900-1935 (Ottawa: University of Ottawa Press, 1988).

[58]This is the thesis of Ronald Hamowy in Restricted Entry. Gidney and Millar challenge Hamowy's viewpoint in Professional Gentlemen, p. 415n85.

affected their beliefs in the need and ability of doctors to heal. To adequately assess the claims for power and authority that the doctors sought, we must understand the society in which they lived. Far from being an egalitarian democracy, British North America was a capitalistic oligarchy, one which placed power in the hands of elites groups which were defined by social norms or legislative decree. To operate within this system, doctors needed to assert their claims on both social and cultural authority. This authority would not stop at the ability to diagnose and treat illness; doctors sought to ensure that the technology of healing--embracing both mechanical and chemical innovation--was in the hands of those who could be trusted to use it properly.

The opinion that doctors sought power merely for personal gain also ignores the emerging importance of positivistic science on social policy. Doctors, and many others, believed that scientific advancement would free the world from much of the hardship that humanity had experienced for millennia. Medical doctors believed that it required more than reading a few books to understand the basics of medical science, and they asserted that doctors should have certain powers specifically because of the complexity of the topics. Finally, as I discussed earlier, the idea of a professional emerged as a means of tempering the competitive capitalist system.[59] Hence, the claims to authority made by doctors were based upon an entrenched hierarchical system, a positivistic faith in the power of science, and a belief in the transcendence of professionalism.

In this dissertation I begin with a brief examination, in Chapter One, of the

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[59]Haskell, ed. The Authority of Experts, p. 185, cited in Gidney and Millar, Professional Gentlemen, p. 104.

relationship of drugs to self medication in Canada in the nineteenth century. I explore the uses of opiates in medicine in Chapter Two and consider the ways that doctors sought control over the definition of the therapeutic efficiency of opiates, to increase their own authority. In Chapter Three I look at how doctors and pharmacists in three Canadian provinces argued for increased legislative control of the sale of drugs for their own professional ends, and consider the professional identity thesis within the broader context of the meaning of professions to Victorian society. With Chapter Four I follow the connection between the therapeutic value of poison/medicines to the danger of chronic poisoning, or addiction. I consider how doctors presented ideas about addiction which validated and were validated by the ascendancy of scientific language and the growing ontological authority of science. I examine how the ideas about addiction were translated into therapeutic action at several public insane asylums in Chapter Five. I suggest that the medical conception of addiction predated, by several decades, the emergence of addiction as a diagnostic category for mental illness at the asylum. With Chapter Six, I return to legislation, examining the drive to restrict and control the sale of patent medicines. At the turn of the century, owing to broadening powers of pharmacy laws, the patent medicine industry was the last major aspect of medicine that had not come under control of some form of legislative regulation. Doctors and druggists successfully lobbied for changes to this status quo, a success which resulted in a constrained authority over the distribution of drugs. The conclusion draws these often disparate threads together. It includes connections to the broader nation-building discourse upon which doctors and pharmacists drew to legitimate their claims, and clarifies how doctors' ideas of legitimacy, based upon

a concept of a strong and healthy white Anglo Saxon nation, informed a broader project of excluding racial and ethnic "others" whose values and presence challenged the "common subjectivity" of Canadian nation builders.

On sources, geography and anonymity.

The bulk of the material used in this dissertation comes from medical libraries, journals and several large archival collections. To explore the ideas of Canadian physicians, I have read several major medical journal collections, and included some of the less prominent journals in my reading to attempt to ensure a diversity of medical opinions. Since much of the discussion on addiction came from commentators outside of Canada, I have also considered the range of debates that took place in several of the key societies which discussed addiction. Also, I read many of the books specifically aimed at drug use or addiction, published outside of Canada, but available within the country and found at Canadian medical libraries; several others were owned by the libraries at the time of their publication. Others were once the property of prominent (Upper) Canadians. Notably bishop John Strachan owned the copy of MacNish's The Anatomy of Drunkenness now held by the City of Toronto Reference Library; Dr. William Canniff's copy of Francis Anstie's Stimulants and Narcotics (complete with uncut sections on chloroform, a substance which Canniff refused to use in his practice) is in the former Academy of Medicine collection, now held in part by the Toronto Hospital Library.

My study has a distinctly central and eastern Canada bias. Most of the surviving journals were published in Toronto or Montreal, with the notable exceptions of the

Western Canada Medical Journal (Winnipeg) and the Maritime Medical Journal (Halifax), both of which are available in the Hannah microfiche collections, and both of which I read for this dissertation. The asylum records and most pharmacy laws I examined came from Ontario, Quebec and the Maritimes for several reasons. The first three comprehensive pharmacy laws were in Ontario, Quebec and Nova Scotia, and those comparisons seemed the most logical for reasons of chronology. I read pharmacy laws in other provinces, especially British Columbia, but found few notable differences. I therefore conclude that the process of pharmacy law creation, as represented by the activities in the three provinces I considered, were roughly similar to those in other provinces. A research trip to the Maritimes in 1996 enabled me to examine the records from the Saint John and P.E.I. Asylums, along with the personal papers of several physicians. No similar research trip to western Canada was possible.[60]

Wading through the vagaries of terminology relating to drugs is difficult. Opiates are literally narcotic; cocaine is a stimulant. However, commentators of the nineteenth and twentieth century often label most restricted drugs as "narcotics," broadly construed. I have tried to avoid this conflation at times, yet it has not always been possible. Also, chloral hydrate, a sedative that came into broad use (also as a substitute for opiates) was often called "chloral." When quoting, or referring directly to a quotation, which uses "chloral," I use that word, but I generally keep to the full term. Although contemporary

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[60]The age of the asylums I explore, two of which were among the first public asylums in Canada, along with the comparative value of examining the ideas and practices of alienists who lived in close proximity, and thereby debated their ideas publicly and privately, justifies the limits of my examination.

commentators on drug and alcohol use often claim that "alcohol is a drug" I have avoided this terminological intermingling, and in Chapter Four I deal specifically with the nineteenth century conflation of alcohol and opiates, a topic that has received too little treatment. Some spelling has been retained, although the spelling of words like "whisky/whiskey" has been a bit of a problem. Both spellings are correct, and both appear in historical and current writing.

In accordance with the requirements of my research agreements with several archives, and in keeping with the spirit of uniformity of my citations, I have maintained the anonymity of many of the individuals whose records I examined for the use and misuse of drugs. All patients are identified by a first name and last initial (unless the first name is not available). The Niagara Apothecary requirements asked that all customers' names remain confidential, while most of the asylum records necessitated a 100 year moratorium on the use of real names. Therefore, all post-1898 patient records use pseudonyms. In the rare case of a cross-over between restricted access material and public access material, I have used pseudonyms to respect the requirements of anonymity.

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Drugs and self-medication during the nineteenth century

To adequately place this study in the broader social history of Canada, this history of the professional definition of the proper use of drugs begins with an examination of the non-professional use of drugs. Since this study concentrates primarily upon the use of opiates, I make a limited survey of Canadian self-medication, primarily exploring the uses of opiates. Opiates are particularly useful to consider, since opium's significant physiological effects made it applicable to a variety of physical conditions. J. Worth Estes, examining the uses of opium from 1700 to 1850, explains that "because it decreases the irritability of most tissues and organs, opium is a sedative, soporific, analgesic, antitussive, antispasmodic, and anti-diarrheal, and to relax the common bile duct when obstructed by a stone."[1] Such diverse applications meant that opium would be a valuable medicine for many common ailments, including physical conditions like coughs, diarrhea, deadening pain and dysentery, and psychological conditions such as anxiety and restlessness. For the sake of brevity, I am considering opiates in self-medication in this fairly narrow band of common conditions, rather than the broader range that Estes outlines.

Exploring the use of drugs in Canada is a difficult task. Import records are scattered and, for most of the century, untrustworthy; until the last third of the century, sales of most drugs were unrestricted and thereby unregistered; many drug vendors' records, if they ever existed, have been lost; and personal testimonials offer a narrow view

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[1]J. Worth Estes, A Dictionary of Protopharmacology: Therapeutic Practices, 1700-1850 (United States: Science History Publications, 1990), p. 142.

of the general use of drugs in Canadian society. Yet evidence does remain that Canadians employed narcotic drugs for a broad spectrum of personal ailments, in the same variety of ways employed by the people of the United States and Great Britain.[2]

Several sources suggest a high use of opiates in self medication, while others caution us to temper any overarching conclusions. Import records of the Department of Trade and Navigation, reproduced annually in the Sessional Papers of the Legislature of Canada, provide the quantity and value of imports of opium, morphine and later smoking opium. Tables 1.1 and 1.2 provide the quantities and value of opium and morphine that were imported "for home consumption."[3] The statistics provided in the Sessional Papers list quantity in "packages" prior to 1875, so Table 1.1 lists the imports in quantities from 1875, and imports in values from 1867. Figure 1.1 charts the quantity and value of imports. Most notable is the sharp rise in opium imports in the early part of the 1890s, followed by a rapid and prolonged decline. From 1908-1911, the imports of opium dropped steadily. The increase in imports during the 1880s and 1890s contrasts with a relatively steady growth in per capita imports (Figure 1.2). The reason for the decade of

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[2]Berridge and Edwards have noted the high incidence of opiate use among the inhabitants of the Fenland district ("the Fens"), where residents used opium to reduce the discomfort caused by conditions endemic to such wet, marshy areas. Canadian data suggests that, except for extreme cases like the Fens, the British experience with medical opiate use was reflected in Canada. The Fen experience may not have been reflected in Canadian society, although a study of immigration patterns from the Fens to Canada may belie that assumption.

[3]The import statistics list items "imported" and "imported for home consumption." The distinction is unclear to me. Although the former term could apply to all items imported, while the latter may apply only to items consumed in Canada, the numbers "for home consumption" were often higher than those "imported." At other times, the numbers are the same, and roughly as often the former numbers are higher than the latter.

Table 1.1. Opium and Morphine Imports to Canada, 1867-1911

	Opium		Morphine	
Year	Pounds	Value	Ounces	Value
1867		$4,252		
1868		$11,317		
1869		$4,732		
1870		$9,196		
1871		$6,873		
1872		$5,856		
1873		$15,590		
1874		$11,737		
1875		$37,440		
1876	23457	$113,397		
1877	455	$2,170		
1878	17523	$82,011		
1879	29379	$117,306		
1880	17210	$83,372	276	$488
1881	22962	$96,027	1007	$2,440
1882	31752	$112,724	825	$1,525
1883	29229	$101,359	358	$597
1884	63910	$213,692	321	$454
1885	85012	$281,860	481	$1,027
1886	75460	$249,054	637	$694
1887	97325	$299,663	69	$64
1888	107018	$319,572	227	$328
1889	69636	$196,100	1290	$1,507
1890	129581	$325,903	5152	$6,703
1891	156841	$372,676	3821	$5,264
1892	146625	$384,705	4288	$3,996
1893	155151	$430,366	5083	$4,359
1894	87050	$211,103	2267	$2,587
1895	32755	$85,046	3986	$4,223
1896	53275	$139,418	5722	$5,913
1897	57285	$149,138	1649	$2,061
1898	60060	$163,526	3552	$3,743
1899	65789	$195,153	2405	$2,695
1900	59573	$196,647	1482	$1,898
1901	85675	$391,326	3702	$4,600
1902	73026	$250,490	3071	$3,655
1903	64742	$196,805	10200	$10,680
1904	50883	$195,350	5414	$6,420
1905	45750	$185,791	5949	$6,711
1906	87200	$321,343	5441	$6,431
1907	69144	$270,619	1523	$1,960
1908	92274	$356,468	1506	$2,952
1909	35626	$151,797	133	$330
1910	3947	$14,282	1590	$2,902
1911	7482	$24,149	1250	$2,377

Table 1.2: Prices of Opium and Morphine Imports Compared, 1876-1911

Year	Opium	Morphine
1876	$4.50	n/a
1877	$6.19	n/a
1878	$3.81	n/a
1879	$3.99	n/a
1880	$3.53	$1.77
1881	$4.08	$2.42
1882	$3.58	$1.85
1883	$3.48	$1.67
1884	$3.31	$1.41
1885	$3.36	$2.14
1886	$3.28	$1.09
1887	$3.14	$0.93
1888	$2.98	$1.44
1889	$3.03	$1.17
1890	$2.54	$1.30
1891	$2.37	$1.38
1892	$2.56	$0.93
1893	$2.66	$0.86
1894	$2.37	$1.14
1895	$2.58	$1.06
1896	$2.64	$1.03
1897	$2.61	$1.25
1898	$2.71	$1.05
1899	$2.93	$1.12
1900	$3.30	$1.28
1901	$3.66	$1.24
1902	$3.47	$1.19
1903	$3.03	$1.05
1904	$3.68	$1.19
1905	$4.08	$1.13
1906	$3.82	$1.18
1907	$3.89	$1.29
1908	$3.85	$1.96
1909	$4.23	$2.48
1910	$2.06	$1.83
1911	$3.25	$1.90
1912	$5.20	$2.60

Figure 1.1. Opium Imports into Canada, 1867-1911. Value and Quantity Compared.

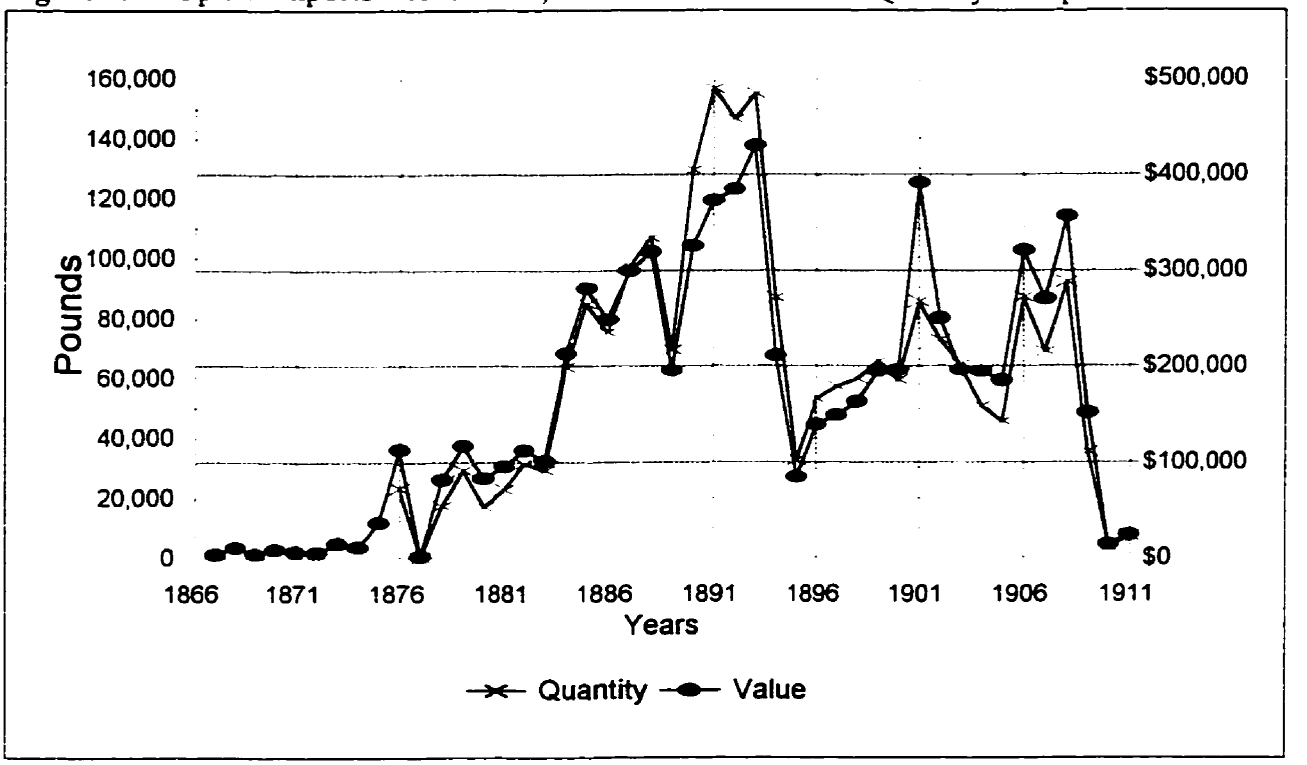


Figure 1.2: Opium Imports compared to per capita imports, 1870-1911.

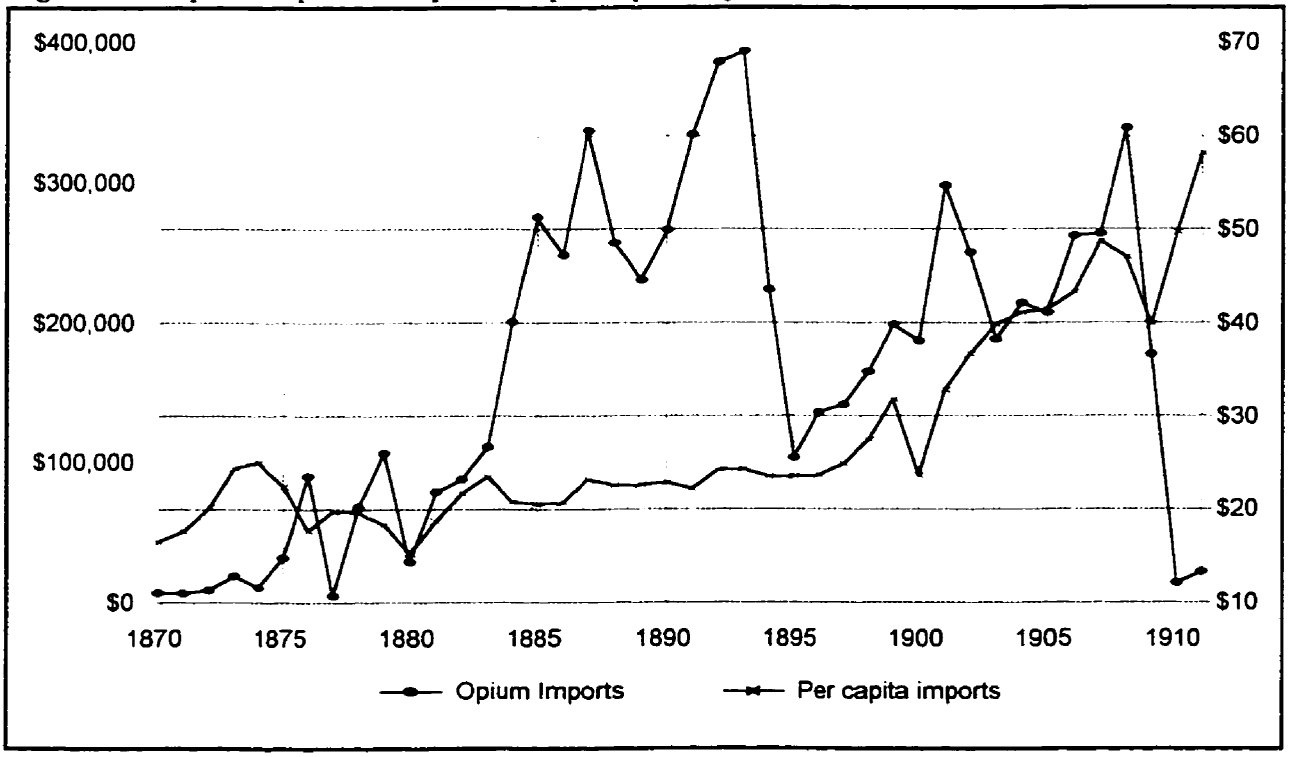


Figure 1.3: Per Pound/Per Ounce costs of Imported Opium and Morphine, 1876-1912

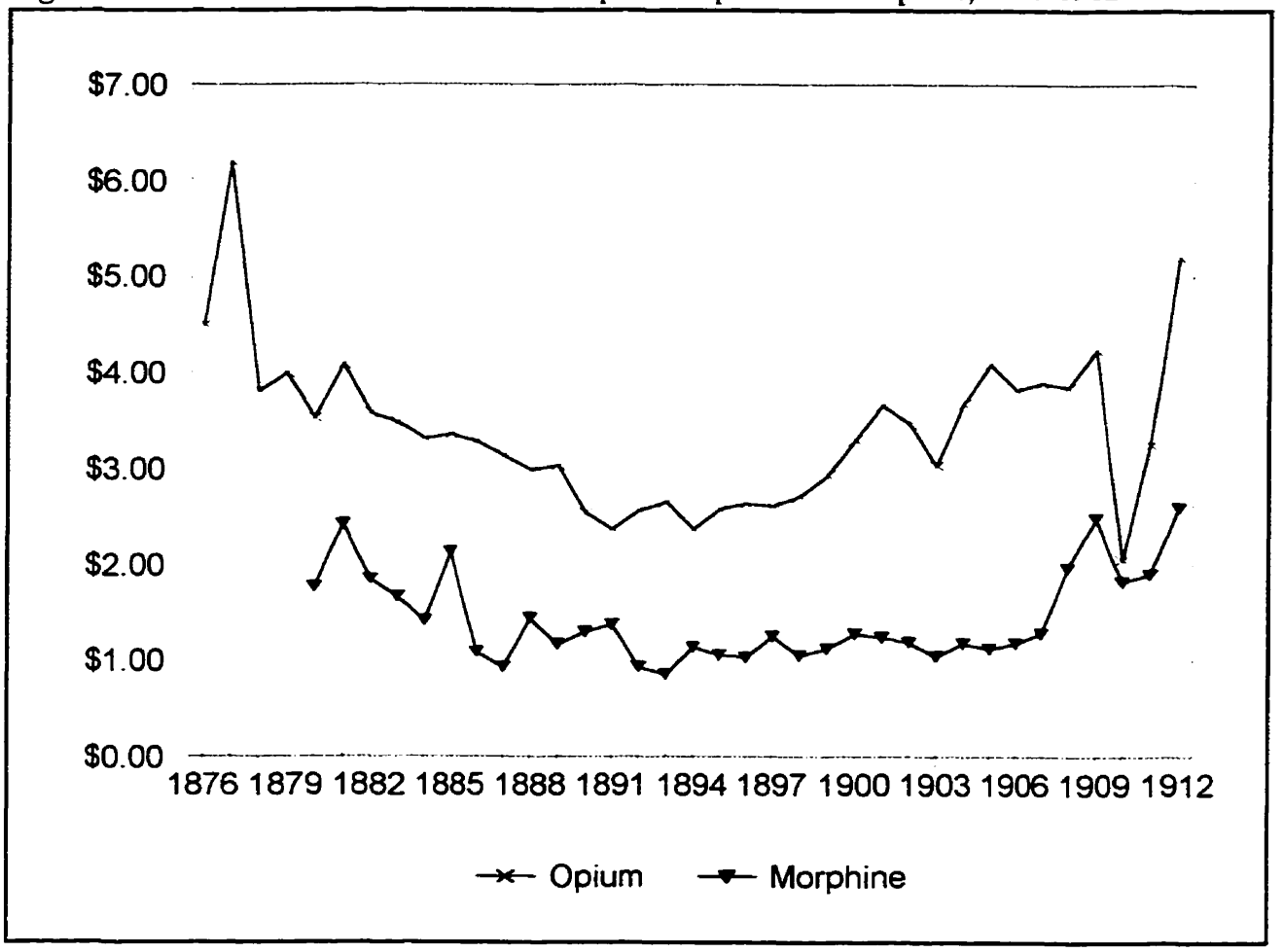
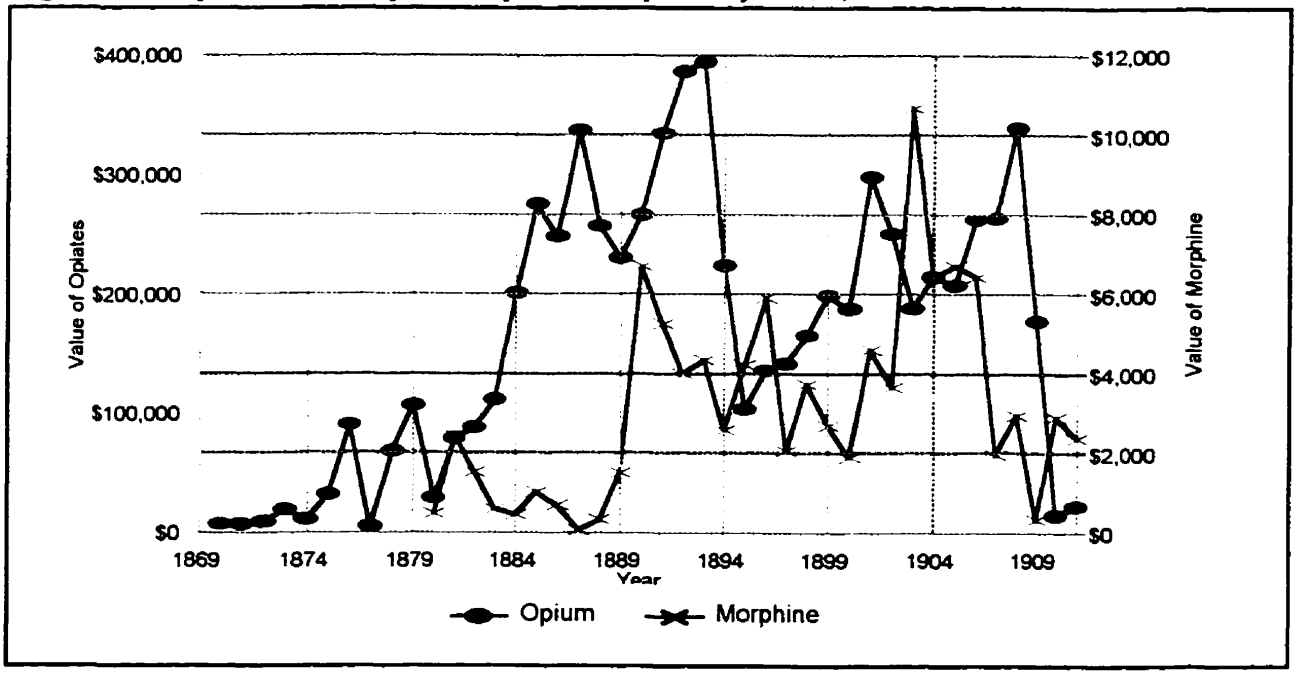


Figure 1.4: Opium and Morphine Imports Compared by Value, 1870-1911



increased imports is difficult to determine. No significant change in Canadian duties on opiates took place, but the period from the mid-1880s to the mid-1890s roughly coincides to a period of high American duties on smoking opium.[4] Undoubtedly, some opium entered Canada for export to the United States, illegal or otherwise, although the numbers I am using related to items imported "for home consumption." Meanwhile, the value of opium does not seem to have changed significantly in this time. Table 1.2 lists, and Figure 1.3 illustrates, the value of opium per pound, calculated by dividing the total value by the total number of pounds imported each year. Again, no significant change in value, which might affect the importing behaviour of Canadians, appears to have taken place. Finally, Figure 1.4 presents a suggestive comparison of opium and morphine imports. Opium imports are charted on the left hand (primary) y-axis, and the morphine imports are presented on the right-hand (secondary) y-axis. This visual comparison suggest an inverse relationship between purchases of raw opium and those of morphine, although that relationship is not likely very strong.[5]

These imports statistics, however, do not indicate how Canadians used the drugs they imported. The Canadian medicine manufacturing industry was growing, and many of the imported opiates may have gone into that process. One rich source of information on

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[4]On American import duties, See Courtwright, Dark Paradise: Opiate Addiction in America Before 1940 (Cambridge, Mass.: Harvard Press, 1982), pp.16-17.

[5]Sources for import statistics come from annual Trade and Navigation Statistics, printed in the Sessional Papers of the House of Commons. Canadian import duties were listed in the Trade and Navigation papers each year. Statistics on per capita import numbers (Figure 1.2) come from K. W. Taylor and H. Michell, Statistical Contributions to Canadian Economic History Volume 2 (Toronto: Macmillan and Company, 1931), p. 3.

drug use is in the surviving records of the Niagara Apothecary, a drug store that opened in the middle of the nineteenth century in Niagara, Ontario, and remained in operation, through several ownerships and under several names, well into the twentieth century. Customer accounts journals, which record selected customers' purchases, demonstrate both the extent of drug use and the case of potential drug addiction. Customer accounts records do not record every transaction made at the business. They are skewed towards the wealthy or those deemed by the proprietor to be trustworthy, and customers were often recorded by family name, infrequently distinguishin for which member of the family the order was intended. We cannot, therefore, use these records to make any conclusions about the class, age or gender of addicts.[6]

Several examples demonstrate the variety of preparations in which opium figured prominently. The account of Robert B, a butcher, shows from 1860-1872 the purchase of such diverse medicines as laudanum, paregoric, generic soothing syrup, tincture of opium, generic pain killer, cherry pectoral, [Mrs.]Winslow's [soothing syrup]; and Browne's Chlorodyne. Most of these substances were likely opiate based. These records also suggest a comparative value in self-medication versus visiting a doctor for a prescription; these drugs were relatively inexpensive, an ounce of laudanum, for example, which would thereby contain several doses (unless the patient was addicted to opiates), was a mere 25 cents. A doctor's visit, as Duffin has noted for the same period, usually cost $1.00,

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[6]In this brief analysis of the Niagara Apothecary records, I have changed the names of all of the customers whom I discuss.

exclusive of the actual prescription price.[7] The most expensive item that Robert's family purchased was a bottle of Browne's Chlorodyne, which cost $1.25. They bought this in 1872, two years after the Pharmacy Act limited the sale of certain drugs. Chlorodyne was a proprietary medicine and therefore unrestricted under the Act.[8]

Some self-medication led to addiction, and the Niagara Apothecary records also suggest that condition amongst the customer records. A district judge of the region began purchasing a solution of morphine in 2 ounce units in 1855. These purchases continued, the same volume of the same substance, several times a month until the middle of 1857. This record suggests a certain guardedness over the judge's purchases. While the first few entries list "morphine solution" the remainder, listing the same amount at the same regular intervals, only note "solution--as before." This type of enigmatic notation was unusual for these records; generally the writer listed the name of the substance. While vagueness weakens our ability to conclude that this customer was an addict, since we cannot be certain that the "solution" was morphine, the uniqueness of this obscure note taking leaves us speculating that something was wrong.

Other cases of habitual use of drugs do suggest themselves in the Niagara Apothecary records. One case of addiction can be corroborated in the fact that a 30-year old single woman customer at the Niagara Apothecary in the early 1870s seems to be the same woman who arrived at the Toronto Asylum later that decade, diagnosed with a

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[7]Jacalyn Duffin, Langstaff: A Nineteenth Century Medical Life (Toronto: University of Toronto Press, 1993), p. 47.

[8]I discuss the Ontario Pharmacy Act in Chapter Three. On Chlorodyne and its relationship with patent medicine legislation, see Chapter Six.

mania from opiate use.[9] This woman's records note her purchases of morphine, chlorodyne and laudanum around 1870, and she continued to buy laudanum in 2 ounce vials for the next two years. Between 1853 and 1875, approximately fifty customer's records indicate repeated and regular purchases of narcotic drugs. The occupations of the customers I could trace in extant manuscript censuses suggest that the class of these patients ranged from skilled working class to the upper bourgeoisie. These included masons, shoemakers, carpenters, farmers, clerks, merchants, army officers, ministers, judges and politicians.

Since these occupations tend to exclude the poorer in society, the value of the Niagara Apothecary records is limited by the demographics of the customers, but it does provide suggestions of the broad use and potential abuse by wealthier members of society. What about the poorer Canadians, and those without ready access to the stock of a drug store? Reconstructing patterns of drug use among the working class and poor is difficult, but we do have suggestions from self-help books, subsequent compilations of folk remedies and several recent academic studies on self medication.[10] Unable to afford a

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[9]I am speculating on this woman's identity, but her real name is and was unique enough to encourage me to cross reference the Niagara Apothecary records with those of the Toronto Asylum. Unfortunately, owing to a research agreement with the Archives that forbids me to disclose the names of the clients, and requires me to maintain a sufficient vagueness about the client's identity to eliminate the likelihood that a reader could find the person in other records, I cannot give more specific details of the client's life.

[10]For the latter, see especially, John K. Crellin, Home Medicine: The Newfoundland Experience (Montreal and Kingston: McGill-Queen's University Press, 1994); Vicki Busby, "'Doctors Can't Cure It': Traditional Medical Practices in Nineteenth-Century Upper Canada: Survival Strategies in a Developing Society, 1783-1920" (M.A Geography, Queen's University, 1993); J. T. H Connor "Minority Medicine in Ontario,

doctor's care, many people would rely upon local home remedies to treat themselves or members of their family. Two major sources, one literary and one orally transmitted, offer suggestions that opiates were part of a broader, non-narcotic, therapeutic regimen.

The first source is the published attempts to reconstruct folk remedies of Canadian settlers. A recent valuable addition to this body of popular history and folklore is Jim Cameron's Good for What Ails You: Self-Help Remedies From 19th Century Canada (1995). Cameron's discussion is a diverse collection of anecdotal and documentary evidence relating to the self medication of nineteenth century Canadians. Although it includes a variety of recipes for conditions for which regular physicians employed opium, Cameron's book does not list opium or any opiate preparations in the remedies it provides. This omission was not a result of Cameron's selective presentation but it may be a result of selective memory of the people whom he interviewed for the book.[11]

A variety of other studies of folk remedies suggest as well the plethora of ways by which Canadians sought to cure the conditions for which regular physicians administered opium. For example, consider the proffered remedies for coughs. Although some of the recipes in the compilations employed a variety of non-indigenous substances, like plantains, saffron or camphor, few of these folk and home remedies included opium as an ingredient. Coughs could be relieved by the juice of a turnip sweetened with sugar, "water whitened with oatmeal," or the "inspissated [sic] milky juice of sowthistle...

1795-1903: A Study of Medical Pluralism and its Decline" (Ph.D, University of Waterloo, 1989).

[11]Personal communication with Jim Cameron.

dandelions or "lettuces."[12] Plasters of mustard, Indian meal and vinegar; mustard and egg white; or onions fried in lard also might relieve the phlegm of the chest.[13] Opiates were not entirely absent from these recipes; boiling poppy heads with different substances, like lemons and brown sugar, or marshmallow root, were also useful to treat coughs.[14] In his study of home remedies in Newfoundland, John Crellin found similar remedies remained in general use into the twentieth century.[15]

Beyond folk remedies, passed on by oral tradition or written down in personal home "receipt" books, people could also look to published guides. Exploring the "old settlers remedies" in Shelburne County, Nova Scotia, Marion Robertson included recipes taken from books owned by these settlers. These volumes included John Wesley's Primitive Physic, and Thomas Phaire's The Boke of Chyldren.[16] Many medicine companies sold almanacs that included a range of recommendations for different conditions, not excluding the company's own products.[17] One of the most widely distributed mid-century self-help books was Dr. Chase's Recipes; or information for everybody. Originally published in Ann Arbor, Michigan, Chase's Recipes was first

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[12]Marion Robertson, Old Settlers' Remedies (Burrington, N. S.: Cape Sable Historical Society, 1960), p. 12.

[13]Respectively, Robertson, p. 14; Cameron, p. 75.

[14]Respectively, Cameron, p. 77; Robertson, p. 12.

[15]John K. Crellin, Home Medicine.

[16]Robertson, "Foreword," Old Settlers' Remedies, n.p.

[17]The Osler Library at McGill University has an extensive collection of these almanacs.

published in Canada in 1865, and went through at least ten reprints before the "third, last and complete" version in 1889. Its popularity may be demonstrated by the fact that it underwent numerous editions; the first Canadian edition was printed the same year as the twenty-third edition in the United States. Chase offered his readers a variety of remedies with a broad range of ingredients, noting that

> Many of the articles called for can be gathered from garden, field or woods, and the others will always be found with druggists, and most of the preparations will cost only from *one-half* to as low as *one sixteenth* as much as to purchase them already made; and the only certainty, now-a-days, of having a *good* article, is to make it yourself.[18]

Most importantly, Chase reminded skeptical readers who would argue that they could get all the recipes they needed from published columns in newspapers, that not only was his book indexed and "handsomely bound" but the recipes presented "the advantage of their having passed under the author's carefully *pruning* and *grafting* hand."[19]

Table 1.2: Dr. Chase's Remedy Ingredients compared.

Substance	**1865**	**1889**
Opium	45 (10.34%)	62 (11.8%)
Chloroform	7 (1.2%)	18 (3.4%)
Alcohol	63 (14.5%)	69 (13.1%)
Total Recipes	435	527

Chase's books demonstrate the variety of opportunities people had for using or not using narcotics. Through the many Canadian editions of the book, the proportion of opiates to recipes remained fairly steady. Out of 435 recipes in the first Canadian edition (1865) for example, 45 (10.34%) included some form

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[18]Chase, Chase's Recipes, ninth edition (Ann Arbor: Published by the Author, 1862), p. xiv.

[19]Ibid.

of opium, including Dover's powder and paregoric. In 1889, the number of recipes had increased to 527, with 62 (11.8%) opium preparations. Table 1.2 compares this change to recipes containing alcohol and chloroform. In these volumes, more than in the home remedies discussed above, opiates vied with other substances to treat common ailments.[20] His remedies for coughs, for example, include several cough lozenges or mixtures employing morphine, opium or laudanum, alongside of a remedy made from "Linseed oil, honey and Jamaica rum," and a cough syrup which demanded the following complex procedure:

> [Mix] Wahoo, bark of the root, and elecamane root, of each 2 ozs,; spikenard root, and tamarack bark (Unrossed, but the moss may be brushed off), of each 4 ozs.; mandrake root, ½ oz.; bloodroot 1/4 oz.; mix alcohol ½ pt. with sufficient water to cover all and let stand for 2 or 3 days; then add more water and boil and pour off, putting on more water and boiling again, straining the two waters and boiling down to 3 pts.;' when cool ad 3 lbs. of honey, and alcohol 1 gill, with tincture of wine of ipecac 1 ½ ozs.;...[21]

Chase recommended equally diverse ingredients and procedures for other complaints, including diarrhea, the recipes for which used regular medicines like laudanum and opium, and herbal remedies of roots, barks and household goods.

The information provided by attempts at reconstructing folk medical knowledge and published volumes like Dr. Chase's Recipes illustrates the broad range of medical therapies to which Canadians had access. Many of these recipes included drugs found in personal and public Pharmacopoeias, while others drew upon widely available substances

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[20]Source: Copies of Dr. Chase's Recipes are available at the Osler Library at McGill University, and on microfiche through the CIHM.

[21]Chase's Recipes, 1862 edition, p. 154.

for their ingredients. Some of these ingredients necessitated access to wild or regionally available vegetation, while others required the reader have access to the broader commercial marketplace. This array of remedies and ingredients is the context in which we must place the following analysis of the ideas surrounding drug use by physicians. Attempts to control certain drugs operated within a society that used them, but in a limited way. The extant folk and home remedy literature suggest that the main users of medical opiates were the medical profession itself. Chase's validation of his book as a series of recipes approved by a medical doctor (and many of the recipes apparently came from other doctors' contributions) suggests the relationship between a physician's authority and the use of opiates. To seek the ideas of opiates as medicine, therefore, we must consider the discussions of doctors themselves.

2

Opiates, medical treatment and cultural authority in nineteenth-century Canada

The complexity of self-medication and home remedies, drawn from a variety of cultural sources, contrasts with attempts by doctors throughout the century to achieve a degree of consistency in medicine. The story of how doctors debated their therapeutic perspectives has been told for several national contexts.[1] Within these debates lay a fundamental drive to establish normative practices and effective treatments; in doing so, doctors would secure their authority and bolster professional status. While a variety of medical philosophies struggled for social and legal acceptance, most of these perspective relied upon some form of chemical or drug therapy. When studying the emergence of controls over drugs, it is valuable to consider how doctors valued these drugs, and how drugs bolstered doctors' claims of authority by aiding their ability to treat and heal the patient.

In this chapter I examine physicians' ideas of therapeutic drug use in Canada in the middle part of the nineteenth century. I use medical reference manuals, medical journals, public newspapers and private practice records to explore the debates about drug use. Owing to the bulk of available material, the discussion focusses mostly upon the debates between allopathic physicians, whose efforts to refine and improve the effectiveness of

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[1]See for instance, Gidney and Millar, Professional Gentlemen: The Professions in Nineteenth-Century Ontario (Toronto: University of Toronto Press, 1994); J. T. H. Connor, "Minority Medicine in Ontario"; Paul Starr, The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry (New York: Basic Books, 1984); John Harley Warner, The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885 (Cambridge, Mass.: Harvard University Press, 1986); Irvine Loudon, Medical Care and the General Practitioner, 1750-1850 (Oxford: Clarendon Press, 1986) .

their approach to medicine resulted in a number of debates and discussions about the nature and effect of drugs like opium.[2] Therapeutic propriety was based upon much more than just medical results, however. Decisions of the efficacy of chemical therapy related to the visible effects of drugs, but these ideas were modified by the credibility of the administrator and the therapeutic philosophies that underlay the decision to use a particular treatment regimen. I explore specifically the use of opiates. Opium, like many active drugs, operated both as a poison and as a medicine. Taken in excessive doses, it could kill a patient, while in proper amounts, opium was a valuable therapeutic agent. The correct and incorrect doses were not uniform; the propriety of administration related to issues of individual credibility, conditions of administration, and the results of the treatment. Doctors used incidents of improper opiate administration, resulting in death or physical distress, to reinforce their claims for professional authority. However, the internecine conflicts between doctors demonstrated their inability to agree upon general principles of drug therapy, conflicts that could result in a diminished credibility for doctors at mid-century.

The value of a drug's power depended upon technological innovations that aided physicians who employed drugs in therapy. The isolation of morphine (1806), the primary active principle of opium, and the advent of the hypodermic syringe (1853), were two

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[2]On different physiological beliefs in Ontario, for example, see J. T. H. Connor, "Minority Medicine in Ontario, 1795-1903: A Study of Medical Pluralism and its Decline" (Ph.D dissertation, University of Waterloo, 1989).

separate innovations that enabled doctors to strengthen their ability to treat patients.[3] I consider the isolation of morphine in the first part of the chapter, demonstrating that constant conflation of terminology alludes to a persistent confusion about the properties of opiates. In the second part of the chapter, I consider the advent of hypodermic medication specifically. Hypodermic administration of drugs was a technological advance that offered promise to physicians, but which also presented new and recurring dangers about both self-medication and later habitual use. As with the issue of opiate use itself, doctors also argued that they should have exclusive control over the use of the hypodermic syringe. The discourse of power and authority in these debates, while attempting to advance the authority of doctors' knowledge in medical issues, demonstrates the socially-constructed and inconsistent nature of that same knowledge.

* * *

In 1869, the Canadian Pharmaceutical Journal published an article entitled "What is Opium?" The author, Dr. Friedrich August Fluckiger, a renowned chemist from Bern, Germany, observed that, despite persistent investigation, "science is far from having an exact idea of the nature of opium."[4] Drawing upon the results of his own experiments and those of other investigators, Fluckiger detailed the chemical complexity of opium. He noted variances and nuances of opium's makeup, and explained to his readers how they could test the potency of opiates. Despite its scientific language and descriptions of

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[3]J. Worth Estes, A Dictionary of Protopharmacology: Therapeutic Practices, 1700-1850 (United States: Science History Publications, 1990), pp. 142-143.

[4]F. A. Fluckiger, "What is Opium?" Canadian Pharmaceutical Journal 2 (January, 1869), pp. 1-4.

experimental procedures and results, Fluckiger's article merely synthesised what people had known for years: opium is a chemically intricate drug. He made no allusion to another, equally perplexing aspect of opium: the social complexity that mirrored, and was a result of, the chemical complexity. In its ability to ease pain, induce sleep, or significantly alter the physical processes of the body, such as reducing intestinal activity and bronchial secretions and increasing perspiration, opium was a valuable medicine of the nineteenth century pharmacopoeia. These therapeutic qualities also made opium a dangerous poison; taken in large doses, opium could kill. Despite the advances of scientific inquiry, "the nature of opium" remained elusive.

Scientific investigation, such as those upon which Fluckiger drew, informed and enhanced the knowledge and power of medical professionals. In the same way that anatomical knowledge and detailed empirical data empowered doctors to try to establish cultural authority and control over their patients, expanding scientific and chemical experimentation provided doctors, pharmacists and other members of a broadly-defined medical profession a positivistic and scientifically-legitimate means of attempting to explain the actions of drugs. Yet for all of the chemical and pharmacological advances to which doctors had access, opium remained a difficult drug to use accurately. The complexity to which Fluckiger alluded hindered the doctor's ability to predict, with any degree of accuracy, the actions and side effects of a drug, and to explain the periodic anomalous and lethal results of drug therapy. When science failed and doctors faced the incongruity between expectations and results, doctors depended upon their social credibility and status based upon non-scientific factors, to legitimize their claims to control

over these substances.

The ability to establish cultural authority over medicine depended upon the nature of the item, the concept or the behaviour over which the authority was sought. When asserting their authority over drugs, doctors confronted both the uncertain composition of opium and, before the last half of the nineteenth century, the uncertain legal position of physicians.[5] In the first part of this chapter I examine these two forms of emerging authority as it related to doctors' use of opiates. I scrutinize first the multiple meanings of opium in social life, and then consider how doctors' conflicts over therapeutic perspectives and political aspirations affected ideas of proper use of opiates. Central to this chapter is the idea that opium in its various forms related to medical power only inasmuch as it was a dangerous poison. Medical power over drugs required those drugs to be dangerous.

As Fluckiger stated, opium is chemically complex. Raw opium consists of a number of alkaloids, including morphine, narcotine, thebaine, codeine, papaverine, and heroin.[6] Morphine is the most significant alkaloid in opium, often comprising ten percent of the total weight of the raw gum opium, and being approximately ten times as potent.[7] After Serturner's discovery and isolation of morphine in 1806 (and publication in 1817),[8]

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[5]See Gidney and Millar, Professional Gentlemen (esp. pp. 85-105) for a more extensive examination of doctors' claims for authority.

[6]Fluckger illustrated that there were 12 known alkaloids (CPJ, Vol 2 p. 1) while Estes, in A Dictionary of Protopharmacology (p. 142.) says opium includes 25 different active ingredients.

[7]Charles F. Levinthal, "Milk of Paradise/ Milk of Hell: The history of ideas about opium," Perspectives in Biology and Medicine 28 (Summer, 1985), p. 570.

[8]Estes, Dictionary of Protopharmacology, p. 142.

chemists and wholesalers of opium began to delineate the various types of opium by the amount of morphine in the raw opium gum. The variations of this morphine percentage could be quite considerable, as the following excerpt from the Montreal Medical Gazette of 1844 demonstrates:

> Bengal investment opium... contains two and a half per cent by weight of pure morphia; Malta Opium, six per cent, ditto; Turkey opium, nine per cent, ditto; and garden opium, Patna and Smyrna opium, ten and a half per cent of morphia each.[9]

Even the above numbers must have been estimates, since the potency of opium varies by the altitude and climate where the poppies are grown. Such variance increased the dangers to the individual of self-application of opium.

This multifaceted physical composition parallels--and may have driven--a multifaceted social and medical experience of opium. To the term "opium" clung a bundle of context-sensitive meanings. Opium poisoning was the cause of numerous murder trial cases and coroner's inquests. In the tinctured state--a mixture of approximately one part opium to ten parts alcohol, often called laudanum--opium became a widespread poison in suicides and child murders. Meanwhile, no doctor's pharmacopoeia was complete without "*tinct. opii.*" Laudanum, altered by enterprising medicine vendors or manufacturers, was the basis for compounds like Paregoric, Godfrey's Cordial, and Mrs. Winslow's Soothing Syrup. These substances helped mothers to soothe infants and children to sleep in the working-class homes in industrial England, and in the middle class homes throughout

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[9]Montreal Medical Gazette, 1 (April 1844), p. 20.

Europe and the Americas.[10] Opium alone and in the form of laudanum appeared in nineteenth-century literature as a symbol of excess and as a tool for deception.[11] In international politics, opium was a key to broader economic and moral discussion about the trade in Asia, specifically over concerns in Great Britain regarding the propriety and validity of Britain's role in the East-India Company.[12] In all of these discussions and images, opium, a single substance, wore a variety of masks.

"A difference of degree or contingency": Public scrutiny of poison administration

A reviewer of Alfred Taylor's On Poisons in the Canadian Medical Chronicle noted that

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[10]Note discussions by Virginia Berridge "Opium and the Workers: 'Infant Doping' and 'Luxurious Use,'" in Berridge and Edwards, Opium and the People: Opiate Use in Nineteenth Century England (London: Allen Lane, 1981), pp. 97-109; Terry Parssinen, "'Mother's Friend': Opium as an Escape," in Parssinen, Secret Passions, Secret Remedies: Narcotic Drugs in British Society, 1820-1940 (Philadelphia: Institute for the Study of Human Issues, 1983), pp. 42-58; Terry Chapman, "Drug Use in Western Canada," Alberta History 24 (Fall, 1976), pp. 18-27; H. Wayne Morgan, Drugs in America: A Social History, 1800-1980 (Syracuse: Syracuse University Press, 1981), pp. 29-63.

[11]For examples of nineteenth century literature in which opium was duplicitous, see any edition of Charles Dickens, Oliver Twist, in which laudanum was both a medicine and then a tool to render a criminal unconscious; Oscar Wilde, A Picture of Dorian Gray, in which Lord Henry Wotton smoked a "heavy opium-laden cigarette" (p. 2) near the beginning of the novel, and Dorian ended up slumming in the East London opium dens near the end. Also consider Wilkie Collins' Moonstone; Dickens Edwin Drood; Arthur Conan Doyle's "The Man With the Twisted Lip" in The Complete Sherlock Holmes Volume 1 (Garden City, New York: Doubleday, n.d.), pp. 229-244 for other examples of opiate use and misuse.

[12]See Geoffrey Harding's discussion of the East India Company in Opiate Addiction, Morality and Medicine: From Moral Illness to Pathological Disease (London: Macmillan, 1988), especially chapters 2 and 3.

"the difference between a remedy and a poison is only one of degree or of contingency."[13] Much of the discussion about legitimate use of opium referred to three key contingencies: for what was the opium used, who administered it, and what were the results? Administered by a credible physician, to a patient whose physical condition required it, and who benefited by the administration, opium was a medicine. Used for disreputable purposes, by individuals with the intent to injure, opium was a poison. Improperly administered by a parent or other individual without proper authority, and causing death or physical distress, opium sat on a blurred line between poison and medicine. All three of these conditions were subject to scrutiny; often the results of the treatment were as important as the authority and purpose of the administrator. Who determined the credibility of a physician, or the necessity of opium? In mid-nineteenth century Canada, the law recognized no single therapeutic perspective as authoritative. Legislation incorporating provincial medical bodies tended to be pluralistic rather than exclusive, leaving the propriety of drug administration open to subjective interpretation.[14]

The subjectivity of medical interpretations, expressed as objective truth, resulted in semantic and philosophical debates and conflicts over propriety and credibility. These debates rested upon issues of power. Believing their training and medical knowledge made them the most credible authorities on medical application of chemicals, physicians

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[13]"Review of Alfred Swaine Taylor, On Poisons in Relations to Medical Jurisprudence and Medicine," Medical Chronicle or Montreal Monthly Journal of Medicine and Surgery (hereafter Medical Chronicle) 6 (May, 1859), pp. 537-538.

[14]On medical registration in Ontario, see Gidney and Millar, "Doctors and the Price of Occupational Closure," Professional Gentlemen, pp. 85-105.

asserted that only reputable medical practitioners should administer medicine. However, in the middle of the nineteenth century, Canadian physicians themselves did not agree on many aspects of physical processes. Their internecine disputes, driven by both philosophical and personal conflicts, coupled with legislative reluctance to recognize any single medical philosophy as valid, limited the credibility of medical practice.[15] Prior to comprehensive medical, pharmacy or poison laws, judicial and public scrutiny often determined the validity and credibility of physicians when using poisonous medicines.

Several writers have noted the place of public scrutiny to the authority of medical practice. A point of conjunction between two significantly different works, Michel Foucault's The Birth of the Clinic, and John Harley Warner's The Therapeutic Perspective, for example, demonstrates that physicians' authority to diagnose and treat rested upon public scrutiny of the doctor's action, rather than medical degrees or certificates. Foucault said that the doctor needed to observe, to recognize the course of the disease and reason out his actions before proceeding to treat the patient.[16] Warner argued that a physician's credibility depended upon his capability to act quickly and decisively when faced with an illness.[17] The two perspectives, drawn from significantly different literature, national

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[15]Although much of the debate carried out between doctors was philosophical, notably between allopaths and homeopaths, but also other "sects" of medicine, the main discussion of this dissertation revolves around the ideas of the regulars. On medical pluralism in Ontario, for example, see J. T. H. Connor, "Minority Medicine in Ontario."

[16]Foucault, The Birth of the Clinic: An archaeology of Medical Perception (New York: Pantheon, 1973), p. 16.

[17]Warner, "Intervention and Identity," in Warner, Therapeutic Perspectives, pp 11-36.

contexts and philosophies have a common thread: doctors' credibility relied partly upon public acceptance of their behaviour, rather than simply institutional validation.

Innovations like the isolation of morphine enabled doctors to overcome some of the variability of opiate doses that made drug use uncertain. Morphine, one of a number of opiate alkaloids, had a more specific and less variable physical effect, although it was not without its uncertain effects. Isolated in the first decade of the nineteenth century, "morphia" entered the *materia medica* of the general physician and the family medical regimen only gradually. In 1832, W. G. Smith noted that "neither morphia, nor any of its salts, have yet come into very general use in the practice of physicians, at least [in North America]." Smith suggested two reasons for this phenomenon. First, he argued that the price of morphine was too high; second, he cited, "an adherence to the old established maxim, never to abandon an article whose virtues are known and universally acknowledged, for one not yet proved, and but just introduced."[18] Morphine soon came into more widespread use, however, and as John Bell, a Canadian medical student in 1863, recorded in his lecture notes, "we use the alkaloids of morphia &c.; opium being used only for laudanum and Dover's Powder."[19]

A sample of the records of Dr. Thomas Geddes, a general practitioner from Yarmouth, Nova Scotia, whose detailed case books have nearly all survived intact,

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[18]W. G. Smith, "An Inaugural dissertation on Opium" (1832) p. 16, in Gerald Grob, ed. Origins of Medical Attitudes Toward Drug Addiction in America (New York: Arno Press Reprint, 1981).

[19]John Bell, "Materia Medica and Pharmacy Lecture Notes," 1863, pp. 152-153; National Archives of Canada, John Bell fonds, MG29 B40 vol. 2.

Table 2.1: Prescribing practices of Dr. Thomas Geddes: Narcotics as percentages of all prescriptions, 1844-1880

Year	Dover's Powder	Morphine	Opium	Tincture Opium
1844	5.47%	2.28%	2.57%	4.59%
1848	6.76%	1.18%	2.45%	4.71%
1854	8.11%	3.82%	2.35%	5.97%
1859	5.68%	11.08%	2.22%	6.23%
1864	7.07%	10.19%	1.63%	4.89%
1869	8.63%	10.75%	2.35%	3.53%
1874	7.35%	8.61%	1.37%	4.44%
1880	10.05%	7.00%	1.26%	4.31%

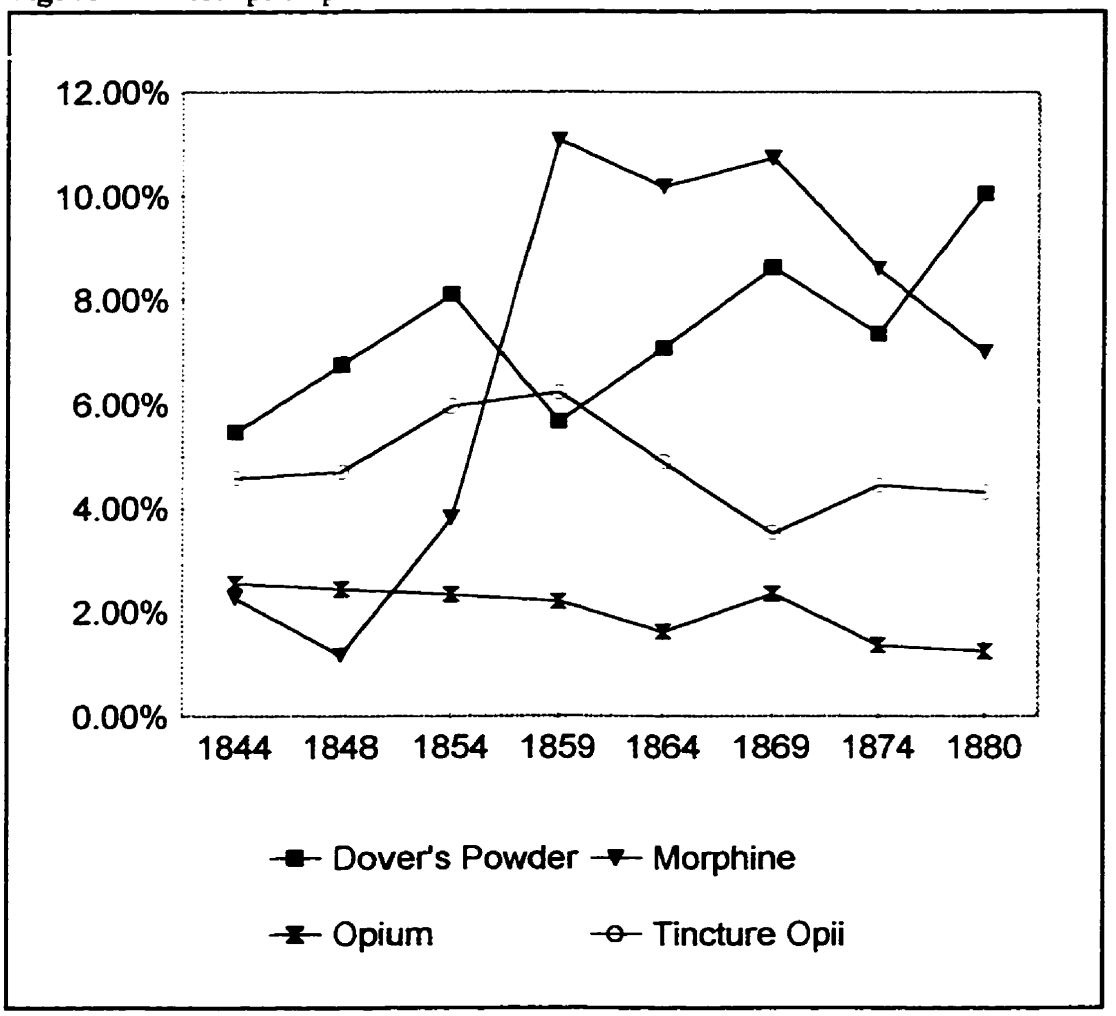
Source: Casebooks of Dr. Thomas Geddes, Public Archives of Nova Scotia.

Table 2.2: Correlation between narcotics prescribed by Dr. Thomas Geddes

	Dover's Powder	Morphine	Opium	Tincture Opium
Dover's Powder	1			
Morphine	0.1657	1		
Opium	-0.5212	-0.4423	1	
Tincture	-0.4301	-0.0547	0.2032	1

On correlation coefficients, see the Appendix.

Figure 2.1 Prescription practices of Dr. Thomas Geddes.



Source: Casebooks of Dr. Thomas Geddes, Public Archives of Nova Scotia.

illustrates how important morphine could become in a doctor's practice. Table 2.1 lists Geddes's prescriptions of morphine, opium, tincture of opium and Dover's Powder (a common patent medicine consisting principally of opium and ipecacuanha) as a percentage of all prescriptions each year.[20] Figure 2.1 charts this data. Notable is the leap in applications of morphine between 1848 and 1859, a period which saw an increase in the popularity of morphine, as the above evidence suggests. While Geddes used morphine often in his practice, he does not appear to have substituted morphine for other opiates. As the correlation table[21] (Table 2.2) demonstrates, there was no statistically significant negative relationship between Geddes' use of morphine and any of the other opiates; Geddes' use of other opiates did not change significantly as he incorporated morphine into his *materia medica*. Morphine was a valuable therapeutic addition to Geddes' practice. Geddes' broad application of morphine is an example of one physician's rapid acceptance of the substance, and may have been related to his schooling or access to the drug. Other examinations, like Duffin's study of James Langstaff, illustrate that some doctors did not

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[20]Source: Dr. Thomas Geddes Casebooks; Geddes Fonds, Provincial Archives of Nova Scotia (PANS). These statistics were compiled by a full reading, rather than a sample, of the casebooks in the years listed. Geddes records are of particular value for historians, since he kept meticulous details of the condition, prescription and cost for every patient in his records. Unlike other notable extensive doctors records (for example, Langstaff, examined by Jacalyn Duffin) Geddes continued to note his prescriptions throughout the nearly half a century of his practice. He worked as a physician from the 1830s to 1880.

[21]On the information provided by correlation coefficients, and the formula for determining these numbers, please refer to the appendix.

use morphine, or may have listed morphine as opium in their records.[22]

The difference between the practices of Langstaff and Geddes could be the result of a number of factors--geographical, pedagogical, or philosophical--and the reason is difficult to isolate, yet it is also suggestive of broader terminological conflation of medicines. To many doctors, the difference between "morphia" and "opium" was not always clear, a conflation which indicates a restricted understanding of the nature of opium. Throughout much of the nineteenth century, physicians tended to equate morphine and opium as having practically the same effects. To many, the only significant difference between the two lay in the dosage. British physician and educator Robert Christison, in his often cited textbook A Dispensatory, or Commentary on the Pharmacopoeias of Great Britain... (1842) explained that "there is scarcely any special purpose served by opium, for which this salt [morphine] may not be advantageously substituted, except in the cases of rare occurrence where it is necessary to compel deep sleep, and the constitution of the individual is known to agree with opium itself."[23] Dr. J. Moore Nelligan agreed, noting in 1849 that "notwithstanding the observations of many, that morphia is free from the stimulating effects of opium, and that it acts purely as an anodyne sedative; it would appear that it possesses essentially.... the actions of the drug

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[22]See Duffin, Langstaff: A Nineteenth Century Medical Life (Toronto: University of Toronto Press, 1993), pp. 75-76.

[23]Robert Christison, A Dispensatory, or, Commentary on the Pharmacopoeias of Great Britain; Comprising the Natural History, Description, Chemistry, Pharmacy, Actions, Uses, and Doses of the Articles of the Materia Medica. (Edinburgh: A&C Black, 1842), p. 646.

[opium] itself."[24] Both writers also observed that morphine was not as popular as opium among physicians. Sir Henry Holland (1855), discussed the effects of "Opium, in one or other of its forms" at length, but rarely distinguished opium from its components.[25] He attributed the isolation of morphine to the resurgence of the use of opium in medicine. He also advised his readers to prefer morphine over opium because morphine's effects "are more explicit, more secure, and freer from injury or inconvenience, than those of any other opiate,"[26] a sentiment that suggests the physician's authority would benefit from using morphine, just as would the patient's chances of recovery. As morphine's use increased, and physicians had more opportunities to observe its effects, they noticed specific differences. H.C Wood, an American medical writer and physician, explained that the several forms of morphine "differ in their therapeutic value from opium chiefly in that they act with less power as sudorifics and in checking secretions in the bowels, and consequently constipating."[27] This distinction notwithstanding, some writers continued to interchange the terms "opium" and "morphine." H. H. Kane's The Hypodermic Injection of Morphia (1880) is notable for its author's conflation of the terms, in spite of the specific title. While he was mostly discussing injection of morphine, his examples combined opium

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[24]Dr. J. Moore Nelligan, Medicines, Their Uses and Modes of Administration, American edition (New York: W.E. Dean, 1849), p. 216

[25]Sir Henry Holland Medical Notes and Reflections (London: Longman, Brown, Green and Longmans, 1855), p. 513.

[26]Holland, Medical Notes, pp. 516-527.

[27]H.C. Wood, Jr., A Treatise on Therapeutics, Comprising Materia Medica, and Toxicology, With Especial Reference to the Application of Physiological Action of Drugs to Clinical Medicine (Philadelphia: Lippincott, 1877), p. 256.

and morphine without distinction.[28]

Conflation of terminology, variability of dosage, and versatility of morphine, all combined to create a potentially dangerous relationship between the medical and poisonous natures of opium. Doctors recognized this danger, and their solution was to insist that only properly-trained individuals should be able to administer opium.[29] Thomas Sydenham, seventeenth-century British physician and the originator of one of the most popular forms of laudanum, had noted that opium was "so necessary an instrument *in the hands of a skillful man*, that medicine would be crippled without it."[30] American essayist W. G. Smith echoed that sentiment over a century later, when he explained that "there is scarcely a disease in which opium may not, during some of its stages, be brought to bear, *by the judicious physician*, with advantage."[31] A physician writing in the Montreal Medical Gazette in 1844 observed that "opiates, *carefully administered*, cannot be too strongly recommended as the most valuable [medicine] within reach"[32] Edward

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[28]H. H. Kane, Hypodermic Injection of Morphia: Its History, Advantages and Dangers (New York: Chas. L. Bermingham & Co., 1880).

[29]Numerous writers extolled the virtues of opium as an essential component of the *materia medica*, but with conditions. A review in the Quebec Medical Journal/Journal de Medecine de Quebec of a book on diseases of the abdomen noted that "the quantity of opium ought to have no limit but the absolute abatement of the pain." (Quebec Medical Journal/ Journal de Medecine de Quebec, 2 (January, 1827), p. 25.)

[30]Quoted by Guenter Risse, in "Brunonian Therapeutics: New Wine in Old Bottles?" in W. F Bynum and Roy Porter, eds., Brunonianism In Britain and Europe: Medical History--Supplement 8 (London: The Wellcome Institute for the History of Medicine, 1988), pp. 46-62. Emphasis added.

[31]W. G. Smith, Inaugural dissertation, p. 70. Emphasis added.

[32]Montreal Medical Gazette, 1 (October, 1844) pp. 193-195. Emphasis added.

Hitchcock, in his Essay on Alcoholic and Narcotic Substances(1830) reiterated the opinion that opium and related drugs were dangerous "when administered as medicines except under the direction of the regular physician. He may use them (especially opium) in many cases, perhaps, with advantage.... the physician is the only proper person to judge of the cases and the quantity in which these substances ought to be used."[33] Non-professional use made opium a poison:

> For every man to take the business into his own hands, without any knowledge of medicine, and to undertake to determine when, and how much... opium... [is] necessary for him, is just as absurd, and as dangerous, as if he were to prescribe and deal out arsenic, or corrosive sublimate, or calomel.[34]

Only the authority of physicians could diminish the poisonous nature of opium.

For centuries, then, physicians recognized the promise and dangers of opium; what they had to determine was not whether it was useful, but how to administer it. This crucial issue of proper dosage informed much of the discussions about opium throughout the nineteenth century. W.G. Smith, cited the beneficial immediate stimulant effects of opium on the body. "In moderate doses, it increases the fulness of the force, and the frequency of the pulse; it augments the heat of the body; quickens respiration, and invigorates both the corporeal and mental functions."[35] In excessive doses, it caused

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[33]Edward Hitchcock, An Essay on Alcoholic & Narcotic Substances, as Articles Of Common Use (Amherst, Mass.: J.S. & C. Adams, 1830) in Gerald Grob, ed., Nineteenth-century Medical Attitudes Toward Alcoholic Addiction : Six Studies, 1814-1867 (New York: Arno Press, 1981) p. 9.

[34]Ibid.

[35]Smith, Inaugural Dissertation, pp. 18-19.

"delirium, sighing, deep, and stertorous breathing, cold sweats, convulsions, and death." By focussing upon observable changes in basic physiological systems, physicians saw opium's genuine effect in a straightforward mechanistic reaction, a benefit to doctors whose power rested upon the empirical physiological effect of therapeutics.[36] However, this external, empirically observable, phenomenon could not account for variability in the effects of opium on the body. For example, when discussing the actions of opium on the "cerebro-spinal system" nineteenth century British physician Jonathan Pereira explained that the drug caused "sopor" or coma "but in some cases we have delirium...."[37] After citing a number of divergent opinions on the nature of opium's action on the body, Pereira admitted that "I believe we shall save ourselves much time and useless speculation by at once confessing our ignorance on this point."[38] George B. Wood, an influential American investigator, outlined the uses of opium in treatment of a number of somatic conditions. In the treatment of inflammation, for example, Wood suggested opium not only relieved pain and aided sleep, but might reduce fevers and inflammation by "repressing the susceptibility of the nervous centres." Wood balanced the value of opium to treat inflammation with its potential dangers. Combined with ipececuanha, for example, opium

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[36]See Warner, Therapeutic Perspective, pp. 11-36, 235-256; Rosenberg, "Therapeutic Revolution," pp. 6-7; Rosenberg's introduction to George Rosen, The Structure of American Medical Practice edited by Charles Rosenberg (Philadelphia: University of Pennsylvania Press, 1983), pp. 7-9.

[37]Pereira, Jonathan, The Elements of Materia Medica and Therapeutics, Second Edition (London: Longman, Brown, Green and Longmans, 1842) Vol 2, p. 1750.

[38]Ibid, p. 1758.

may help to "subvert the incipient attack; but the practice is somewhat hazardous."[39]

Opium's usefulness drew not only from its visible effect upon the body, but also from how this effect suited conceptions of disease. Traditional Galenic medicine, upon which much Western medicine was based, viewed disease as a result of the imbalance of the four humours of the body, blood, phlegm, yellow bile and black bile. Opium's quality of reducing bodily secretions aided the physician to balance the latter three fluids. In allopathy, the philosophy of the regular physicians in nineteenth century Europe and the Americas, opium countered the symptoms of many diseases. Jonathan Pereira explained that "allopathy" held that the best way for a physician to treat a disordered somatic condition was to establish an artificial, controlled disease, "a new kind of action... in the part affected, by which the nervous morbid action is superseded," primarily through drug therapy.[40] The benefit of establishing an artificial disease was that it would be under the physician's control.[41] The medical attendant could then diminish this new ailment until both conditions had dissipated. This philosophy of pathophysiology, challenged in the latter third of the century by the germ theory of disease, rested on the belief that bodily disease was internal, the result of a weakening of the body, an imbalance of the system, a deranged condition of the blood, and subsequent morbid manifestations.

Some earlier and alternative therapeutic philosophies also valued opium. The

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[39]George B. Wood, Treatise on the Practice of Medicine, Fifth edition (Philadelphia: Lippincott, 1858), p. 228.

[40]Jonathan Pereira, The Elements of Materia Medica and Therapeutics, Third edition (Philadelphia: Blanchard and Lea, 1852), vol 1, pp. 169-171.

[41]Ibid., pp. 167-168.

philosophy of John Brown (Brunonianism), was an alternative to the therapeutics of the Edinburgh school of medicine, the nature of which historians continue to debate. Brunonianism, which had declined by the middle of the century, saw bodily disease as a result of too much or too little stimulus. To this perspective, opium was a valuable stimulant and narcotic.[42] Homeopathy, an alternative medical field which prescribes helping the body heal itself through reproducing symptoms of disease, employed--and still employs--opium. Morbid symptoms, according to homeopaths, were the visible manifestations of the body's attempt to resist disease; the homeopath's role was to identify the proper means by which one could help the body to fight the disease. Homeopaths would then use medicine such as opium in minute doses to reproduce symptoms.[43]

Doctors and legal definitions

The usefulness of opium in these and other therapeutic perspectives led to concerns over

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[42]On opium in Brunonian theory see Dolores Peters "The British Medical Response to Opiate Addiction in the Nineteenth Century" Journal of the History of Medicine 36 (October 1981), pp. 455-488; G. B. Risse, "Brunonian Therapeutics"in Bynum and Porter, eds., Brunonianism In Britain and Europe, pp. 46-62. See also Michael Barfoot, "Brunonianism under the Bed" An Alternative to University Medicine in Edinburgh in the 1780s" in Bynum and Porter, eds, Brunonianism in Britain and Europe, pp. 22-45. Pereira discussed Brunonianism in The Elements of Materia Medica and Therapeutics., pp. 145-146.

[43]Homeopathy was an influential alternative to allopathy. On homeopaths and their relationship to regular practice, see, for Canada, J. T. H. Connor, "Minority Medicine" and Gidney and Millar, Professional Gentlemen; for the United States, see Starr, The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry (New York: Basic Books, 1984), pp. 96-102; Lester King, Transformations in American Medicine: From Benjamin Rush to William Osler (Baltimore and London: Johns Hopkins University Press, 1991), pp. 195-196.

the mis-use of opium. The assertions that opium was valuable only in the proper hands implied a recognition of the dangers of opium overdose and poisoning. While doctors attempted to define the proper therapeutic uses of opium, they often encountered the problems of opium poisoning. Opium poisoning occupied a dual role in the discourse over opium by doctors. They saw the dangers of iatrogenic opium poisoning as threats to the health of their patients and their own professional credibility, and therefore aimed to ensure they understood the poisonous nature of opiates; at the same time, stories about doctors' struggles to save the lives of the victims of opium poisoning, reported in medical journals, served to increase doctors' chances to heal their patients, and bolster the credibility of their profession.

It was outside of the esoteric debates between physicians in medical journals and textbooks that doctors would establish their authority with the public. Called as medical witnesses in poisoning trials, physicians presented their opinions of the nature of poisons for legal purposes. To help fellow doctors in this task, several physicians published exhaustive studies of poisons during the early part of the century. One key work was Alfred S. Taylor's On Poisons (1848). A lecturer on medical jurisprudence and chemistry at Guy's Hospital in London, England, Taylor provided cases and examples of the nature of poisons, to aid in clarifying legal definitions and precedents. "The Crime [sic] of poisoning has been of late so fearlessly on the increase," ran the preamble, "that it seems essential for the proper administration of justice, and for the security of society, to collect

and arrange ... those important medical facts in relation to death by poison."[44] Prior to detailing the action of most known poisons, Taylor considered how the law should define the word itself. His definitions submerged the substance beneath a series of categories based upon the physiological conditions of the subject's body and the authority and context of the substance's administration. While navigating the rocky terrain of semantic and legal conditions, Taylor observed that a substance was not a poison when the deleterious effects resulting from its use "[do] not depend upon the nature of the substance taken, but upon the system at the time at which it [the poison] is swallowed."[45] A true poison would always affect the system negatively Taylor reminded his medical colleagues that this medical distinction would not suffice for legal purposes. The law was concerned more with the intent to do harm, than with the nature of the substance itself. Taylor explained that "whether a particular substance be or be not a poison is a question of fact left for the decision of a jury from the medical evidence given in the case."[46] Scientific knowledge had to yield to legal determinations.

Opium, Taylor noted, was one of the most ubiquitous poisons. He cited English death statistics from 1837 and 1838 which blamed opium for more deaths by poisoning than any other substance. Opium deaths were most often suicide and accidental infant

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[44]Taylor, On Poisons, in Relation to Medical Jurisprudence and Medicine, edited by R. E. Griffith (Philadelphia: Lea & Blanchard, 1848), p. v.

[45]Taylor, On Poisons, p. 18.

[46]Taylor, On Poisons, p. 16.

poisonings.[47] While other writers asserted that opiates were valuable medicines when administered by physicians, Taylor also illustrated the corollary: opium was often a poison when administered by the untrained parent or nurse.[48] Incidents of opiate administration to children concerned physicians. An 1827 article in the Quebec Medical Journal/ Journal de Médécine de Quebec, reported the outcome of a coroner's inquest into the death of two infants.[49] The infants had received seven drops of laudanum. Reminding his readers of the acceptable dosages of laudanum, the editor noted that "practitioners seldom order a greater quantity than a drop for a dose, and generally only half a drop."[50] In 1870, commenting on the trial of several city pharmacists for selling laudanum contrary to the poison law (see chapter three), a correspondent to the Globe insisted that "[l]audanum is not the deadly poison which would usually be selected to procure the death of an adult enemy. It is *the* deadly poison of the murderer of infants and of the suicide. It is *the* deadly poison of accidental deaths."[51]

In 1847, the Montreal General Hospital was the site of one such accidental death, the results of which suggested a need for increased control of drugs by doctors. Alexander Campbell, who was being treated for an inflammation of the leg, received an

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[47]Taylor, On Poisons, p. 460.

[48]Berridge and Edwards, Opium and the People, pp. 97-105; Morgan, Drugs in America, pp. 2-3; 37-38

[49]The Journal did not note where the deaths took place.

[50]Quebec Medical Journal/Journal de Medecine de Quebec, 2 (January, 1827), p. 44.

[51]Globe, December 1, 1870. Emphasis in original.

overdose of laudanum when he asked a fellow patient, William Halloran, for a drink of port wine from one of three bottles near his bed. Halloran, who had "sore eyes," handed Campbell the bottle the latter indicated. Campbell almost immediately realized that he had drunk laudanum instead of wine. Despite doctors' attempts to keep him alive, Campbell died seven hours later. The subsequent coroner's inquest needed to determine why Campbell had access to the laudanum, who was responsible for administering it, and whether or not Campbell had committed suicide by misinforming Halloran of the bottle's contents. The inquiry focussed partly upon the responsibility of the ward nurse, Susan Oliver, and the propriety of Halloran's behaviour. Medical witnesses vouched for Oliver's credibility, and stated that the practice of patients "assisting other patients when the nurse is absent" was common. The coroner's jury determined that Campbell was the victim of a fatal mistake and that no one was directly to blame. It also asserted that the hospital needed to refine its method of administering and storing potentially dangerous medicines. The boundaries of the authority of administration needed more clear definition, to avoid a recurrence of such a tragedy.[52] That the jury scrutinized closely the activities of the nurse, but generally only discussed the actions of the doctors when they described their attempts to save Campbell's life, suggests an acceptance of the credibility of the physicians' actions. The outcome of the inquest, furthermore, provided a justification for increased control by duly accredited physicians.

Poisoning by self-administration of opium was not an infrequent occurrence, and in

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[52]British American Journal of Medical and Physical Science, 2 (January, 1847), pp. 250-253.

medical journals doctors often outlined their treatments to inform their colleagues. Several articles in mid-century medical journals demonstrated the variety of cases of poisoning a doctor might face, as well as how experience reinforced the doctors' belief that they should have control over the use of poisonous drugs. In 1846, Dr. George R. Grasett, a Toronto physician, reported a case of poisoning by opium to the Toronto Medico-Chirurgical Society. He prefaced his report with stating "I am quite aware that cases of this nature not infrequently occur..."[53] Both cases Grasett reported were suicide attempts, one "had its origins in pecuniary losses" and the second attempt at suicide "being induced by the previous commission of a crime." Ten years later, Dr. A Grant, an attending physician at the General Protestant Hospital in Ottawa, published his "Notes on Three Cases of Poisoning" in the Medical Chronicle. Like Grasett, Grant also recognized that opium was "one of the agents most frequently used as a means of destroying life."[54] The first of the three poisoning cases he related was a woman's attempt at suicide by a large dose of laudanum.

Methodology in treating opiate poisoning was generally uniform, and we can take Grasett's case as an example.[55] First, the doctor attempted to induce vomiting by

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[53]Reprinted in The British American Journal of Medical and Physical Science, 3 (April 1847), p. 313.

[54]Medical Chronicle, 6 (October 1858), p. 197.

[55]Taylor himself devotes much of On Poisons to the topic of reviving people poisoned by opium.

administering about half a drachm of the sulphate of zinc, an antispasmodic and emetic.[56] The patient "was then dragged around the room, more like a corpse than a living being." After about fifteen minutes, Grasett administered another half a drachm of sulphate of zinc, as the first dose had not induced the desired purging. Generally, the physician would attempt to pump the stomach, but in this unfortunate case, "a very important part of the tube" was missing. The doctor poured warm water into the stomach and induced vomiting to "irrigate" the stomach, and the attendants kept the young man in "constant motion." The patient slowly regained lucidity, and begged the doctor to be permitted to sleep. As the doctor was worried that the patient would lapse back into opium coma and not recover, he refused to allow the patient to rest quite yet. He continued the intense treatment, keeping the patient in motion and awake, and made the young man swallow a good deal of strong coffee. In several hours, after a vigorous and diligent attention by the physician and the young man's friends who assisted the doctor, they allowed the patient to sleep. He fully recovered.[57]

With cases of poisoning by opium, doctors confronted the inexact and subjective nature of their therapeutics, and this subjectivity occasionally resulted in attacks from colleagues. In 1845, Dr. S. C Sewell reported a case of poisoning by laudanum to the British American Journal of Medical and Physical Science, which prompted a medical colleague to challenge Sewell's treatment with vigour. Sewell's patient, seeking to treat his colic, mistakenly took ten drachms of laudanum instead of tincture of rhubarb. When

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[56]Estes, Dictionary of Protopharmacology, p. 213.

[57]Medical Chronicle, 6 (October 1858), p. 197.

Sewell arrived, the patient was still "awake and conscious," and seemed agitated. Sewell's immediate action was similar to that of Grasett: administer an emetic and pump the patient's stomach. Sewell and a colleague, Dr. Scott, also administered two ounces of vinegar every half hour. As the patient became increasingly lethargic, the doctors ordered two men to walk the patient between them all night. The treatment was successful, and the next day the man began to recover.[58]

Two months later Dr. John S. Stewart of Kingston challenged Sewell's observations and procedures. Stewart argued that several experts claimed vinegar was contra-indicated in opium poisoning; he argued that Sewell's assertion that the patient had felt little effect from the opium over five hours was not supported by the presenting signs of pinpoint pupils and agitated demeanor. Stewart contradicted Sewell's observation that little of the laudanum had been digested, and surmised that perhaps he had been misinformed by the patient about the quantity of laudanum ingested. Sewell had noted that colic generally caused "great tolerance of opium." and that the mucous membrane of the stomach was irritated, and the digestion of the opium had been slowed. Stewart saw "no necessity for referring the tolerance of the poison to two of the supposed causes," the irritated mucous membrane and the state of digestion. He impugned Sewell's ability to observe and deduct with the assertion that "reasoning on false premises, and jumping to rash conclusions should be avoided where medical facts are to be ascertained."[59] If Sewell

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[58]S.C. Sewell, "Case of Poisoning by Tr. of Opium," British American Journal of Medical and Physical Science, 1 (June, 1845), p. 61.

[59]John Stewart, "Observations on a Case of 'Poisoning by Tincture of Opium,'" British American Journal of Medical and Physical Science, 1 (August, 1845), p. 115-116.

replied to Stewart's critique, the Journal did not print it.

These descriptions of poisoning cases illustrate the bifurcated appreciation doctors could have of opiate poisoning. Grasett, Grant and Sewell all faced patients whose access to and misuse of opiates led to possibly fatal results. Their rapid action and ultimate success would reinforce their medical authority. Grasett's ability to treat the patient without the proper stomach pump may have further bolstered his reputation as a skilled practitioner. That consciousness of reputation may have also driven Stewart's attack upon Sewell's therapeutics. Sewell's medical degree gave him the authority to practice medicine and his successful treatment of his patient lent credibility to his ability; his actions would have been valid in the eyes of his patient and in the opinion of Dr. Scott, on whom he called for assistance. Yet to Stewart, Sewell's observations and suggestions had little constructive value to other physicians. By citing accepted authorities on poisons, including Christison and Pereira, Stewart supported his challenge to Sewell's credibility.

The deaths and legacies of Job Broom and John Blackie

Doctors' success in treating patients whose self administration of opiates led to poisoning may have bolstered their claims to authority, but doctors' failures diminished the power of those claims. While many of the internecine debates remained in the pages of medical journals and the minutes of medical societies, occasionally medical knowledge, science and authority entered the scrutiny of the public. During the summer of 1855, the deaths of two men in Toronto at the hands of adherents to two competing medical schools in the

city, brought the issues of medical credibility, honour, character and pragmatic questions of the nature of investing authority in medical bodies, into public scrutiny. Claims to authority over the use of drugs, arguments about the accuracy of medical knowledge, and the imprecise, subjective nature of doctors' legal testimony combined in the outcomes of the deaths of Job Broom and John Blackie.

In mid-July, James Dickson, a student at John Rolph's Toronto School of Medicine, mistakenly administered an overdose of morphine while treating a man named Job Broom for dysentery. During a long day and night, Dickson and Rolph's colleague Dr. William Aikens, worked to keep Broom awake, lest he fall into coma and die from the overdose. They slapped, shook, shouted at, and threw towels soaked in scalding water at the patient, and managed to keep him conscious. Broom survived the night, but died five days later. When the family called for a coroner's inquest, Dickson became caught in a conflict between the Toronto School and the rival Trinity School of Medicine. As Jacalyn Duffin has noted, this conflict was rooted in animosities between the two schools.[60] At the inquest, evidence seemed to exonerate or condemn Dickson according to the pedagogical and political allegiance of the witness. A perfunctory post-mortem, carried out by adherents to the Trinity School determined that Broom "likely" died of the overdose, and the shock to the system caused by the attempts to revive the patient. Rolph and his colleagues countered that Broom could not have died from an overdose five days after he had awakened; they suggested that the cause of death was dysentery. Outside observers

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[60]Jacalyn Duffin, "In View of the Body of Job Broom: A Glimpse of the Medical Knowledge and Practice of John Rolph" Canadian Bulletin of Medical History/Bulletin canadien d'histoire de la médecine 7 (1990): 9-30.

condemned the inadequate post-mortem examination, and tended to side with Rolph.[61] Dickson was found guilty of manslaughter, but was completely exonerated at the fall court of assize.[62] The jury (and the press) admonished Rolph and Aikens for allowing medical students to practice on the poor.

Two weeks later, a field labourer named John Blackie died while under the care of Dr. Cornelius Philbrick, one of the physicians who had performed the post mortem on Broom. Blackie had suffered an extreme attack of delirium tremens after drinking cold water while working in the fields under the hot sun. Philbrick's treatment included large doses of morphine. At the subsequent coroner's inquest, the medical evidence was much more detailed than that given at the Broom inquiry. Issues emerged regarding medical credibility and authority, physiological uncertainty, and the proper administration of opium. The jury concluded that Blackie died from delirium tremens, brought about by a drink of cold water; Philbrick was not to blame.[63]

Taken together, the Broom and Blackie cases illustrate the evanescence of the idea of opium's "judicious use," and challenged the idea of objective medical science. The outcome of the treatments was the same--both patients died--yet the authority of the administrator and the propriety of his therapeutics, determined the legal credibility of his

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[61]Medical Chronicle 3 (September, 1855), pp. 149-155.

[62]Several Toronto newspapers followed the inquiry closely. The Globe provides detailed transcriptions of the Broom and the Blackie trial, as well as commentary and correspondence. It also noted Dickson's eventual exoneration. See The Globe, July 28, 31; August 9, 15, 16, 18, 21, 22, 1855.

[63]For details, see verbatim reports in the Globe, August 9, 15-18, 21, 1855.

behaviour. Dickson's authority was debatable, but his diagnosis seems to have been credible. Philbrick's authority was assured, yet his diagnosis was heavily debated. This legal and social scrutiny reflected the attitudes to which doctors were subject and medical professionals' subjective use of supposedly objective scientific "facts" to bolster their social and political authority. What follows is a brief discussion of the complex relationship between credibility and medical knowledge in these cases, and how they combined to affect conceptions of the nature of opium.

During the Broom inquest, the credibility of Dickson, Aikens and Rolph in their treatment of Broom was connected to their means of reviving the victim of poisoning. As the Grasett, Grant and Sewell articles illustrate, the methods used by the members of the Toronto Medical School generally followed accepted practice. Despite these medical precedents, the jury and the public seems to have been upset at the treatment of Broom, and the condition of the man's corpse. The apparent physical abuse, explicitly detailed by several of the witnesses to the inquest, seems to have violated a line of demarcation between acceptable and unacceptable medical treatment. Neither legal nor medical justifications could alleviate public concern over such apparent disrespectful "mistreatment." Conversely, the means of diagnosing Broom's cause of death was through an extremely limited autopsy of Broom's body, yet the Trinity professors' testimony held more weight. The plausibility of the Trinity professors' testimony, was based more on their social credibility, compared with the weakening of Rolph and Aikens' medical authority, than on conclusive, objective science.

In the Blackie inquest, more emphasis was placed upon the scientific explanations,

but ultimately the credibility of the administrator prevailed. As Duffin observed, "Teachers of both medical schools had boned up on their pharmacology for *this* inquest."[64] The key factor in determining the validity of Philbrick's authority lay in the understanding of the physiological changes wrought on the body by alcoholism. Blackie was an habitual drunkard, who had rarely been seen sober, although hardly ever so drunk as to be unable to work. His immediate affliction seemed to be delirium tremens, a somatic condition, identifiable through observation, and associated with prolonged, or the abrupt cessation, of drinking.[65] This condition became a key aspect of the trial, as the Coroner was "prejudice[d] against all alcohol-consuming creatures."[66] Yet the shaking of the limbs, hallucinations and general derangement typical of DTs were not exclusive to that condition. Rolph suggested that Blackie had probably been suffering from meningitis, whereas several of Philbrick's colleagues argued that Blackie's body displayed the symptoms of apoplexy. Some doctors questioned the judiciousness of the large doses of morphine. Rolph noted that whether or not his diagnosis of meningitis was correct, he would not have administered such a large dose of morphia. He also suggested that Philbrick's behaviour was irresponsible, whether or not the patient had delirium tremens:

> more persons have been killed in delirium tremens by over doses of opium than ever have been cured; the mortality from inordinate doses of opium is very great... it is plain to me that when Dr. Philbrick called on Monday morning and caused the patient to be roused... he must have thought the

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[64]Duffin, "In View of the Body of Job Broom," p. 16 emphasis in original.

[65]While usually associated with cessation of drinking, DTs also manifested themselves after prolonged drinking sprees.

[66]Duffin, "In View of the Body of Job Broom," p. 16.

patient was under the influence of morphia.[67]

Rolph testified that according to Christison, seven grains of morphia are equivalent to about 42 grains of opium, or 1¾ ounces of laudanum.[68] Aikens concurred with his colleague, arguing that the dose that Philbrick gave was "a fatal dose and not a proper one for delirium tremens or any other disease, *unless* the patient has been long habituated to the use of opium in very large quantities."[69] However, contemporary medical writing suggests that Rolph and Aikens testimony on the treatment of delirium tremens was incorrect. Many nineteenth-century commentators argued that opium was crucial in the treatment of delirium tremens.[70]

Qualifying his assertion with reference to the opium habit, Aikens reflected concerns about the uncertainty presented by the inebriate's deranged constitution. Physicians often generalized when discussing the physiology of the habitual user of alcohol or narcotics. In the Blackie inquest, several physicians believed that a drunkard could easily handle a large amount of opium, just as an "opium eater" would do. Testifying on

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[67]Testimony of Dr. Rolph, Globe August 16, 1855.

[68]Ibid. See also Robert Christison, A Treatise on Poisons in Relation to Medical Jurisprudence Physiology and the Practice of Physic, 4th edition (Edinburgh: Adam & Charles Black, 1845).

[69]Testimony of Aikens, Globe August 16, 1855. Emphasis added.

[70]See, for example, discussions of treatment for delirium tremens by Dr. Corrigan, "Delirium Tremens" British American Journal of Medical and Physical Science 2 (November, 1846), p. 183-4; Edward Stanley, "On Delirium Tremens" Medical Chronicle, 3 (September, 1855), pp. 143-6; James Crawford, "Case of Delirium Tremens from the Use of Opium" Medical Chronicle 3 (October, 1855), pp. 161-163; Anonymous, "Delirium Tremens--Treatment of" Canada Medical Record 7 (September, 1878), p. 269.

Philbrick's behalf, Dr. Russel noted that "there are some diseases which render a patient tolerant of opium, delirium tremens for instance."[71] Dr. Widmer reinforced the notion that the system of the habitual user of opium or alcohol was deranged. He explained that he had always been cautious with morphine, but "I once gave a huge poisonous dose of laudanum to a respectable person in this city; in the course of an hour, I gave an ounce of laudanum in two doses; the patient went to sleep, slept all night, and recovered perfectly... That patient had not been in the habit of taking laudanum, but he had been in the habit of taking large quantities of [alcohol]."[72] According to this perspective, a healthy body would die after a large dose of morphia, but a deranged body needed a shock to help to re-balance the system. Blackie, a drunkard who required sleep to alleviate his delirium, needed a large dose of morphia to achieve this end. Philbrick was therefore justified in administering enough morphia to, as he described it, "kill four persons in perfect health."

Other doctors challenged this justification. Echoing Pereira's advice to "confess our ignorance" on the effects of opiates on the body, a Dr. Nicol observed that "it is impossible to say what would be the proportion of doses of morphia administered to a habitual drinker labouring under delirium tremens, and to a person not so affected; an almost unlimited amount could be given to some patients in delirium tremens, especially the tremens produced by opium eating."[73] Nicol argued an approach to physiology which recognized different actions of drugs on different physical states. This variability

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[71]Testimony of Dr. Russell, Globe, August 21, 1855.

[72]Testimony of Dr Widmer, Globe August 18, 1855.

[73]Testimony of Dr. Nicol, Globe, August 21, 1855.

repeatedly challenged physicians. In the positivistic search for hard and fast rules regarding the effects of therapeutic measures upon the body, variability of somatic reactions was the physician's albatross. In the face of conflicting medical testimony, eight of the fourteen members of the jury determined that Philbrick did not act improperly, and that Blackie's body and habits caused his death.

The outcomes of these two inquests was a tarnished reputation for doctors, public scrutiny of the internecine conflicts within the medical "fraternity," and a demonstration of the socially-determined nature of legitimate medical scientific knowledge. In both inquests, the juries--groups of laymen, not medically trained--rendered their decisions based on whether the evidence accorded with generally held physiological perceptions, the character of the individuals involved, and what the jury perceived as acceptable medical treatment. Newspaper commentaries attacked doctors for their undignified behaviour, and suggested that the city was safer only because everyone now knew the low quality of medical practice.[74] Doctors' authority rested upon public perceptions of their character, a reality that the two inquests made strikingly clear.[75] The variability of the actions of

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[74]See "Doctors Differing," Globe August 17, 1855.

[75]On perceptions of the physician's character, see, S.E.D. Shortt, "Physicians, Science, and Status: Issues in the Professionalization of Anglo-American Medicine in the Nineteenth Century," Medical History, 27 (1983), p. 51; on the acceptability of treatment, see Shortt, ""Before the Age of Miracles": The Rise, Fall, and Rebirth of General Practice in Canada, 1890-1940," in Charles Roland, ed., Health, Disease and Medicine: Essays in Canadian History (Toronto: Hannah Institute for the History of Medicine, 1984), p.130; Warner, "Intervention and Identity," in Warner Therapeutic Perspective, pp. 11-36; Paul Starr, in The Social Transformation of American Medicine, p. 14, suggested that diagnosis and prognosis were at least as important as treatment, as did Charles Rosenberg in his introduction to George Rosen in The Structure of American Medical Practice, pp. 7-10. In this sense, Dickson's uncertainty and Philbrick's swift and decisive action, may have

opiates, the uncertainty of the condition of the body in specific diseased states, and a divided medical profession weakened the authority of doctors. That Philbrick was exonerated while Dickson was condemned suggests that the dual nature of opium as a poison and a medicine was socially determined; the judicious use of opiates related to the public acceptance of the individual's actions.

Hypodermic injection as extension and subversion of scientific authority

Doctors credibility was related to their ability to heal, and their capacity to draw upon extant medical knowledge and technology to achieve that end. The discussions about poisoning treatment are incidents of sharing of knowledge. However, knowledge is not the only type of shared medical resource. Doctors also relied upon certain forms of technology to achieve their goals and bolster their credibility. The stomach pump, for example, was an aid to treating poisoning; Grasett's innovation without the stomach pump was a piece of knowledge he shared with his confreres for the good of the profession, and the patient. Knowledge bolstered a doctor's ability to function quickly and decisively; technology enhanced his or her ability to heal. Key to medical power, then, was the emergence of new technologies. When discussing the medical use of drugs, a central technological development was the hypodermic syringe. The syringe--basically the tube and plunger--has been used since classical times, but the hypodermic needle--a hollow needle attached to the syringe--was an innovation of the nineteenth century. Use of

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contributed to onlookers' perception of their credibility.

hypodermic medication developed slowly from the 1830s to the 1850s.[76] Wielding a syringe, the doctor could administer medicine without the participation of the patient. The doctor did not require the patient to swallow, and the drug would not be discharged through vomiting or defecation (in the case of suppositories). The individual became a passive--though not disinterested--player in the medical drama.

The hypodermic syringe gave doctors control over the administration of drugs that they viewed as essential to their ability to heal the patient. Morphine injection quickly became a popular form of medication. As one writer noted of the hypodermic syringe in 1871, "Physicians of the present day carry in a pocket-case more active elements of prompt medication than used to be packed in a good-sized pair of saddle bags."[77] Here the issue of power and control are central; the syringe enabled the prompt action that Warner noted was key to a doctors' ability to secure power. Also the ability to administer drugs without the participation of the patient is power. These sentiments emerged in the numerous discussions of the benefits and dangers of hypodermic medicine printed in Canadian medical periodicals in the middle of the century. These discussions suggest how doctors quickly came to recognize that hypodermic morphine could be a panacea for many illnesses. Considering this potent therapeutic tool, some felt that the habitual use of

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[76]See Norman Howard Jones, "A Critical Study of the Origins and Early Development of Hypodermic Medication," Journal of the History of Medicine 2 (1947): 201-242; John S. Haller, Jr. "Hypodermic Medication: Early History" New York State Journal of Medicine (October, 1981), pp. 1671-1679. On hypodermic medication and addiction, see Morgan, Drugs in America, pp. 22-4; David Courtwright, Dark Paradise, pp. 46-48; Berridge and Edwards Opium and the People, pp. 135-149.

[77]"Hypodermic Medication," Canada Lancet 12 (September, 1879), p. 4.

morphine through hypodermic injection was nothing more than an inconvenient side effect, potentially beneficial, and neither serious nor difficult to treat. As long as doctors retained their control over the patient, morphine injection was exclusively beneficial.

One of the earliest extended discussions of the use of hypodermic injections of opiates to appear in Canadian medical periodicals drew upon work being carried out in Great Britain. In 1860, the British American Journal printed an article entitled "On the treatment of neuralgia and other diseases by narcotic injections--the hypodermic method." It drew upon an article by Dr. Alexander Wood in the British Medical Journal, and compared it to the pioneering work of others. Wood's investigations, the editor of the Journal observed, "has effected an almost complete revolution in the management of Neuralgic affections and . . . the utility of the practice is now acknowledged in other affections."[78] Wood discussed recent discoveries on the characteristics of nerves, and then outlined his discovery: by injecting opiates directly at the location of pain, he could provide almost immediate relief. Wood described the speed and immediate effectiveness of opiate injection. His descriptions of the treatment's results alluded to an immediate benefit of the technology: "the severe pain... is at once cured;" "from that day she has never had a touch of neuralgia again;" "the pain became instantly relieved, and soon left entirely. Since then it has never returned."[79] In one case, he punctured a woman "upwards of one hundred times, always in different places," following the pain around the body, until the only area left unpunctured, and in pain, was on the head. Yet he could not

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[78]British American Journal, 1 (January, 1860), p. 24.

[79]Ibid, p. 26

find the exact point of pain, and felt he could do nothing until he located an exact spot, by feeling around the surface of the head. Several months later he did find that spot, injected the opiate, and healed his patient.

Despite these results, Wood concluded his observations with several notes of caution, and here the acquired knowledge and concerns over opiates emerged. He assured his reader that using Nepenthe (laudanum) could alleviate fears of "gastric disturbances" in place of opium. He noted potential toxicity of injected opiates in "elderly people," but assured his readers that there was little danger. His final caution was less clear, "you must choose the proper person for the use of the remedy." While this warning may have been a cryptic message about guarding against giving morphine to habitual users, Wood was likely referring to the idea of specificity. Each body had an individual reaction to drugs, and so each body needed to be treated carefully, by a learned physician. This cryptic note alluded to the need for a proper administration of hypodermic morphine. Only a properly trained physician could administer hypodermic drugs safely.

After the extract from Wood's article, the British Medical Journal included an abstract discussing the use of hypodermic injections of morphine by "Mr. Hunter," probably Dr. Charles Hunter, a British physician who refined Wood's approach by demonstrating that injections did not need to be administered locally. Hunter's conclusions "revealed [hypodermic morphine's] true potential."[80] As with Wood's article, the editor included brief cautionary notes regarding hypodermic medication for the benefit of the Canadian audience; these cautions indicate the priorities of the doctors regarding

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[80]Berridge and Edwards, Opium and the People, p. 139.

therapeutics. Unconcerned with addiction, the editor noted that "the practice is occasionally however, not without bad consequences, the worst of which are the formation of little abscesses and erythema."[81] Since opiate injection provided a means of direct intervention into the body of the patient, medical concern revolved around physical responses, not behavioral change. Because doctors were finding the location of pain on the surface of the body, they did not need to look further than the exterior for detrimental effects of their treatment. Wood's journey around the body of his patient to locate the exact spot of pain demonstrates how the doctor was still concerned with immediate consequences of physiologically active drugs; when a drug therapy resulted in successful alleviation of pain, side effects were not important.[82]

In 1866, the Canada Medical Journal published an article by Dr. James Ross of Toronto that presented morphine injection as a panacea for many ills otherwise difficult to treat. Entitled, "The Hypodermic Injection of Morphia," this article presented ten cases in which the author found morphine infection useful. Three of Ross's cases were of "Cholera Canadensis . . . a disease that has proved very troublesome and unmanageable to every practitioner acquainted with it . . . "[83] and the other seven cases presented a variety of conditions which hypodermic morphine remedied. Ross's article is notable not only because it is an early instance of Canadian discussion of morphine injection, but because he displays its broad applications.

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[81]British American Journal 1 (January, 1860), p. 28,

[82]Rosenberg, in Rosen, The Structure of American Medical Practice, pp. 7-9.

[83]Canada Medical Journal, 2 (April, 1866), p. 437.

Several of Ross's patients found no relief when he administered drugs orally, but morphine almost immediately gave positive results. He injected morphine into a 35-year-old woman (case 1) who "had suffered under meierania of the right side for four or five months," and would not respond to the "usual remedies, both anodyne, and anti-periodic." The results were rapid: "in ten minutes, [it] produced a peculiar sensation of dizziness in the head, and within an hour the pain had entirely subsided and she fell asleep."[84] Ross proceeded to inject half a grain of acetate of morphia for the next ten days, then every second evening for ten days more. The result was certain: "she has had no return of the pains, and now enjoys good health." A case of a 30-year-old man who had chronic pain in his neck, "evidently of a neuralgic character," was relieved in about fifteen minutes. Over the next several days, Ross repeated the injections whenever the man began to feel the pain. Again, the results were definite: "I saw him two months after in good health, when he expressed himself very thankful for the relief he had obtained."[85]

Ross's use of hypodermic morphine, his implications that the injections cured these cases of chronic pain, and his enthusiasm for the new technology, illustrates a process of potential iatrogenic dependency creation. Whether the injections served as temporary relief while the body healed itself, or the morphine had no other effect than that of deadening the pain, the introduction of hypodermic morphine as a source of immediate

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[84]Ibid, p. 434.

[85]Ibid, p. 434

relief and gratification could create addiction.[86] Even though a dose of one-half grain is well below the amount needed to create a physical dependency, as David Courtwright noted, the psychological effects on both the patient and doctor, created a tendency towards increased use:

> The patient, instantly reinforced by the relief of pain and infused with a sense of well being, would have remembered the wonderful effect of the drug administered in this way, and would likely have requested the same treatment in the future, particularly if he suffered for a chronic disease and experienced recurring pain. The physician... was also reinforced by the injection. His patient responded quickly; pain disappeared and mood improved.[87]

Although these specific cases may not necessarily have led to addiction, by the 1880s, hypodermic morphine addiction was a clearly defined physiological issue, and enough of a problem to merit several key publications on the topic. Among these publications was H. H. Kane's bombastic Hypodermic Injection of Morphine (1880) and Eduard Levinstein's highly influential Morbid Craving for Morphia (1878).[88]

The use of hypodermic morphine is difficult to isolate in doctors records, since treatment may have only listed morphine as an administered drug. Thomas Geddes' records of drug use (Table 2.1) do not describe whether he employed a hypodermic in all of these cases, but at least one case of hypodermic morphine dependency may have

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[86]Berridge and Edwards Opium and the People, p. 142; Parssinen, Secret Passions Secret Remedies, p. 81-82; Morgan, Drugs in America, pp. 26-27; Courtwright, Dark Paradise, pp. 46-48; Musto, The American Disease, pp. 72-75.

[87]David Courtwright, Dark Paradise, p. 47.

[88]H. H. Kane Hypodermic Injection of Morphine: Its History, Advantages and Dangers (New York: Charles Bermingham, 1880); Eduard Levinstein Morbid Craving for Morphia (Die Morphiumsucht) (London: Smith and Elder, 1878).

resulted. In 1871 Geddes brought a patient to the Saint John Lunatic Asylum. His patient was suffering from what was likely morphine addiction, the result of Geddes' therapy. "The tendency," wrote Dr. John Waddell, the asylum physician, "is to injure himself by taking morphine which was left for injections."[89] Geddes had left a hypodermic syringe with the patient, and the physician-endorsed self-treatment had lasted for over two years.

Some physicians who wrote of the benefits of hypodermic injection of morphine were not ignorant of the potential for addiction this practice presented; they just did not, initially, view addiction as anything more than a temporary condition, a necessary side effect of treatment, that only needed the physician's action to control and remedy. In his Manual on Hypodermic Injection (1869), Roberts Bartholow, an Ohio physician, illustrated the potential for developing the "morphia habit" when the physician repeatedly injects hypodermic morphine over an extended period (he does not specify how much or how long). After listing the physical symptoms of morphine habit, Bartholow adds that in extreme cases "mental disturbances . . . may accompany the physical derangement."[90] Despite the severity of the habit, Bartholow assured his reader that the conditions "may be averted by judicious treatment." His assertion was confident: "After quite a large experience in this method of treatment, I am able to say that I have not yet experienced any special difficulty in ceasing the injections after long use..."[91] He set out a number of

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[89]Case Book of the Saint John Lunatic Asylum, Public Archives of New Brunswick (RS 140, B3), July 18, 1871, p.553.

[90]Roberts Bartholow, A Manual on Hypodermic Injection: The Treatment of Diseases of the Hypodermic Method (Philadelphia: J.B. Lippincott & Co., 1882), p. 72.

[91]Ibid, p. 72.

"rules" for his readers--who would themselves be physicians--to reduce a patient's morphine dependence through injection. The physician should gradually decrease the amount of morphine, and the doctor should not inform the patient of this change. By maintaining his or her control over the use of morphine, the doctor could ensure a return to full health.

Bartholow's confidence that morphine addiction was an insignificant, possibly even therapeutically beneficial, side-effect of judicious treatment was reflected in other discussions of the value of hypodermic morphine. In the Canada Medical Journal of 1871, Dr George Oliver of London England likewise viewed the morphine habit as a temporary condition that may actually be necessary to heal the patient. Oliver observed that the morphine habit "is evidently akin to the opium-habit" but the former condition was not accompanied by the gastrointestinal problems attending prolonged consumption of opium. He noted the continued hypodermic use of morphine "not unfrequently does good to the stomach and bowels, and above all, to the circulation."[92] He agreed that in some conditions, particularly individuals suffering from "obstinate chronic neuralgia," the morphine injections should be avoided. Yet he asserted that "there is another important class of cases . . . in which we may secure all the good out of morphia.... set up a morphia-habit, and then get safely over the habit by firmly withholding the morphia, and yet retain the good results."[93]

Oliver presented a case of a woman who was suffering from severe gastrointestinal

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[92]Canada Medical Journal, 8 (August, 1871), p. 92.

[93]Ibid, p. 92.

problems after "what appeared to be an attack of ordinary typhoid." Like Ross, Oliver tried other remedies, but they either had no effect, or complicated the condition. After several weeks of failed treatments, and several weeks of pain for his patient, Oliver decided to "rely entirely upon the hypodermic injection of morphine night and morning." As with earlier cases, the results were rapid, and favourable. "Progress dated from the time the irritated bowel got under the influence of hypodermic morphia."[94] Soon, however, Oliver noticed the dependency that he had created:

> In the course of a few weeks, it was observed that the omission of only one injection at the usual time caused the patient to pass several miserable hours... Being fearful lest my patient, imperfectly cured, should without the injections, relapse into something like her previous state, and seeing how useful the morphia appeared to be as a tonic, I advised the night and morning injection to be continued.[95]

After two months he reduced the injections to once per day; after five months, when the patient seemed restored to her health, Oliver decided to cease the treatment. "I sent her away without her syringe (she injected herself), and she passed a few very miserable days, and got over it without any further trouble."[96] He justified his decision to maintain the dependency by claiming that otherwise the patient may have died.

Oliver's discussion presented the issues of medical power through the use of hypodermic injections of morphia as a balance between the accepted authority of the doctor, and the power of the visible therapeutic results. He used the needle, like Ross had

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[94]Ibid, p. 94.

[95]Ibid.

[96]Ibid, p. 95.

done, as an alternative solution when more familiar treatments failed. Doing so, he gained confidence in his authority and also believed he earned the patient's respect. He decided that the treatment should continue, yet he did relinquish his control over the actual administration of the drug by permitting the patient to inject herself. In his eyes, he maintained control, since he was still making decisions on the nature of the therapy. Finally, he decided to cease the injection, and he did not suggest that his patient might resist the doctor's decision, or continue to use morphine injections to maintain her addiction. Oliver's inference that the woman did stop on his orders does not necessarily mean she actually listened to his advice. It does, however, demonstrate the confidence Oliver had that his patient would listen; he had no reason to believe that she would not do so. The investigations of Bartholow and Oliver took place during a transitional period in the understanding of opiate therapy and habituation. Within the next several years, concern over opiate addiction would replace the confidence in hypodermic morphine with an awareness of the dangers of unsupervised self-application of opiates.

The power and control that the hypodermic needle provided to the doctor also presented several challenges to the physician's authority. These challenges were both through the physical reaction of the body to injected morphine, and the patient's decision to continue the injections after the physician decided they were no longer necessary. As I discussed above, the initial therapeutic reaction to opiate poisoning was emetic and purgative. However, when injected opiates caused an overdose, the purging and stomach pumping treatment lost its value. Some doctors managed to incorporate the hypodermic syringe into successful treatment of opiate poisoning. For example, one doctor used

hypodermic atropine to alleviate the effects of opiate poisoning.[97] Hypodermic medication therefore led to further declines in earlier therapeutics. Now overdose had to be treated with other substances: since the drug was injected into the body, gastrointestinal purging would do little. A story of the death of a man from the hypodermic injection of morphine in 1871 noted that, when he was found, "every remedy and appliance known to science were promptly used for his relief but without avail."[98] Dr. Oliver provided a brief case in which he was faced with a severe reaction to injected morphine with more success. As the patient cried out in alarm, and her eyes "bulged out," Oliver administered a traditional medicine, "brandy...[and] all came right in about half an hour."[99]

Hypodermic medication could further challenge the therapeutics of doctors when patients began to take hypodermic opiates habitually. Dr. Jamison Beemer Mattison, an addiction specialist in Brooklyn, wrote about a Canadian woman's treatment for addiction at his clinic in 1880. He charged that "the course of the medical gentlemen in supplying this patient with a hypodermic syringe and solution of morphia, with instructions for self-taking.... was--to put it mildly--exceedingly indiscreet. Such action and advice are almost

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[97]See George Ross, "Case of Poisoning by Opium, successfully treated by the Hypodermic Injection of Atropia," Canada Medical Journal, 6 (August, 1869), pp. 62-65. See also "Treatment of Opium Poisoning," extracted in Montreal Medical Journal 23 (October, 1893), pp. 312-315.

[98]Anonymous, "Death from hypodermic injection of morphia" Canada Medical Journal 8 (November, 1871), p. 251-253.

[99]Canada Medical Journal, 8 (August, 1871), p. 95.

certain to end in addiction."[100] For Mattison the onus was on the doctor to retain control; the "judicious administration" of opiates, discussed by his medical forebears, necessitated the doctor's control over this new technology. He called for physicians to ensure their authority by not relinquishing control of medicine to the patient. This entreaty might have been impossible for physicians to heed, however, since, as Morgan has observed for the United States, hypodermic syringes were readily available.[101] Some records suggest that Canadians had similar access to such items. At the Niagara Apothecary, for example, several non-physician patients' records included the purchase of syringes, although these are not specifically identified as hypodermics.[102]

The concern over the potential for addiction to develop from the hypodermic injection of morphine fuelled concern over addiction in general. A key player in these debates was Edward Levinstein, a German clinician, whose first concerted study, Morphiumsucht was translated into English as Morbid Cravings for Morphine in 1878. Some argue that Levinstein's work on treatment of morphine addiction instigated the medicalization of the condition he called morphiomania.[103] His work may also have brought to a close the unfettered therapeutic use of hypodermic morphine. Like Oliver,

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[100]J. B. Mattison, "A Case of Double Narcotic Addiction," Canada Lancet 17 (December, 1884), p. 103.

[101]Morgan, Drugs In America, p. 24.

[102]Niagara Apothecary Customer Accounts Records (Archives of Ontario, F1373-11-0-1 to 4), assorted customers accounts. These records are organized by surname.

[103]Harding, Opium Addiction, Medicine and Morality p. 58; Berridge and Edwards Opium and the People (p. 142) see Levinstein as the first "all-embracing analysis of the condition of morphine addiction to reach the English medical profession."

Levinstein found the best means to cure addiction was often through immediate cessation of the drug. Unlike Oliver, Levinstein did not find addiction to be benign, nor did he feel the process so simple, or so rapid. In 1877, the Canada Lancet printed a translation of one of Levinstein's earliest articles, "The Abuse of Hypodermic Injection of Morphia (Morphiomania)," in which he attacked the practices and beliefs of physicians like Oliver. "The producers and propagators of the disease are those physicians who, in affections more or less painful and of great length, have allowed their patients to inject themselves." Most culpable, Levinstein charged, were those physicians "who know the relief produced, but not the dangers."[104] He proceeded to list the symptoms of morphiomania, physical and mental, drawing parallels with "dipsomania." His discussion concluded with three case studies of patients he treated in his clinic. In the accounts of these patients, the themes of the untrustworthiness of the addict and the power of the physician emerge.

Levinstein insisted that the patient would try any means possible to gain access to morphine, and should not be trusted. In order to "wean inveterate morphiomaniacs from their drug is impossible," he explained, "unless they be treated as prisoners."[105] The deceptiveness of the patient had to be countered by the vigilance of the medical attendants. The severe physical derangement of the patient during the first three days would be "so grave, that it is necessary the physician should be profoundly penetrated by the duty he has imposed on himself to regard calmly those sufferings, and have neither ear nor heart for despair, lamentations and tears." The doctor must exercise a dual control: he

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[104]Canada Lancet, 9 (January, 1877), p. 138.

[105]Ibid, p. 141.

must control his patient, and he must control his own sense of sympathy.

In his concluding remarks, Levinstein returned to his condemnation of doctors who permit their patients to administer hypodermics to themselves. He refused to accept the excuse that the doctor was too busy and, in such cases, Levinstein directed the doctors to administer morphine "internally," instead of hypodermically. This method, he claimed, "is not accompanied by that sensation of happiness, altogether useless, which makes that substance a source of pleasure."[106] Self-administration, meanwhile, was the only means by which the habit could develop. "Experience teaches that the use of morphia... as long as it is administered by the physician himself, does not conduce to morphiomania."[107] He concluded his article by noting that it was essential for society that the physician inject the drug personally: "the method of subcutaneous injections is a benefit to the human race; in the hands of the ignorant, it is a calamity."[108] Were the physician to lose control over the practice of medicine, society would be endangered.

To many nineteenth-century physicians, Levinstein's revelations were most likely remarkable not because he presented symptoms of conditions with which they would not be familiar, but because he presented these conditions in a medicalized format.[109] He presented detailed case studies, empirically observed, and made conclusions that made the

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[106]Ibid, p. 142.

[107]Ibid.

[108]Ibid.

[109]Parssinen and Kerner, "Development of the Disease Model of Drug Addiction in Britain, 1870-1926," Medical History 24 (July 1980), p. 279.

condition a medical rather than a moral condition.[110] Hypodermic morphine addiction, to Levinstein, was a distinct and dangerous pathological condition which resulted from a lack of self discipline on the part of the physician. For Levinstein, and for others, the physician shirked his or her duties to society when he or she relinquished control over medical technology. Medical knowledge and medical technology would be beneficial only when wielded by the proper authority. Just as earlier writers insisted upon the importance of the control of opiate administration by physicians, so Levinstein insisted upon the control of morphine injection by his peers. Society's safety depended upon it.

Introduced as a fast and effective means for physicians to treat their patients, the hypodermic injection of morphine soon became subject to the same qualifications as other forms of drug consumption. According to medical commentators, the power of the drug lay in the power of the physician, and it was in society's best interest that the physician retain this control. The medical profession would also benefit, since control over apparatuses, like control over administration of drugs, would add weight to the medical profession's insistence upon professional recognition.

Conclusions

Inherent within the poisonous nature of certain drugs lay both promise and danger for physicians. Doctors connected their interests in securing authority over the use of specific substances to the potential dangers of the mis-use of dangerous drugs. Yet the variability

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[110]I discuss the epistemological shift from moral to medical pathology in Chapter Four.

of the strength of opiates, combined with the imprecision of knowledge about the exact properties of complex drugs like opium presented challenges to doctors' quest for social and cultural authority. Since they were unable to define exactly the action of drugs upon the body, doctors scrutinized closely the therapeutics of their colleagues. Cases of iatrogenic poisoning weakened the credibility of doctors with the public, and the dangers of drugs which could potentially bolster their authority could also diminish it. The animosities that coloured the testimony during the Broom and Blackie incidents put medical witnesses' physiological opinions into sharp relief, but the conflicting evidence was the result of a variety of factors, some having little to do with the growth of anatomical or physiological knowledge. Varied opinions on the state of the body in health and disease, different therapeutic perspectives, contrasting pedagogical techniques, and even political affiliation prevented agreement among doctors. These social and epistemological factors, combined with the idea that medical science discovered objective facts, made expert witnesses' testimony peremptory, without necessarily being accurate.

Hypodermic administration of drugs subsequently offered a means of overcoming some of the challenges caused by imprecision of drug therapies. However, hypodermics presented a new set of concerns, and intensified some of the earlier dangers. With hypodermics, traditional treatment of overdosing from orally ingested drugs was essentially rendered ineffectual. Also, unlike oral consumption of drugs, which was a practice that predated the rise of professionalization in medicine, hypodermic administration of drugs was initially a distinctly medical procedure. Non-medical individuals who became addicted through hypodermic drugs were mis-using both a drug

and a technological innovation which offered such promise to doctors. The result was an intensified discussion over both the restriction of access to drugs, and reconsideration of the nature of drug addiction. While hypodermic morphine addiction may not have been the singular cause of a shift in medical attitudes towards non-medical drug use, the juxtaposition of the potential benefits of the new technology with the perception of an increased potential for addiction, intensified and shifted medical scrutiny of drug habituation.

3

Pharmacists, Physicians, and Authority in Mid-Nineteenth-Century Canada: Debates over the Professionalization of Pharmacy

The importance of dangerous drugs like opiates to medical therapeutics gave doctors reason to attempt to restrict the access to these substances. Their efforts focused upon both the education and authority of the vendors of medicine, and the extent of public access to "poisons." In this chapter I examine the emergence of pharmacy laws in Ontario, Quebec and Nova Scotia, the first three Canadian provinces to pass pharmaceutical incorporation acts. After a brief historiography to situate the discussion in mid-Victorian Canadian society, I discuss the British context of pharmacy and apothecary legislation, precedents to Canadian pharmacy laws. I then explore several attempts by Lower Canada doctors to gain control over the education and registration of apothecaries. Ideas of professional honour and the character of the individual affected the disparate theories on how best to ensure the safety of the people, and that economic relationships challenged the idea of professional transcendence in Ontario, Quebec and Nova Scotia. Finally, I consider the motivations behind the formation of poison laws themselves, using the example of the Ontario Pharmacy Act.

The creation of pharmacy laws is important to the broader issues of emerging authority over narcotic drugs. Effective legislation made requirements on the qualifications of vendors and the handling and sale of specific poisons. By linking poison laws with pharmaceutical incorporation legislation, legislators placed the responsibility of limiting improper access to certain substances under the purview of governments and professional associations. This process set a precedent. Controlling the retailing of

poisons was now ostensibly a state function, approved by the medical community, and managed by a legal organization. The pharmacy laws instigated in the late 1860s and early 1870s set the foundation for future enactments restricting the sale and use of "controlled" substances.

The drive for the regulation of the sale of medicine involved conflict between doctors and druggists over their often competing interests in the changing health services industry. Several writers have demonstrated that mid-century laws to license physicians tended towards the pluralistic.[1] Dedicated to ideas of liberty and free trade, legislators were unwilling to grant broad powers--and the social authority that accompanied them--to "regular" physicians. These same forces and ideals affected the movement to regulate the sale of drugs. Pharmacists' claims to professional status were hindered by the fact that theirs was not one of the "traditional" professions: medicine, law and the clergy.[2] Yet their claims as gatekeepers to dangerous medicines, and the need for properly-trained compounders of medicines, legitimised their efforts to achieve some form of professional closure. Doctors' quest for the right to define fact and value relating to drug use and

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[1]J.T.H. Connor, "Minority Medicine in Ontario , 1795-1903: A Study of Medical Pluralism and its Decline" (Ph.D dissertation, University of Waterloo, 1989); Elizabeth McNab, A Legal History of Health Professions in Ontario: A Study for the Committee on the Healing Arts (Toronto: Queen's Printer, 1970), pp. 9-12; Gidney and Millar, "The Origins of Organized Medicine in Ontario, 1850-1869," in Charles Roland, ed., Health, Disease and Medicine: Essays in Canadian History, (Toronto: Hannah Institute for the History of Medicine, 1984), pp 65-95; Gidney and Millar, "Doctors and the Cost of Occupational Closure, in Gidney and Millar, Professional Gentlemen: The Professions in Nineteenth-Century Ontario (Toronto: University of Toronto Press, 1994), pp 85-105.

[2]See Eliot Freidson, Profession of Medicine: A Study of the Sociology of Applied Knowledge (Toronto: Dodd, Mead & Company, 1970), pp. 3-6, for more on the traditional professions.

distribution was proscribed by the pharmacists' own claims to legitimacy and authority over the properties of and access to dangerous drugs.

A key issue, over which the two groups argued, was how best to ensure the safety of the population in the face of perceived widespread misuse of poisonous drugs. Doctors felt they should have jurisdiction over the education and trading practices of druggists, while pharmacists felt they should regulate themselves; to do so, they needed to have a legally incorporated professional body. Here the nineteenth-century conception of the professional as an individual who could transcend the temptations and corruption of the capitalist marketplace affected the debates. Doctors, who were still consolidating their professional associations, implied that they were above the influence of the market, and were thus able to oversee the actions of druggists with an objective and authoritative scientific perspective. Druggists argued that physicians were not above the temptations of the marketplace. Nevertheless, pharmacists contended that by achieving professional status, pharmacists would be able to regulate themselves, and thereby protect the public from the unscrupulous trader. The results affected access to and control of drugs in the Canadian provinces.

Historians of pharmacy incorporation laws have argued that these laws resulted from the efforts of a class of educated and influential tradespeople who hoped to create a monopoly and secure their own economic advantage. Several examinations of the British pharmacy laws explore this process.[3] Studying the 1841 creation of the Pharmaceutical

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[3]S. W. F. Holloway, "The Orthodox Fringe: The Origins of the Pharmaceutical Society of Great Britain" in W. F. Bynum and Roy Porter, eds., Medical Fringe and Medical Orthodoxy, 1750-1850 (London: Croom Helm, 1987), pp. 129-157; Peter

Society of Great Britain, S. W. F. Holloway contended that the Society emerged through the efforts of a few wealthy and influential London chemists and druggists who hoped to gain economic and political advantages, irrespective of the needs or conditions of the tradespeople in the provinces. He thereby challenged the romantic assertions of earlier pharmacy historians that the creation of the Pharmaceutical Society represented a growing occupational consciousness. Peter Bartrip illustrated how pharmacists and physicians used public fears about the apparent widespread cases of accidental and intentional poisoning by arsenic to secure a measure of social power, manifested in the British Arsenic Act of 1851. By playing on these public fears, Bartrip argued, the medical profession and apothecaries began a process of chipping away at the monolithic *laissez faire* ideology that had limited government involvement in issues of trade. Virginia Berridge and Griffith Edwards, in Opium and the People, found that a similar class-centred activity influenced the creation of the Pharmacy and Sale of Poisons Act of 1868. This latter legislation, which influenced the Canadian pharmaceutical legislation, was the result of concern by doctors and pharmacists about public availability of dangerous drugs, including opium's prevalence among the working classes.

The Canadian history of pharmacy has been given much less attention, but most of the studies have taken similar perspectives as the British historiography. Apart from the generally uncritical histories written by or for the pharmacists themselves, the few other

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Bartrip, "'A Pennurth of Arsenic for Rat Poison': The Arsenic Act, 1851 and the Prevention of Secret Poisoning." Medical History 36 (1992), pp. 53-69; Virginia Berridge and Griffith Edwards, Opium and the People: Opiate Use in Nineteenth Century England (London: Allen Lane, 1981), Chapters 7-10.

examinations of pharmacy in Canada reveal class and status-based motivations.[4] R. J. Clark's examination of the Ontario College of Pharmacy, for example, argues that the pharmacists' political activity strove to achieve a degree of occupational autonomy from the encroachments of the physicians and grocers.[5] This activity, Clark observes, was determined by the economic context in which the druggists operated.[6] However much pharmacists hoped to raise themselves above trade, through the exercise of their esoteric knowledge, they were firmly ensconced in everyday commercial life.

Economic motivations, however, were not necessarily central to the drive for professionalism. Gidney and Millar contend that the development of professions in Ontario was part of a broader social formation process. Professionals insisted that only valid and honourable professions could guide the healthy development of Upper Canadian society. The Victorian concept of the professional as an individual who could rise above the temptations of the capitalist marketplace, provides a compelling means of examining the motivations of pharmacists, whose occupation was rooted in trade.[7] To explain

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[4]See Stanley William Jackson, The Pharmacy Act of Ontario (Toronto: Ontario College of Pharmacy, 1967); E. Stieb, One Hundred Years of Pharmacy in Canada (Toronto: Canadian Association of the History of Pharmacy, 1969).

[5]R. J. Clark, "Professional Aspirations and the Limits of Occupational Autonomy: The Case of Pharmacy in Nineteenth Century Ontario," Canadian Bulletin of Medical History/ Bulletin Canadien d'Histoire de la Médecine 8 (1991), pp. 43-63.

[6]Johanne Collin's recent article demonstrates the complex and unique nature of the development of Quebec pharmacy. Collin, "Genèse d'une profession: les pharmaciens au Québec au XIX[e] siècle," Canadian Bulletin of Medicial History/ Bulletin canadien d'histoire de la medecine 14 (1997), pp. 241-262.

[7]Gidney and Millar, Professional Gentlemen pp. 203-211; Thomas Haskell, "Professionalism *versus* Capitalism: R. H. Tawney, Emile Durkheim, and C. S. Peirce on

adequately the development of early Canadian pharmacy laws, which were the first legislative attempts to control the sale of "dangerous" drugs, this "professional-conflict model" needs modification. It should be expanded to consider the idea of professional honour, the process of professionalization, and the interaction between professional idealism and public scrutiny.

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The pharmacists' uncertain legal status, the imprecision of existing poison laws, and the social assessments of dangerous drugs became an issue of public debate at the end of 1870. In November, John Gale and George Albert Mason initiated a project in Toronto to test the integrity of the extant law governing the sale of poisons in Ontario.[8] Approaching several dozen pharmacists in the city, Gale attempted to buy a small quantity of laudanum. He offered a number of different reasons for the purchase, but never provided documentation required by the law to authorize the sale. Twenty-five of the druggists sold Gale the drug; some of them confided that they were contravening the law, while others demanded a detailed explanation of the ailment for which Gale needed the

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the Disinterestedness of Professional Communities," in Thomas Haskell, ed., The Authority of Experts: Studies in History and Theory (Bloomington: Indiana University Press, 1984), pp. 180-225; David A. Hollinger, "Inquiry and Uplift: Late nineteenth-Century American Academics and the Moral Efficacy of Scientific Practice," in Haskell, ed., The Authority of Experts, pp. 142-156.

[8]Mason's occupation is not clear. Some writers referred to him as "Whiskey Detective Mason" while others called him the "notorious police informer." Neither epithet seems to have referred to an official occupation, but rather to his preoccupation with seeking out violators of the liquor licensing act, and prosecuting them for profit. On Mason's reputation, see Montreal Star, July, 1869; Canadian Pharmaceutical Journal, 4 (January, 1871).

substance. With this evidence in hand, Gale and Mason approached the police magistrate. They claimed that the pharmacists had violated the Strychnine Act of 1859.[9] This act placed minimal requirements on the sale of "arsenic, corrosive sublimate, strychnine, or other... deadly poison" but these conditions were vague and generally unworkable. It required a person who wanted to buy certain substances to produce "a certificate or note from....a Physician, Surgeon, or some Priest or Minister of religion."[10] Mason and Gale's motivation seems straightforward: "one moiety of the penalty shall belong to the prosecutor and the other moiety to her majesty;" the maximum fine was $40.[11] The practice was not new to Mason, whose nickname, "Whisky Mason" came from his investigations of and profit from, violations of liquor licensing laws.

The subsequent trial demonstrated the ambiguities of the term "poison" and the need to define who had authority to delineate what substances should be controlled. The defence argued that a "deadly" poison was one that caused death immediately, which laudanum generally did not do. Witnesses for the defence, physicians, university professors and pharmacists, argued that laudanum was not a deadly poison, and in fact "is kept in almost every house as a medicine."[12] Several newspapers and professional journals

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[9]On details of the case, see Canada Pharmaceutical Journal, 4 (January, 1871), pp. 6-7.

[10]Statutes of Canada (1859) Cap XCVIII.

[11]Canadian Pharmaceutical Journal, 4 (January, 1870), pp. 6-7. Neither Mason nor Gale appear to have been lawyers, and the "prosecutor" of the case appears to be the person who brings the case against the defendant.

[12]Canadian Pharmaceutical Journal, 4 (December, 1870), p. 180.

brought the case to the public. The Globe argued for public convenience, stating that although laudanum was "often resorted to by suicides, [it] is not deadly in small quantities, such as are needed, say, to ease a toothache or to check diarrhoea, and it is a resort at all hours when the application to the minister or surgeon would be very difficult or inconvenient."[13] When cross-examining the pharmacists, the prosecution asked why they were so careful to scrutinize the purchasers, if laudanum was not a "deadly" poison.[14] According to the prosecutors, if pharmacists recognized the dangers of laudanum, then they must have believed it was poisonous, despite what the expert testimony argued. The magistrate seems to have agreed; he decided against the druggists, and fined them each $25 and costs.[15]

British experience with pharmacy laws

As I will discuss below, the Gale and Mason incident took place in Ontario as pharmacists were pushing for incorporation acts in several Canadian provinces, and the creation of Canadian pharmaceutical laws reflected earlier efforts in Britain to achieve the incorporation of pharmacy. Johanne Collin and Denis Béliveau argue that some of the

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[13]"The Sale of Poisons," Globe, November 29, 1870.

[14]Canada Lancet, 3 (January, 1871).

[15]Canadian Pharmaceutical Journal, 4 (January, 1871), p. 7. The pharmacists' lawyer argued that the evidence taken in the case "was in some points defective," and the court agreed to try another case as a test. In this one, Mason did not bode so well. As the Canadian Pharmaceutical Journal noted several months later, Gale and Mason had a falling out, and Gale abandoned Mason in the courts. Since Gale was Mason's principal witness, the case against the pharmacists fell apart. (Canadian Pharmaceutical Journal, 4 (April, 1871), p. 40.)

restrictions imposed by the Apothecaries' Act upon general practitioners led some practitioners to emigrate in search of better, less restrictive opportunities. Many came to North America.[16] Likewise, many Canadian physicians and pharmacists had been born or trained in Great Britain.[17] Attempts by the medical profession of Great Britain to gain control over pharmacy had their parallels in Canada. Examining the British context helps clarify the diverse occupations encompassed under the heading of "pharmacist," including chemist, druggist, pharmaceutical chemist and apothecary.[18] Examining the historical development of these linguistic distinctions helps us to understand the nature of the tension between doctors and pharmacists in Canada. Before exploring the mid-century Canadian experience, therefore, we turn to Britain.

The main precedents in these distinctions can be found in the progress of British

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[16]Johanne Collin et Denis Béliveau, Histoire de la Pharmacie au Québec (Montreal: Musée de la pharmacie du Québec, 1994), pp. 71-2.

[17]See Gidney and Millar, Professional Gentlemen, esp. 23-4 for the doctors; the background of pharmacists is not detailed in any systematic way in secondary literature. See, however, biographies provided in the Dictionary of Canadian Biography for several key members of the pharmaceutical profession, including John Kerry, William Elliot, Edward Shuttleworth, and Benjamin Lyman. Individual biographies are also available on people such as Shuttleworth (Ernst W. Stieb, "Edward Buckingham Shuttleworth, 1842-1934" Pharmacy in History 12 (1970), pp. 91-116) and J. B. D. Fraser (Allan C. Dunlop, "Pharmacist and Entrepreneur: Pictou's J. D. B. Fraser" reprinted from Nova Scotia Historical Quarterly 4 (March, 1874), pp. 1-20.).

[18]The acts themselves noted the multiplicity of pharmaceutical practices, when they listed the titles which duly licensed pharmacists could use. The Ontario Act, for example, prohibited anyone who did not hold a license from the college of Pharmacy, "to assume or use the title 'Chemist and Druggist,' or 'Chemist' or 'Druggist' or 'Pharmacist or Apothecary' or 'Dispensing Chemist or Druggist'." The Quebec and Nova Scotia Act added the term "pharmaceutist." Far from merely noting differences in labelling, these numerous titles refer to an historical delineation between the various branches of pharmacy.

legislation from the end of the eighteenth century to the 1868 Pharmacy Act. Prior to 1868, each of the three branches of pharmacy was represented by different, often conflicting occupational associations. Apothecaries traditionally were individuals who would often attend the sick, prescribe for them, and then make up the medicine. Legal precedent forbade apothecaries from charging for diagnosis or prescription; they could charge only for compounding and selling drugs. Druggists, traditionally, had been individuals who simply traded in drugs, and chemists were compounders of more complex substances. The distinction between the latter two trades blurred significantly before the beginning of the nineteenth century. Apothecaries contended that chemists and druggists had no formal training in the properties of drugs, and were therefore a public health danger.[19]

In 1815, after several years of lobbying and concessions, the Apothecary's Company of London managed to see the Apothecaries' Act passed. The initial aim of this legislation for the apothecaries themselves had been to reassert control over the business of drug compounding and trade. Through the machinations of some powerful drug merchants, the act included a clause that specifically exempted chemists and druggists from the provisions of the act. Although many historians have viewed the act as a positive step in the rise of the profession of pharmacy, Holloway argues that it was an attempt by physicians and surgeons to reassert a rigid hierarchy of medical occupations. According to this interpretation, apothecaries would hold a position subservient to physicians.

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[19]Roy and Dorothy Porter, "Rise of the English Drug Industry: The Role of Thomas Corbyn," Medical History, 33 (1989), p. 282.

Doctors saw the act as a means of nipping in the bud the upward aspirations of the apothecaries.[20]

Unfortunately for the doctors, their results did not favour the physicians' aspirations. As Holloway demonstrates, the Apothecaries' Act provided no concise definition of the role of an apothecary. Such a definition was "essential to the enforcement of the Act."[21] The only role of the apothecary that the act specifically described was the fifth clause, which stated that "it is the duty of every ... apothecary to prepare with exactness and to dispense such medicines as may be directed for the sick by any physician."[22] The doctors had hoped this provision would place apothecaries in their dutiful subservient position, but subsequent legal decisions disappointed the physicians. The courts determined that an apothecary was anyone who was a practitioner and mixed and prepared medicines. These discussions had a profound effect upon general practitioners, most of whom also provided medicines for their patients.[23] Under this interpretation, no practitioner could make up medicines for a patient unless he held a license from the Apothecaries' Company. Furthermore, the Act required anyone who

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[20]Holloway, "The Apothecaries' Act, 1815: A Reinterpretation. Part I: The Origins of the Act." Medical History, 10 (April 1966) pp. 107-129. Irving Loudon discusses multiple interpretations of the Apothecaries Act in Medical Care and the General Practitioner: 1750-1850 (Oxford: Oxford University Press, 1986), especially Chapters 6, 7 and 8.

[21]Holloway, "The Apothecaries' Act, 1815: A Reinterpretation. Part II: The Consequences of the Act." Medical History 10 (July 1966) p. 221.

[22]Quoted in Holloway, "Apothecaries' Act," Part 2, p. 221.

[23]Ibid, p. 224; Loudon, Medical Care and the General Practitioner, pp. 171-173.

sought an apothecary's license to undergo five years of apprenticeship prior to receiving that licence. This clause "carried with it the implication that the general practitioner was a tradesperson, not a member of a learned profession."[24] By the late 1820s and early 1830s, judicial decisions further permitted apothecaries to receive payment for attendance. By 1858, the distinction between a university-trained practitioner and what Roy and Dorothy Porter call an (apprenticeship trained) "apothecary-cum-general practitioner" had blurred to the extent that the Medical Act of that year recognized both types of practitioner in its provisions.[25]

The tendency for the apothecary to begin "leaping over the counter, stepping into the physician's shoes, and becoming a prescriber in his own right," which had begun prior to 1815, came with a price.[26] John Crellin notes that the 1815 Act permitted apothecaries to concentrate on medical practice; those who preferred to maintain their dispensing business often left the task to a subordinate.[27] Apothecaries' general tendency to eschew dispensing opened new opportunities for more general dispensing businesses. The Porters suggest that in doing their rounds, apothecaries neglected their shops, thereby leaving openings in the trade for druggists and dispensing chemists.[28] Druggists and chemists

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[24]Holloway, "Apothecaries' Act" Part 2, p. 224.

[25]Roy and Dorothy Porter, "Rise of the English Drug Industry," pp. 280-281.

[26]Ibid, p. 281.

[27]J. K. Crellin, "Pharmaceutical History and its Sources in the Wellcome collections," Medical History 11 (1967), p. 216.

[28]Roy and Dorothy Porter, "Rise of the English Drug Industry," pp. 280.

recognized their similar occupational interests, and often united for mutual benefit against legislation or the hazards of their business. In 1839, druggists and chemists formed the "Druggists Provident Association," a mutual benefit association. Two years later, under the leadership of Jacob Bell, a wealthy London druggist, many drug wholesalers and chemists met in London to form the British Pharmaceutical Society. They set up a system of lectures, which eventually become a formal School of Pharmacy, and in 1843 the Society received a royal charter. Not only was the Pharmaceutical Society the result of the distinct actions of an elite among the pharmacists to extend their values and control over the entire profession, but by creating a basis for more detailed scientific investigation, it also helped pharmacy to gradually gain in professional scientific authority.[29]

By the 1840s, then, many British chemists and druggists had united under the common occupational title and ideal provided by the Pharmaceutical Society, although they were far from a consolidated group. They did manage to attract members of the Society of Apothecaries who had retained a concern for dispensing rather than the preoccupation with medical practice.[30] The society, as Holloway points out, was a reaction against attempts by other members of the medical community to attempt to control the pharmaceutical trade.[31] These attempts continued after the 1843 Charter. Doctors proposed new medical bills which would have placed pharmacy under the auspices of physicians and surgeons; the government proposed poison bills in 1857 and

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[29]Holloway, "Orthodox Fringe," pp.154-157.

[30]Berridge and Edwards, Opium and the People, p. 114

[31]Holloway, "The Orthodox Fringe," pp. 129-131.

1859 that the Pharmaceutical Society opposed because of the restrictions they placed on pharmacists' activities; and a rival United Society of Chemists and Druggists formed in 1860-61 out of dissatisfaction with the apparent inactivity of the Pharmaceutical Society. Until at least 1868, therefore, pharmacists in Britain were professionally disparate, and not legislatively secure.

The Pharmacy Act of 1868 aimed to consolidate the pharmaceutical profession. In extending professional powers, it granted pharmacists a substantial degree of power over distribution of poisons in British society. The act came after more than a decade of debates about the nature of pharmacy and the importance of restricting access to drugs. As early as 1851, the "Arsenic Act" had provided preliminary conditions over the sale of that drug. In 1852, a Pharmacy Act provided a means of registering pharmacists, but fell short of the goals of the Pharmaceutical Society to consolidate its institutional control. Both provided partial templates for the 1868 legislation. The British Pharmacy Act gave broad educational powers to the Pharmaceutical Society, involved a system of registration and examination, and restricted the public availability of poisons. It listed fifteen substances in a two-part Poison Schedule appended to the Act. The drugs in the first part could be sold only to a purchaser familiar to the pharmacist, or to whom the pharmacist was introduced by an acquaintance. These substances had to be labelled clearly as "poison," and the purchase would be recorded in a poison register. The substances in part two needed to adhere only to the labelling requirements. "Opium and all preparation of poppies" were included in part two.[32]

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[32]Ibid., pp. 113-117.

The British experience paralleled and offered some precursors to the British North American experience with pharmacy laws. As Holloway notes for Britain, pharmacists united periodically to resist perceived encroachment from other quarters, most notably doctors. British North American druggists also often periodically united. To examine in more detail the emergence of pharmacy laws in Canada, it is valuable to consider some incidents of periodic and temporary episodes of unity. Here we see how notions of doctors' authority was dependent upon druggists' skills, but the doctors tried to use their authority to restrict the power of druggists.

Educating the apothecaries.

During the 1840s, physicians in Lower Canada were pressing the legislature for the broader powers associated with legislative incorporation.[33] They argued that doctors should control most facets of medical treatment including the licensing and education of pharmacy. Since the Quebec Act of 1788, the state had licensed apothecaries, but this law merely required individuals who sold medicine to obtain a license from the governor of the province. The law set no educational requirements.[34] In 1842, Dr. Archibald Hall, a prominent Montreal physician, addressed his "Letters on Medical Education" to the members of the legislature. Hall observed that the current state of medical education in

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[33]For more on the early years of Quebec pharmacy, see Collin et Beliveau, Histoire de la Pharmacie au Québec (Montreal: Musée de la pharmacie du Québec, 1994); Collin, "Genèse d'une profession: les pharmaciens au Québec au XIX[e] siècle," Canadian Bulletin of Medicial History/ Bulletin canadien d'histoire de la medecine 14 (1997), pp. 253-257.

[34]Stanley William Jackson, The First Pharmacy Act of Ontario (Toronto: Ontario College of Pharmacy, 1967), p. 2; and Consolidated Statutes of Canada (1848) Section 16.

Canada was unsatisfactory. He proposed a detailed and ambitious bill that would encompass the occupations of physician, surgeon, "Man-Midwife," and apothecary. Hall's proposal placed apothecaries in a distinctly subservient but necessary place within the spectrum of health services. Even the title of the Act, "to Regulate the Study and Practice of Physic, Surgery and Midwifery" suggests the secondary status of the apothecary to Hall. Although he wished for specific restrictions and requirements to four distinct medical occupations, he only mentioned three sectors in his title. Yet he did recognize the importance of pharmaceutical education. His bill required each aspiring apothecary to serve a three-year apprenticeship with a physician or apothecary, and to attend classes in chemistry, pharmacy and *materia medica*. Prior to receiving a license, each apprentice had to sit an examination in these three subjects before a Medical Board. Anticipating future pharmacy acts, Hall also included several clauses that outlined the conditions under which poisons "such as corrosive sublimate, arsenic, laudanum and the like" should be stored and sold.[35]

Hall's suggestions were reflected in the medical and poison legislation he and his confrères presented to parliament over the next few years. In both 1845 and 1846, Lower Canada physicians presented an "Act Respecting the Medical Profession and the Sale of Drugs." This bill detailed the responsibilities of the proposed College of Physicians and Surgeons to examine and license physicians, surgeons, midwives and apothecaries. Dr. A. Von Iffland proposed that the doctors should include a section governing the education of

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[35]Archibald Hall, Letters on Medical Education (Originally published in the Montreal Gazette) Addressed to the Members of the Provincial Legislature of Canada (Montreal: Armour & Ramsay; Kingston: Ramsay, Armour & Co., 1842.), pp. 24-27.

apothecaries and druggists, "as might ensure to the public as well as to the medical profession, men of good education and thoroughly versed in chemistry and pharmacy."[36] Briefly united to oppose this initiative, several apothecaries protested to Von Iffland, explaining that they were preparing to petition the Legislature for their own act of incorporation. The doctors acquiesced, and the legislation that passed in 1847 mentioned pharmacists only to reaffirm the provisions of the Quebec Act of 1788. Von Iffland complained a decade later that the pharmacists "abandoned the measure then contemplated for their self-improvement, preferring to remain as individuals or associated traders, and subject... to no other responsibility than that of tradesmen."[37] He concluded that it was time, in 1857, for the College of Physicians and Surgeons to take action, "as may guard against the evils of ignorance."[38] Von Iffland's attack was factually inaccurate; in 1849 the pharmacists had presented legislation that attempted to create a college of pharmacy, but that legislation did not pass.[39] Nevertheless, they had not presented legislation to the government since then.

Doctors insisted that public health was in danger by the unscrupulous nature of capitalist competition in the marketplace. Von Iffland observed that the College of Physicians had recently examined and licensed two pharmacists. It would be "an act of

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[36]Medical Chronicle, 4 (February, 1857), p. 333.

[37]Ibid.

[38]Ibid, p. 334.

[39]See Journal of the Legislature of Canada, February 15, 1849. "Petition of A. Savage and others, Apothecaries, Chemists and Druggists, of Canad East, for an Act of Incorporation."

gross injustice to them," he stated, "were they to be placed in the same position for public consideration and patronage, as others who are not so qualified by the College."[40] He recognized the pressures of the market upon an occupation that, at its heart, was one of trade in commodities rather than exclusively a grasp and command of philosophical concepts and esoteric knowledge. In 1860, Hall agreed that the potential dangers posed by the pressures of the marketplace were specifically the reason that the public should demand properly qualified apothecaries. The pharmacists' knowledge of drugs was important, but equally important was that their "character should be a guarantee of the purity and genuineness of the materials which they are using."[41] Hall further argued that the sale of poisons needed tighter regulation. Economic necessity, Hall claimed, may cause an apothecary to use cheaper or adulterated substances when making up prescriptions, or to sell poisons to anyone who demanded them, with no regard to the use for which the purchaser intended the substance.

Eventually, doctors achieved some control over pharmaceutical education in Lower Canada. From 1858-1860, the Lower Canada physicians repeatedly presented bills in the legislature specifically designed to "regulate the education of Apothecaries, Chemists and Druggists, and the Sale of Poisons." Each of these faced opposition from pharmacists, and did not pass the legislature. Then, in 1864, the legislature amended the 1847 Medical Act to place the responsibility for licensing pharmacists under the auspices of the College of Physicians and Surgeons. The following year, the College amended its

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[40]Ibid.

[41]British American Journal, 1 (January, 1860), p. 46.

bylaws to include specific educational requirements for the pharmacists.[42]

The character in study

The concern over the character of the pharmacist was a key aspect of the doctors' appeals for pharmaceutical education. Von Iffland's 1846 measure stressed that the doctors needed to ensure pharmacists "of good education *and* thoroughly well versed in chemistry and pharmacy."[43] Gidney and Millar have discussed how "good" education related not only to knowledge, but also to character. In Von Iffland's statement, the moral character of the individual was a key aspect of pharmaceutical education, since, he implied, while many people could learn chemistry and pharmacy, only men of "good education" could adequately take on the important responsibilities of a pharmacist. Similarly, in 1860, Hall stated that education of pharmacists should include "a thorough classical education" along with attendance at lectures in chemistry and *materia medica*.[44] The provisions for education that the College of Physicians passed in 1865 made a classical education a prerequisite for studying medicine, surgery, midwifery or pharmacy.[45]

These requirements of a classical education reflect a broader issue of the honourable nature of certain occupations and professions, assured by the moral character

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[42]"An Act to amend Chapter Seventy-One of the Consolidated Statutes for Lower Canada, respecting the Medical Profession and the Sale of Drugs," Chapter 51 Statutes of Canada (27-28 Victoria) pp. 269-270 Section 1. Montreal Witness, December 30, 1869.

[43]Medical Chronicle, 4 (February, 1857) p. 333.

[44]British American Journal, 1 (May, 1860), p. 239.

[45]Canada Medical Journal, 1 (April, 1865), pp. 395-396.

of the individual. Commenting upon similar requirements demanded of applicants to Colleges of Physicians and Surgeons, Ronald Hamowy contended that this sort of prerequisite was unnecessary, and indicative of the self-serving, class-based interest among physicians to restrict access to the profession. By setting up a number of *ad hoc* barriers to licensing, the doctors could thin the ranks of aspiring physicians, and increase their own economic and social position in society.[46] Gidney and Millar disagree with Hamowy's perspective. They argue that doctors and others viewed classical education as indicative of the moral standing and authority necessary for an individual to adequately carry out a professional calling. For the physicians who demanded a classical education of aspiring pharmacists, the requirement would ensure that moral men were in control of the distribution of drugs.[47]

The emphasis upon the character of the pharmacists had a practical purpose. Since compounding medicines required detailed technical aptitude, the good character of the druggists should guarantee a person who was always able to act competently. During the 1871 debates on pharmacy laws in Ontario, the Globe argued that no act of incorporation could prevent some of the mistakes caused by basic human failings, since "the most intelligent men, with every certificate of competence, may fall into unsteady habits and

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[46]Ronald Hamowy, Canadian Medicine: A Study of Restricted Entry (Toronto: The Fraser Institute, 1984), pp. 20-22; 300n62.

[47]Gidney and Millar, Professional Gentlemen, pp, 22-25; 415n85. See also Gert H. Brieger, "Classics and Character: Medicine and Gentility," The Bulletin of Medical History, 65 (1991): 88-109; Rebecca J. Tannenbaum, "Earnestness, Temperance, Industry: The Definitions and Uses of Professional Character Among Nineteenth-Century American Physicians," Journal of the History of Medicine and Allied Sciences 49 (April, 1994), pp. 251-283.

make some mistakes when more or less intoxicated."[48] The Halifax Citizen echoed this concern in 1874 when the province's doctors presented a bill to control the actions of pharmacists. The Citizen opposed the act, since it would examine knowledge only, without making considerations for the dispenser's character. "He may be constitutionally careless and slovenly, or he may be a man of unsteady or dissipated habits."[49]

Pharmacists did not deny the importance of proper character to their profession; but they disagreed with physicians about the best way to ensure it. Doctors argued that a proper classical education was essential to make moral pharmacists, while the pharmacists and their supporters contended that a better way to ensure the best character of the pharmacist in the community was to grant pharmacists self-regulating powers. The difference in opinions was a key point of contention during the discussions of the Quebec pharmacy bill in 1869. In a conference with representatives of the province's doctors, members of the Montreal Chemist's Association discussed the different perspectives of the two groups. The doctors claimed that they needed to retain "their present position with increased powers," that the pharmacists were not numerous enough to form a College, and that in any case the legislation to incorporate a college should not precede "a grand educational scheme." The pharmacists explained that "there are means of education at present in existence, but there is absolutely no authority to prevent incompetent persons entering the trade." The Montreal chemists were surprised by the degree of resistance given by the physicians to their legislation. Yet the doctors, by their own arguments,

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[48]Globe, January 28, 1871.

[49]Halifax Citizen, April 25, 1874.

supported the aim of the druggists:

> One [physician] asserted that [the pharmacists of Quebec City] were not deserving of the confidence of the public, and that he could not trust one of them to make up a prescription. Our instant reply was that... nearly all [of these pharmacists] held the licence of the College of Physicians to pursue their calling.[50]

In October, 1869, John Dougall, the editor of the Montreal Witness, a notorious spokesperson for liberal and evagelical reform causes, and a strong supporter of the efforts of the pharmacists, insisted that pharmacists should be allowed to regulate themselves, "without the 'aegis' of medical boards," and to educate their pupils free from "the evil influences which surround the medical schools."[51]

The effect of the market

Dougall's suggestion that medical schools were "evil," and of dubious character, hints at another conflict relating to the concern over the improper use of poison: who, really, was at fault? Physicians often characterized pharmacists as incompetent, but pharmacists and their supporters responded in kind, with charges that doctors were human beings as liable to make mistakes and be tempted by the lure of financial gain as anyone else. In 1874 the Nova Scotia Medical Society presented its bill "for restricting the sale of poisons &c., by druggists in the province of Nova Scotia." The title suggested that the legislation targeted

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[50]Montreal Witness, December 30, 1869.

[51]Montreal Witness, October 27, 1869. On John Dougall's reforming zeal in theory, see Paul Rutherford, A Victorian Authority: The Daily Press in Late Nineteenth-Century Canada (Toronto: University of Toronto Press, 1982), pp. 48-51; for Dougall's reforming zeal in practice, see Peter deLottinville, "Joe Beef of Montreal," Labour/Le Travail, 8/9 (1981-1982), pp. 9-40.

the activities of pharmacists as requiring vigilant supervision. The bill met stiff resistance in the legislature and the popular press. The Halifax Citizen noted that some sort of regulation was necessary, but characterized the Nova Scotia Medical Society as too "grasping" to be trusted to have the best interests of the public at heart.[52] A correspondent to the Halifax Reporter and Times, calling himself "Medicus" argued more passionately that the bill was a conspiracy by the doctors who were "afraid of the superior intelligence and attainments of those engaged in the Drug and Prescription business."[53] Medicus characterized physicians as interested only in personal gain. He argued that the public needed protection, not from pharmacists, but from "the grabbing and grasping rapacity of the medical profession generally... most of them like to, and do, demand and take a good fat fee *whenever* and wherever it can be got..."[54] In the Witness of November, 1869, Dougall made similar charges. Since doctors billed patients per visit, and often per prescription, Dougall reasoned, it was in the doctor's interest to extend the length of time for treatment, to keep the nature of disease a mystery, and to prescribe more drugs than necessary. He likened doctor's business practices to those of other professions and other trades, whose position provided them with the opportunity to mislead the public for pecuniary gain. "A shoemaker who made boots that would not wear out, would soon be gazetted for lack of custom," argued Dougall, "the doctor who

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[52]Halifax Citizen, April 25, 1874.

[53]Halifax Reporter and Times, April 28, 1874. This "Medicus" was not Archibald Hall, who died in 1868.

[54]Halifax Reporter and Times, April 28, 1874, emphasis in original.

should make all his patients well, would be a like sufferer."[55] However, whereas "boots are things people understand a little... diseases are things no one understands,--not even the doctors,--and so it is the doctors' interest that your case becomes as difficult and interesting a one as possible. It is much to their credit when this interest does not bias them, but they would be saints indeed if it never did, unconsciously at least."[56] One wonders what kind of recent experience Dougall had with his doctor.

Thrusting the doctors' interests into the capitalist market, Dougall questioned the relationship and interdependence of physicians and pharmacists. He observed that until recently in England doctors were paid only for writing prescriptions: "This was good for apothecaries, and terrible for patients; and it is still suspected that doctors have an interest in the amount of drugs consumed." He suggested that a better means of remunerating doctors would be to set up a system in which families payed doctors an annual salary whether or not the physician had to treat any illness.[57] The writings of people like John Dougall, "Medicus," and the editor of the Halifax Citizen denied that physicians possessed any special rights or qualities that raised them above the baseness of capitalist competition.[58]

Pharmacists and their supporters often accompanied their attacks on doctors with assertions of the honour of the apothecaries themselves. Medicus insisted that the

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[55]Montreal Gazette, October 27, 1869.

[56]Montreal Witness, October 27, 1869.

[57]Montreal Witness, October 27, 1869.

[58]See Thomas Haskell, "Professionalism *versus* Capitalism."

pharmacists would never defraud the public as doctors were apt to do. "[Pharmacists'] standing as a class in society is too high for that, for they fully realize the responsibility resting upon them in the sale of poisons."[59] The Globe's editor argued likewise, saying that "the educated druggist is one of the most careful of traders. A high sense of responsibility governs his proceedings, whether dispensing or retailing his goods."[60] Writing on the Gale and Mason incident, "J.B.D.," a correspondent to the Globe, attested to the integrity of all pharmacists in the careful dispensing of poisons. "There is no druggist in the Dominion," he asserted, "who would knowingly and willingly contravene the law as it now exists." Yet "J.B.D." himself proceeded to demonstrate how a caring pharmacist, concerned for the health and comfort of his patrons would in fact contravene the law with impunity:

> Even now, while I am writing, occurs an instance of the inefficiency of the law as it now stands. A lady had just entered the shop and request[ed] a remedy for toothaches, with which she is at the time sorely tormented. I immediately (knowing her well) offer her a mixture--properly labelled--of chloroform, camphor, laudanum, &c. which I have reason to believe will at once give her relief... At the same time, I know I am breaking one of the laws of the country... and am rendering myself liable to the infliction of a penalty. But what is to be done?[61]

J.B.D.'s gendered imagery--the compassionate male professional risking his license to help out the needful woman--helped him to bolster his assertion that pharmacists were righteous and honourable men, whose capable and efficient service to the public was

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[59]Halifax Reporter and Times, April 28, 1874.

[60]Globe, December 1, 1870.

[61]Globe, December 5, 1870.

hindered by burdensome laws. The solution to this problem, he asserted, was clear: incorporate the pharmacists, and they would regulate themselves.

In many of the poisoning cases that caught the attention of the public, neither doctors nor druggists were exclusively at fault. As Mason and Gale (and J.B.D.) demonstrated, pharmacists often broke the law by dispensing dangerous drugs. Notorious cases of murder by poison publicized the dangers of this practice. The case of James Deacon, from Clarendon county, Ontario, who poisoned his wife with strychnine in 1870 caught the attention of the public. He had purchased half an ounce of the drug from a local grocer, and the poison had been "as easy to purchase as so much tobacco."[62] Poisoning was also often through the mistakes of druggists. In 1865, a man in Quebec City died after taking a tonic compounded by a local apothecary. The druggists mistakenly included a dose of aconite, or wolfsbane, which is a powerful poison.[63] Still, in other cases doctors were at fault. During the 1874 debates in Nova Scotia, the member who introduced the pharmacy bill--which pharmacists disparaged--cited an incident of poisoning by a drug mistakenly sold in the place of Epsom Salts to justify the need to regulate pharmacists' actions. The Halifax Citizen pointed out that a physician had sold the drug, not a pharmacist: the proposed law would have affected dispensing by pharmacists, but not physicians, and would not have prevented similar accidents.

Not only did pharmacists argue that doctors were equally culpable in cases of poisoning; they also emphasized that druggists themselves needed protection against

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[62]Globe, November 29, 1870.

[63]See Canada Medical Journal, 1 (February, 1865), pp 353-358 and 391-393.

ignorant vendors of medicine. Unscrupulous traders damaged the reputation of honourable members of the profession by selling medicine to anyone, regardless of the intent or identity of the purchaser. During the second reading of the proposed Ontario Pharmacy Act in 1869, Dr. William McGill, who presented the bill, claimed that "there were a number of persons acting as chemists who caused by their carelessness and blunders more evil than was generally known."[64] McGill insisted that "the respectable educated chemists felt that they required protection from such men."[65] The incorporated pharmaceutical association would help pharmacists protect themselves from the unscrupulous individuals in their own ranks, like the grocer who sold Deacon the strychnine.

Despite the conflicting views of how to assure pharmaceutical integrity and the health of the people with respect to sales of poisons, doctors generally endorsed the professional aspirations of pharmacists In 1870, the Canada Lancet supported the pharmacists in the Gale and Mason case by condemning the magistrate's decision.[66] The bill to incorporate pharmacists in Ontario was presented by Dr. McGill, a physician, and had the support of other doctors in the legislature. Likewise in Nova Scotia, one of the most vocal supporters of the bills the pharmacists presented was a Dr. Parker, who illustrated his speech with his own positive experiences with a dutiful and educated

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[64]Toronto Telegraph, November 26, 1869.

[65]Globe, November 26, 1869.

[66]Canada Lancet, 2 (January, 1870).

pharmacist, who caught Parker's rare prescribing errors.[67] Yet the relationship which physicians envisioned was distinctly patriarchal. The Nova Scotia doctors had pressed their 1874 bill, which focussed specifically upon the pharmacists as culpable for misuse of poisons. Archibald Hall's letters to the legislature, and his writings in medical journals also demonstrated this perception. In the British American Journal of 1860, he argued that the legislation to regulate the education of apothecaries sponsored by Lower Canada doctors was not an attempt to enforce "an especially obnoxious measure" on the apothecaries. "The interests of the Profession [doctors] are too closely interwoven with those of the Apothecaries to permit of a serious antagonism."[68] Yet note the language: the doctors were "the Profession" and the apothecaries were not.

The percentage system, and the economics of professional status

Despite periodic support by physicians like McGill, pharmacists were eager to reveal that doctors were as liable to economic concerns as were druggists. Here the pharmacists made a concerted attack upon the professional honour of physicians, while attempting to gain professional independence for themselves. In 1869, a pharmacist wrote to the Montreal Star complaining about the agreement between some city doctors and druggists by which the pharmacist would give a doctor a percentage of the cost of a prescription--sometimes a third of the price--if the doctor sent his patient to that pharmacist. The correspondent, calling himself "Justice," explained that he was often asked by customers

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[67]Halifax Reporter and Times, March 15, 1876.

[68]British American Journal, 1 (January, 1860), pp. 46-7.

to prescribe for them, but according to the law, he sends them to a doctor for advice. "And what return do you think I get for doing so?" he roared, "in nine cases out of ten, my customer is prescribed for by the doctor, *and sent to some other store to get his prescription dispensed.*" Justice asked why he "has any incentive to keep within the law....when a doctor knowingly influences his patient, to leave the drug store where he may have dealt with satisfaction for years, in order to send him elsewhere, and that, for no other reason but because he has an underhand arrangement." What surprised Justice the most was that the practice was carried out by men "who hold positions as professors of medical colleges."[69] In the Canadian Pharmaceutical Journal Shuttleworth called the practice "undignified, ... unfair...and dishonest," and agreed that "if... the druggist is so effectually cut off, by medical law, from any profits he might derive from prescribing, we think the charge of 'undignified' professional business may well lie at the door of the physicians..." Shuttleworth did not blame only the physicians. He recognized that both doctors and druggists participated in this unfair business. A correspondent to the Canadian Pharmaceutical Journal agreed, saying that "the public may be hoodwinked for a time by a designing physician and a dishonest apothecary."[70] The results, Shuttleworth explained, would only hurt the public, since it would cause a proliferation of "cheap drugs, incompetent assistants, and high prices . . . we hold that no honest trade can admit of a reduction of 33 per cent in its profits. . . . the public cannot long remain blind to such a

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[69]Montreal Evening Star, July 23, 1869. Emphasis in original.

[70]Canadian Pharmaceutical Journal, 3 (September, 1869), p. 133.

flimsy artifice, and the sooner the veil is raised, the better for honest men."[71] Agreeing with the argument that the practice is unfair to "honest" apothecaries and to the public, another correspondent argued the solution: incorporate provincial pharmaceutical societies, so they could regulate their own.[72]

Competence of apothecaries' clerks was a central issue to commentators on the so-called percentage system. They explained that not only did the system force druggists to pay their clerks less, but it also forced apothecaries to make their clerks work longer hours, and neglect their education. This issue was the impetus for another round of debates on the percentage system in late October, 1869. A bill was presented in the legislature to restrict the hours of operation by apothecaries in the province. The restriction would have allowed clerks to attend lectures. The bill had divided the province's pharmacists, some agreeing with the provisions, while others argued that it interfered with their rights to operate their businesses when they desired. Dougall of the Witness suspected a conspiracy:

> It is whispered that some proprietors are scarcely their own master in the matter, that certain medical men claim a share of the profits of dispensing, and that they expect, as "sleeping partners," to have access to those dispensaries under their particular patronage at all hours. Has the "percentage system" anything to do with this?[73]

Dougall viewed such collusion as dangerous to the public and immoral. He argued that the druggists who wished to close their shops early to permit their clerks to improve

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[71]Ibid, p. 131.

[72]Canadian Pharmaceutical Journal, 3 (October, 1869), p.150.

[73]Montreal Witness, November 1, 1869.

themselves, should do so, and allow "the public to judge." Dougall's proffered solution suggested that ultimately, the druggists and doctors were subject to the judgement and actions of the market; laissez faire would regulate away the unethical. Whereas both physicians and pharmacists believed that professional bodies were best able to protect the public from the unscrupulous, Dougall argued that the well-informed public had the integrity to decide who was more deserving of patronage.

The principal reply from the doctors did not deny the existence of the percentage system, but rather explained that it ensured the safety of the public. The Montreal-based Canada Medical Journal pronounced the practice to be beneficial for all involved. According to the editor, the pharmacists started the "custom" in response to market pressures. As the numbers of drugstores increased in Montreal, proprietors tried to induce people to bring in their prescriptions, not to gain profits from prescriptions, but to increase sales of other items. Owing to competition among druggists, the practice became "almost universal." The editor proceeded to argue that, even though the market pressures drove the combination, the financial arrangement was beneficial to the public specifically because of the dependent position in which it placed druggists. "The practice of sending his prescriptions to one shop enables the Physician to exercise a degree of control over the compounder, as to the quality of the drugs, &c., which are supplied." He also argued that the oversight of the physician would induce the pharmacists to "avoid mistakes and employ more skilful assistants." As to the charge that the financial arrangement induced doctors to prescribe more drugs than necessary, the editor explained that only a foolish patient would "take physic" from someone whom the patient suspected of being

influenced by a financial motive.[74]

The Canada Medical Journal's defence drew upon the key points of tension between the doctors and the druggists. The journal's editors emphasized the dangers of capitalist competition, and the ability of the physician to transcend the temptations of common market forces, to the benefit of public health. The doctor's role was to protect the people, and with respect to dangerous drugs, the best way the doctor could act as guardian of the public's health was by regulating the behaviour of the pharmacist. The argument implied that pharmacists were less able to avoid temptation, more liable to corruption, and in need of assistance to elevate themselves above market pressures. This perspective incited the wrath of several pharmacists, who vented their spleens in the pages of the Witness. One correspondent claimed that:

> just in proportion as the legitimate profits of the druggist are cut down, so will the quality of the articles and the quality of the salary of his assistants be cut down also... if the writer [of Journal's article] is so exceedingly mean as to take his pay out of the ordinary profits of the druggist; and not out of the extraordinary profits put on to cover the percentage system, then he must be a mean man indeed.[75]

Another writer challenged the Canada Medical Journal's claim that doctors were too honourable to be tempted to order more drugs than necessary. While working in England, the writer had observed that doctors often ordered more drugs than necessary. "Instead of ordering an honest six or eight ounce mixture, a dozen draughts [sic] are very likely ordered, which will cost at least three times the amount, and I need not say that the

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[74]Canada Medical Journal, 6 (November, 1869), p. 235.

[75]Witness, December 6, 1869.

druggist's share of the spoil is a very small one."[76]

The debates over the percentage system demonstrate the different theoretical and practical perceptions of the nature of the drug business as a part of the medical community. Doctors argued that the importance of the percentage system was not for pecuniary gain, but rather for the control it gave them over pharmacists, who were too often tempted by the lure of profits. Pharmacists responded with simple lessons in practical economics. Denied their profits, pharmacists would be forced to react by diminishing the quality of drugs or the wages--and hence quality--of clerks, the two factors that the editor of the CMJ argued, the percentage system improved. Both sides, however, saw the dangers of the market forces on their ability to protect the health of the public. John Kerry, one of the founders of the Montreal Chemists Association, recognized the pressures of trade, and observed that a professional association would help to alleviate the dangers of competition. Kerry noted that

> though some part of their time is occupied in the practice of what is a professional calling, the larger portion [of their time]... must be given to trading on its narrowest sense, and the [Montreal Chemists'] association, by promoting the study of the sciences which bear upon their occupation, was not only calculated to elevate their minds, but to implant and cultivate a brotherly interest in their fellow members.[77]

The "brotherly interest" would eliminate competition. While their income depended upon day-to-day commodity trade, pharmacists' perceived role as independent and educated guardians of the public health would improve by the creation of some form of

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[76]Witness, December 14, 1869.

[77]Montreal Gazette, September 7, 1869.

pharmaceutical association. To assure their independence, the druggists had to deal with the percentage system. At the next annual meeting of the Montreal Chemists Association, a Mr. Gardiner presented a resolution to search for alternatives to "the system adopted for many years by most of the leading medical men of this city, of insisting upon their prescriptions being taken to one druggist in particular, thereby practically ignoring all others equally competent to dispense them." Gardiner moved that the association form a committee "to devise the best means to remedy this evil."[78]

Honourable intentions and hidden motivations

Assertions over the professional honour of pharmacists, expressed in the debates over the percentage system and in the need for incorporation generally, reveal a contradiction that alludes to the insincerity of the pharmacists' claims to selfless professional aspirations. While supporters like John Dougall and "Medicus" of Halifax argued that physicians, despite their professional incorporation, were not above the temptations of the market, pharmacists like Kerry and Gardiner insisted that the creation of a pharmacy association would in fact enable the pharmacists to rise above similar temptations. The contradiction suggests that protecting the public was secondary to a desire to protect the pecuniary interests of bona fide members of the pharmaceutical fraternity.

This contradiction appears vividly in the process of the creation of the Pharmacy Act of Ontario. Dr. McGill presented the Pharmacy Bill in three subsequent sessions before it became law in 1871. In each phase of its development, the bill was amended.

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[78]Montreal Gazette, December 6, 1870.

The Canadian Pharmaceutical Society (ostensibly the precursor to the Ontario College of Pharmacy) discussed the amendments and made recommendations to the legislative committee debating the bill. In the Society's discussions, economic priorities appear.[79] In Ontario, Edward Blake, a key opponent to the law, had expressed his interest in seeing some form of regulation of the sale of poisons, but argued that this regulation needed to include provisions to prevent the improper dispensing of poisons by unskilled clerks.[80] Addressing this issue, Clause 4 of the first bill allowed only people engaged "in the business on his own account... to be enrolled as a Member of the said Society." Likewise, Clause 20 restricted the right to sell poisons to people registered as full members of the society. In the 1869-70 session, both of these clauses were amended. Now Clause 4 allowed every person "engaged in business on his own account and every person who, at the time of the passing of this Act, *has served an apprenticeship of three years and has acted as a Druggist's assistant for one year*" to become full members of the College, with the rights to open their own pharmacy without undergoing an examination. Clause 20 limited the right to dispense poisons to "no other person except a Pharmaceutical Chemist... *or his employee or employees.*"[81] The members of the CPA supported the amendment to Clause 4 through appeals to economics. At the meeting of the Association, the president, William Elliot, expressed his concern over the amendment. He argued that only pharmacists currently in business "held property, and had money invested in the

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[79]See Jackson, Ontario's First Pharmacy Act, pp vi-vii; 17-24.

[80]Blake, quoted in the Toronto Telegraph, November 26, 1869.

[81]Province of Ontario, Bills (1869) #135; Bills (1869-70) #11. Emphasis added

business, and these claims could not be overlooked." Shuttleworth agreed, but added that an apprentice who had spent five years in this position held vested rights, too, and that "a knowledge of pharmacy was not to be obtained only by an outlay of time, but required considerable sums of money also."[82] While professional skills and knowledge were important for pharmaceutical practice, of at least equal importance was the amount of money an individual had invested.

A second concern in the Ontario legislature involved the widespread use of patent medicines. The 1870 amendments to the bill included Clause 27, which required manufacturers of patent medicines to register the recipes of their products with the government. Many commentators argued that patent medicines contained drugs that were restricted under the proposed poison laws.[83] However, as Clarke explained, several key members of the pharmaceutical association also manufactured their own patent medicines.[84] The trade could be highly profitable. One of the supporters of the decision to remove Clause 27, for example, was Hugh Miller, who was a successful patent medicine manufacturer.[85] The 1871 Ontario Pharmacy Act passed only after this clause was removed. The trade in patent medicines remained virtually uncontrolled until 1908.

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[82]Canadian Pharmaceutical Journal, 3 (December, 1869), pp. 178-9.

[83]I discuss this issue further in chapter 6. On American perspectives of poisons in patent medicines, see Terry Parsinnen, Secret Passions, Secret Remedies: Narcotic Drugs in British Society, 1820-1940 (Philadelphia: The Institute for the Study of Human Issues, 1983), pp. 71-2.

[84]Clark, "Professional Aspirations," pp. 47-49.

[85]Clark, "Professional Aspirations," p. 48.

Pharmacists' claims to require professional organization to help raise themselves above the temptations of the capitalist marketplace did not convince many opponents of the incorporation acts. The effect of professional aspirations on the integrity of the free market was at the heart of critiques in all three provinces. The editor of the Montreal Evening Star, Hugh Graham, questioned the motives of the pharmacists. He noted that although the apothecaries claimed their incorporation would help to protect the public, "those two human weaknesses, love of gain and misuse of authority, are too equally distributed to make it safe to trust altogether their [pharmacists'] purity."[86] Graham reasoned that if the existing state of education was adequate, then the College was unnecessary, since the medical College was equally capable of licensing pharmacists. However, if the existing state of education was bad, and the College was intended to remedy a bad situation, then why did the pharmacists include a clause exempting practising pharmacists from examination?[87] Graham decided that, were the legislation to pass, "the safety of the public is no better served" than it was before. The Montreal Witness came to the defence of the pharmacists, reasoning that pharmacy "is a calling requiring great manipulative skill... [and] those who exercise it are likely to be the best judges of the competency for licenses."[88] Likewise, in Ontario opponents were in favour of restrictions on the sale of poisons, but saw the proposed Pharmacy Act as creating a

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[86]Montreal Evening Star, October 22, 1869.

[87]Montreal Evening Star, December 7, 1869.

[88]Witness, October 27, 1869.

trade monopoly, much like the "ancient guilds of the middle ages."[89] The Telegraph objected to this contention, arguing that by a system of licensing and registration, "the public will be properly protected,"[90] but opponents were not convinced. When the bill finally passed in early 1871, it had the support of the government, while the first two bills had been treated as private members' bills.[91] Nevertheless, critics like Edward Blake, leader of the provincial opposition, managed to modify the legislation to weaken its impact upon trade. The revisions made by the Committee of the Whole demonstrate the strength of the anti-monopoly sentiment in the legislature. Provisions restricting the "sale" or "trade" of medicines, except for the most dangerous poisons, were deleted, leaving the act to regulate principally the action of compounding medicine. Compounding required specific esoteric knowledge of pharmaceutical properties, whereas selling was only an issue of trade.[92]

Concerns in Nova Scotia about how the incorporation of the Pharmaceutical Society would affect trade focussed not on whether druggists would have a monopoly over other traders in medicines, but rather on how the city druggists in Halifax and Dartmouth were trying to control and restrict the actions of medicine vendors and pharmacists in rural areas. In 1875 and again in 1876, members from rural ridings

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[89]Blake, quoted in the Toronto Globe, January 12, 1871.

[90]Telegraph, December 9, 1869.

[91]Canadian Pharmaceutical Journal, 4 (February, 1871).

[92]See amended Bill 135 (1869-1870 Session), and the list of modifications for Bill 20 (1871 Session). Legislative Journals of Ontario, February 1, 1871 p. 103.

persistently argued that the bill should be amended to make its conditions apply only to Halifax and Dartmouth. In the country, the trade would remain unrestricted. This clause was the subject of what may have been the most protracted series of debates carried out on the pharmacy laws in any of the three provinces I am examining. These debates illustrated both the issue of the convenience to the people in remote areas, as well as the hostility rural dwellers felt towards the perceived dictates of urban professionals.[93] The 1875 bill did not pass, and when in 1876 an almost identical bill was brought forward, the first proposed amendment, by Mr. Whitman of Annapolis, would have changed the bill's name from incorporating a "Nova Scotia" pharmaceutical society, to incorporating a society in "the city of Halifax and the town of Dartmouth."[94] After more heated debate, this proposal did not pass, and later that year the pharmacists saw the creation of the Nova Scotia Pharmaceutical Society.

Reminiscent of Holloway's thesis about the imposition of specific values held by an elite of the profession upon the common traders in medicines, the rural-urban tension in Nova Scotia also appeared in Quebec and Ontario. The Quebec legislation was the project of the Montreal Chemist's Association, but this group was not alone in its support for the bill. Petitions of support came to the legislature from pharmacists in "Montreal, Three Rivers, Sherbrooke and Coaticook."[95] Yet, some commentators still had their suspicions. In 1869, the Montreal Evening Star argued that the proposed Pharmacy Bill

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[93]Halifax Citizen, April 20, 1875; April 24, 1875.

[94]Halifax Reporter and Times March 15, 1876.

[95]Herald, December 3, 1869.

"is designed to deprive general dealers and grocers of the right to sell those simple medicines in common use which trade has always been, particularly in the country parts, a portion of their business."[96] In Ontario, the issue of remote locations manifested itself in the legislative debates of 1871. A Mr. Perry argued that

> in many places in the country, it would not pay to establish a drug store and consequently drugs had to be sold by the common storekeepers. Under this [Pharmacy] Act a farmer who might happen to have a tooth-ache would have to go perhaps twenty miles before he could find a man licensed to sell him a few drops of laudanum.[97]

In debates in all three provinces, the manner by which legislators conceived of the relationship between the city and the country affected the nature of the pharmaceutical legislation and the sale of poisons.

Who controls the poisons?

Subtle differences between provincial debates notwithstanding, the poison provisions in the resulting legislation were fundamentally identical in all three provinces. The laws forbade sale of poisons listed in an attached schedule by anyone except those who held valid licenses. All three laws specifically exempted duly licensed physicians and surgeons, as well as wholesale manufacturers. Finally, all included a process of amending the list of poisons which included consultation with a legally recognized medical authority.

As parts of broader incorporating legislation, these laws conferred rights and authority upon pharmacists specifically. While in all three provinces, the criteria for being

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[96]Montreal Evening Star, October 22, 1869.

[97]Leader, January 27, 1871.

licensed were subtly different, the benefits of achieving a license sounded substantial. Being members of the pharmaceutical profession, pharmacists had the exclusive right to trade in poisons as long as they followed proper procedures. Only physicians and surgeons were exempted from the provisions of the act. In Ontario and Quebec, pharmacists were trusted to sell poisons only to people with whom they were familiar, or to whom they had been introduced by an acquaintance. These sales would be recorded in poison registers. This provision alluded to a sense of moral authority imbued in the pharmacist, but without actually explicitly stating that the pharmacist had the moral authority to determine who could and could not purchase poisons. What, for example, constituted "familiarity"?

Structurally, the acts suggested different principal motivations between the different provincial enabling efforts. In Ontario, the Act began by setting out the conditions of storage and sale of poisons, before detailing the corporate makeup of the College of Pharmacy. In Quebec and Nova Scotia, meanwhile, the poison provisions and means of punishing transgressors of these provisions came after the details of the structure of the associations. More significant is the treatment of poisons themselves. In Ontario, mirroring the British Pharmacy Act, the poison schedule was bifurcated. Substances in the first part were more dangerous poisons, including morphine, strychnine and arsenic, needed to follow specific labelling and bottling instructions, and their sale would be recorded. The second part listed other "poisons within the meaning of this Act" but were not specifically controlled by labelling, bottling, recording the sales, or familiarity with the purchaser. In other words, part two was a list of substances which pharmacists had the

exclusive right to sell. Having divided the poison schedule between two types of poisons, the Ontario Act did not outline any means of controlling the poisons in the second part of the schedule. It left that consideration to the discretion of the individual pharmacist.

The bifurcated poison schedule in Ontario, a direct reflection of the British Pharmacy Act of 1868, was not repeated in Quebec or Nova Scotia.[98] Although the Quebec poison provisions reflected almost verbatim those in the Ontario Act, these requirements for storing, labelling and dispensing poisons related to one undivided poison schedule. In Nova Scotia, the provisions covered the sale of poisons, but not their storage or labelling. The more nuanced treatment of poisons in the Ontario act did not necessarily define a more adequate means of ensuring a restricted public access to medicines. As Table 3.1 illustrates, Part One of the Ontario schedule listed fifteen specific substances; Nova Scotia's schedule listed forty three (Table 3.2); Quebec's schedule listed only twelve (Table 3.3). However, the wording of the Quebec schedule was open to interpretation. The last item on that list was Strychnine, and "all poisonous vegetable alkaloids and their salts." This addition could be broadly construed. Under both the Quebec and Nova Scotia acts, public access to opiates was more directly prohibited. The Ontario Act listed "Opium with its preparations, including Laudanum, &c., but not Paregoric" in part two, with "Morphia and its salts and solutions" in part one. Both the Quebec and Nova Scotia Acts included all opiates except paregoric (and syrup of poppies, in Quebec) in the schedule of restricted poisons. Since only part one of the Ontario schedule was subjected

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[98]The Quebec legislature did bifurcate the poison schedule in the 1890s. See chapter six.

Table 3.1: Poison Schedule of the Ontario Pharmacy Act, 1871

Schedule A.

PART I

Acid, Hydrocyanic (Prussic).
Aconite and compounds thereof.
Antimony, Tartrate of.
Arsenic, and the compounds thereof.
Atropine.
Conia, and the compounds thereof.
Corrosive Sublimate.
Digitaline.
Ergot
Hemp, Indian.
Morphia and its salts and solutions
Oil Cedar.
Strychnine, and Nux Vomica.
Savine, and preparations of.
Veratria.

PART II

Acid Oxalic.
Belladonna, and the compounds thereof.
Beans Calabar.
Cantharides.
Chloral Hydrat [sic].
Chloroform and Ether.
Conium, and the preparations thereof.
Croton Oil and Seeds.
Cyanide of Potassium.
Euphorbium.
Elaterium.
Goulard Extract.
Hyosciamus and preparations.
Hellebore.
Iodine.
Opium, with its preparations, including Laudanum, &c. but not paregoric.
Pink Root.
Podophyllin.
Potassium, Iodide of.
Potassium, Bromide of.
St. Ignatius Beans.
Santonine.
Scammony.
Stramonium and preparations.
Valerian.
Verdigris.
Zinc, Sulphate of.

Sources: Canadian Pharmaceutical Journal, 4 (February, 1871), p. 29.

Table 3.2: Poison Schedules of Nova Scotia Pharmacy Act, 1876.

Schedule A

Acids: carbolic, muriatic, nitric, oxalic, hydrocyanic or prussic.
Aconite and its preparations.
Aconitia.
Antimony, tartarized or tartar emetic.
Arsenic, and its compounds and preparations.
Atropia and its salts.
Belladonna, and its preparations.
Cantharides and its tincture.
Chloroform.
Chloral-hydrate and croton chloral-hydrate.
Chloride of Zinc.
Conium and its preparations.
Conia.
Colchicum and its preparations.
Creosote.
Croton Seeds and their oil.
Cyanide of Potassium and all other cyanides.
Digitalis and its preparations.
Digitaline.
Elaterium.
Ergot and its preparations.
Essential Oils of bitter almonds, cedar, rue, savin and tansy.
Ether.
Euphorbium.
Goulards extract of lead.
Henbane and its preparations.
Hellebore, black, white and green, and their preparations.
Indian hemp and its preparations.
Iodine and its preparations.
Mercury, all poisonous compounds of, including corrosive sublimate, red and white precipitates, and iodides of mercury.
Morphia and its salts and preparations.
Nux Vomica and its preparations.
Opium and its preparations, except paregoric.
Pink root.
Phosphorus.
Podophyllin.
Savin and its preparations.
Santonine.
Scammony.
St. Ignatius' beans.
Stramonium and its preparations.
Strychnia and its salts and preparations.
Veratria and all poisonous vegetable alkaloids and their salts.

Source: Statutes of Nova Scotia (1876) Chapter 11, pp. 21-22.

Table 3.3: Poison Schedule of the Quebec Pharmacy Act, 1875.

Schedule A

Arsenic and its preparations.
Prussic Acid.
Emetic Tartar.
Cyanide of Potassium and all Metallic Cyanides.
Aconite and its preparations.
Opium and its preparations, except Paregoric and Syrup of Poppies.
Essential Oil of Almonds unless deprived of Prussic Acid.
Corrosive Sublimate.
Cantharides.
Savin and its Oil.
Ergot of Rye and its preparations.
Strychnine and all poisonous vegetable Alkaloids and their Salts.

Source: Statutes of Quebec (1875), Cap XXXVII, pp. 161-162.

to strict controls, opium continued to be, at least in theory, publicly accessible in that province. The apparent laxity seems not to have troubled the Ontario pharmacists. Soon after the Act passed third reading, the Canadian Pharmaceutical Journal printed an "Answer to enquiries regarding the Pharmacy Act." The answer related mostly to questions of qualification and the grandparenting clause. It discussed the sale of poisons only briefly, to explain that, from the time the act was passed until it came into force, there were no restrictions on the sale of poisons. Convinced that there was no danger and alluding to the honour of pharmacists, Shuttleworth wrote that "the matter is doubtless in safe hands."[99] As the poison laws were a key feature in Ontario pharmacists' arguments for incorporation, it appears that they felt the act gave them sufficient jurisdiction over the control of poisons. Since the act placed poisons under the auspices of pharmacists (they could not be sold by others), the poisons listed in part two became subject to the discretionary vending by the individual pharmacist.

Conclusions

The pharmacy acts in Ontario, Quebec and Nova Scotia were the products of efforts by doctors and druggists to refine the relationship between the two professions, control public access to medicines and thereby assert professional authority in the issue of public health and safety. The result was a formally interdependent system which, although exempting doctors from the legislation's restrictive clauses, accepted the limited authority

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[99]"Answer to Enquiries Regarding the Pharmacy Act," Canadian Pharmaceutical Journal 4 (March, 1871).

of both professional bodies. While the legislation appears to have validated physicians' dominant role in distribution of pharmaceuticals, druggists' quest for professional status and self regulating powers was successful. They did not accept the legislation as static expressions of their subservience to doctors' authority. Discussions in the pharmaceutical journals in subsequent decades illustrate a persistent challenging of the attempts by doctors to exert their authority over pharmacy. Pharmacists resisted these challenges, and the two bodies continued to debate their roles in medical treatment.[100] In spite of concerns expressed by legislators, the druggists acquired a closed corporation over one facet of retail trade, and they revelled in their newly established trade monopoly.[101] The preoccupation with trade may belie the pharmacists' claims to professional transcendency: trade was a central concern in the pharmacists' professional journals. In the years following the creation of the Pharmacy Act in Ontario, for example, the material in the Canadian Pharmaceutical Journal, and later the Canadian Druggist, concentrated on the intricacies of trade and profit. The incorporation of the pharmaceutical Association, Society and College enabled druggists to gain broader surveillance powers over their colleagues, a means of limiting debilitating competitive trade practices. In the years following the passing of the Pharmacy Act in Ontario, for example, pharmacists repeatedly expressed their concern over the need to ensure that practising pharmacists were licensed. In June, 1873, a druggist charged that the College of Pharmacy was utilizing the services

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[100]Clark, "Professional Aspirations," explores the post-1871 decades of organized Ontario pharmacy.

[101]Collin discusses the importance of trade to creating a unique character of Quebec pharmacy in "Genèse d'une profession," pp 255-257.

of pharmacists' nemesis, George "Whisky" Mason, to investigate grocers who sold drugs without a license. The Registrar of the College denied the accusation.[102]

[102]See Canadian Pharmaceutical Journal, 6 (June, 1873), pp. 405-6; 412. Shuttleworth discussed the case in an editorial, in which he revealed that although the Registrar may not have directed Mason to act on behalf of the College, he had provided the "detective" with a list of all members "who were keeping an open shop in violation of the Act." This action was not approved by the Council, Shuttleworth explained, but was the result of the exasperation of the Registrar over the delinquency of many druggists.

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International debates on addiction, medical ascendancy, and doctors as guarantors of national integrity

In 1867, Dr. D. McGillivray, a physician to the Ottawa Protestant Hospital, visited a thirty-seven year old barrister from New York identified only as Mr. M.D.B., who was complaining of delirium tremens. Mr. M.D.B confessed to the doctor that he was an habitual user of alcohol and morphine. Two years earlier his doctor had prescribed laudanum to ease the pain of a leg injury. Over time the addiction grew; owing to the excessive amounts of laudanum he would need to maintain his habit, Mr. M.D.B turned to morphine, which satisfied the addiction in smaller doses. McGillivray treated the delirium tremens, but continued to observe Mr. M.D.B. with fascination. The barrister was intent on displaying his ability to withstand morphine's toxic effects. He took a drachm bottle of the drug, enough, McGillivray noted, to kill twenty people, mixed it in a tumbler with whiskey, drank it, and went off to enjoy the theatre. McGillivray was surprised and concerned at such excess, and he cautioned his patient "against the results sooner or later to follow such enormous doses of poison and such flagrant abuse of his constitution." The man's response was simple: "I am used to it and there is no danger." Several days later, Mr. M.D.B. returned to New York to visit his family.[1]

The doctor's report of the case would serve a much different purpose had his experience with this morphine addict ended at Mr. M.D.B.'s departure. However, after four months the barrister returned to Ottawa, "feeble and exhausted, worn and emaciated,

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[1]D. McGillivray, "Excessive use of Morphia, A DRACHM of the Sulphate taken at one Dose with impunity," Canada Medical Journal, 5 (February, 1969) pp. 352-354.

apparently fast sinking a victim to his evil habits of the dangers attending which he was now fully convinced." He began to try to resist his cravings. "With perfect consciousness that he was destroying himself and with every desire to struggle against the insatiable cravings of his diseased appetite he found it utterly impossible to offer the slightest opposition to them." Unable to control his addiction, Mr. M.D.B. continued to weaken, until "death closed his sad career."[2]

McGillivray's report presents a vivid example of a transitional phase in the medical ideas about substance addiction. In the 1860s, physicians had not yet formulated a disease theory of addiction, yet they did encounter habitual drug use. Drug habituation fit into a broader category of abnormal behaviour, what David Musto called "vice-disease, easily acquired, progressively damaging, and difficult to cure," resulting from a weakness of the will.[3] McGillivray's reference to Mr. M.D.B.'s "diseased appetite" indicates this interpretation. Along with his surprise over the excessive amounts the patient could tolerate, McGillivray focussed upon the patient's unwillingness, not inability, to stop. The concept of vice-disease related to a moralistic interpretation of recreational substance use, allied with, but not the same as, alcohol consumption. Although he was healthy in appearance, Mr. M.D.B. was "an inveterate smoker, and a hard drinker, almost incessantly revelling in debauchery and profligacy." McGillivray interpreted these excessive habits as having led to increased use of morphia, since "the more whiskey he drank the more

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[2]Ibid.

[3]David Musto, The American Disease: Origins of Narcotic Control (New Haven: Yale University Press, 1973), pp. 72-5.

morphia he was required to take." This causation is not necessarily accurate, but does suggest how the physician viewed the relationship between morphine and alcohol. Liquor, the focus of a great deal of social opprobrium, was the destroyer; morphine, a valuable medicine, was merely the agent of that destruction, but not the initial cause. Mr. M.D.B. presented what doctors labelled an "addictive personality," a person whose character tended particularly towards excessive habits.[4]

While chronicling the case for the information of his colleagues, McGillivray included no details of the attempted treatment. He told of an iatrogenic addiction, an abuse of medicine, indiscriminate access to dangerous substances, the subversion of the will to the baser animal cravings, and the consequences of these transgressions. It was a cautionary tale for doctors against the inordinate prescription of opiates, an illustration of the excesses of habitual opiate consumption, and a reminder of the ultimate fate of such behaviour. McGillivray's concern, while ostensibly for the benefit of other opium addicts, was equally for the benefit of his colleagues. Just as the proper use of drugs in therapeutics bolstered doctors' authority, misuse could challenge it.

In this chapter, I consider the emergence of a scientific interpretation of habitual substance use, and how it related to conceptions of medical authority. As I discussed in chapters two and three, doctors viewed the control of opium and other dangerous poisons as necessary to protect the public health and concomitantly bolster their professional

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[4]Mariana Valverde discusses the "addictive personality" in her recent article "'Slavery from Within': The Invention of Alcoholism and the Freedom of the Will." Social History 22 (Autumn 1997), pp. 251-268. My thanks to Dr. Valverde for permitting me to read this article in its manuscript form.

authority. Defining and restricting poisons were the points of debate in these chapters, and neither doctors nor pharmacists achieved dominance over the control of drugs. Since a key aspect of cultural authority required the definition of fact and value, in this chapter I look at how ideas of habitual drug use related to doctors' confidence in the ability of medical science to define "facts" and physicians to define "value." The medicalization of addiction would inform discussions doctors had with pharmacists and politicians over the social dangers of drug use, a topic that I take up in subsequent chapters.

In this discussion I follow the discussions of substance habituation from a moral failing to a physical affliction. I begin by considering two medical arguments for increased medical intervention in the treatment of inebriety prior to the rise of the disease theory of addiction. To adequately discuss the links between moralistic conceptions of inebriety and medical conceptions of opiate habituation, I then consider how writers compared opiates and alcohol. The social and medical ideas of alcohol and narcotic drugs overlapped and often conflicted. Turning to the growing medical scientific investigation of drug addiction, I then explore how the emerging disease concept of addiction permitted doctors to define a behavioural condition in somatic and medical terms. By the turn of the century, medical addiction specialists claimed an authority over a phenomenon that they could explain no more adequately than their moralist predecessors. Finally, I link ideas of addiction to Canadian physicians' growing insistence upon their role as guardians of national health.

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The history of addiction has received a great deal of attention over the past three decades.

Much of the recent scholarship concerning the emergence of the idea of addiction in America draws upon Harry Gene Levine's 1978 "The Discovery of Addiction." Levine argued that the concept of drinking as addictive, and addiction as an irresistible compulsion, began in the late eighteenth century, and gained ascendancy by the middle of the nineteenth. He explained that the concept of addiction "can be best understood not as an independent medical or scientific discovery, but as part of a transformation in social thought grounded in a fundamental change in social life."[5] That ideas about addiction were founded in social change suggests that doctors' response to substance use was rooted in broader ideas about social stability and progress.[6] However, since writers did not always view alcohol and opium habituation as essentially the same, it is important to consider the different ideas surrounding habitual substance use.[7] While physicians debated the value of alcohol in medicine, opium's medical utility was rarely scrutinized. It remained a key substance in the western pharmacopoeia.[8] Social transformation is central

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[5]Levine, "Discovery of Addiction: Changing Conceptions of Habitual Drunkenness in America," Journal of Studies on Alcohol 39 (January, 1978), p. 53.

[6]The clash of political ideas about alcohol and medical therapeutics are discussed more fully in Chapter Five.

[7] In a recent reflection on his 1978 paper, Levine linked the anti-alcohol ideology to "all anti-drug ideology," implying parallels between these two forms of addiction. This connection may not be entirely valid, since the two were not always linked. See Levine, "To Conference Participants," presented at the conference on Historical Perspectives on Drug and Alcohol Use in American Society, College of Physicians, Philadelphia, May 9-11, 1997.

[8]On the role of alcohol in medicine, see Sarah E. Williams, "The Use of Beverage Alcohol as Medicine, 1790-1860," Journal of Studies on Alcohol 41 (May, 1980) pp. 543-566; Warsh discusses alcohol as therapy briefly in Moments of Unreason: The Practice of Canadian Psychiatry and the Homewood Retreat, 1883-1923 (Montreal and Kingston:

to understanding the concept of alcohol addiction, but equally valuable when looking at drug habituation is the role of medical definitions of addiction, and how the medical profession viewed its social role as authoritative.

The role of physicians in defining drug addiction has been a theme in several valuable studies of addiction.[9] Timothy Hickman recently asserted the importance of professional aspirations in framing the "problem" of addiction. He argues that controlling addiction, and pressing their definition of a medicalized concept of addiction was part of a broader professionalization mandate of the doctors. I believe that Hickman is correct to assert the centrality of medicine in the emergence of the ideas of drug addiction, but I would add that we need to consider not only professional status issues, but also how an emerging confidence in positivistic science as a means of cultural definition recast earlier moral issues into a scientific mould. The growing emphasis on science as an explanatory

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McGill-Queen's University Press, 1989), pp. 145-147. Discussions of the centrality of opium in nineteenth century therapeutics are many, but for Canada see, Jacalyn Duffin, Langstaff: A Nineteenth-Century Medical Life (Toronto: University of Toronto Press, 1993), pp. 75-6. For the United States, see especially, John Harley Warner "Therapeutic Change" in Warner The Therapeutic Perspective: Medical Practice, Knowledge and Identity in America, 1820-1885 (Cambridge, Mass.: Harvard University Press, 1986), pp. 83-161.

[9]Timothy Hickman, "The Double Meaning of Addiction: Habitual Narcotic Use and the Logic of Professionalizing Medical Authority in the United States, 1900-1920," paper presented at the conference on Historical Perspectives on Drug and Alcohol Use in American Society, College of Physicians, Philadelphia, May 9-11, 1997; Berridge, "Morality and Medical Science: Concepts of Narcotic Addiction in Britain, 1820-1926," Annals of Science 36 (1979), pp. 67-85; Geoffrey Harding, Opiate Addiction, Morality and Medicine: From Moral Illness to Pathological Disease (London: Macmillan Press, 1988); Terry Parssinen and Karen Kerner, "Development of the Disease Model of Drug Addiction in Britain, 1870-1926," Medical History 24 (July 1980), pp. 275-296; Warsh, "The Aristocratic Vice: Medical Treatment of Drug Addiction in the Nineteenth Century," in Warsh, Moments of Unreason, pp. 155-170.

system gave physicians confidence and authority to seek to control and urge regulation of various social practices. Virginia Berridge, Geoffrey Harding and Terry Parssinen and Karen Kerner have all noted the rising power of physicians in defining addiction and prescribing legislative action on the growing "problem" of drug addiction in Britain during the early twentieth century.[10] Likewise, David Musto recognized that the physicians and pharmacists who pressed for narcotic legislation may have framed their opinions in terms of positivistic science, but they also regarded narcotic restriction laws as potentially advantageous for their professional aspirations.[11] Doctors' central role in re-framing a moral concept in medical language is integral to understanding the shifting policy decisions relating to drug use.

By situating the advent of a moralistic conception of drug addiction as late as 1874, historians of drug history may undervalue the importance of earlier discussions of habituation. As Levine observed, from the end of the eighteenth century, writers considered the problem of drunkenness, or inebriety, and often linked it with other substances, like opium, tobacco, coffee and tea. The strong evangelical tradition in North America was particularly influential in driving a moral discourse of addiction long before the development of medically-centred addiction organizations like the (British) Society for the Study of Inebriety (SSI) or its American cousin, the American Association for the

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[10]Berridge, "Morality and Medical Science," pp. 78-82; Harding, Opiate Addiction, Morality and Medicine," pp. 56-82. Parssinen and Kerner, "Development of the Disease Model," pp. 283-287.

[11]Musto, The American Disease, pp. 13-14.

Cure of Inebriates (AASCI) in 1870.[12] With its revival meetings and stories of spontaneous conversion experience, evangelicalism offered a challenge to emerging medical concepts of addiction. Recent work by Katherine Chauvigny on conversion testimonials of ex-drunkards suggests that historians need to consider more clearly the impact of religious ideas on addiction theories.[13] To consider the transition from religious themes to scientific explanatory discourse is part of the current chapter's purpose.

The addicted body and temperance sentiment as political/moral polemic

As Dr. McGillivray's diagnosis of Mr. M.D.B demonstrated, doctors often compared habitual drug and alcohol use. Drunkenness was a social concern throughout the century, and to properly contextualize emerging ideas about drug habituation, it is useful to consider some of the key themes within discussions of inebriety. Excessive use of alcoholic beverages presented a dilemma to physicians and reformers early in the century.

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[12]Both Organizations underwent name changes in the course of their existence. The SSI was originally the Society for the Study and Cure of Inebriety. It dropped the "Cure" in 1887, and later became the Society for the Study of Addiction. (See Virginia Berridge, "Society for the Study of Addiction," British Journal of Addiction 85 (1990), pp. 987-1016). The AASCI was originally The American Association for the Cure of Inebriates, and changed its name to the "Study and Cure of Inebriety" several years after its formation. That change suggests the focus on a more scientific and hopeful programme--studying the condition, rather than the patient. (Leonard Blumberg, "The American Association for the Study and Cure of Inebriety" Alcoholism: Clinical and Experimental Research 2 (July, 1978) pp. 235-240).

[13]See Katherine A. Chauvigny, "Reforming Drunkards in Nineteenth Century America: A Popular Religious Therapeutic Tradition," presented at Historical Perspectives on Drug and Alcohol Use in American Society, College of Physicians, Philadelphia, May 9-11, 1997.

Several historians have examined the reactions to the intemperate use of alcohol.[14] This section, therefore, focusses upon the combination of medical and religious discourses of alcohol consumption throughout the first two-thirds of the nineteenth century. What changed as the century progressed was not the interpretation of alcoholism, but rather the authority that physicians developed, reinforced by the language of science, and shorn of a language of religion. This increased moral authority and belief in their social leadership validated the medical profession's attempts to restrict and constrain alcoholic excess.

Two works demonstrate the key issues in medical temperance discussions. The American Samuel Bayard Woodward (1787-1850), a key figure in the early formation of the American psychiatric profession, and the founder of the nineteenth-century inebriate

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[14]For the United States, see Joseph Gusfield, Symbolic Crusade: Status Politics and the American Temperance Movement, Second Edition (Urbana: University of Illinois Press, 1986); Norman H. Clark, Deliver us from Evil: An Interpretation of American Prohibition (New York: Norton, 1976); Jack S. Blocker, Jr. American Temperance Movements: Cycles of Reform (Boston: Twayne, 1989) Ian Tyrrell, Sobering Up: From Temperance to Prohibition in Antebellum America, 1800-1860 (Westport, Conn.: Greenwood Press, 1979); for Canada, see Jan Noel, Canada Dry: Temperance Crusades Before Confederation (Toronto: University of Toronto Press, 1995); M. A Garland and J. J. Talman, "Pioneer Drinking Habits and the Rise of the Temperance Agitation in Upper Canada prior to 1840," Ontario History 27 (1931), pp. 341-364; James M. Clemens, "Taste Not, Touch Not, Handle Not: A Study of the Social Assumptions of the Temperance Literature and Temperance Supporters in Canada West, 1839 to 1859," Ontario History 64 (1972), pp. 142-160; Cheryl Krasnick Warsh, ed., Drink in Canada: Historical Essays (Montreal and Kingston: McGill-Queen's University Press, 1993); Reginald Smart, and Alan C. Ogborne, Northern Spirits: A Social History of Alcohol in Canada (Toronto: Addiction Research Foundation, 1996). On the theories of addiction, see Harry Gene Levine's seminal article, "The discovery of addiction;" and Levine, "The Alcohol Problem in America: from temperance to alcoholism," British Journal of Addiction 79 (1984), pp. 109-119; Timothy Hickman has challenged some of Levine's conclusions in "The Double Meaning of Addiction."

asylum movement, published his collected Essays on Inebriate Asylums in 1830.[15] Three decades later, Canadian James Bovell published his Plea for Inebriate Asylums (1862) addressed to the legislature of the province of Canada. Bovell (1817-1880), was a Toronto physician, medical educator (who had testified against Dickson in the Broom inquest), a strong influence on the young William Osler, and became an ordained minister in the Church of England later in his life.[16] Taken together, these two works demonstrate central themes to medical discussions about the dangers of inebriety to society, and doctors' role in curtailing the problem.

Woodward's explanation of inebriety centered upon the Christian tension between passion/body and reason/mind. To Woodward, the body was weak. The physical system was liable to be "moulded by any factitious influence."[17] The key danger of intemperance were that, by drinking, the body--as opposed to the will--would become weaker, would

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[15]On Woodward, see "Woodward, Samuel Bayard" Dictionary of American Biography. Woodward was the founder and first president of the AMSAII, which later became the American Psychiatric Association.

[16]James Bovell, A Plea for Inebriate Asylums: Commended to the Consideration of the Legislators of the Province of Canada (Toronto: Lovell and Gibson, 1862). I am grateful to Mariana Valverde for providing me with a copy of Bovell's work. On Bovell, see "Dr Bovell's Quadrilateral Mind," in A. B. McKillop, A Disciplined Intelligence: Critical Inquiry and Canadian Thought in the Victorian Era (Montreal and Kingston: McGill-Queen's University Press, 1979); Charles G. Roland, "James Bovell, (1817-1880): The Toronto Years," Canadian Medical Association Journal 91 (1964), pp. 812-814; M. E. Silverman. "James Bovell: A Remarkable 19th-century Canadian Physician And The Forgotten Mentor Of William Osler." Canadian Medical Association Journal 148 (March 15, 1993), pp. 953-7.

[17]Samuel B. Woodward, Essays on Asylums for Inebriates (Worster, Mass.: s.n., 1836) in Gerald Grob, ed. Nineteenth-Century Medical Attitudes Toward Alcoholic Addiction (New York: Arno Press, 1981), p. 3.

become ruled by the passions, rather than by morality or the reason. Intemperance, then, was "a physical evil, depending on certain diseases or modifications of the functions of the system... and not under the control of the will."[18] By losing control of the will, the drinker would allow his bodily passions to lead the individual to ruin.

This concern over bodily desires overwhelming reason and morality was also at the heart of Bovell's argument. By drinking, the individual was submitting to debased, corporeal wants rather than the pragmatism of moral reasoning. As Mariana Valverde notes, submitting to the bodily passions was considered a process of losing one's liberty, becoming subjected to a "slavery from within" which necessitated intervention by outsiders.[19] To Bovell, the individual's loss of moral sovereignty justified the state's creation of inebriate asylums, where the combination of medical and moral treatment would lead to a combined secular and spiritual salvation.

Both Woodward and Bovell linked personal responsibility with civic virtue. Inebriety wreaked physical and moral damage on the individual, and the drunkard wreaked physical and moral damage on the state. Woodward believed that a person who drank to incapacity flaunted the freedom inherent in the value system of the United States. First, the individual contributed to the political economy of the society or nation. Second, through procreation, the body ensured the continual population of the nation. By consciously and willfully debasing one's body, the individual affected the present and future fortune of the nation. More importantly, the drunkard passed that propensity on to

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[18]Woodward, Essays on Asylums, p. 3.

[19]Valverde, "Slavery from within," p. 265.

future generations.

Bovell reiterated such concerns, and presented a view of the state as the benign patriarch, leading its citizens to freedom. The role of the state was "to conserve the morals of the people, for the end of all good government is the morals of the people."[20] Many drinkers wanted to be free, but could not do so on their own. A true liberal state had to fight for the emancipation of the will, to free it from the control of the body. The key, explained Bovell, was not to forget that some people suffered from "imperfect development of their moral qualities," and therefore needed to be educated and enlightened. "In many instances," drunkards were "keenly sensible to their fault, and would most thankfully submit to any restraint which would save them from the power of their enemy."[21] A moment of enlightenment, prompted by proper education of the drunkard's condition, led to the drinker's search for salvation.

The penitence-atonement-redemption cycle was central to both writers' concepts of how the drunkard would be saved. According to Bovell, the will that had become enslaved to the body needed the intervention of "the dictates of approving reason," to help the drunkard recover. This intervention was possible in a specialist inebriate asylum, where medical treatment would parallel moral uplift. However, such outside human intervention was only effective to a limited degree. "No mere human efforts can possibly reclaim fallen human nature." Redemption came through communion with God.[22]

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[20]Bovell, A Plea For Inebriate Asylums, p. 30.

[21]Ibid.

[22]Ibid, p. 32.

Woodward had also placed spiritual uplift as central to the drunkard's salvation. It was so important, that in one example, medical and state intervention played no discernable role in the inebriate's rescue. For an undisclosed reason, an intemperate man attended a temperance lecture, where his mind was changed and he decided to mend his ways. With the encouragement of his wife, the man passed "a season of sobriety... [during which] his whole character was reformed."[23] There followed considerable financial, moral and emotional elevation and prosperity. What is especially interesting about this example is that it seems to contradict Woodward's physiological and metaphysical arguments. The treatment became irrelevant; what changed the man's life was a pseudo-religious awakening followed by a period of reflection and repentance, encouraged by his noble wife. The temperance meeting provided a surrogate for the religious revival. The doctor was superceded by divine intervention and enlightenment. Presumably, Woodward used this example to show the proper means of personal salvation, while he continued to argue that the state should provide the means for more people to reach this personal epiphany.

These two writers presented solutions to the problem with habitual alcohol consumption posited upon the physical condition of the body, but dependent upon an inherent understanding of the metaphysical or spiritual core of the individual. To cure intemperance, both body and soul needed ministration. Medical intervention was not sufficient for a cure; religious awakening was equally necessary. Religion and medicine, then, were mutually reinforcing authoritative discourses in early- to mid-nineteenth-century temperance arguments. As the century wore on, science increasingly replaced

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[23]Woodward, Essays on Asylums, p. 26.

religion as the definitive means of authority. Science sought conclusive answers to materialistic questions, while religion admitted the realm of the unknown: the Will of God.[24] In the rest of this chapter, I consider the development of a scientific language surrounding habitual substance use. The language became more esoteric and inacessible to the public, but the ideas underlying this medical scientific language continued to rest upon a moralistic basis. Doctors asserted their authority over the physical well-being of the population by reifiying moral and spiritual concepts.[25]

Comparisons of alcohol and opium

To bridge discussions between alcohol inebriety and opium habituation, we must first consider the ideational relationship between alcohol and narcotic drugs. Few historians have discussed directly the connections between opium and alcohol in the debates over inebriety. The most notable discussion is Shepard Siegel, who uses his examination of the Victorian ideas about alcohol and drugs to reconsider contemporary drug treatment programmes.[26] Yet the relationship between opiates and liquor is an important topic for

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[24]As A. B. McKillop has shown, part of the role of science prior to the Darwinist ontological challenge was to learn more about God's design, through an empirical examination of the natural world. A. B. McKillop, A Disciplined Intelligence. See also Valverde, "Slavery from Within," p. 260; Carl Berger, Science God and Nature in Victorian Canada (Toronto: University of Toronto Press, 1983).

[25]S. E. D. Shortt, "Physicians, Science, and Status: Issues in the Professionalization of Anglo-American Medicine in the Nineteenth Century," Medical History, 27 (1983) pp. 51-68; Mitchinson, The Nature of Their Bodies: Women and their Doctors in Victorian Canada (Toronto: University of Toronto Press, 1991), pp. 42-43.

[26]Sheperd Siegel, "Alcohol and Opiate Dependence: Re-evaluation of the Victorian Perspective," in Howard D. Cappell, Frederick B. Glaser, Yedy Israel, Harold Kalant,

analysis. Alcohol was the substance of considerable social opprobrium, while opiate addiction, at least when discussing home consumption, was almost a political non-issue before the end of the century.[27] How did writers on habitual substance consumption see the relationship between drugs and alcohol?

Considering the effects of habituation, many writers linked the two substances. Robert Hamilton, in his Practical Hints on Opium Considered as a Poison (1790) stated that "opium and spirituous liquors in their effects, are very analogous to each other."[28] Edward Hitchcock, wrote in 1830 that "I group [spirits, wine, opium and tobacco]... together as alike to be rejected," and provided a list of damaging physical and moral effects of the substances.[29] Scottish physician Robert MacNish, whose Anatomy of Drunkenness (1832) was in early influential text on liquor consumption, called the opium habit "most pernicious, and [in] no way different from that of drunkards."[30] This combination was not exclusive to the first part of the century; at the end of the century,

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Wolfgang Schmidt, Edward M. Sellers and Reginald G. Smart, eds. Research Advances in Alcohol and Drug Problems, Volume 9 (New York: Plenum Press, 1986), pp. 279-314; Dolores Peters touches on the comparisons in "The British Medical Response to Opiate Addiction in the Nineteenth Century," Journal of the History of Medicine 36 (October, 1981), pp. 469-427.

[27]The opium trade in Asia rarely entered discussions of non-Asian opium addiction.

[28]Robert Hamilton, Practical Hints on Opium Considered as a Poison (Ipswich: G. Jermyn, 1790) in Gerald Grob, ed. Origins Of Medical Attitudes Toward Drug Addiction in America: Eight Studies, 1791-1858 (New York : Arno Press, 1981), p. 41.

[29]Edward Hitchcock, An Essay on Alcoholic and Narcotic Substance, p. 4.

[30]Robert MacNish, The Anatomy of Drunkenness, Fourth edition (Glasgow: W. R. M'Phun, 1832) p. 68.

commentators insisted upon the fundamental similarity of opium and alcohol's effects.[31]

More subjective and personal interpretations of the immediate effects of the substances drew a sharper distinction. Thomas DeQuincey, the author of Confessions of an English Opium Eater (1821), not surprisingly viewed opium as a transcending substance. He did not believe that "any man, having once tasted the divine luxuries of opium, will afterward descend to the gross and mortal enjoyments of alcohol.... opium communicates serenity and equipoise to all the faculties, active or passive; and... it gives simply that sort of vital warmth which is approved by the judgement."[32] Robert MacNish, although he saw the long-term effects of opium and alcohol to be equally "pernicious," offered a comparison of the immediate transcending quality of opium versus alcohol that reflected DeQuincey's distinction. Reflecting the comments of Samuel Taylor Coleridge, MacNish speculated on the way the substances affected the moral being. Opium appealed to the higher nature of humanity, while alcohol excited the base animal instincts.[33]

Later in the century, positive descriptions of opium's effects had declined.

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[31]Samuel Parrish "The Philosophy of Intemperance" Proceedings of the First Annual Meeting of the American Association for the Cure of Inebriates in Gerald Grob, ed. Proceedings of the American Association for the Cure of Inebriates (Arno Press Reprint, 1981), p. 20. Hereafter called "Proceedings of the AASCI"; Edward C. Mann, "The Nature and Treatment of the Morphia Habit," Montreal Medical Journal 24 (July, 1894), p. 4.

[32]"DeQuincey's 'Confessions of an English Opium Eater,'" in anonymous ed., The Opium Habit: With Suggestions as to the Remedy (New York: Harper & Brothers, 1868) pp. 80, 85.

[33]MacNish, Anatomy of Drunkenness, pp. 70-71. On Coleridge, see Alethea Hayter, Opium and the Romantic Imagination: Addiction and Creativity in DeQuincey, Coleridge, Baudelaire and others Second Edition (New York: Crucible, 1988); Berridge and Edwards, pp. 50-57.

Physicians like Dr. E. R. Palmer, whose article suggesting an antidote to opium addiction appeared in Canada Medical Record in 1881, criticized laudatory conceptions of opium, but reiterated the differences between opium and alcohol. Palmer called it a "pernicious notion... that there is something far more exhilarating far more divine in the intoxication produced by opium." This concept was nonsense, Palmer explained, and offered an interpretation of opium as it affected the body in contrast to its effects on the mind. "Opium eating is a curse without any qualifying dispensation... Unlike alcohol, it cannot be said of opium that its constant use improves the vital powers of the enfeebled."[34] To Palmer, opium was a depressant and narcotic, not in any way a stimulant. Palmer's argument reflected the general therapeutic shift in the last part of the century. Many physicians reduced their therapeutic use of drugs in preference to embracing a regimen of physical support and nutrition. In this approach, the use of alcohol, which many doctors saw as nutritive, was preferable to opium, which had little nutritive value.[35]

The comparison between opium and alcohol addiction also had a more direct causal relationship. As Dr. McGillivray noted in Mr. M.D.B.'s case, one substance often led to another. W. G. Smith observed in 1832 that women resorted to opium as a

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[34]E. R. Palmer, "The Opium Habit--a Possible Antidote" Canada Medical Record, 9 (May, 1881), p. 80.

[35]Musto, in The American Disease, paraphrases The Right Reverend Charles Brent's comparison of the value of alcohol versus opium, p. 11; Williams, "Use of Beverage Alcohol;" Rosenberg, "Therapeutic Revolution" Morris Vogel and Charles Rosenberg, eds., Therapeutic Revolution: Essays in the Social History of American Medicine (Philadelphia: University of Pennsylvania, 1979), p. 17; Warner, Therapeutic Perspective, pp. 143-148.

substitute for gin and brandy.[36] When considering the social effects of prohibitory laws, Parrish explained that drugs in the form of "bitters, cordials, syrups, essences and tinctures... are not only used as intoxicating drinks where there is prohibition, but when there is not these compounds are sold at the public bars alongside of whisky, brandy and gin."[37] In 1849, a legislative committee of Upper Canada, while considering a bill to regulate the sale of alcohol, noted the connection between alcohol and opium, but rejected its significance. The chair, A. Gugy,[38] recognized that some people felt that liquor restriction might result in more people "resort[ing] for excitement to opium or to some other drug."[39] Gugy said this trend would not occur, since opium was a private indulgence, while liquor was more social and public. However, the linkage between alcohol and drug abuse was clear. An alternative to Gugy's point had been made in Britain by Edwin Chadwick in 1834. Chadwick reported to the Select Committee on Inquiry into Drunkenness that "if alcohol sales were restricted, people might be driven to some other form of enjoyment."[40] Chadwick's perspective was reiterated forty years later when, in

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[36]William G. Smith, Inaugural Dissertation on Opium, 1832, in Gerald Grob, ed. Origins Of Medical Attitudes Toward Drug Addiction in America: Eight Studies, 1791-1858 (New York : Arno Press, 1981) p. 21.

[37]Parrish, "The Philosophy of Intemperance," p. 35.

[38]Probably Bartholomew Conrad Augustus Gugy (1796-1876).

[39]Journal of the Legislative Assembly of Upper Canada, Appendix ZZZ, 1849. I am grateful to Dr. Martina Hardwick for this reference.

[40]Paraphrased in Elizabeth Lomax, "The Uses and Abuses of Opiates in Nineteenth-Century England," Bulletin of Medical History 47 (March-April, 1973), p. 167.

1878, an anonymous writer in the Canadian Monthly charged that the temperance movement was causing an increase in the number of addicts to "opium, hashich, hydrate of chloral, and other such still more noxious substances" by making alcohol more difficult to purchase. He cited his own experiences as an opium eater as proof.[41] A case of opium poisoning reported in the Canada Medical Journal in 1869 also alluded to the connection between alcohol and opium. A man was found unconscious in his office after taking over an ounce of Laudanum while in a drunken stupor. Although the writer, George Ross, made no direct connection between the two drugs, he did not consider the incident to be an attempted suicide, but rather a progressive form of indulgence, not unlike the case reported by McGillivray.[42]

As the century drew to a close, addiction specialists began to make more sharp distinctions between physical and moral results of alcohol and opium addiction. These distinctions, while couched in medical terminology, recognized an implicit link between moral and physical conditions. In his expanded version of Inebriety or Narcomania (1894), Norman Kerr, president of the Society for the Study of Inebriety, compared opium and alcohol addiction as both somatic and moral/mental phenomena. Alcohol indulgence could be either social or solitary, whereas opium was exclusively consumed alone. "Alcohol infuriates," and opium generally soothes the habitue. Opium raised the temperature, while alcohol lowered it. "Carefully conducted scientific experiments"

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[41]Anonymous, "Opium Eating," Canadian Monthly, 13 (March, 1878), p. 248.

[42]George Ross, "'Case of Poisoning by Opium, successfully treated by the Hypodermic Injection of Atropia,' Under the Care of Francis W. Campbell," Canada Medical Journal (August, 1869), 62-65.

suggested that alcohol affected animals, but opium generally did not. Alcoholics were more untruthful than opium addicts, while it was more difficult for opium users to exercise moderation than for alcoholics. Under the subtitle of "perversion of the affections," Kerr presented a gendered moral interpretation of the differences between opium and alcohol. "Opium transforms the manly, high-toned, pleasant companion into an effeminate, drivelling, querulous bore. Alcohol changes the neat, active, attractive and devoted helpmeet into a dirty, idle, repulsive and selfish brute."[43] This distinction is curious, since many writers associated opium with women and alcohol with men. Perhaps Kerr was trying to draw upon a gender-specific worst-case scenario.[44] Since the long-term use of opium "is seen in a rather nervous disquietude and excitability," opium was connected to speculation and gambling, while alcohol "is apt to provoke the animal passions and incite to lust."[45] Physically, alcohol presented a much more severe pathological transformation than did opium, although opium presented a "more irreclaimable and incurable diseased condition." Both substance negatively affected the reproductive system.

The ideas of commentators on alcohol and opium use demonstrate that in both

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[43]Norman Kerr, Inebriety or Narcomania: Its Etiology, Pathology, Treatment and Jurisprudence (London: Lewis, 1894), p. 106.

[44]He may also have alluded to the Victorian medical conception of vital power, which offered a gendered notion of proper channelling of energy. Bruce Haley discusses how doctors used a modified form of temperaments physiology. Replacing Galenic temperament distinctions (phlegmatic, bilious, etc) with temperaments based upon general categories like gender and body size, physicians offered physiologies that explained disease as an abnormal channelling of energy. See Bruce Haley, The Healthy Body and Victorian Culture (Cambridge, Mass.: Harvard University Press, 1978), p. 43.

[45]Kerr, Inebriety or Narcomania, pp. 106-107.

immediate physical effects and long-term dangers, opium and alcohol were simultaneously similar and different. The differences often related to class-based conceptions of the substances' effects upon the physical system, and medical ideas of therapeutic efficacy. The elevation of the higher or nobler aspects of humanity, presented by opium's hypnotic effects, contrasted with the debasement of alcohol. However, the moral dangers of opium habituation were equally as dangerous as the moral dangers of alcohol consumption. As addiction research became more formalized, doctors like Kerr tried to draw distinctions based on scientific categories, but fell back on moralistic observations. Since both substances were part of the *materia medica*, what needed to be understood was what, exactly, caused habituation, and how best to alleviate the dangers of these substances. Such a project would enhance doctors' ability to use these medicines effectively, and without danger.

"The enemy within": Defining and locating addiction

Commentators on addiction rarely offered a concrete definition of the condition itself. In his 1875 "Opium Poisoning," Joseph Parrish explained the variety of effects of opium on various individuals as the result of "an abnormal predisposition to organic disease of some kind... that this predisposition resides primarily in the germinal cell, there can be no doubt. As every element of the physiological structure exists in the germ before the time of its maturity, ... so the tendency to disease, exists in the same germ, and is as certain to be develop... as the embryo itself is certain to develop into a human being."[46] Addiction was

[46]Parrish, "Opium Poisoning," pp. 10-11.

part of a "variety of tendency to disease," but yet undefined. In the 1890s, Norman Kerr offered a similarly elastic definition. He spoke of "narcomania... a mania for narcotism of any kind, an inexpressibly intense involuntary morbid crave for the temporary anaesthetic relief promised by every form of narcotic."[47] The AASCI's definition paralleled Kerr's, calling opium neurosis "a central neurotic change, brought about by the long persisting perversion of function and impairment of central nervous nutrition, from its persisting presence in the nutrient pabulum of the circulation."[48] The vagueness of these terms enabled investigators to link them to any number of factors based upon race, ethnicity, class, gender or even profession.

To mid-century medical commentators, the addictive nature of opiates and alcohol was loosely defined as a form of poisoning: chronic poisoning. Mr. M.D.B.'s death was the result of this condition. The term itself implies a drawn-out morbid process: if habitual use did not lead to death, it at least resulted in a debilitating physical condition. In the Ontario Legislature, Dr. McGill alluded to this debilitative propensity of poisons in his 1869 presentation of the first Ontario Pharmacy Bill. In an 1875 address to the American Association for the Cure of Inebriates, Samuel Parrish, made the delineation clear when he discussed "Opium Poisoning":

> I am not speaking of those cases of acute poisoning, in which persons have taken a large dose for the purpose of self destruction, or by mistake ,in the treatment of which there is but one course to pursue, but of cases of chronic poisoning from

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[47]Kerr, Inebriety or Narcomania, p. 32.

[48]AASCI, Disease of Inbriety, p. 317.

long continued and habitual dosing of the drug.[49]

Here Parrish made a critical distinction. The familiar forms of poisoning, those that led to death, were the immediate effects of opiate mis-use, but not the only one. Logically, then, the longer-term use of drugs would lead to eventual dissipation and death. The key issue for Parrish, however, remained the fact that death would result from this misuse of drugs; just as the judicious use of opiates were helpful to the patient, an injudicious use could cause the patient's death.

Defining habitual opiate use as a form of poisoning opened the possibility that extant poison legislation could control the trade in habit forming poisons. In 1880, the editor of the Canada Medical and Surgical Journal drew his readers' attention to this potential when he reprinted an editorial from the British Medical Journal. The Journal's correspondent suggested that all narcotics should be labelled "poison," so that the extant poison laws could prevent inadvertent "abuse of narcotics."[50] As I discuss more fully in Chapter Six, this form of justification also occurred in the drive to restrict addictive drugs in Canada at the end of the nineteenth century.

Chronic poisoning was not adequate to explain the physical causes of drug habits, but determining the physical cause of addiction was central to developing medical authority over treatment. Understanding the physical reasons for drug habituation was therefore a point of intense debate among doctors. Some writers skirted the issue; they

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[49]Samuel Parrish, "Opium Poisoning" Proceedings of the Sixth Annual Meeting of the AASCI (1875), p. 16

[50]Canada Medical and Surgical Journal, 8 (April. 1880), p. 429.

preferred to describe the effects of drug habits, and appeal to the reader to treat these substances with caution. Others, like Francis Anstie, alluded to an inherent weakness in the individual addict. Using a distinctly subjective means of investigating--personal experience--he speculated that only specific constitutions were particularly susceptible to the positive effects of recreational opiates.

> In the great majority of European constitutions, opium produces nothing resembling mental excitement; the effect on myself, for instance, of a large dose, is mere depression and misery. But with most Orientals and with some Europeans whose constitutions or whose habits of life are peculiar, a condition is produced... which is very remarkable.

These individuals "appear much exhilarated in spirits, and their minds work with much freedom."[51] Not only did Anstie deny a universally uplifting effect of opium, but he suggested that those who found opium alluring were somehow outside of the "normal."

For temperance advocates, however, arguing that only certain individuals were particularly susceptible to addiction did not suit their purposes. Writers like Hitchcock, whose Essay on Alcoholic and Narcotic Substances was published by the American Temperance Association in 1830, could not avoid alluding to a predisposition to inebriety, but suggested that anyone may be so predisposed. Among the reasons that Hitchcock provided for avoiding intoxicating substances was that they were "fascinating to the diseased appetite."[52] Yet, since Hitchcock directed his essay "Particularly to Students" and did not identify who could possess this type of appetite, for which alcohol and opium

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[51]Francis Anstie, Stimulants and Narcotics: Their Mutual Relations (London: Macmillan & Co., 1864), p. 79.

[52]Edward Hitchcock, An Essay on Alcoholic and Narcotic Substances, p. 4.

were particularly "fascinating," he was suggesting that the readers should avoid these substances because they may actually possess the diseased appetite, and not know it. This conception of an internal depravity that needed to be suppressed by willful action was a fundamental Christian tenet. A Baptist minister from New York summarized the nature of human depravity in an article reprinted in the Montreal Transcript in 1847. Rev. Mr. Cushman wrote "we have... an enemy within. To do good requires self-denying effort--to do evil is easy."[53]

The blatant moralistic arguments of religious temperance reformers faded as scientific medicine consolidated its hold on the investigations of addiction. In 1870, the medical consideration of alcohol inebriety and substance habituation in general took a decidedly institutional turn, a process that began to cement the scientific nature of investigations into addiction. The American Association for the Cure of Inebriates met for the first time in the parlour of the Young Men's Christian Association in New York.[54] Under the presidency of Dr. Willard Parker, and the secretaryship of Dr. Joseph Parrish, the association brought together interested physicians and inebriate specialists as a "scientific gathering." In his opening address, Parker noted how at the beginning of the century, insanity was not considered a medical problem, but a "visitation of God's displeasure" but by 1870 it was a treatable condition. Parker hoped that the Association would be able to demonstrate the same was true for inebriety: habitual substance use

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[53]Montreal Transcript, January 9, 1847.

[54]See Leonard Blumberg, "The American Association for the Study and Cure of Inebriety." In the interest of uniformity, I use the acronym AASCI throughout.

would cease to be an issue of morality, and become an issue of medical science. He concluded by stressing a constructive motive for the Association: "It must be the steady aim of this body to impart scientific truth, and thus enlighten the mind of the public, inducing it to move in its power, and demand protection against a disease, infinitely more destructive than cholera, yellow fever, small pox, or typhus."[55] The Association asserted that "intemperance is a disease... it is curable in the same sense that other diseases are."[56] Although centred upon alcohol inebriety, the AASCI considered other addictive substances. One of the invited attendees was Alonzo Calkins, author of Opium and the Opium Habit. At the concluding session, Dr. D. L. Mason "called attention to the fact that the opium disease required attention from this body."

The discussions in the AASCI, and its British cousin, the Society for the Study of Inebriety, suggest attempts by medical investigators to distance themselves from the moralists.[57] Samuel Parrish discussed both intemperance generally, and opium addiction specifically, in papers he presented to the AASCI. Parrish critiqued the moralists and reformers who viewed drinking as the first step on a downward path that ended in physical debasement. He argued that intemperance was most often the result, not the cause, of personal weakness. He drew out his argument in detail, before recognizing intemperance

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[55]"Minutes," Proceedings of the AASCI (1870) p. 3.

[56]"Minutes," Proceedings of the AASCI (1870), p. 8.

[57]Both the SSI and the AASCI intended to challenge scientifically the apparent blind moralism of earlier temperance movements. See Virginia Berridge, "Society for the Study of Addiction," p. 991; Leonard Blumberg, "American Association for the Study and Cure of Inebriety," p. 237.

as a "pravity" rather than "depravity" of the will:

> Depravity of will signifies a state of natural debasement, without any cause... Pravity of will signifies a departure from a right purpose, and implies a *cause* for such departure; hence it is a disordered, enslaved will; the cause of which , may be in a limited or inharmonious organization, or it may result from the ignorant or reckless indulgence of modes of life.[58]

By insisting upon a "departure from a right purpose," Parrish allowed the possibility of a cure. What the physician needed to do was to determine the cause of the departure. Parrish here reflected the temperance reformers like Bovell, Woodward and Hitchcock when he allowed for a diversity of causes--spanning moral and physical. He placed the onus to find the cure, however, on proper scientific investigation.

The primary defect both moral and medical reformers hoped to address was the impaired will. The majority of AASCI members saw the damaged will as the result of a distinctly physical disorder, rather than moral tendency.[59] Parrish turned the moralists's causation on its head, charging that non-medical reformers were "unaccustomed to investigate the philosophy of physical cases."[60] Instead of drunkenness leading to impairment and debasement, "we have primarily a defective condition of body or mind, and an impaired will, among its earliest evidences; then an appetite, and lastly,

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[58]Parrish, "The Philosophy of Intemperance," p. 30. Emphasis on original.

[59]The ranks of the AASCI were not closed on this issue, however. Early meetings saw dissent mar the discussions of moral versus medical explanations. Yet, in its primary publication, Diseases of Inebriety (1894), the AASCI asserted a somatic origin to the weakened will. This assertion may have owed to the influence of Crothers, who was the principal author of the book.

[60]This concept was reiterated by Lewis D. Mason, "The Aetiology and Therapeutics of Alcohol Inebriety," Canada Lancet (reprinted from Brooklyn Medical Journal), 26 (October, 1893), p. 38.

drunkenness with all its resulting ends."[61] Parrish did admit that there were cases in which the individual chooses to drink from "a deliberate perversity or recklessness of will," but he conceded that those cases were outside of the purview of human law or medical treatment. It was then, he proclaimed, a matter between the "human consciousness and its Divine Author." Having removed the anomalous willful drunk from the equation, Parrish determined that he and his colleagues had to treat intemperance as a disease.[62] Only the physician could successfully identify and treat the ailment that caused drinking.

When he turned to consider opiate use specifically, Parrish refined his perspective to account for conditions he observed in the habitual use of the drug. In 1875 he presented his "Opium Poisoning" to the AASCI, in which he asserted that "there exists an abnormal predisposition to organic disease of some kind in most individuals."[63] This predisposition meant that for some people, opium could have a stimulant effect, while for others it was a narcotic.[64] By asserting this dual nature of opium, Parrish was able to account for the variety of observed effects of opiates upon different systems, a variety which had perplexed investigators like Francis Anstie. The multiplicity of somatic reactions suggests what John Harley Warner explained as a denial of disease-specific therapeutics, the recognition of which was essential to the elevation of the medical

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[61]Parrish, "The Philosophy of Intemperance," p. 31.

[62]Ibid, p. 32.

[63]Parrish, "Opium Poisoning," p. 10.

[64]Ibid, p. 11.

profession.[65] Parrish suggested a physiological explanation for addiction that parallelled Hitchcock. Parrish called opium "a fascinating drug, in its influence upon both mind and body, with persons who have not an opposing idiosyncrasy." This fascination, whether it was for the stimulant or narcotic effect of opium, was a "variety of tendency to disease."[66] In his initial statements about opiate addiction, then, Parrish elaborated a developing conception of addiction as a condition of some constitutionally abnormal type of person. While he asserted that he did not believe alcohol and opium habits to be "identical in constitutional origin," by suggesting a medical explanation for the conditions under which opiate and alcohol addiction could develop, Parrish made a key contribution to a medical discourse of addiction founded simultaneously on moral and scientific grounds.[67]

The disease theory of addiction, elaborated by both the AASCI and the SSI, had its adherents in Canadian medical circles.[68] Stephen Lett, the preeminent addiction specialist in Canada, argued in an address to the American Medical Association in 1891, that "it is all important [that] the physician should eliminate from the mind the *vice* theory, and consider the case in the light of a disease. . .requiring skill, patience, and sympathy to

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[65]John Harley Warner, "The Principle of Specificity," in Warner, The Therapeutic Perspective, pp. 58-80, especially, p. 80.

[66]Parrish, "Opium Poisoning," p. 11.

[67]Ibid, p. 20.

[68]Although the exact makeup of the membership of these organizations is unclear, at least one Canadian practitioner joined the SSI in its first year. Dr. Simon Fitch of Halifax, N.S. was listed in the Council. See reproduction pages of the Society's first meeting, reproduced in Berridge, "British Society for the Study of Addiction," pp. 994-995.

successfully combat."[69] Lett's confidence that scientific labelling would permit successful treatment did not always see results in practice, as Warsh has demonstrated.[70] The disease theory did not entail a distinct therapeutic programme, but rather permitted a range of interpretations. In 1896, members of the Montreal Medico-Chirurgical Society discussed their adherence to the disease theory of inebriety as it related to alcohol use. Dr. O. C. Edwards presented a paper on treating alcohol inebriety with "the hypodermic administration of chloride of gold." This specific remedy mirrored the "cure" marketed by Leslie Keeley, whom regular physicians condemned as a quack.[71] Edwards and others argued that the gold cure was not quackery in the hands of a skilled and conscientious doctor.[72] At the Society's meeting several doctors vehemently disagreed with Edwards's treatment, while agreeing that inebriety was a disease. They presented different explanations of how the disease operated on the body. Dr. T.J.W. Burgess called it an inherited unstable nervous organization; Dr. James Stewart insisted that inebriety disease

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[69]Stephen Lett, "Treatment of the Opium Neurosis," Journal of the American Medical Association, 17 (November 28, 1891), p. 828.

[70]Warsh, "The Aristocratic Vice," in Warsh, Moments of Unreason, pp. 155-170

[71]On Keeley's remedies, see Cheryl Krasnick Warsh, "Adventures in Maritime Quackery: The Leslie E. Keeley Gold Cure Institute of Fredericton, N. B.," Acadiensis 17 (Spring 1988), pp. 109-130; Daniel J. Malleck, "Keeley, Leslie E.," in American National Biography (Cary, N.C.: Oxford University Press, forthcoming); H. Wayne Morgan, "No, Thank You, I've Been to Dwight' Reflections on the Keeley Cure for Alcoholism," Illinois Historical Journal 82 (Autumn, 1989), pp. 147-166.

[72]"The Treatment of Inebriety as a Disease," in account of the Montreal Medico-Chirurgical Society, Montreal Medical Journal, 8 (March, 1896), pp. 736-737. See Dr. Manchester, "The Treatment of Inebriety by the General Practitioner," Western Canada Medical Journal, 2 (December, 1908), pp. 577-587, in which Manchester endorses Edwards's treatment.

was "due to paralysed control," and Dr. J.B. McConnell stated simply that the inebriate was "neurotic."[73] These explanations demonstrate the fluidity of the disease theory of addiction. Moreover, they all presented explanations for the somatic basis of inebriety that merely attached contemporary medical language to an observed behavioural condition. They offered no significantly different interpretations from the earlier ideas of inebriety as a result of the weak will and immoral behaviour. Christian temperance asserted that one's improper actions could result in damnation and social decline, while scientific medical inebriety studies argued that one's actions could lead to disease, and social decline. Both relied upon the conception of a fundamentally flawed individual; the physicians, however, argued that some were more likely to become diseased than others.

The disease theory of inebriety did not go unchallenged by addiction reformers. Robert Harris, of the Franklin Reformatory in Philadelphia, rejected it. At his institution, they treated drunkenness "as a habit, sin and crime." While the appetite for alcohol may be inherited, Harris explained, "the *passion* for it, can only be obtained by indulgence."[74] His perspective echoed the arguments of other temperance reformers, whom Parrish characterized in his 1870 paper as lacking the scientific appreciation of the process of addiction.[75] These writers were not always the non-scientific ignorant moralists that

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[73]"Treatment of Inebriety as a Disease" Montreal Medical Journal, 8 (March, 1896) p. 737.

[74]Harris, "Report of the Franklin Reformatory Home For Inebriates, 913-915 Locust Street, Philadelphia," Proceedings of the AASCI (1875) pp. 80-83. Emphasis in original.

[75]Blumberg explains how the AASCI attempted to make room for ideas like those of Harris. He and his institution, however, soon broke away from the AASCI, a

Parrish characterized them to be. In the Canada Lancet in 1892, New York City physician Charles Dana challenged the tendency of investigators to find disease where no distinct pathological or somatic etiology could be determined. Dana insisted that too little was known about the source of addiction for it to be properly considered as a disease. He also linked drunkenness with other forms of socially-proscribed behaviour.

> In a certain sense... criminals, sensualists, libertines, drunkards are all the victims of a disease, ie, of a constitution and personality which are abnormal. But... we still consider disease to be a disorder of the body and its organs; vice to be a disorder of the character, for which the individual must be held responsible.[76]

Alluding to what John Burnham called the "constellation of vice," and redefining this constellation as forms of functional disease, Dana reasserted the agency of the addict, but insisted upon medical treatment of this condition.[77]

Diathesis and the potential to heal

Key to the disease theory of addiction was the idea of a diathesis. Doctors saw the diathesis as answering questions regarding the agency of the addict, and what physical or moral conditions could lead to addiction. We can also see that the diathesis presented a flexible etiological trope with which almost all behavioural anomalies could be defined in a

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movement that may have had more to do with institutional rivalry within Philadelphia than with ideological differences. Blumberg, "AASCI," p. 236.

[76]Charles L. Dana, "The Nature and Frequency of Inebriety, With Remarks on its Treatment" Canada Lancet, 24 (June, 1892), p. 302. Reprinted from Medical Record.

[77]John Burnham, Bad Habits: Drinking, Smoking, Taking Drugs, Gambling, Sexual Misbehavior, and Swearing in American History (New York: New York University Press, 1993).

simultaneously physiological and moral manner. W. F. Bynum explains how the concept of diathesis "was a useful but extremely elastic and ultimately unfalisfiable idea."[78] The assertion of the existence of a diathesis--a predisposition or primary derangement of the system, which led to the use of some addictive substances--was a key factor in the development of the disease theory of addiction. The idea of a diathesis had existed since ancient times, but its modern usage emerged from the writings of French physician August Morel. His theory of degeneracy incorporated intoxication from opiates and alcohol as potential causes of decline. Morel argued that a degenerated human nervous system operated at a subnormal level, and that "the nervous functions of the afflicted person declined from the high moral levels of normalcy to abnormal, instinctive, and animalistic."[79] Morel's corollary applied the idea of diathesis to this form of degeneracy. American alienist George Millar Beard's neurasthenia thesis presented physicians with another potential piece to the addiction puzzle. Beard argued that humans had a only limited supply of nervous energy, which could be taxed by stress. The theory led to the supposition that modern life and mental activity tended to put a strain upon the reserves of nervous energy.[80] The result of a weakened mental state was a search for stimulus, and the result of stimulus was a debased human nature. Inebriety through opiates or alcohol, therefore, led to mental and moral decline.

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[78]See W. F. Bynum, "Darwin and the Doctors: Evolution, Diathesis, and Germs in 19th-Century Britain," Gesnerus 40 (1983), p. 46.

[79]Paraphrased by Jaffe, "Reform in American Medical Science" p. 140.

[80]Jaffe, "Reform in American Medical Science," p. 140.

These concepts, applied to drug addiction, presented a bifurcated conception of addiction, fueled by social class issues. It explained the preponderance of opiate addiction among elites, and asserted the urgency of the need to find a cure. Social cohesion depended on it. In the literature advertising his "Opium Cure," H. J Brown noted that "Opium is a *corrosion and paralysis* of all the noblest forms of life."[81] Brown's vituperation may have been partially self-motivated: he was selling an opium cure, and needed to reinforce an alarmist perspective. But he was not alone in his characterization of opium as debasing to the higher sensibilities. Many writers noted that control of self was the principal loss to the opium addict, and this concern reflected an upper class fear of decline. Stephen Lett included an account in the Canada Lancet of a man who was "absolutely owned," by morphine after a first, and relatively minor dose of the drug.[82] The anonymous writer in the Canadian Monthly, who charged the temperance movement with driving him to opium addiction, recounted his experience with drug dependence as a cautionary tale against "opium slavery" for upper class readers.[83] He set himself apart from the image of the libertine who took drugs for pleasure, since he did not become addicted through "vicious disposition towards the use of opium," but rather through self-medication. Dr. Jansen Beemer Mattison, a Brooklyn addiction specialist and occasional contributor to Canadian medical journals, noted the insufficiency of the term "opium

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[81]Brown, An Opium Cure (1872) p. 7, emphasis in original.

[82]Stephen Lett, "The Prognosis of Drug Habits, with some reference to treatment," Canada Lancet, 34 (1), September, 1900, p. 2. On Lett, see Warsh, "The Aristocratic Vice," in Moments of Unreason pp. 155-170.

[83]Anonymous, "Opium Eating," pp. 248-249.

habit" since it implied that the opiate was "quite under individual control," which was not the case.[84] Samuel Parrish concurred in this opinion. Personal restraint and integrity disappeared when the individual became "enslaved to the drug." The result was a dramatic decline in social mores, and addicts "no longer conceal the fact [of their 'enslavement'] from the public, but indulge with the same *abandon* of self, and the same disregard of public sentiment, that distinguishes the confirmed alcoholic sot."[85] The message Parrish sent was dire: while opium may have been the habit of the more refined classes, indulgence lowered elites to the state of the shameless drunk on the street. Such a merging of alcohol temperance with anti-opium sentiments, uncomplicated by physiological explanations, provided a clear image of the dangers of opiate indulgence.

Diathesis was a remarkably flexible diagnostic device, and while it could fuel fears of upper class decline, a result of nervous exhaustion and a search for stimulation, it could also explain debasement through hereditary taint.[86] Thomas D. Crothers, editor of the AASCI's Quarterly Journal of Inebriety, and a central figure in the turn of the century inebriety movement, asserted in 1902 that over sixty percent of inebriates "have inherited a predisposition to seek [alcohol and drugs] for some relief," from the stress of modern

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[84]J. B. Mattison "The Treatment of Opium Addiction," Canada Medical Record, 15 (January, 1885), p. 73.

[85]Parrish, "Opium Poisoning," p. 9.

[86]I have not found any work that explores the bifurcation of the diathesis, although Bynum, in "Darwin and the Doctors," does call it an "elastic" concept.

life.[87] This diathesis fit into a Darwinist conception of society, and constructed those whose predisposition to addiction overwhelmed their ability to resist their urges, as social "others" in need of reform.

Both the AASCI and the SSI emphasized the idea of inherited diathesis as the predominant cause of addiction. The existence of a diathesis became almost assumed when discussing cases; its fluidity also permitted observed anomalies in addictive behaviour. After detailing the idea of the evolution of brain and nerve defects, attributed to "environment, nutrition, growth and development," the AASCI asked, in its collected volume The Disease of Inebriety (1893) "why should an increasing number of persons take opium continuously for the transient relief it gives? Why should the effects of this drug become so pleasing as to demand its increased use, irrespective of all consequences? The only explanation is the presence of a neurotic diathesis, either inherited or acquired."[88] Conversely, although opium was used in many treatments, the AASCI opined that "all these and similar cases do not become opium takers... owing to the absence of some diathesis inherited or acquired."[89] Only those persons with an inherited or acquired diathesis would become addicts; the AASCI dismissed the potential for a non-physical cause of addiction. Although appearing to reject the moralistic approach to addiction,

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[87]T. D. Crothers, The Drug Habits and Their Treatment: A Clinical Summary of Some of the General Facts Recorded in Practice (Chicago: G. P. Engelhard & Co, 1902), p. 18.

[88]AASCI, The Disease of Inebriety from Alcohol, Opium, and Other Narcotic Drugs: Its Etiology, Pathology Treatment and Medico-legal Relations T.D. Crothers, ed. (New York: E. B Treat, 1893) pp. 319-320.

[89]Ibid, pp. 323-324.

what the AASCI did was attach pliable medical jargon--diathesis--to an unexplained psychosomatic phenomenon, which earlier writers attributed to a weak morality, or the "addictive personality," like the late Mr. M.D.B.

The malleability of diathesis permitted multiple uses and some confusion. Norman Kerr, ardent supporter of the disease theory of addiction, and the central voice in the SSI until his death in 1899, refused to attach the term "diathesis" to all causes of addiction. The distinction was semantic rather than philosophical. Kerr mentioned the term "diathesis" only when discussing heredity; he may have considered diathesis to describe an inherited condition, while he did not believe opiate addiction was always inherited. Opiate addiction, he said, "cannot lay claim to so great indebtedness to heredity... or so marked pathological disturbance as an antecedent or coincident condition; but it is in a vast number of cases an undoubted disease, a functional neurosis."[90] Kerr's ideas may have been shaped by the inability of investigators to find distinct physical lesions relating to opium addiction.[91] His reference to "carefully conducted scientific experiments" reveals the limits of physiological investigation. He used these experiments briefly, to demonstrate that opium acted differently on animals than alcohol did, but could not conclude about the physiological mechanisms that opium affected. Kerr and others paralleled limited "scientific" investigations with detailed clinical observation of the various forms of addiction, according to racial and gendered taxonomy. The few laboratory experiments that did take place, therefore, were of limited

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[90]Kerr, Inebriety or Narcomania, p. 100.

[91]Dolores Peters, "British Medical Response," pp. 478-479.

value to explaining the physical location of addiction.[92] Subsequently, Kerr conceded that a functional change, rather than physical lesion, was at the heart of the behavioural and somatic deterioration wrought by opiate addiction. The results, however, were the classic slippery slope to depravity, reiterated in both temperance tracts and medical investigations throughout the century. He listed the effects of opium addiction in a declining list of depravity: "functional derangement, impairment of the nutritive process, nerve exhaustion, slovenliness, aimless laziness, a dried, wrinkled cadaverous skin, general wasting and emaciation, and a bent form, are prominent links in the lethal chain."[93]

Despite the extensive investigation and attempts to explain scientifically the yet unexplained disease of addiction, the writings of late nineteenth century physicians reflected a discourse that informed the writing of pre-disease theory writers: salvation came through penitence. Just as the inebriates in Woodward and Bovell's examples were often saved after religious awakening and personal reflection, the cases in the later descriptions of the disease of addiction needed to undergo a similar penitence-atonement-redemption process. In his 1902 report of clinical cases, Crothers explained generally how

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[92]As A. Jaffe noted, "though experts had long agreed that drugs altered bodily functions, there was little offered in the way of explanations and identification of the mechanisms involved in this alteration process." A. Jaffe, "Reform in American Medical Science: The Inebriety Movement and the Origins of the Psychological Disease Theory of Addiction, 1870-1920," British Journal of Addiction 73 (1978), p. 145.

[93] Kerr, Inebriety or Narcomania, p. 101. Similarly, in the AASCI's Disease of Inebriety, physical mechanisms are implied, but the proof of these assertions was demonstrated in sociological and hereditarian factors. See AASCI, Disease of Inebriety, pp. 317-318.

doctors should approach the different types of drug addicts they may confront. Reiterating the doctrine of specificity, Crothers recognized that "each case should be a law unto itself." However, his details of the withdrawal process required a submission to the will of the physician (penitence), and a physically wrenching therapeutic regimen (atonement) before the individual would be cured (redemption).[95]

Salvation through science, part I: Henry Howard's somaticism and social progress

The flexibility of the idea of diathesis was connected to a broader trend in reiterating unidentified behavioural anomalies as scientifically defined concepts, waiting to be explained. Linking addiction to a diathesis, a functional physical impairment lacking a specific location, was part of a broader shift towards distinct somatic basis for behavioural problems. In Canada, the somatic focus was championed by Dr. Henry Howard, superintendent of the Longue Pointe Asylum in Quebec. Howard insisted that all disease was the result of physical lesions in the mental apparatus, and used the term "materia cogitans" to describe the physical location of all mental phenomena. The brain was not the only place of mental activity, since studies suggested that the nerves and the spinal column affected mental processes.[96] In an article on "Man's Moral Responsibility," read to

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[95]Crothers, "The Drug Habits and Their Treatment," pp. 65-72. People who possessed a diathesis the obtain relief from all states of pain and exhaustion, needed gradual withdrawal, but a military regimen of discipline. For others, Crothers gave ipecac with opium, and "the revulsive [sic] action and relaxation which followed soon broke up the fixation from...opium" (p. 68). For brain workers and professionals, he advocated that "these cases should be treated heroically; the opium should be removed by the use of substitutes, and active medication follow" (p. 73).

[96]Henry Howard, "Address delivered at the opening of the Summer Session Clinic for Diseases of the Nervous System, McGill University, April 14, 1885" Canada Medical

the Montreal Medical Chirurgical society in 1875, Howard explained the delineation between will, soul, mind, and morality. The will was the action of the immortal and immutable soul upon the body, but the individual's morality is determined by his or her physical makeup. "The mental and physical organization, being one mind and body, constitute one animate man, inseparable and indivisible; both are the act of procreation."[97] Ten years later his materialist conception of disease was more forceful.

> If you enquire of me, what is the mind in the abstract? I answer you, I don't know; I only know it is a phenomenon of matter. What is force? A phenomenon of matter. What is sensation? A phenomenon of matter. What is consciousness? A phenomenon of matter. What is moticity? A phenomenon of matter. What is intellect? A phenomenon of matter. What is instinct? A phenomenon of matter. What is automatism? A phenomenon of matter. What is reflex action? A phenomenon of matter. What is conduct? A phenomenon of matter...[98]

This materialist conception permitted Howard to see all illness, be it mental, moral or physical, as based either in early development or pathological change. "There are very many circumstances over which we had, or have, no control--that lessen our moral responsibility. None of us had a choice of parentage, the time or place of birth, our early education and surroundings."[99]

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and Surgical Journal, 13 (May, 1885), pp. 577-595. Here Howard may be referring to the work of individuals like Benjamin Carpenter, who argued that the will may be partly a result of identifiable physical actions, such as unconscious reflexes, but Carpenter and others did not accept the idea that all aspects of the willful and moral being could be physical phenomena. See Haley, "*Mens Sana in Corpore Sano:* Victorian Psychophysiology," in Haley, The Healthy Body and Victorian Culture, pp 23-45.

[97]Henry Howard, "Man's Moral Responsibility from a Scientific Standpoint," The Canada Lancet 8 (February, 1876), p. 164.

[98]Howard, "Address," pp. 879-880

[99]Howard, "Man's Moral Responsibility," p. 164.

Howard's adamant somaticism led to a redefinition of the term "morality," and a reconsideration of the doctor's social role. He asserted that all treatment of mental illness must be "scientific morality... [which] consists in knowing the physical cause for physical effect, and this we never will know perfectly till [sic] physical science is made the basis of medical knowledge."[100] Howard illustrated the connections between morality and physical actions by calling a badly-conducted muscle "an immoral muscle; it does not, because it cannot, obey the will." Likewise, the individual's conduct is the result of the physical organization of the materia cogitans:

> If its functions be normal, the man's conduct will be normal, and he will consequently be a moral man, living in obedience to nature's laws, and delighting in his knowledge of them. If its functions be abnormal, his conduct will be abnormal; he will be a fool, and consequently an immoral criminal."

In his conception of the physical origin of disorganization, Howard used two terms: "pathological defects" and "teratological defects." People who suffer from pathological defects were maniacs but could be treated and may be returned to a normal state when the physician treated the abnormal organ. Teratological defects, a term derived from "teratology," the biological study of the physical origins of monsters, were less easily treated. The physical damage came from conditions of the early development of the materia cogitans, and may be irreversible, or from hereditary predisposition, which could not be changed.

Although he did not specifically discuss addiction, Howard alluded to an explanation of the physical causes of inebriety, and to its treatment. His argument

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[100]Howard, "Address," p. 583.

reflected his debt to Beard's neurasthenia thesis. The higher nerve centres, which control higher reasoning, and separate humans from animals, are of a lower organization, and therefore more susceptible to being damaged. "It is well known what a glass of brandy, a dose of opium or a whiff of ether or chloroform will do with these nerve centres; fortunately, the lower centres, because higher organized, are not so sensitive to these drugs, or there would be more deaths from inebriety, and, consequently, less fools and maniacs."[101] Addiction, then, was either a pathological or teratological condition of the higher nerve centres. Treatment, if possible, would consist in the same sort of moral scientific treatment that other nervous diseases required. This treatment needed to be distinctly somatic.

Howard's reification of all mental derangement permitted broader importance of medical science. He concluded his address to the students of McGill, for example, with a stern reminder: "if you would be scientific mediciners [sic], you must be physicists, you must be men to study the physiology of matter in all and every degree of its stages, mineral, vegetable, and animal, and then will you be truly scientific medical men." This programme would aid social progress, since "every man is intellectually and morally what he is, in virtue of the functions of his physical or structural organization" medical science would help the "man of law" understand both social deviance and the criminal.[102]

Howard's materialistic conception of disease was part of a broader trend towards finding all disease, including addiction, in a somatic organization. Although expressed in

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[101]Howard, "Address," pp. 587-588.

[102]Howard, "Address," p. 595.

scientific jargon, and repeatedly stated to be "scientific," this conception of disease merely embodied the unexplainable action--or inaction--of the will. Howard did not deny the metaphysical, and in all of his articles he reminded his readers that he believed in God. Instead, he insisted that all doctors needed to know to treat their patients, they could find by systematic scientific investigation of the body. However, most of these conceptions merely supplanted an acknowledged divine intervention with a mysterious but ultimately identifiable physical cause. This substitution of science for religion was part of a broader decline of religion as an explanatory discourse, but the elements of mystery and stewardship of science, that were the earlier purview of the ministry, became the domain of a secular scientific community.[103] While this trend was not restricted to addiction, it was a defining force that gave teeth to the addiction profession.[104]

Salvation through science, part II: Doctors assert their authority

United in formal organizations, and engaged in persistent investigations of the physical

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[103]Carl Berger, Science, God and Nature, p 47; Mitchinson, The Nature of their Bodies, pp. 42-43. The decline of religion has been debated for some time in the field of religious history; for Canada, most notable discussions are in Ramsay Cook, The Regenerators: Social Criticism in Late Victorian English Canada (Toronto: University of Toronto, 1985); Michael Gavreau, The Evangelical Century: College and Creed in English Canada from the Great Revival to the Great Depression (Montreal and Kingston: McGill-Queen's Press, 1991); David B. Marshall, Secularizing the Faith: Canadian Protestant Clergy and the Crisis of Belief, 1850-1940 (Toronto: University of Toronto, 1992), especially pp. 53-59; A. B. McKillop, A Disciplined Intelligence.

[104]See Jim Baumohl, "Inebriate Institutions in North America, 1840-1920" in Cheryl Krasnick Warsh, ed, Drink in Canada: Historical Essays (Montreal and Kingston: McGill-Queen's University Press, 1993): 92-114; Jim Beaumohl and Robin Room, "Inebriety, Doctors, and the State: Alcoholism Treatment Institutions Before 1940," Recent Developments in Alcoholism, 5 (New York and London: Plenum, 1987), pp. 135-174.

origin of the moral being, doctors pressed for their elevated leadership role in society. To be sure, physicians had occupied many positions of social prominence for decades; what the doctors wanted was not just personal elevation, but social and cultural acceptance of their cosmology. They argued that when the public accepted the medical perspective as authoritative, doctors might be more effective in protecting the health and integrity of the nation. Reinforcing these assertions was a reflection on the recent past, to a primitive medical period that has been eradicated by progress, and to a near future in which many forms of physical and moral deviance would disappear. This idea of doctors as stewards of national integrity would help to drive the legislation restricting drugs, and defining non-medical drug use as wrong. Briefly, then, I will look at how doctors formulated their role as guarantors of social progress.

By the end of the century, both the AASCI and the SSI had insisted that addiction was a disease in need of systematic scientific treatment. The work of the two organizations aimed to rid the study of addiction of the moralistic and unscientific approach that the leadership felt marred its programme. In his introduction to The Disease of Inebriety, Crothers provided a brief history of addiction treatment in America. He wrote that, after the first Inebriate Asylum at Binghamton New York closed, converted by the state to a regular lunatic asylum, opponents of the institution pointed out that the medical approach to addiction was "an 'infidel work' to diminish human responsibility."[105] The AASCI's program was distinctly medical and increasingly scientific,

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[105]AASCI, The Disease of Inebriety, 23-24.

as Crothers explained, works published by members of the association, and in its Journal of Inebriety "have given great impetus to its [inebriety's] scientific study."[106] Dr. Willard Parker had called the AASCI "a scientific gathering" which sought to impart "scientific proof."[107] Likewise, the SSI proudly proclaimed its aims of nonpartisanship, preferring instead the unbiased and objective aims of scientific study of addiction. Dr. James Stewart explained in 1892 that "here we assemble as scientific physicians to discuss the disease of inebriety, not the vice of drunkenness."[108] By adhering to a supposedly objective scientific pursuit of knowledge, physicians saw their role as transcending the petty bickering of moralists.

To physicians, the role of scientific investigation was a socially uplifting programme. Howard's insistence that the progress in scientific medicine would enable lawyers to understand deviance reflected the ideas of the inebriate specialists about the role of medicine in advancing society. In 1875, Samuel Parrish predicted that opium addiction would soon join alcoholism in requiring legislative action to prevent it. He called upon his professional colleagues to take an active role in educating society for this change. It was not the first time he made this call, nor was he alone in his insistence that doctors play a central part in the work against addiction. At the inaugural meeting of the AASCI, Parrish noted that "hitherto, intemperance had been considered mainly by moralists and jurists... who have not gone behind its visible manifestations, to seek for

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[106]Ibid, p. 26.

[107]"Minutes" Proceedings of the AASCI (1870), pp. 2-3

[108]Cited in Berridge, "Society for the Study of Addiction" (1990) p. 998.

absolute and primary causes."[109] Dr. E. C. Mann echoed Parrish's optimism twenty-five years later, when he said that the medical profession needed to study inebriety "as physiologists and pathologists, and not as moralists or reformers." He proceeded to list more specifically the physical and physiological phenomena that doctors needed to consider, which emphasized the interconnection between the mind and the body.

> The laws governing the organism, the dependence of a healthy mind upon a healthy physical condition, the transmission of normal sensations only through the media of sound nerve trunks and vice versa, . . . must be recognized and applied in the consideration of the subject of intemperance, and in explaining the unnatural phenomena [sic] of the inebriate.[110]

Stephen Lett agreed when he stated in 1891 that only by recognizing the nature of addiction as a disease, could physicians look towards a definite, scientific cure.[111]

Doctors' social role, combined with their command of medical science, was necessary to influence legislation and curtail dangerous social practices. Fred. H. Hubbard commented in 1881 that the medical profession "has been strangely apathetic with respect to the increase," in opiate addiction. The result had been further social danger, since addicts had been left "in the hands of unprincipled quacks."[112] "Quack" treatment would lack the philosophical and scientific nuances available to the scientific physician. Ironically, the Canada Medical and Surgical Journal, in reviewing Hubbard's

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[109]Parrish, "The Philosophy of Intemperance," p. 25.

[110]E. C. Mann, "The Disease of Inebriety: Spreeing and Tippling," Canada Lancet, 27 (June, 1895), p. 306.

[111]Lett, "Treatment of the Opium Neurosis," p. 828.

[112]Fred. Heman Hubbard, The Opium Habit and Alcoholism (New York: A. S. Barnes & Co., 1881), p. iv.

book, complained that it was "too popularly written," and would have been more valuable to "scientific physicians" had the author used more technical language.[113]

Doctors' role of protecting and healing the public also would affect legislation and public perception of addiction. In 1898, Dr. Alvin Rosebrugh presented the Ontario legislature with a plan, on behalf of the Prisoner's Aid Association of Canada, to reform the province's drunkards. The Canada Lancet editorialized that physicians should "use their very great influence upon the communities in which they live" to raise public opinions in favour of the bill.[114] But this great influence was moralistic as well as technical in nature. Concerning the need to educate the public about the poisonous nature of alcoholic beverages, and their "ravages upon the various organs of the body... their power to weaken the will and moral sense," J. W. Grosvenor of Buffalo, New York wrote in the Canada Lancet that doctors should take the lead. "The people," he explained, "will listen more attentively to such teachings, from the medical profession than from any other sources."[115] Here the scientific intersected with moral authority: how else could doctors demonstrate not only the effect on the bodily organs, but also on the "will and moral sense"? Finally, this onus to save the addict did have a transcendent purpose. "When we [cure the morphine habit]," wrote the editors of the Canada Lancet in 1891, "without entailing a bondage . . . the millennium will be nearer than now." Using scientific

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[113]Review of Hubbard, Canada Medical and Surgical Journal, 10 (February, 1882), p. 411.

[114]Canada Lancet, 30 (June, 1898), p. 533.

[115]Grosvenor, in Canada Lancet, 28 (May, 1896), p. 301.

knowledge and social power to cure addiction was an important Christian calling, and would save society.[116]

This conception of medical science as saving the nation provided a broad impetus for doctors to claim further social and cultural authority. Considering themselves to be the guardians of physical health, which now meant the entire being, moral and physical, physicians extended their role to vigilantly protecting moral and mental vitality. Alfred T. Schofield, a British physician, illustrated the connections between mind, body and morality when he wrote that "the wise physician must grasp the underlying unity of the spiritual and material, and recognize that [disease] of the body... does influence diseases of the soul, so does the mind influence states and diseases of the body."[117] Dr. John Stewart, the president of the Canadian Medical Association in 1905, connected the physician's role more closely to the moral development of the individual and the nation, when he said "we should accustom ourselves to remember that the body with which we deal is of value only as the tenant and instrument of an indwelling spirit, and that the health of the body is our care simply because its ill-health may hamper the action of the intellectual and moral energy within it."[118] Stewart's purpose was utilitarian; he saw that the only way truly to ensure the health of the body was by attending to the vitality and correct operation of the mental and moral being as well as the somatic. "We cannot treat our patient to advantage

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[116]Canada Lancet, 24 (October, 1891), pp. 33-34.

[117]Alfred Schofield, "The Relation of Mind and Body," Western Canada Medical Journal, 1 (December 1907), p. 550-551.

[118]John Stewart, "Presidential Address," Canada Lancet, 41 (October, 1905), p. 104.

if we regard only his physical condition, and neglect consideration of his mental equipment and moral proclivities."[119] Professional authority and scientific advancements enabled physicians by the turn of the century to extend their hopes for authority and control to the entire being.

Asserting their authority over the individual body, doctors expected their benign control to extend to the body of the nation. As Stewart noted in his 1905 address, "it is with the community as with the individual." In his presidential address to the Canadian Medical Association in 1886, Dr. T.K. Holmes, quoted "Froude" (probably British historian James Anthony Froude) who asserted that "a sound nation is a nation that is composed of sound human beings, healthy in body, strong of limb, true in word and deed, brave, temperate, sober, chaste; to whom morals are of more importance than wealth."[120] The editors of the Western Canada Medical Journal concurred, noting that "the best asset that any nation can have... is health."[121] Stewart agreed, and extended the physician's social role to aid in the development of a strong and healthy "national character... the medical profession may have a large influence in moulding the spirit of a nation"[122] In this perspective he created a cyclical argument that reinforced his profession's social importance. Public health laws would help to strengthen and develop the national

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[119]Ibid, p. 101.

[120]T.K. Holmes, "Addressed Delivered Before the Canadian Medical Association," Canada Medical and Surgical Journal, 15 (September, 1886), p. 75.

[121]"Infant Mortality" [editorial] Western Canada Medical Journal, 1 (August, 1907), p. 369.

[122]Stewart, "Presidential Address," p. 101.

character, but sufficient laws could be created only by a society of noble character. Physicians' role, then, was to guide the public to ensure its integrity and strength of character. Stewart further argued that the biggest threat to the individual was his or her ignorance of medical and physical processes. He concluded that it was proper and important that one's level of education should determine the degree of one's individual freedom.[123] Physicians, educated in the physical mechanisms of the body, were better able to guide and protect the nation. Public health and welfare, and therefore the national character, would best be served in the hands of properly educated, duly recognized and professionally united physicians. Their authority would ensure the liberty and integrity of the nation.

The doctor's authority in social policy decisions was reiterated by representatives of the late-nineteenth century evangelical temperance movement. The Canadian members of the Woman's Christian Temperance Union, in their work against narcotics, recognized the importance of communicating with doctors on this issue.[124] Their concern was both to

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[123]Ibid, p. 102.

[124]On the WCTU in Canada, see Nancy M. Sheehan,"The WCTU on the Prairies, 1886-1930: An Alberta-Saskatchewan Comparison," Prairie Forum 6 (1981) pp. 17-33; Wendy Mitchinson, "The WCTU: 'For God and Home and Native Land': A Study in Nineteenth-Century Feminism," in Linda Kealey, ed., A Not Unreasonable Claim: Women and Reform in Canada, 1880s-1920s (Toronto: Women's Press, 1979), pp. 151-167; Mitchinson, "Aspects of Reform: Four Women's Organizations in 19th-Century Canada" (PhD Dissertation, York University, 1978); Daniel Malleck, "Priorities of Development in Four Local Woman's Christian Temperance Unions in Ontario, 1877-1895," in Jack Blocker and Cheryl Krasnick Warsh, eds., The Changing Face of Drink (Toronto: Histoire Sociale/Social History, 1997), pp. 189-208; Sharon Ann Cook, "Through Sunshine and Shadow": The Woman's Christian Temperance Union, Evangelicalism and Reform in Ontario, 1874-1930 (Montreal and Kingston: McGill-Queen's Press, 1995); Mariana Valverde, The Age of Light, Soap and Water; Valverde, "'When the Mother of the Race is

remind doctors not to prescribe drugs if at all possible, but moreover to ask doctors to educate their patients about the dangers of drug use. The WCTU employed a variety of tactics, from encouraging members to visit their local physicians with the union's message, to sending letters to medical bodies, to entertaining medical students, and reminding them of the necessity of the temperate prescription of drugs.[125] The WCTU appears to have recognized the need to continually draw upon the position of doctors to get their own anti-drug message to the population. In 1892, the Dominion WCTU's Resolution Committee recognized the value of education about the dangers of opium when it stated that: "Whereas throughout Canada the use of opium in its various forms, simply as an intoxicant, is spreading with wonderful rapidity, therefore be it resolved.... that the druggists and doctors be requested to warn their patients in regard to the nature of opium and other narcotics when used as a medicine."[126] The following year the committee replaced the word "requested" with "urged," and the same passage reappeared for a

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Free': Race, Reproduction and Sexuality in First-Wave Feminism," in Valverde and Iacovetta, eds., Gender Conflicts: New Essays In Women's History (Toronto: University of Toronto Press, 1992), pp. 3-26.

[125]The Ontario WCTU requested the Ontario Medical Council "to pledge themselves against prescribing narcotics, except when positively necessary," but the union received no reply. No record of the request appears in the records of the Ontario Medical Council, or the Ontario Medical Association. Report of the Annual Convention of the Ontario Woman's Christian Temperance Union (Toronto: William Briggs & Sons, 1895), p. 144. The Health and Heredity Superintendent, Maria G. Craig, urged the members to approach medical students about the concern with inordinate prescription of dangerous drugs. (Maria G. Craig, "Health and Heredity," Woman's Journal, 14 (January 15, 1899), p. 2.).

[126]Report of the Annual Convention of the Dominion Woman's Christian Temperance Union (Toronto: William Briggs & Sons, 1892), pp. 112-113; Provincial Archives of Ontario, MU8398.1-8.

number of years.

Conclusions

By attempting to wrest definitions and discourses surrounding addiction from the hands of moralists and reformers, physicians asserted the primacy of science in being able to diagnose, treat and possibly cure addiction. This elevation of the power of science occurred despite any significant advances in the definition of addiction. By reifying addiction, and locating it within the body, medical scientists insisted that society should see its hopes for a cure to addiction in the progress of science. Likewise they explained their repeated failures as a result of some mysterious (but scientifically-defined) somatic condition. The changes in the pathology of addiction contributed to and were the result of an increase in doctors' power, but these changes replaced an outsider status based upon morality with one based on medical science. Mr. M.D.B.'s addictive personality became an addictive diathesis. The seemingly incurable addict, who willfully neglected his or her body, remained, but now the imperative to strengthen the will was a medical problem. The elevation of scientific truth, and doctors' roles as arbiters of propriety, helped doctors to define the values associated with certain medical "facts" about addiction. Their authority in defining addiction grew, while the values they set forth remained ensconced in what Harding called a "moral pathology." Since the medical conception of addiction reiterated an earlier moral determination of drug habituation, the addict continued to occupy a paradoxical position in the late Victorian medical mind-set: vice-ridden deviant and diseased, medicalized victim.

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"A state bordering on insanity"?: Drugs and addiction in nineteenth-century Canadian asylums

Prior to the significant epistemological and organizational developments of the 1870s, discussed in the last chapter, doctors fit patients who habitually used drugs into earlier diagnostic categories based on preconcieved ideas of either behavioural or somatic dysfunction. When Dr. McGillivray associated Mr. M.D.B.'s morphine habit with his drinking he relied upon extant categorization. The barrister's behaviour was a result of a profligate lifestyle, and his whisky drinking and fast life explained his morphine addiction. To properly understand the broader impact of the changing ideas about drug use, it is useful to consider how ideas about drugs and addiction affected the diagnostics of general practitioners and the perceptions of society. To address that question, in this chapter I look at the prescriptions, admissions and case records of several public insane asylums. State-run institutions were intended to ensure a degree of social stability, and physicians argued that scientific medicine would protect the mental and physical integrity of the nation.[1] Doctors who referred people to the asylum were acting upon their authority to

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[1]While not subscribing entirely to the social control interpretation of the role of asylums in society, I do recognize that, within the historical literature on asylums, a distinct thread of social stability remains constant. Asylums were created for a variety of reasons, a key one was to contain or heal the insane, and thereby ensure social progress. For an overview of the challenges to the social control theory, see Thomas E. Brown, "Dance of the Dialectic? Some reflections (Polemic or otherwise) on the Present State of Nineteenth Century Asylum Studies" Canadian Bulletin of Medical History, 11 (1994), pp. 267-295. Also Andrew Scull, "From Madness to Mental Illness: Medical Men as Moral Entrepreneurs" in Scull, The Most Solitary of Afflictions: Madness and Society in Britain, 1700-1900 (New Haven and London: Yale University Press, 1993), pp.175-231; Nancy Tomes, A Generous Confidence: Thomas Story Kirkbride and the Art of Asylum-keeping, 1840-1883 (Cambridge: Cambridge University Press, 1984); Anne Digby, Madness,

interpret an individual's behaviour as requiring state intervention. How did physicians who were not consciously looking for addiction interpret the condition of the habitual drug user? Moreover, why did members of the public, upon whom often rested the decision to seek treatment for their friends and relatives or less frequently themselves, determine that habitual drug use required institutionalized state intervention?

This chapter is a case study of the interaction of elite ideas, government policy, and general medical practice. My sources include records that indicate the presence of drugs and addiction at several public lunatic asylums in Canada from the middle of the nineteenth century to the beginning of the twentieth. I also draw upon the published reports of alienists, and consider the specific cases of patients admitted to several key public asylums, those in Saint John, New Brunswick, Charlottetown, Prince Edward Island, and Toronto, Kingston and London, Ontario.[2] First, I examine the use of drugs and alcohol in the

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Morality and Medicine: A Study of the York Retreat 1876-1914 (Cambridge: Cambridge University Press, 1985); Cheryl Krasnick Warsh, Moments of Unreason: The Practice of Psychiatry at the Homewood Retreat, 1883-1923 (Montreal and Kingston: McGill-Queen's University Press, 1989); S. E. D. Shortt, Victorian Lunacy: Richard M. Bucke and the Practice of late Nineteenth-Century Psychiatry (Cambridge: Cambridge University Press, 1986); Wendy Mitchinson, "The Toronto and Gladesville Asylums: Humane Alternatives for the insane in Canada and Australia?" Bulletin of the History of Medicine, 63 (1989), pp. 52-72; Barry Edginton, "The Well-Ordered Body: The Quest for Sanity Through Nineteenth-Century Asylum Architecture," Canadian Bulletin of Medical History 11 (1994), pp. 375-86.

[2]The asylums were chosen for several reasons. The St John Asylum was the first in British North America and detailed casebooks survive; the Toronto asylum was the first in Ontario, and near complete records remain of that asylum; the London asylum quickly became the largest in Ontario, and both the Kingston and Toronto asylum have admissions registers that are complete for the period under study, an essential factor for studying reasons for admission; both the London and Toronto asylum were superintended by notable figures in nineteenth century Canadian psychiatry; the P.E.I. asylum, while not a "first" or largest, was overseen by a physician, John Mackieson, who left behind several

therapeutics of alienists. During the last half of the century, asylum physicians were debating ideas about the efficacy and value of chemical intervention in treating mental derangement. While part of a broader change in medical therapeutics in North America, at least part of this therapeutic shift was a response to public concerns over the use of alcohol.[3] Then, I turn to the appearance of the habitual drug user at the asylum. I ask what conditions led families and physicians to send drug addicts to seek treatment at the public institutions, and how addiction fit into the broader diagnostic categories of asylum superintendents.

The main conclusions of this chapter suggest the emergence of the concept of addiction as a viable diagnostic category in general medical practice and asylum therapeutics. In the 1870s inebriety specialists had begun to consider addiction a functional disease requiring medical treatment, but public asylum medical personnel did not begin to identify drug addiction as a form of mental derangement that could benefit from their intervention until several decades later. To asylum doctors at the beginning of the period under study, habitual drug use was a secondary characteristic to a more extensive, but traditional, form of mental derangement. In the early part of the twentieth

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discussions of his own interpretation of mental and physical derangement, from both his private practice, and his work at the asylum (which he carried on simultaneously).

[3]On the therapeutic shift, see John Harley Warner, The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885 (Cambridge, Mass.: Harvard University Press, 1986) pp 143-148; Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning and Social Change in Nineteenth Century America," in Morris Vogel and Charles Rosenberg, eds., The Therapeutic Revolution: Essays in the Social History of American Medicine (Philadelphia: University of Pennsylvania, 1979), p 17; Sarah E. Williams, "The Use of Beverage Alcohol as Medicine, 1790-1860," Journal of Studies on Alcohol 41 (May 1980), pp. 543-566.

century, however, that diagnostic convention changed. Doctors began to describe addiction as a specific form of mental disease. Considering social reasons for sending the addicts to asylums, this chapter then explores how families sent addicted relatives to the asylum only after the addiction resulted in further socially destructive or offensive behaviour.[4] Finally, it suggests how shifting classification of drug use operated within a broader discourse of mental illness and national development to influence ideas about the potential social problems of drug use.

Drug use at the asylum reflects the emergence of a medical discourse about drug habituation on a micro-history level. By considering the way ideas about drugs in therapy changed in the decades before the creation of prohibitory legislation, we can suggest how broader social movements affected medical practice. In addition, as we examine how and when doctors and members of the public identified drug use as a form of behaviour requiring correction, we see the foundations of the idea of drug use as social deviance. Doctors saw themselves as community leaders, but this self-perception did not necessarily lead to an acceptance of their ideas by the public. The interconnection between medical ideas and social perceptions of improper behaviour, provided in the records of asylum admissions, enable us to close this gap between theoretical/intellectual shifts and changing social perception. In effect, we can explore how doctors' claims to cultural authority successfully affected the perceptions of drug addiction as a disease, which required state supported medical intervention.

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[4]In exploring case records from asylums, while adhering to privacy guidelines, I have given the first name and last initial of all patients, not only those whose identities must remain concealed.

Part I: The use of drugs and alcohol in nineteenth century asylum care

Substances that caused mental and often physical changes to the individual played a multifaceted role in the nineteenth century lunatic asylum.[5] Narcotic drugs like opium, morphine, chloral hydrate, cannabis indica (or Indian hemp); stimulants like cocaine; and alcohol all had a functional and a dysfunctional place within the asylum community. Drugs and alcohol acted both as causes of insanity, and remedies for symptoms or conditions under which the patient laboured.

The role of drugs in asylum treatment remained relatively static as physiological and therapeutic philosophies shifted significantly. While differing in fundamental points, the physiological approach to mental illness developed and debated by John Brown, William Cullen (both of the Edinburgh School of Medicine) and Benjamin Rush (at the Pennsylvania Hospital) at the end of the eighteenth and beginning of the nineteenth centuries, drove a somatic approach to insanity that embraced a variety of treatments to counteract a deranged nervous system. As Nancy Tomes has shown, new physiological explanations of mental disease led alienists to treat insanity with distinctly physical methods, such as depletion regimens to treat manias and stimulants to treat melancholia.[6] The therapeutic skepticism of William Tuke and Philippe Pinel near the beginning of the nineteenth century challenged extant physical therapeutics, and threatened the very foundations of the arguments that mental illness required the treatment of medical

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[5]Warsh, Moments of Unreason, pp. 120-125.

[6]Tomes, A Generous Confidence, pp. 57-8; 77-80.

practitioners. Doctors struggled to reassert their ascendancy; they embraced the new therapeutic approaches to insanity, commonly called "moral treatment," while seeking organic explanations for why moral treatment seemed to work.[7] Proponents of moral treatment argued that earlier, often violent somatic treatment was useless, if not harmful, to the physical and mental well-being of the patient. Moral therapists emphasised kindness, pleasant surroundings, and limited chemical intervention. Doctors who used physical remedies, whether chemical or heroic, were therefore hard pressed to justify their therapeutics.[8] Tuke, who was a Quaker philanthropist, and not a physician, eschewed the therapeutics of his contemporaries. Hoping to reconcile moral treatment with their own search for professional legitimacy, physicians reconceptualized insanity as requiring a system of "cerebral pathology" emphasising treatment through the "nutrition, stimulation and repose of the brain."[9] Giving moral treatment a physiological justification helped to cement the authority of physicians in asylum treatment.

By the middle of the nineteenth century, then, the diagnosis of mental illness had undergone significant shifts, and with these changes came concomitant changes in therapeutics; yet drugs remained important in the treatment regimen. Asylum physicians rejected the harsh depletion regimens, primarily bleeding and purgings, which earlier alienists used to relieve over-stimulation, in favour of drug therapies to calm patients. The

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[7]See Scull, The Most Solitary of Afflictions, pp 188-202. Tomes, A Generous Confidence, pp. 80-81

[8]Scull, The Most Solitary of Afflictions, pp.188-198.

[9]Ibid, p 240.

isolation of morphine from opium contributed to this shift. Unlike opium, which had a variety of effects on the individual, from causing nausea to some to acting as a temporary stimulant to others, morphine, injected subcutaneously or swallowed, was more directly sedative in its actions. The shifting therapeutic priorities championed by physicians like Pinel, who conceived insanity as a functional disorder caused by "abnormal trains of nervous motion," a melding of functional and organic explanations, allowed asylum superintendents to use "a very flexible etiological scheme" to explain and treat insanity.[10] These systems permitted physicians to deem a variety of activities like drinking, smoking, drug use, masturbation and sexual promiscuity as dangerous to the individual's mental and physical health.

In Canada, moral treatment combined with therapeutic substance use within the asylum walls. The government of Upper Canada/Canada West, encouraged by reports of a high recovery rate of patients in asylums in England, France and the United States which utilized moral treatment, envisioned that the Toronto lunatic asylum would follow these principles.[11] The several physicians who preceded Joseph Workman as medical superintendent of the fledgling asylum took advantage of the physical and psychological

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[10]Tomes, A Generous Confidence, pp. 80-1. On Pinel's approach to mental illness, see Dora Weiner, The Citizen Patient in Revolutionary and Imperial Paris (Baltimore: Johns Hopkins University Press, 1993), pp. 247-280.

[11]Workman's use of alcohol is documented in Thomas Brown, Living With God's Afflicted: A History of the Provincial Lunatic Asylum at Toronto, 1831-1911 (Ph.D dissertation, Queen's University, 1981) and Thomas Brown, "Workman, Joseph" Dictionary of Canadian Biography, Volume 11 (Toronto: University of Toronto Press, 1966) pp. 1122-1126; see also Shortt on Bucke's use of alcohol, in Victorian Lunacy, pp. 129-130

effects of alcohol.[12] Beer played a threefold role in the early asylum therapeutics. Contemporary psychology viewed insanity to be at least partly the result of physical weakness, and alcohol, especially beer, provided a valuable restorative. Many considered it to be highly nutritious. Beer was also a reward for good work. One patient "works very hard in the yard and begs the beer as a remuneration," and another received "one glass of beer as a reward for working well."[13] Finally, alcohol was a handy sedative, and early records of the Toronto asylum often suggest that alcohol given for physical restoration also helped sedate patients. Patients displaying mania and dementia admitted in the early years of the asylum's existence often received "beer daily," "a small glass of warm beer, with a little sugar and ginger in it," "one glass of beer today only"; "a glass of beer occasionally [; patient is] getting thin in flesh."[14] The uses of beer also suggested an interconnection between ideas about alcohol and opiates as therapeutic substances (discussed in Chapter 4). A patient who entered suffering from mania in 1841, for example, received a glass of beer a day for the first five months he was in the asylum, both to restore his flesh and to calm his mania. When the physician put the patient on morphine to calm him down, prescriptions of beer stopped.[15]

The alternating use of alcohol and morphine in the above mentioned case may not

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[12]See Brown, "Workman, Joseph."

[13]Toronto Asylum Casebook (Archives of Ontario, RG 10-20-B-4, MS 640 Reel 14), respectively: p 20,John S.; p. 199 Mrs. H.

[14]Toronto Asylum Casebook, records respectively, of patients Kerwin F. (p. 1); John G. (p. 2) Marcy C. (January 21, 1841); Samuel M. (p.8 July 22, 1841).

[15]Toronto Asylum Casebook, p. 8, Samuel M., July 22, 1841.

have been a general trend in asylum therapeutics. Although few concrete records of treatment for each patient, giving precise amounts of alcohol or drugs dispensed, appear to have survived, an analysis of the asylum's purchases suggests no relationship between drugs and alcohol in the asylum. Table 5.1 lists the cost of purchases of alcohol and several key sedatives beginning in the last decade of Workman's tenure. As I discuss below, in 1880 the Ontario government ceased providing funds for alcohol purchases. Figure 5.1 represents graphically the comparative expenses. The correlation equation in Table 5.2 demonstrates no statistically significant relationship between the instances of alcohol and opiate purchases in the period 1866-1879, which suggests that the use of alcohol and medicine was only marginally interconnected. The subsequent lack of notable rise in medicine purchases after 1880 further suggests this trend: drugs and alcohol were rarely substitutes. They had their distinct place in the asylum. In 1878, as discussed below, Daniel Clark, Workman's successor, would make suggestive comments about the interrelationship between alcohol and drug therapeutics in the Kingston Asylum, where John Dickson had ceased using alcohol but increased his use of chloral hydrate and opium.[16] Unfortunately, since alcohol was both a beverage and a medicine during most of Workman's tenure, these statistics are of only limited value. We can also look at the numbers in Table 5.1 as an indication of the relatively marginal amounts of drugs used, compared to the ubiquity of alcohol.[17]

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[16]On this discussion, see also Warsh, Moments of Unreason, pp. 145-146.

[17]See Appendix, on correlation coefficients, for a more detailed explanation of this statistical method.

Table 5.1 Purchases at Toronto Asylum Compared, 1866-1902

Year	Medicine	Medical Comforts	Beer, Wine Spirits
1869	$246.59		$2,547.58
1870	$322.99	$1.27	$2,764.92
1871	$291.00	$13.50	$2,184.50
1872	$277.37	$51.14	$2,016.65
1874	$293.93	$123.18	$1,930.00
1874	$279.68	$63.40	$2,086.00
1875	$299.22	$57.58	$1,799.05
1876	$295.24	n/a	$1,463.41
1877	$265.95	$131.25	$890.22
1878	$472.52	$148.50	$955.03
1879	$397.37	$111.05	$1,453.66
1880	$321.74	$365.48	
1881	$450.36	$94.13	
1882	$367.24	$44.02	
1883	$493.29	$116.09	
1884	$590.79	$60.87	
1885	$486.62	$56.19	
1886	$539.03	$39.76	
1887	$551.77	$37.05	
1888	$436.04	$58.21	
1889	$411.37	$90.80	
1890	$742.25	$104.20	
1891	n/a	n/a	
1892	$580.93	$178.46	
1893	$571.14	$61.60	
1894	$807.13	$41.76	
1895	$691.66	$86.45	
1896	$748.83	$112.04	
1897	$695.94	$70.19	
1898	$571.48	$81.27	
1899	$688.91	$130.26	
1900	$599.00	$212.51	
1901	$381.16	$256.57	
1902	$472.91	$222.73	

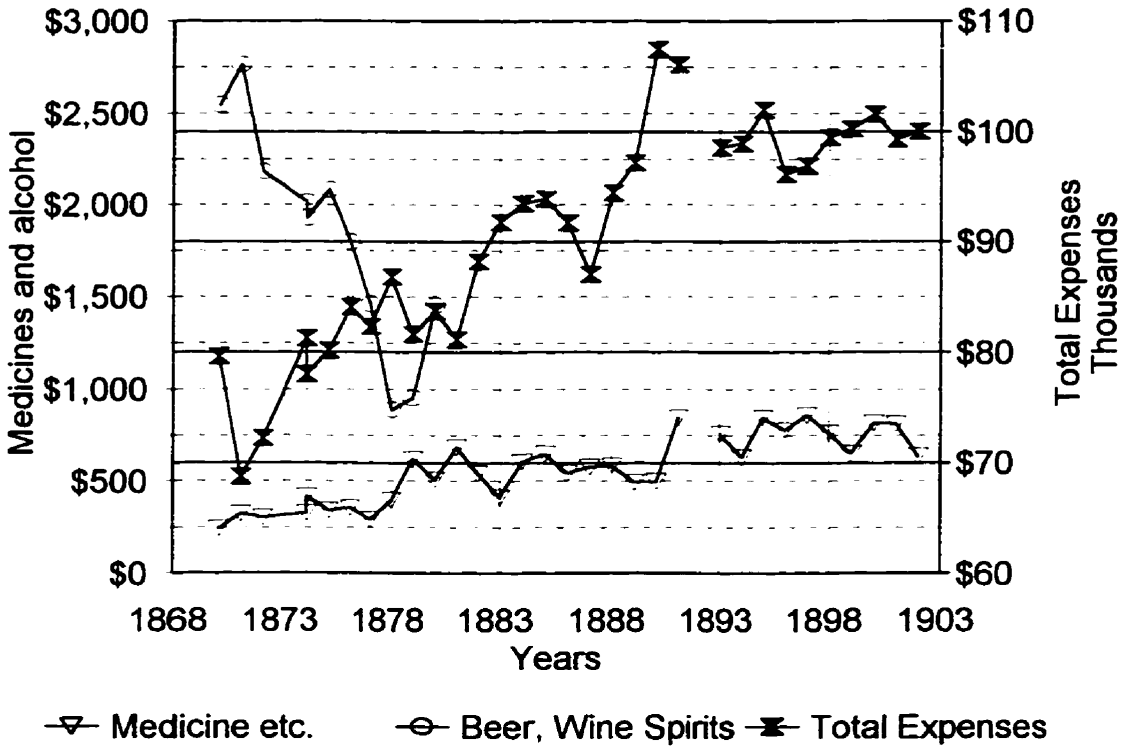
Table 5.2: Correlation of purchases, 1866-1879

	Medicine	Medical Comforts	Liquor
Medicine	1.0000		
Medical Comforts	0.7474	1	
Liquor	-0.4834	-0.4807	1

Source: Annual Report of the Inspector of Asylums, 1869-1902.

On crrelation coefficients, see the appendix.

Figure 5.1: Expenses at Toronto Asylum compared. Medicine, Alcohol and Total expenses.



Source: Annual Reports of the Inspector of Asylums, Sessional Papers of Ontario, 1869-1902.

Although drugs as sedatives were secondary to liquor in early asylum treatment, they soon surpassed the more socially-charged use of alcohol. Opiates had wide utility in asylum therapeutics throughout the century. Physicians whose diagnostic epistemology asserted that insanity was generally the result of physical shocks that unbalanced the delicate somatic balance had few qualms about using drugs. Any means to restore the equilibrium was sufficient. A mid-century example of this perspective is provided in the records of Dr. John Mackieson, the attending physician at the Provincial Lunatic Asylum in Prince Edward Island. Mackieson believed that insanity was exclusively the result of improper brain activity.[18] "The mind appears to be disordered," he told the legislature in 1872, "only because the organ through which its operations are manifested is not in a condition of health."[19] The body was unable to transmit properly the will of an immortal and inflexible soul, a perspective held by many mid-century alienists. Unlike many others, however, Mackieson tended to eschew the use of moral treatment. Mackieson, who graduated from the Glasgow School of Medicine in 1815 was influenced more directly by the physical therapy of Scottish physicians, Brown and Cullen, than by the moral therapy of the British Quaker, Tuke, and the French asylum physician , Pinel, and he employed

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[18]Mackieson's work has recently been examined by David A. E. Shephard in two separate articles, "A Light on Medical Practice in 19th-Century Canada: The Medical Manuscripts of Dr. John Mackieson of Charlottetown" Canadian Medical Association Journal, 159 (August 11, 1998), pp. 253-257; "An Island Doctor: The Life and Times of Dr. John Mackieson, 1795-1885," Island Magazine 38 (Fall/Winter, 1995), pp. 32-38. For a less glowing picture of Mackieson, see P. E. Rider, "'A blot upon the fair name of our Island': The Scandal at the Charlottetown Lunatic Asylum, 1874" Island Magazine 39 (Spring/Summer, 1996), pp. 3-9.

[19]Mackieson, "Reports to the Trustees of the Provincial Lunatic Asylum," printed in the Journal of the Prince Edward Island Legislative Council, January 31, 1872.

treatments which rested upon direct organic counter-irritation, rather than any identifiable form of moral treatment.[20] Physical therapies like cold showers or warm baths would help restore the body's balance, while heavy doses of drugs would calm the patient.[21] Patients whose insanity Mackieson attributed to fever, for example, would receive a cold head bath each day, or more frequently. One patient received morphine and "head showers with cold water, night & morning."[22] Another, diagnosed with monomania, received "a purgative powder, to be followed by the Black Draught [sic], and her Head and Shoulders to be showered."[23] A patient diagnosed with puerperal mania, "has no organic ailment... [I] Ordered the Shower Bath to the Head, and shoulders daily and to have a tonic mixture."[24] Another woman, whose condition Mackieson diagnosed as being "moral insanity" "has not corporeal ailment, but states that her bowels are slow[.] Was ordered a Purgative Powder and a mixture of Quinine and Tincture of Steel."[25] Mackieson saw insanity as frequently resulting from a shock to the body, often through a severe change in bodily temperature (dunking in cold water, or going from the cold air to the warm air too quickly, for example), which could have either organic or functional

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[20]Shephard, "An Island Doctor."

[21]Mackieson, "Reports to the Trustees of the Provincial Lunatic Asylum," printed in the Journal of the Prince Edward Island Legislative Council, January 31, 1872.

[22]Case book of the PEI Lunatic Asylum, Case 3, July 27, 1868.

[23]Case book of the PEI Lunatic Asylum, Case 4, August 27, 1868.

[24]Case book of the PEI Lunatic Asylum, Case 6, August 27, 1868.

[25]Case book of the PEI Lunatic Asylum, Case 5, May 25, 1869.

results. Consequently, he had few qualms about prescribing drugs to keep the patient calm while the physical remedies restored the body's natural condition. He employed primarily opium and chloral hydrate in this capacity. He may have recognized, however, the dangers of drug habituation. In his private practice he would conclude many treatments in which he had prescribed large doses of opiates with a prolonged period of weaning the patient from the drug.[26]

Other asylum physicians also employed drugs as therapeutic agents in directly treating insanity. John Waddell, the Medical Superintendent of the St. John, New Brunswick asylum from 1849 to 1875, and also a graduate of the Glasgow School of Medicine (two decades after Mackieson) looked for both humoural imbalance and functional derangement when diagnosing insanity. While he rarely recorded his treatments in his casebooks, Waddell usually observed the state of the patient's bowels and the patient's ability to sleep. Opium was valuable in addressing both of these abnormal conditions, since it could relieve costive bowels and induce sleep.[27] In the London asylum in the early 1870s, Stephen Lett, then an assistant physician, was "trying hydrate of chloral" to calm a "violent & destructive" patient. After several days of this treatment, the

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[26]See the description of cases found in Mackieson's private practice records. He collected notable cases in a book he may have intended for publication. See John Mackieson, Sketches of Medical and Surgical Cases: Exhibiting a Concise View of the Characters, Causes, Symptoms, Morbid Appearances, and Method of Treatment Adopted in the More Important Cases of Disease. With Notes and Practical Remarks. (Unpublished Manuscript, date 1826). Public Archives and Records Office, Prince Edward Island. David A. E. Shepherd discusses this work in "A light on medical practice."

[27]See for example, Saint John Lunatic Asylum Casebook, March 27, 1866, p. 350. Provincial Archives of New Brunswick.

doctors stopped the "chloral," which had worked well to help the patient sleep and made him "much more quiet during the day."[28]

With the growing force of arguments for "moral treatment" over chemical intervention, asylum physicians resorted less frequently to drug therapy. Daniel Clark of Toronto noted his growing concern over chemical treatment in general. In June, 1888, Clark read a paper on Neurasthenia to the Ontario Medical Association in which he argued that treatment of neurasthenic patients must include "no chloral, no opium, no alcohol; in short, no artificial stimulant, soporific or narcotic." He insisted that "three hours of natural sleep or rest have in them more recuperative power than nine hours of stupor or drugged quietude. Such short cuts to rest only murder natural sleep and strangle the heroic efforts of nature to come back to normal conditions."[29] In his 1895 textbook, Mental Diseases, Clark conceded that drugs could sometimes be effective, yet he maintained that "medicine is only an assistant to nature. . . there are no cure-alls in pharmacy and therapeutics. . . We can only steer the vessel, but its propelling power must be left to nature's vital agency."[30] To Clark, the asylum physician's role was as an assistant to nature, and it was a function that only physicians could fill adequately.

Clark's perspective at the end of the century had been forged both through his own

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[28]London Asylum Casebook, (Archives of Ontario, RG 10-20-C, MS 856, reel 1), p. 51.

[29]Daniel Clark, "Neurasthenia," abstracted in the Canada Lancet, 20 (July, 1888), pp. 330-331.

[30]Daniel Clark, Mental Diseases: A Synopsis of Twelve Lectures (Toronto: William Briggs, 1895), pp. 202-3.

experience in the direct asylum treatment of his patients and in his encounters with the bureaucracy of the Ontario legislature. In 1877 and 1878, the morality of alcohol in the care and treatment of the insane became a topic of debate in Ontario. In February, the legislature's Committee of Public Accounts held a series of meetings to examine the need for alcohol in asylum treatment. It called Clark, Workman, Lett--still assistant physician at the London Asylum--and Dr. John R. Dickson, the medical superintendent of the Kingston Asylum, to answer questions about the value of alcohol in therapy. The committee's inquiry coincided with broader political movements, since in 1879 the federal government would enact the Canada Temperance Act, or Scott Act, a local option act that reiterated the pre-confederation Dunkin Act (1864).[31] Clark, Workman and Lett defended the importance of alcohol in the broader therapeutic ecology of the asylum. They drew upon personal experiences to defend their use of alcohol, and Clark embarked upon a protracted discussion of the work of notable medical authorities who endorsed alcohol as a medicine. When asked if he used alcohol "for the purpose of effecting a cure" for insanity, Clark replied that "all such treatment tends to effect a cure, but... nature does primarily the cure." Alcohol could aid nature in curing the patient, if a cure was possible.[32] Dickson, who had ceased using alcohol in 1871, argued from statistical tables that, since 1871, the death rate and recovery rate in his asylum was more favourable than in either Toronto or London. He referred to a few medical opinions, notably Sir Benjamin Ward Richardson, a

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[31]See Reginald G. Smart and Alan C. Ogborne, Northern Spirits: A Social History of Alcohol in Canada (Toronto: Addiction Research Foundation, 1996), pp. 40-43.

[32]"Appendix 1: Report of the Committee of Returns," Journal of the Assembly of the Province of Ontario (1878), p 21.

physician to several hospitals in London, England and Dean of St. George's School of Medicine, and Dr. Ezra Hunt, from Mettuchen, N. J. to support his assertions. The latter had presented a paper at the International Medical Congress in Philadelphia in 1876 which rejected alcohol as a valuable food or medicine."[33] Partly as a result of this committee's findings, the Inspector of Asylums, J. S. Langmuir, instructed each medical superintendent to cease using alcohol as a food. "[T]he supply of malt and spirituous liquors must be accepted and looked upon entirely as medicines, and only to be given upon the prescription of the Medical superintendent." He also reduced the combined appropriation for beer, wine and spirits from $4000.00 to $1600.00.[34]

In their subsequent reports to the Provincial Inspector, the asylum physicians commented upon that directive and its potential ramifications. Clark included in his 1878 report to the legislature a twelve page article arguing in detail the importance of alcohol in medical treatment, and especially in treating insanity. He constructed his argument on three main themes. First, he quoted Ontario Provincial Treasurer and later Minister of Education Adam Crooks (whose name became attached to the provincial liquor license legislation, or "Crooks" Act of 1876), who had observed that "everybody knew that there were such varieties of physical constitution and so many varied conditions of human nature, that it was impossible for any government, assembly of medical men, or convention

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[33]"Report of the Committee of Returns," pp. 20-29; 42-49; 51-57.

[34]"Report of the Inspector of Asylums," Sessional Papers of Ontario (1878) p. 25. As the records of Table 5.1 suggest, this appropriation appears to have been entirely cut off in the next few years.

of experts, ever to arrive at a conclusion in favour of an invariable system of treatment."[35] For Clark, the Inspector's directive was a direct challenge to medical authority. Second, he noted that many eminent physicians agree that alcohol is a valuable medicine. He cited such luminaries as doctors Wood;[36] Francis Anstie, a physician at London, England's Westminster Hospital and instructor at its school; W. B. Carpenter, professor of physiology at the Royal Institutions, London and professor of forensic medicine at University College, London; Henry Maudsley, physician to the Manchester Asylum and professor of medical jurisprudence at University College, London; and even Benjamin Ward Richardson, whom Dickson had cited in support of his decision to cease using alcohol in therapy. Although Richardson was opposed to alcohol in medicine, Clark cited passages of the doctor's work to suggest that alcohol did have nutritive and therapeutic value. Finally, he repeated the assertions he had made in front of the Committee of Returns, that, "If I gave opium or hydrate-chloral, the patients would always feel worse the next day."[37] He expanded upon these sentiments, stating that alcohol was superior to opium and chloral hydrate because the sedating effects of the latter two came at the price

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[35]Clark, "Report of the Medical Superintendent of the Toronto Lunatic Asylum" (1878), p .281. Hereafter, superintendents' reports will be recorded as "Report" with the year. On Crooks, see "Crooks, Adam," Dictionary of Canadian Biography Volume 11.

[36]Which "Dr. Wood" is uncertain. In 1860, Dr. George Bacon Wood published A Treatise on Therapeutics and Pharmacology or Materia Medica (Philadelphia: Lippincott, 1860) and in 1877 Dr. Horatio C. Wood published A Treatise on Therapeutics Comprising Materia Medica and Toxicology (Philadelphia: Lippincott, 1877). Since Clark referred to Wood's "recent" work on therapeutics, he probably meant H.C. Wood. See Clark, "Report" (1878) p. 283.

[37]"Report of the Committee of Returns" (1878) p. 23.

of significant physiological dangers. "Opium will produce rest for the time being, but as a rule it is followed by nausea, fretfulness and debility. Hydrate chloral will produce sleep, but as a rule weakness and general lassitude follow its use. . . A dose of whiskey once a day will have more efficacy with no disagreeable feelings following, than can be effected by another drug whatsoever its shape and potency."[38] Above all, Clark noted, chloral and opium when used in insanity, often led to addiction.

Clark supported his argument with several suggestive pieces of evidence attacking Dickson's defence of his cessation of alcohol in therapy. He suggested a revision of the statistical tables Dickson had provided, to illustrate the comparative insignificance between the death and recovery rates of the Toronto and Kingston asylums. He also provided a table comparing the use of opium, chloral and morphine in the Toronto, London and Kingston asylums. This table demonstrated that a significantly larger amount of these "more pernicious drugs" were employed by the physicians who endorsed the elimination of alcohol in their asylum practice. He also reminded his readers that just because Dr. Hunt's paper was read at a prestigious gathering, did not mean its views had the endorsement of the membership of the organization.[39] Finally, he included several cases, in which alcohol provided the necessary therapeutic solution. Two of these cases were women who had contracted the opium and chloral habits through medical treatment prior to arriving at the Toronto Asylum. Both were relieved by regular doses of whiskey,

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[38]Clark, "Report" (1878), p. 290.

[39]Ibid, p. 281

and sent home.[40]

Clark directly contradicted the evidence of his medical colleague, while enforcing the idea of the authority of physicians in guiding policy from a transcendent vantage point. Clark reminded his readers that he was himself in favour of the prohibition of alcohol as a beverage. "In fact," he said, "my scrap-book contains editorials and printed correspondence more pointed and forcible than polite, which were hurled at my head, because of my defence of prohibition views."[41] Showing how his learned medical perspective endorsed alcohol in spite of his personal moral opinion of drinking, Clark both disassociated medical alcohol from everyday drinking, and suggested that medical opinion should operate on a plane that transcended common social life. Clark could set aside his own personal feelings for the sake of objective medical science. By citing the words of Crooks, whose name was tied to the provincial local option legislation (Crooks Act, 1876), to reinforce the need for medical authority to operate outside of legislative intervention, Clark could bolster his claims of objectivity.

Although not the focus of Clark's attack, Richard Maurice Bucke soon championed the rejection of alcohol in therapy, and he and Clark debated their perspectives in their superintendent's reports for several years.[42] In 1877, soon after

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[40]Ibid, p. 289.

[41]Ibid.

[42]On Bucke, see S.E.D. Shortt, Victorian Lunacy; Wendy Mitchinson, "R. M. Bucke: A Victorian Asylum Superintendent," Ontario History 73 (December, 1981), pp. 238-254; Mitchinson, "Gynecological Operations on Insane Women, London, Ontario 1895-1901," Journal of Social History, 15 (Spring 1982), pp. 467-84; Cheryl Krasnick (Warsh), "'In Charge of the Loons': A Portrait of the London, Ontario Asylum for the

assuming the superintendency of the London Asylum, Bucke argued that "without saying yet that [alcohol] is never a desirable medicine in [insanity]. . . I can say that I believe that [the insane's] best interests demand only a very limited use of these medicines."[43] By 1879, he proudly recorded that he had used "but a very small portion of the six hundred dollars granted by the Government last year to purchase alcoholic stimulants for the use of this asylum." He further boldly contended that physicians who still believed that alcohol was necessary in successful treatment, "while not less honest and intelligent than are those who differ from them, are simply, on this point, mistaken, just as were the majority of the profession in the matter of blood-letting a hundred years ago."[44] He resolved to use alcohol only in a diluted form, and he would take the expense from the appropriation for medicines. By 1882, he reported that a year earlier "I. . . ceased prescribing it entirely, and during the year just closed no alcohol in any form has been used at this institution, nor do I expect to use any in future."[45]

Bucke's personal encounter with therapeutic skepticism coincided with the investigation of the Committee of Returns, and the subsequent debate over alcohol and other drugs in asylum therapeutics. S. E. D. Shortt described how Bucke's failed attempts to treat masturbation surgically led him into a period of therapeutic conservatism, Drawing upon the works of therapeutic skeptics like German psychiatrist Richard von

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Insane in the Nineteenth Century," Ontario History 74 (September, 1982), pp. 138-184.

[43]Bucke, "Report," (1878), p.313

[44]Bucke, "Report," (1879), p. 331-2.

[45]Bucke, "Report," (1882), p. 70.

Krafft-Ebing; and John C. Bucknill and Daniel H. Tuke,[46] Bucke determined that the best treatment of insanity was not chemical or surgical, but moral treatment.[47] In treating his patients, Bucke began to reduce his therapeutic use of alcohol, drugs, and physical restraint. Unlike Dickson, however, Bucke initially hesitated to conclude that his new therapeutic approach resulted in significantly higher recoveries or lower death rates than at the other asylums. "The death rate and the recovery rate at an institution are liable to wide fluctuations from a great variety of causes, but [my statistics show]. . . that the disuse of alcohol has not affected prejudicially either the one or the other of them." He contended that he had never argued this change in therapeutics would have revolutionary shift in asylum treatment, "I simply said that alcohol did no good, was a useless expense, and that its use at the Asylum did harm by tending to keep alive in the country the delusion that alcohol is a valuable agent in the treatment of disease."[48] As Warsh noted, by 1884, Bucke described as "remarkable" the 1% decline in death rates and the increased recovery rates.[49]

While Clark argued that restriction of alcohol was a violation of the authority of medical professionals, Bucke argued that medical science could gain in authority and precision only by abandoning outdated techniques like alcohol in therapy. By associating

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[46]Authors of A Manual of Psychological Medicine (1858) reprinted four times, last reprint 1879.

[47]Shortt, Victorian Lunacy, pp. 127-128.

[48]Bucke, "Report" (1884), p. 69.

[49]Warsh, Moments of Unreason, p. 147. Bucke, "Report" (1884), p. 69.

the therapeutic use of alcohol with generally discarded practices like blood letting, Bucke suggested that his perspective could lead a socially progressive society forward. In 1888, he attempted a scientific explanation for the deterioration resulting from substance use. To Bucke, alcohol affected the brain by penetrating the nerve, and damaging the fragile nerve molecule. The alcohol molecule, he asserted, was harder and smaller, and therefore could pass "in all directions between and among the nerve molecules." When the two molecules collided, the nerve molecule would be damaged. The effects of this process appeared in the behaviour of the individual.

> Observe now a man swallow several ounces of alcohol... His eyes brighten, his muscles brace up, become more tense, his ideas flow, he begins to talk, perhaps sing, speaks louder than usual, wants to fight, feels that he is very strong... All this (on the hypothesis) simply means that the alcohol molecules, rubbing against the nerve molecules, have caused more or less collapse of a greater or less number of these. . . [50]

In comparison to chemicals that are useful to mental processes, Bucke explained the damage that "alcohol, chloral, morphia etc., etc.," by insisting simply that "they have no business among the nerve molecules, no provisions is made for them there, and when they get there, they are simply foreign bodies, hostile elements."[51]

Bucke proceeded to discuss this basic molecular action with relation to other intoxicating chemicals, listed in Table 5.3. Morphine and Strychnine, Bucke noted, were the largest and hardest of the molecules. They, consequently, did more damage than laughing gas, methylic alcohol, sulphuric ether, common alcohol and amylic alcohol; the

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[50]Bucke, "Report" (1888), pp. 33-34.

[51]Ibid, p. 36.

effects lasted longer and each was, therefore, a "true intoxicant."[52] The affinities Bucke drew between the biochemical relationship of these nine substances, however, collapsed somewhat when he related them back to their effects on the mind. Strychnine, which held physical characteristics similar to morphine "acts on the motor centers while they [the

Table 5.3: Dr. Bucke's list of intoxicants, 1888.

No.	Name	Formula	No. Of Atoms	Atomic Weight
1	Laughing Gas	N_2O	3	44
2	Methylic Alcohol	$C H_4 O$	6	32
3	Sulphuric Ether	$C_2 H_5 O$	8	45
4	Common Alcohol	$C_2 H_6 O$	9	46
5	Amylic Alcohol	$C_5 H_{12} O$	18	88
6	Chloroform	$C H Cl_3$	5	119.2
7	Chloral Hydrat[sic]	$C_2 H Cl_3 O H_2 O$	8	165.2
8	Morphia	$C_{17} G_{19} N O_3 H_2 O$	43	303
9	Strychnia	$C_{21} H_{22} N_2 O_2$	47	334

Source: "Report of the Medical Superintendent of the London Asylum" (1888) p. 35

other eight] act first and chiefly on the centers of moral and intellectual life."[53] Bucke's attempts to explain the functional outcome of chemical reactions in the brain often rested, precariously, upon assumptions that begged the question he was trying to answer. For example, he attempted to explain that sugar, starch and resin could not pass "into the substance of the nerve centers" by asserting that "*doubtless* the size and shape (*the latter quite unknown to us*) determines which can pass and which cannot." He did not know the

[52]Ibid, p. 37.

[53]Ibid.

shape of these molecules, but since they were not dangerous to the mental faculties, they had to adhere to his theory, which the above quotation purports to support. He then proceeded to explain why sulphur could pass through the nerve molecule and not cause damage: "the reason. . . is *doubtless* that being an elementary body and not a compound molecule, its atom is small and smooth." This assertion followed his admission that they could not know the shape of chemicals.[54] Bucke's self-serving science helped him to argue that medical science and society in general could only benefit from the eradication of alcohol in therapy and in general use. Since it also provided scientific basis for temperance sentiment, Bucke's perspective could help legitimize the role of "scientific" medicine in social policy.

The success of Bucke's arguments in helping to shape alcohol policy in Ontario, and in reinforcing extant temperance sentiment with the government, was suggested in a series of fiery letters between Dr. Charles Kirk Clarke, superintendent of the Kingston Asylum from 1885 to 1905 and the Inspector Dr. W. T. O'Reilly in 1887. Perusing the accounts of purchases at the Kingston Asylum in 1886, Dr. O'Reilly noticed a claim for a purchase of wine. The Bursar of the asylum, William Anglin, reported that Clarke "says that Whiskey and Brandy as well as Wine have been had for the Asylum recently, and no objection had been made."[55] O'Reilly reviewed previous reports, and then asked Clarke to explain his actions. O'Reilly reminded Clarke of the decision to cease permitting alcohol in

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[54]Ibid, p. 35. Emphasis added.

[55]Anglin to O'Reilly, Feburary, 1887. (The record says 1877, but that cannot be accurate, given the period of tenure of O'Reilly, C. K. Clarke, and the dates on the subsequent letters). Archives of Ontario, RG 63-A-1 #6748.

Ontario asylums, and the debates at the end of the 1870s. Clarke was an assistant to Daniel Clark in Toronto at that time. While Daniel Clark continued to argue against the decision to remove the allocation for alcohol, the Provincial Secretary, Arthur Sturgis Hardy, wrote to Langmuir about the former's disapproval of Clark's opposition:

> If Dr. Bucke and other medical superintendents can secure the ordinary good health of their patients without the use of liquor, and Dr. Clark feels that he cannot do so, then I would at once recommend that Dr. Clark be removed to some smaller institution conducted without the use of liquor, that somebody else [be] placed in charge of the Toronto Asylum... Liquor is or is not necessary for patients in our asylums, and experience and the opinion of the Legislature are in favour of its non-use and I certainly concur with that![56]

O'Reilly told Clarke that any use of alcohol as medicine must be done on the medical superintendent's "own responsibility," a statement which, given the inclusion of Hardy's decision to remove Daniel Clark in 1880, must have been a veiled threat.

C. K. Clarke replied by insisting that he had done nothing wrong, and that he often used alcohol as medicine in his treatments. The problem had been that the Bursar's report had listed wine separately, instead of with other medicines. His interpretation of the outcome of the debates in the 1870s was that "the use of alcoholic liquors as beverages should be discontinued in the Asylums" and limited to use as a medicine. He reflected Daniel Clark's argument that the government should not dictate on medical issues, stating that

> my impression was that the government placed medical men at the head of Asylums for the purpose of caring for the unfortunate insane in an intelligent manner and doing everything possible to restore the unfortunates to sanity. I have also been under the impression that the Gov't did not wish to dictate any particular

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[56]O'Reilly to C. K. Clarke, March 3, 1887. Archives of Ontario, RG 63-A-1 #6748.

> line of medical treatment to be followed--being satisfied that its officers were properly qualified to carry on this part of their duty successfully."[57]

Upon Clarke's request for the government to make a final decision on this matter, O'Reilly replied that Clarke "must use alcohol... on your own responsibility" and that the government agreed with Bucke's recent conclusions about the medical value of ending alcohol in therapy.[58] Bucke's "scientific" conclusions bolstered extant temperance sentiments.

Drug therapy permeated other aspects of asylum treatment. When Clark and Bucke debated the value of the non-restraint movement, the issue of the danger of drugs in therapy emerged once again. Clark argued against the "mania for absolute non-restraint" and stated that those who reduced their dependence upon physical restraint would turn to chemical means of sedating patients.

> [I]n many of those Institutions where the much-condemned mechanical restraint is vetoed, large quantities of sedatives and narcotics are used. This means that mechanical restraint is put upon the brain in another form by soothing potions, not intermittently, but continuously. . . Opium and its salts, hydrate chloral, croton-chloral, and kindred drugs, are the sheet anchors; and under their influence, the usual restraint becomes unnecessary. This narcotism [sic] is not called restraint, but it is the worst kind of it.[59]

When Bucke began his use of non-restraint, he countered similar arguments with the contention that he had not "used any morphia, chloral, or other sedative drug for the

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[57]C. K. Clarke to O'Reilly, March 5, 1887.

[58]O'Reilly to C. K. Clarke, March 14, 1887.

[59]Daniel Clark, "Report" (1878), p. 244-245.

purpose of quieting or calming any noisy or violent patient."[60] Bucke explained his new therapeutic perspective as "the re-humanization of the patient" and proceeded to explain the role, or non-role, of chemical intervention in this goal. "I do not believe that drugs are capable of taking any important part in the attainment of this end, the agents upon which, I think we shall have ultimately to depend are kindness, management, hygienic measures, such as fresh air, good food, exercise, rest, sleep, etc., regular work, amusements, properly ordered mental exercise, and other similar means . . ."[61]

The use of drugs and alcohol in therapeutics, then, was part of a broader discourse about the proper role of physicians in treating of insanity. Positioned on opposite sides of several medical debates, Clark and Bucke could still agree that doctors should have the exclusive authority to define and control the appropriate use of drugs and alcohol. To them both, medical professionalisation had an essential social role, but the uncertainty about the processes of the body, and the constantly expanding and often contradictory scientific conclusions about chemical therapy, continued to be matters of intense debate. The power of their evidence was necessarily modulated by politics and social temperaments. Since drug and alcohol therapy continued to be an important part of medical and psychological practice, these debates could be particularly acrimonious.

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[60]Bucke, "Report" (1884), p. 70; On alcohol in therapy, see Warsh, Moments of Unreason, pp. 145-146.

[61]Bucke, "Report" (1884), p. 68.

Part II: Asylum admissions and categories of diagnosis

The decision of how to use drugs in asylum therapeutics was only part of the operation of drugs and alcohol in the life of the asylum. Doctors, like Bucke and Clark, recognized the potential dangers of substance use, but working in institutions in which mental derangement manifested itself in many forms, they had to confront a variety of physical and behavioural conditions to treat their patients. In this section, we turn to examine the appearance of drugs and drug use within the broader context of public asylum admissions.[62]

First, I look at the process of asylum admissions, then I look at the reasons why people committed their drug using relatives or friends. The process of asylum admissions was a bureaucratic interaction between general practitioners, the public, and asylum physicians. Expanding that discussion to the admission of patients whose diagnostic profile included drug use, I explore the inexact nature of front line diagnostics in helping us to recognize addiction. Since the diagnosis of insanity relied upon the impressions of

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[62]I should distinguish between the goals of my study and those of Warsh on the Homewood Retreat (Moments of Unreason, 1989). Since Homewood, especially under Stephen Lett, promoted itself as a place to send drug addicts, the conscious recognition of drug addiction as a condition requiring medical aid was implicit in the patient's arrival. People sending friends and relatives to Homewood did not have to decide that addiction was a mental illness requiring treatment; they were sending their loved ones to a "retreat" for treatment of their drug habit. The condition itself may not necessarily have been considered a mental illness which could properly be addressed at an asylum. My purpose, however, is to look at the way that ideas about addiction, and the interpretation of addiction, emerged from other, more traditional categories of insanity. Warsh's work is valuable for understanding the demographics of upper class addiction and some of the general themes surrounding addiction as a medicalized problem. My work seeks to see the development of this problem from a secondary, and not necessarily problematic, aspect of a patient's psychological profile, to becoming itself a form of mental alienation.

the behaviour of the patient, the evidence about this behaviour provides indications about how drug use fit into earlier conceptions of mental disease. I use several instances where the records suggest a drug habit, but the drug habit itself was not considered by those observing the behaviour as the primary reason for committal. This examination is important to the thesis because it helps to clarify how the medical interpretation that drug addiction was a form of mental disorder reiterated the need for state intervention. I find that prior to 1900, drug addiction was an attendant condition of other, more traditional forms of mental derangement. After the turn of the century, addiction emerged as itself a form of alienation. Then, when we consider reasons families sent addicted relatives to the asylum, we can identify some broader social forces that drove the interpretation that drug habituation, and the attendant behavioural modifications that it caused, was a condition requiring asylum treatment. These two discussions explore how the authority of physicians as protectors of public safety and health, manifested itself in the actions around addiction. Drug addiction slowly became another form of social deviance that required state control.

* * *

Asylum admissions were an interactive process, and they provide a means of understanding the views of both medical professionals and some members of the general public. The provincial governments entrusted the care of the insane to a medical superintendent and his staff, but the decisions to send the patient to the asylum came from several directions. Doctors' examination and referrals paved the way to the asylum gate. This documentation provided the asylum staff with an initial impression of the patient's

case up to the time of his or her arrival, and was crucial to adequate treatment. T. Millman, Second Assistant Physician at the London Asylum, noted in an 1880 article in the Canada Lancet, that doctors needed to observe proper diagnostic procedures to aid the asylum personnel in their treatment.[63] Patients could also arrive at the asylum from a gaol upon a warrant from the Lieutenant Governor. In this case, the patient was in gaol for safe keeping or for committing a crime or mischief. Warrant patients required the assessment of one doctor, and the endorsement of a magistrate. Unlike certificate patients, warrant patients were not free to leave once the asylum physician determined him or her to be cured. A warrant of discharge was necessary before a warrant patient could leave. The development of the system of admissions, and the several flaws of the system, have been the topic of other works, and do not need to be examined here in any depth.[64] For our purposes it is important to recognize that the records of the initial visit to the asylum were not just the impressions of the asylum personnel. The admitting officers generally recorded the information provided on the referral letters, along with other

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[63]T. Millman, "Admission of Lunatics into Asylums" Canada Lancet, 13 (October, 1880), 33-38.

[64]Wendy Mitchinson, "Reasons for Committal to a Mid-Nineteenth-Century Ontario Insane Asylum: The Case of Toronto" in Mitchinson and Janice Dickin McGinnis, eds., Essays in the History of Canadian Medicine (Toronto: McClelland And Stewart, 1988), pp. 88-109; Mitchinson, "The Toronto and Gladesville Asylums: Humane Alternatives for the Insane in Canada and Australia?" Bulletin of the History of Medicine 63 (1989):, pp. 52-72; Barry Willer and Gary Miller, "Classification, Cause and Symptoms of Mental Illness," Canadian Psychiatric Association Journal 22 (August, 1977), pp. 231-235; Warsh,"The Medical World of the Asylum: Diagnostics and Therapeutics" in Warsh, Moments of Unreason, pp. 37-62. Shortt, Victorian Lunacy, pp. 49-56; Geoffrey Reaume, "999 Queen Street West: Portrait of Life at the Toronto Hospital for the Insane, 1870-1940" (PhD Dissertation, University of Toronto, 1997).

qualitative data provided by family, friends or even the police officers that brought the patient to the asylum. Subsequent entries record the assessment of the patient's condition and progress by the medical personnel.

The medical superintendent had limited control over eligibility to enter the asylum, although some evidence suggests that he could shape the demographics of his institution in accordance with personal or governmental policy aims. In the 1850s, owing to overcrowding at the Toronto asylum, for example, the Government of Canada gave Joseph Workman permission to deny entry to patients whose condition he did not consider urgent. This policy could allow Workman to refuse those he did not believe to be insane based upon his personal criteria.[65] Other asylum superintendents were not so fortunate. John Waddell, a dedicated temperance reformer, repeatedly noted his outrage at the government's decision, in the early 1850s, to permit police who picked up drunks on the street to take them to the asylum. This procedure contradicted medical authority and defined drunkenness as a form of insanity which deserved state intervention. Waddell followed the rules of his superiors, but he was not happy about it. In the Toronto Asylum, during its early years, several entries note repeated visits by individuals suffering delirium tremens. Some of these patients' visits lasted only a few hours.[66] Yet delirium tremens was not necessarily an admissible form of mental disorder. In 1850, when admitting a

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[65]See By-laws Established by the Board of Directors of the Provincial Lunatic Asylum, Toronto, C. W. (Toronto: Carter and Thomas, 1852) of By-laws of the Provincial Lunatic Asylum, Toronto, C. W. (Toronto: Rowsell & Ellis, 1862).

[66]See, for example, Richard B. patient, who entered on September 7, 1846, and stayed for seven hours. Toronto Lunatic Asylum Admission Records. Patient #409.

patient suffering from delirium tremens, an asylum officer wrote across the admission form, "Delirium Tremens--ought not to have been admitted."[67] Whether this reflects policy decision, or a revised definition of insanity by asylum personnel is unclear. Yet after that note, admissions of patients with delirium tremens practically ceased.

Asylum physicians drew upon knowledge of physical processes and practical experience to interpret the diagnoses of patients who arrived at their institutions. Asylum records demonstrate how the physicians viewed conditions through potentially static diagnostic paradigms that precluded the incorporation of different forms of derangement. They often sought conditions to explain behaviour that seemed to fit a specific etiology, and used their expertise to challenge the diagnostics of general practitioners. For example, Waddell's temperance perspective may have coloured his diagnoses, since he often looked for alcoholism to explain behaviour that appeared to be that of a drunkard. Unlike some asylum records, those for the Saint John Asylum did not routinely record "habits of life" generally referring to a tendency to be temperate or intemperate and industrious or lazy; as a result when Waddell noted whether or not a patient was temperate, the inclusion was significant. For a man who arrived at the asylum in February, 1863, Waddell observed that there had been "no report of his being in liquor," although the symptoms suggested otherwise.[68] Another man, this one suicidal, who had tried to kill himself with an overdose of laudanum, was "a temperate man" an observation which implies that the attempted

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[67]Toronto Lunatic Asylum Admission Records. Patient #904 (unclear, could be 906).

[68]Saint John Lunatic Asylum Casebook, February 19, 1863, p. 234.

suicide suggested he was a drinker.[69] More perplexing for Waddell was Michael Q., brought to the asylum by police, and acting rowdy, not unlike "someone who had partaken of a stimulant, but [the police] could not detect the alcoholic breath."[70]

Waddell was not alone; other physicians' comments suggest similar diagnostic presuppositions, often challenging the information provided in referral forms. While assistant physician in the London Asylum, Stephen Lett, noted of one patient's admission forms, "Causes said to be unknown but I (S.L.) fancy drink."[71] When trying to determine if another patient's condition was hereditary, Lett commented that, "Friends say not hereditary, but I (S.L.) think this doubtful."[72] Masturbation was another convenient diagnostic category. One patient at London was "in good bodily health; looks like a masturbator."[73] At the Toronto Asylum, the admitting physicians occasionally rejected the exciting causes suggested by referring doctors, and inferred the "solitary vice" instead. One patient's insanity was "said to be [the] death of his mother, but masturbation more likely," and another's doctor suggested the cause was sunstroke, but the admitting physician observed "more probably masturbation."[74]

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[69]Saint John Lunatic Asylum Casebook, June 21, 1862, p. 211.

[70]Saint John Lunatic Asylum Casebook, Michael Q., February 3, 1876, p 115.

[71]Records of the Provincial Lunatic Asylum, London, (hereafter, London Asylum Casebook), RG-10-20-C vol 5, page 247, patient #1039.

[72]London Asylum Casebook (Male), vol 5, page 242, patient #1012.

[73]London Asylum Casebook (Male), page 365, patient #1265.

[74]Toronto Asylum Admissions Records, patients #4833 & #4925.

This tendency to seek causes where none may have existed, and to marginalize the observations of referring physicians and others who were more familiar with the individual patient, reflects a significant aspect of asylum medicine. More than just demonstrating the subjectivity of asylum diagnostics, it implied a belief in the power of the medical superintendent over the field of psychiatry and challenged the referral system which asserted the authority of physicians in the state's control of social deviants. While reinforcing a hierarchy of psychological knowledge, at the top of which sat the asylum medical staff, it also challenged the authority of the broader medical profession. Doctors often argued that the specific nature of disease was unique to each patient, and thereby required individualistic treatment. Daniel Clark made this comment when defending his use of alcohol and challenging the Ontario Government's blanket rejection of alcohol therapy, as did C. K. Clarke when challenged by O'Reilly in 1887. The specificity argument also was fundamental to their defence against patent medicine vendors and self-help schemes, and it bolstered doctors' bid to gain broader professional powers. Yet asylum physicians' tendencies to extrapolate certain conditions from symptoms where they may not have existed, challenged the spirit of that medical knowledge. Disregard of letters of referral also made asylum physicians liable to overlook key aspects of the patient's condition. Taking patients from across the region, medical superintendents rarely had prior knowledge of the individuals who arrived at the asylum gates.

The subjectivity of diagnostics suggests a potential that drug use or addiction could remain unidentified, or that, when identified, its significance was marginalized. Prior to the turn of the century, addiction does not appear to have been part of the diagnostic

categories used by physicians. Affecting both behaviour and physical appearance, addiction could fade before more common diagnostic precedents of asylum psychology. In many accounts of addiction, the patients were emaciated and drawn; some exhibited mania, while others were desultory, and often suicidal. Yet these appearances and actions were not exclusive to addiction. Compounding the problem of diagnostics was the potential that addicts would not disclose their condition. The Provincial Inspector of Ontario observed in 1886 that any list of causes of insanity will be flawed because, amongst other reasons, the family or the individual may not wish to divulge embarrassing information, such as "if the patient has been addicted to any particular vice or excess."[75] Long before investigators attached a social opprobrium to drug addiction, Thomas DeQuincy preferred to keep his addiction secret, and published his first version of his Confessions of an English Opium Eater (1821) anonymously.[76] This recognition of the secrecy of drug users was not confined to the users themselves or the medical profession. The comments of the chair of the 1849 legislative committee investigating liquor laws in Upper Canada, discussed in Chapter Four, recognizes the idea that drug use was a solitary indulgence. Mr. Gugy, the committee chair, argued that opium eating would never

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[75]"Report of the Inspector of Prisons, Asylums and Hospitals," Sessional Papers of Ontario (1885), p 8. The inspector provided this qualification annual when discussing the table of "Causes of Insanity." This cryptic phrase likely referred to more commonly identified behaviour, like masturbation or alcoholism, but what is important in that quote is the fact that families kept some conditions secret.

[76]Parssinen, Secret Passions, Secret Remedies: Narcotic Drugs in British Society, 1820-1940 (Philadelphia: The Institute for the Study of Human Issues, 1983), p. 5.

become as prevalent as liquor because opium inspired solitary consumption.[77]

The solitude of the drug user fit a pattern of behaviour that concerned asylum physicians: the improper and introspective focus of mental energy. As Michael J. Clarke has discussed, a key aspect to theories of mental alienation from as early as 1800 was the belief that conditions like morbid introspection--focussing too persistently upon a single activity or idea--were central causes and forms of insanity.[78] Moral treatment, which attempted to redirect the patient's attention to a variety of "healthy" pursuits, attacked that single-mindedness. Clarke mentioned masturbation specifically as a form of particularly aberrant behaviour (to the Victorian physicians) which contributed to, and was indicative of, deeper mental derangement. The drug user's tendency towards secret or solitary activity parallelled the behaviour of a masturbator. The thematic similarity between masturbation and addiction as causes of insanity should not be overlooked as merely coincidental, since both behaviours in those deemed insane reflected a dominant theme in nineteenth century psychiatry, the concern over morbid introspection. The behavioural similarities between masturbation and drug addiction lead us to speculate that addiction was another one of those single-minded pursuits that doctors felt could not possibly have been healthy. Recreational drug addiction, unlike alcoholism, was self-indulgent, inspired introspection, and had no practical purpose. It also spent vital force and misdirected time

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[77]Journals of the Legislative Assembly of Upper Canada (1849), Appendix ZZZ.

[78]Michael J. Clarke, "'Morbid Introspection', Unsoundness of Mind, and British Psychological Medicine, *c.*1830- *c.*1900" in W. F. Bynum, Roy Porter and Michael Shepherd, eds., Anatomy of Madness Vol 3: The Asylum and Its Psychiatry (London: Routledge, 1988) pp. 71-101.

and energy in a developing industrial civilization forged by a work ethic that eschewed self indulgence and wastefulness.[79] Drug addiction, therefore, bore aspects of behaviour that fit into Victorian psychiatric diagnostics, yet the addiction itself did not need to be identified for a drug user to be a candidate for asylum treatment.

Drug use as condition of insanity

Many descriptions of patients arriving at the asylums suggested the potential that the patient used drugs, but before the last decades of the century, physicians rarely considered habitual drug use as a cause of insanity. When drugs did appear in the patient's records, they were linked to an earlier conception of the relationship between mind and body. As Charles Rosenberg has shown, the idea of psychosomatic illness had an entirely different meaning in mid-nineteenth century medical treatment: physicians often attributed physical disease to mental or moral dissolution, and mental derangement could similarly be the result of distinct physical causes.[80] In most asylums, the superintendents encountered some patients whose insanity was apparently the result of physical shocks, like being dunked in or showered by cold water, or the shock of excessive medication. Michael M., an Irish farmer, arrived at the Toronto Asylum in June, 1847 with a condition that was

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[79]On drug use and industrial society, see Wolfgang Schivelbusch, Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants (trans. David Jacobson) (New York: Pantheon Books, 1992); on drug addiction as challenging bourgeois sensibilities, see Berridge and Edwards, Opium and the People, Chapter Four, "Opium in the Fens"; Chapter Nine, "Opium and the Workers: 'Infant Doping' and 'Luxurious Use'"; Chapter Eighteen, "Changes of Scene."

[80]Charles E. Rosenberg, "Body and Mind in Nineteenth Century Medicine: Some Clinical Origins of the Neurosis Construct" Bulletin of the History of Medicine 63 (1989), pp. 185-197.

"thought to be from taking med. which did not agree with him." He stayed there for the rest of his life.[81] Likewise, physicians attributed the derangement of Delilah H., a 26 year old domestic who arrived at Toronto in 1864, to "med'n used for bronchitis."[82]

Basing their assessments upon physical appearances, subjective references, and personal experience, physicians often understated or missed key factors in the individual's condition, such as drug use. Admission registers illustrated the initial point of contact between the asylum physician and the patient, and were not necessarily an accurate depiction of the conditions surrounding the individual's alienation. In the St. John asylum, Waddell also often attributed behavioural change that may have resulted from drug use to other, more orthodox, diagnoses. Joseph S., who had been treated by Dr. Thomas Geddes of Yarmouth for rheumatic affliction in the thigh and hip, seems to have been a victim of classic iatrogenic addiction. The treatment of the leg was unsuccessful, and resulted in a maintenance supply of hypodermic morphine to deal with the pain. "[A]bout 8 months ago he first showed symptoms of imbecility which increased to a form of hypocondriasis. [The patient] was formerly lively [and] cheerful, is now sad and despondent, and the tendency is to injure himself by taking morphine."[83] Joseph's case demonstrates the potential to view an addiction as another form of mental disorder. The physical manifestation of prolonged opiate dependency could appear as a form of depression or imbecility. The "potential to injure" suggests an indefinite conception of the

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[81]Toronto Asylum Admissions Register, Michael McC. patient # 517.

[82]Toronto Asylum Admissions Register, Delilah H. patient #3039.

[83]Saint John Lunatic Asylum Casebook, July 18, 1871, p. 553.

results of taking large doses of morphine. Was the patient attempting suicide, or just using an amount of morphine that could be fatal to one who had not developed a tolerance? Finally, a desire for repeated doses of medicine like morphine could fit a loose definition of hypochondria. That Joseph was an addict seems highly likely; that his addiction was not initially identified suggests the difficulty physicians had in recognizing addiction when they were not yet looking for it.

The only case in which Waddell recognized opium addiction, was that of William M., who had become addicted to opium while in the East Indies. Here again, Waddell--and the referring physicians--initially diagnosed the condition with more common categories of concern, despite a history of opium use. William arrived at the asylum as a "suicidal drunkard," and Waddell's description of the case identified the process of the patient's opium addiction. He "had previously been to the East Indies as Capt[ain] of a ship, and it is supposed that he contracted there the inordinate use of opium." Once he returned to Canada, he lost his supply of opium, and spent the winter in a state of delirium. "He had so far [ceased]. . . his opium in May that he crossed the Atlantic as a mate in a ship of his father intending to go East again, but having returned to his old habits again in Liverpool, he was [urged]... by the Capt. of [the] ship to return home..."[84] William's experience reflected many of the growing myths and realities of opium in Western society. The slow decline into opium, exposure to the dens in Asia, the pain of release, the return to old habits, and the moral and physical decay that resulted (he arrived at the asylum "dissipated and dark") were the images from contemporary alarmist

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[84]Saint John Lunatic Asylum Casebook, August 10, 1876, p. 160-161.

narratives describing the dangers of opium.[85] However, even with this suggestive history, William did not arrive at the asylum until he appeared to display suicidal tendencies.

Although the above cases suggest that drug addiction was the principal cause of the behavioural change, since the physicians themselves marginalized the patient's addiction while they sought other, more traditional forms of mental derangement, our observations must remain speculative. In some cases, however, drug use was not identified in the initial entry documents, but became an issue of the patient's condition after he or she came under the institution's care. Three cases illustrate the ways in which drug use could appear in the etiology of the patient's insanity. Neither physician who referred John M. to the Toronto asylum in 1895 mentioned the existence of a drug habit, but John admitted upon his arrival that "he had abused the use of chloral and other drugs."[86] He was a model patient, "always acted quiet and gentlemanly" and appears to have recovered rapidly. He left the asylum two months after his admission.[87] Catherine A., conceded upon her arrival at Toronto in September 1884, that she habitually took 30 grains of morphine, yet her referring doctors did not mention this condition.[88] Although they recognized the extreme quantity of Catherine's opiate consumption, the asylum physicians

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[85]See, for example any editions of Oscar Wilde, A Picture of Dorian Gray (London: Oxford University Press, 1974); Charles Dickens, The Mystery of Edwin Drood (Oxford: Clarendon Press, 1972) Wilkie Collins, The Moonstone (London: Chatto, 1907).

[86]His age is not clear, it may have been 31 or 37.

[87]The asylum practice was to send patients on probation first. John was formally discharged soon afterwards. Toronto Asylum Casebook, patient #7773, page 403.

[88]Toronto Asylum Admissions files, patient #5810.

were not certain that the drug use was the primary cause of Catherine's debility. The "morphia [was] stopped on admission which *might* clear insan[ity]," wrote the admitting physician.[89] Here, too, the direct relationship between insanity and addiction had not been established. The exciting cause of her condition was listed as "mental trouble upon loss of property."[90]

In these cases, the main cause of the patient's aberrant behaviour may have been drug addiction; however, whenever these doctors noted that the patient used drugs habitually, they considered the addiction secondary to more traditional categories of mental alienation. Their reliance upon traditional categories was bolstered by the fact that the patients were not sent to the asylum until they demonstrated behaviour that challenged social norms. All of the patients were either suicidal or homicidal, and these conditions suggest the social role for the asylum as a place to correct deviant behaviour. Addressing the overt behaviour of the patient was central to asylum therapeutics. Sometimes surface symptoms were all that asylum physicians addressed. For example, examining asylum therapeutics in Revolution-era France, Dora Weiner has shown how depletion regimens may have been successful in treating insanity because "they often weakened violent patients into compliance, so that they were pronounced cured and dismissed."[91] Moreover, as Howard J. Shaffer has explained in reference to Levine's classic "Discovery

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[89]Toronto Asylum Casebook, patient #5810. Emphasis added.

[90]Toronto Asylum Admissions files, patient #5810. The role of morphine in Catherine's condition remains unclear, however, since she died four days after her arrival.

[91]Dora Weiner, The Citizen-Patient, p. 254.

of Addiction," clinicians generally only find what they are looking for, rarely new conditions.[92] Likewise, when treating patients who may have been habitual drug users, the doctors sought specific behavioural aberrations that challenged social norms; until addiction became one of those forms of deviance, it was a secondary condition of insanity.

The identification of drug use as a primary factor in insanity was a gradual process. For some patients who arrived at the asylum, drug use did appear in their psychological profile, yet their physicians deliberated whether or not drug addiction itself constituted insanity. Dr. John Fulton sent the female patient Thomasina M. to the Toronto asylum in 1875, noting that hers "is more probably a state bordering on insanity, than active insanity [and] is apparently caused by the habitual and excessive use of opium." Thomasina confirmed her use of three to four ounces of laudanum each day, but her doctor could not decide if this was insanity.[93] A male patient, Charles O., who arrived at the London asylum in 1871, had been "under treatment by private practitioners who have by all appearances given him large doses of morphine or some other preparation of opium." Yet the referring physician was unable to determine if addiction was actually insanity, and questioned "very much this being a case of brain disease; I fancy the great trouble was the use of too much opium... to procure sleep."[94] For both of these cases, addiction was a problem, but it was not insanity.

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[92]Howard J. Shaffer, "The Discovery of Addiction: Levine and the Philosophical foundations of Drug Abuse Treatment," Journal of Substance Abuse Treatment 2 (1985), p. 42.

[93]Toronto Asylum Casebook, patient # 4341.

[94]London Asylum Casebook, vol 1, p. 86.

Table 5.4: Causes of insanity in patients admitted to Ontario Asylums, 1879-1908.

Cause		79	80	81	82	83	84	85	86	87	88	89	90	91	93	94	95	96	97	98	99	99*	00	01	02	03	04	05	06	07	08
Drink	M	3					2	4		4		9	4	4	2	3	6	11	4	8	11	8	6		13	16	31	25	52	29	74
PRDSP	W	1						3	1	1				1	1			1			1				1	2	4	4	14	5	12
Drugs	M																		1			**	**				1				5
	W					1						2										**	**				20		2		4
Drink	M	10	18				13	12	10	7	14	21	13	6	19	12	13	22	20	18	21	24	21		24	25	42	62	44	42	27
EXCIT.	W	3	4				3	7	6			2	1	6	3	2	4	2	1	9	3	2	5		12	10	8	5	18	4	3
Drugs	M											1						1	3			**	**		2	2					2
	W											2						1	1		1	**	**		8	8	25				2
Total	M	270	292	291	268	268	271	269	303	224	359	294	321	461	401	407	532	436	545	379	407	397	405	410	434	458	511	519	568	525	
	W	245	282	253	257	275	237	203	251	212	312	265	376	436	419	374	516	414	444	445	386	396	392	606	455	500	538	568	528	497	

NOTES: "Drug use" indicates mention of drugs, namely, opium, chloral, morphine or cocaine.
There was no report of causes in 1892
* In 1899 the Ontario Legislature sat twice; both Sessional Papers are listed as "1899."
**"Morphine habit" listed as a category, but no patients listed, in 1899 and 1900.

Source: Annual Report of the Inspector of Asylums, Sessional Papers of Ontario, 1879-1908.

Despite the difference in conditions and results, all the above cases are of patients whose drug use was not considered to be their form of mental derangement; at most, it was a contributing factor to their insanity. This etiological construction began to change near the end of the century. Table 5.4 provides a list of the frequency that drugs appeared as causes of insanity in the admissions of Ontario asylums from 1877 to 1904.[95] As the Ontario Provincial Inspectors noted, the usefulness of any list of causes of insanity was restricted by the fact that the cause was often unclear. Daniel Clark also argued this point in 1898, noting the difficulty in linking insanity directly to alcohol or (less frequently) drug habituation. Usually, he said, drug use that appeared at the asylum was an indication of a deeper problem.[96] These numbers, although not presenting a definite impression of the patients' conditions upon arrival, suggest a general growth in the idea that substance use could cause insanity. While significantly more patients had conditions caused by drink, several patients' disorders were listed as having been caused by drugs. The classifications seem tied to the conditions, and before the turn of the century, drug use was not identified

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[95]The Ontario Legislative records appear to be the only ones in Canada that appear to have considered drug use in an early period. In British Columbia, for example, drug use was occasionally a factor in insanity, but not until the end of the century was any form of drug habituation included regularly in the list of causes. This discrepancy may have been a result of the individual goals of the government officials (like the Inspector) or of the fact that, with more asylums, and a larger urban population, Ontario may have seen more incidents of drug use being associated with insanity.

[96]Clark, "Annual Report of the Medical Superintendent of the Asylum for Insane, Toronto" Papers of the Legislative Assembly of Ontario (1898), p .39. This sentiment was also expressed by T. Millman, who, while assistant physician in London, wrote an article for the Canada Lancet instructing physicians on how to fill in the asylum admission forms properly. See "Admission of Lunatics into Asylums" Canada Lancet 13 (Oct, 1880), pp. 33-37.

under a single name. Such an identification might suggest an emerging uniform concept of illness, or policy towards a condition that resulted from drug use. In 1889, for example, three patients had the "chloral habit," and in 1896, two had the "opium habit." By the end of the century, "morphine habit" was a recurring category, even though frequently no admissions were listed in that category. In 1897 the category was "morphine and cocaine," a title which does not indicate whether the two were taken in tandem, or only recorded together. In the annual report of Dr. C. K .Clarke, the Superintendent of the Kingston Asylum, drug use merged with alcohol into the general category "intemperance in drink or drugs." The notable increase in the cases of alcohol and drugs as causes of insanity, while not large enough for statistical tests, do suggest that those referring people to asylums, or the asylum physicians themselves, saw drug use more frequently as a viable cause of mental illness. The evidence of the Royal Commission on the Liquor Traffic, which investigated the nature of alcohol consumption in Canada at the end of the nineteenth century, reinforces this suggestive data. In letters to physicians, the commission included the question "In your opinion, does the use of intoxicating beverages increase the number of insane persons?" Out of 1457 letters, 1052 answered in the affirmative, 228 in the negative, and 177 made no or "indefinite" replies.[97] The change in the perceptions of drugs as causes of insanity after the turn of the century requires more scrutiny.

Taking the admissions registers of the Toronto and Kingston asylums for

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[97]Minutes of Evidence of the Royal Commission on the Liquor Traffic in Canada Volume 1 (Ottawa: 1892), pp. 53-55.

comparative purposes, we can see how the identification of addiction as a form of mental derangement emerged in the first decade of the twentieth century. Since the Toronto Asylum included a "superior ward" to attract wealthier patients who could afford it, and its demographics may have been skewed towards richer patients, I have examined the records of the Kingston Asylum, which, by the 1870s, no longer included "criminally insane" patients.[98] Table 5.5a-c demonstrates that, when we consider drug-using patients by class of lodging, we find that Toronto attracted more wealthier addicts. This fact must temper subsequent conclusions. Once again, the small number of cases make any more elaborate statistical tests irrelevant; these observations, therefore, are more suggestive than conclusive.

The gendered nature of addiction is a notable factor in these admissions records. As Tables 5.5a-c demonstrate, while the Toronto asylum admitted slightly more male drug users than female, the Kingston asylum admitted significantly more women with drug habits than men. This differentiation may have been the result of the cost of admission to Toronto; it is possible that families could justify the expense of sending male members to the superior wards of Toronto, since men were considered breadwinners. That preponderance of men in Toronto may have been balanced by the absence of male "pay patients" in Kingston since, as Table 5.6 illustrates, the two asylums taken together divide the genders almost evenly. This total may be a coincidence, however, since the

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[98]The Toronto asylum had several levels of paying wards, a $3 ward, and a "superior" ward in which many patients paid $6.00 or more a week. See admission records of the Toronto Asylum, Archives of Ontario, RG-10-20-B. On Kingston's asylum, see Catharine Sims, "An Institutional History of the Asylum for the Insane at Kingston, 1856-1885" (Master's Thesis, Queen's University, 1981).

Table 5.5a "Class" of drug user patients by the amount they paid. Toronto asylum: 1875-1906

	to$6	to $3	Free	N/A	Total
Men	11	3	5		19
Women	6	2	1	2	11
Totals	17	5	6	2	30

Table 5.5b "Class" of drug user patients by the amount they paid. Kingston asylum 1875-1906

	Pay	Free	Total
Men	0	6	6
Women	8	7	15
Total	8	13	21

Table 5.5c Class of drug user patients compared, 1875-1906.

Patients		Pay	Free	Total
Toronto	Men	14	5	19
	Women	10	1	11
Kingston	Men	0	6	6
	Women	8	7	15
Both	Total	32	19	51

Table 5.6 Gender of admissions in which drug use is a cause or form of insanity 1875-1906

	Toronto	Kingston	Total
Male	19	6	25
Female	11	15	16
Total	30	21	51

Sources for all tables: Admission Registers for the Toronto Asylum and the Kingston Asylum, 1875-1906, Archives of Ontario.

Table 5.7 Substance used in cases of addicts, 1875-1906.

Substance	Toronto		Kingston		Total
	M	F	M	F	All
Opium	2	6	3	9	20
Cocaine	2	0	0	1	3
Opium & Cocaine	6	1	0	0	7
Opium & Alcohol	7	0	2	1	10
Other*	2	4	1	4	11
Totals	**19**	**11**	**6**	**15**	**51**

*Including "other drugs"; patient was described as having a "drug habit"or cases in which the condition included "alcohol and other drugs."

Table 5.8 Form of Mental Derangement in drug use cases, 1875-1906

Asylum	Gender	Melancholy	Mania	Drug Habit	Other or N/A	Total
Toronto	Male	4	7	2	6	19
	Female	3	3	0	5	11
Kingston	Male	0	2	2	2	6
	Female	3	6	4*	2	15
	Total	10	19	8	15	51

*Includes "Mania with cocaine habit"

Table 5.8a Form of Derangement in drug use: 1890-1899

Asylum	Gender	Melancholy	Mania	Drug Habit	Other or N/A	Total
Toronto	Male	1	6	0	2	9
	Female	0	1	0	1	2
Kingston	Male	0	0	0	1	1
	Female	0	1	0	1	2
	Total	1	8	0	5	14

Table 5.8b Form of Derangement in drug use: 1900-1906

Asylum	Gender	Melancholy	Mania	Drug Habit	Other or N/A	Total
Toronto	Male	1	1	2	3	7
	Female	0	0	0	2	2
Kingston	Male	0	1	1	1	3
	Female	1	4	4	1	10
	Total	2	6	7	7	22

Sources for all tables: Admission Register of the Toronto Asylum and the Kingston Asylum, 1875-1906, Archives of Ontario.

demographics of other asylums would also have been affected by the attraction of Toronto's "superior wards." While a notable number of men at Toronto were wealthy professionals, the numbers on the chart may not be entirely indicative of how many professionals entered the asylum. The physician John B., for example, entered as a free patient, but Daniel Clark put him in the $6 ward because the ward "to which he really belonged" was full. Clark was eventually criticized by families of the paying patients for extending "this kindness" to John.[99]

As Table 5.7 suggests, the differences in demographics at the two asylums, however, also appears to have affected significantly the types of drugs the patients used. Men at Toronto were much more likely to use a variety of drugs, or combinations of drugs, than were women at that asylum, and men and women in Kingston, all of whose drug use generally involved opium or occasionally opium and alcohol. Cocaine use was significant among the Toronto male addicts, but not to the other patients.[100] Cocaine was more often combined with habitual use of other drugs, a trend that mirrors the findings of Warsh in her study of Homewood.[101] The first admission of a cocaine user at the Toronto asylum was an analytical chemist in 1895. Of the eight male patients whose drug use included cocaine, three were physicians: one of the patients used cocaine exclusively and two combined cocaine with morphine; a fourth doctor took cocaine and alcohol, and is

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[99]Toronto Asylum Records, patient #8360.

[100]I discuss the emergence of concerns over addiction to cocaine in Chapter Six.

[101]Warsh, Moments of Unreason, pp. 160-61. Coincidentally, among the numerically more addicts at Homewood, Warsh only found eight cocaine users.

thereby listed in the "other" category of Table 5.8.

Cases of addiction in the admissions records of the asylums suggests how drug use entered the lexicon of asylum diagnostics through traditional channels. It was first a cause of other traditional forms of insanity, such as melancholia and mania, and later became itself a form of mental alienation. In the first years of the twentieth century, earlier categories broke down as psychologists sought new answers to the persistent problem of diagnosis of insanity. In 1908, for example, this re-evaluation of traditional categorization received the endorsement of the government of Ontario when it created a new system for classifying insanity. The categories began with "Psychoses Associated with Toxaemia," which included the sub-categories of "morphinism, cocainism, and several forms of dementia associated with alcoholism.[102] Prior to this official shift, physicians had begun to re-consider their classification system, a reconsideration which increasingly recognized drug addiction as itself a form of mental derangement. Tables 5.8a and 5.8b illustrate the "Forms of Mental Derangement" in which drug use appeared either an exciting or less frequently predisposing causes in patients entering the Toronto and Kingston asylums. Since, as demonstrated earlier, drug use in the nineteenth century could often be mis-interpreted or mis-categorized, we cannot conclude that incidents of drug use increased, yet the growing incidents of drugs as causes and forms of insanity, illustrate a changing recognition of the potential for drugs to significantly alter behaviour. Therefore, these statistics suggest a terminological incorporation of drug use and addiction within the

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[102]S. A. Armstrong, "Regulation Respecting the Classification of Insanity to be Adopted in all Hospitals for the Insane of the Province of Ontario," Report of the Inspectors of Hospitals for the Insane (1908) pp. xii-xiii.

classification of cause and forms of insanity in the first decade of the twentieth century. Drug use was now a mental illness which observers, be they family, friends, doctors or other officials, believed required institutional care.

This terminological shift did more than recognize drug use as a form of insanity. Just as alcohol use and masturbation were causes of insanity that doctors expected to find when confronting certain behavioural anomalies, some evidence suggests that drug use became a similar presupposed cause of insanity. This change took place about the same time that drug use actually became a form of mental derangement. In Kingston, in 1907, the admitting physician began to note the absence of drug use in manic and demented patients who arrived at the asylum. A farmer suffering from "acute mania" had habits described as "industrious, temperate, no drugs" a housewife with chronic dementia was "active intemperate no drugs" and another with delusional mania was "active not addicted to alcohol or drugs."[103] When we compare the referral forms, on which details of the cases were provided by the patients' referring physicians, with with the admission registers, in which the asylum's admitting physician transcribed the information on these forms (and supplemented it with his own observations), we see a further tendency to regard drug use as a cause or form of insanity. A grocer who entered the paid wards at the Toronto asylum in August 1899, for example, was melancholy from the death of several children and business losses. His doctors noted these tragedies drove him to take "drugs, chloral and laudanum" but considered the predisposing cause of his derangement to be the loss of his children, and the exciting cause to be financial difficulties. The

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[103]Kingston Asylum Casebook, respectively, patients #4049, 4063, 4087.

admitting physician wrote that the cause was "alcohol, laudanum & chloral." The man's condition was probably more than just addiction, however, since he remained for over two years.[104]

This determination that drug use was a distinct cause of insanity may have served to blur other conditions. Just as we must be careful when trying to identify addicted patients who were not described as addicts, we must consider carefully any attempt to reconsider a diagnosis that included drug use. Several cases for which drug use was a cause but not a form of mental derangement demonstrate that we must be cautious in our interpretation of any case. Given identifiable effects of the drugs I am exploring, we would expect a patient whose condition was caused exclusively by addiction to require only a few months' stay to recover from the addiction and withdrawal symptoms; yet this pattern was not always the case. A woman at the London asylum, for example, had taken drugs for a tumour and the pain that resulted from it. The tumour disappeared, but she continued to take opium. She remained at the asylum for a year and a half.[105] The same condition befell a physician from Stratford, who arrived in the London asylum in 1875. The exciting causes of his condition were "Morphine and [a] hard country [medical] practice."[106] Although removed from the country practice, and likely taken off the drug,

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[104]Toronto Asylum Admissions files, patient #8532.

[105]London Asylum Casebook, patient #7202, March 12, 1892.

[106]This case was one of the earliest instances of a direct link between drug use and insanity. One wonders if the man's status as a physician may have influenced the diagnosis, since from the beginning of the shift in ideas about drug habituation, commentators (usually doctors) were concerned about physicians' tendency to use drugs, often owing to the stress of their lifestyles.

this doctor remained in London for nearly three years.[107] A physician whose mania both the referring and admitting physicians figured may have been caused by cocaine use, remained in the Toronto asylum for two years, and was discharged "unimproved."[108] A medical missionary who arrived at Kingston with both predisposing and exciting causes listed as "morphine habit" (but with no listed "form of mental disease") remained at the asylum for over five years before leaving improved.[109]

This shifting diagnostic classification in the admission records may serve to hide a process that was taking place before drug use became itself a reason for admission to the asylum: a recognition that drugs were the only cause of the mental disorder, and a subsequent conflation of cause and form of mental disease. In Mental Diseases, Daniel Clark refused to consider all drug addiction to be insanity. "The delirium or mania induced by . . . toxic agents such as alcohol, opium and its salts, cocaine, hydrate chloral and such like, are not insane conditions," he argued. He disagreed with authors who called such states "toxic insanity. . . alcoholic insanity, morphinic [sic] insanity, haschish [sic] insanity, etheric [sic] insanity, chloralic [sic] insanity, cocainic [sic] insanity, and oxy-carbonic insanity." Clark insisted that drug use was a form of insanity only when a permanent derangement of the brain followed the disuse of the substance.[110] However, in letters to the family and colleagues of patients whose insanity was caused by drug use, but

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[107]London Asylum Casebook, patient #926.

[108]Toronto Asylum Casebook, patient #8360.

[109]Kingston Asylum Casebook, patient #3203.

[110]Daniel Clark, Mental Diseases, p. 37-38 emphasis added.

who were not classified specifically as suffering from addiction or the drug habit as a "Form of Mental Disorder," Clark's discussion suggests that his may have been a semantic delineation. In these letters, Clark explained his treatment of the patient's condition. Often Clark and his staff interpreted and treated the patient's condition as if drugs were the only cause of the disorder, and the insanity caused by drugs was potentially temporary.[111] This interpretation contradicted the position Clark took in Mental Diseases. Clark appears to have accepted drug addiction as a viable form of mental derangement prior to more formal recognition of that etiological shift. At the turn of the century, Clark's therapeutic perspective straddled a period in which drug use was a cause of more extensive mental problems, and another when addiction itself became a form of insanity.

Clark's interpretation of addiction was shaped by the conditions in which he worked, and may not reflect the perspective of all medical superintendents at the time. Having the benefit of a "superior ward" for wealthy insane patients, Clark may have looked upon mental affliction caused by drug addiction more sympathetically, or even with more awareness of the concerns manifested in the medical literature about upper-class addiction. Hence, he may have been more willing to link addiction and insanity directly. Other physicians, less familiar with addiction, or less sympathetic to the drug habitue, may have interpreted addiction differently. We are rarely fortunate enough to have a case in which two medical superintendents assessed the same patient. However, in 1896, a patient arrived at the London asylum, and then was transferred to the Toronto asylum.

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[111]See Toronto Asylum Admissions files, especially for patients #8442, 8360 and 8536.

His condition became the subject of considerable scrutiny by both Bucke and Clark, as well as by the Provincial Inspector, Christie. The case of Edward C. provides a valuable opportunity to compare directly how substance use operated in the subjective terminological realm of asylum diagnostics.

When Edward, a resident of London Ontario, and a confirmed liquor, cocaine and opium user arrived at the London asylum, it was after being treated for liquor and cocaine addiction at the Keeley Institute in Dwight, Illinois, and then a series of misadventures in Georgia. He had hallucinated that people were trying to kill him; he threatened the life of his wife, and he attempted suicide in an Atlanta police lockup. When his family took him to the London Asylum, after retrieving him from the Atlanta authorities, he was described as "Intemperate, has used cocaine, alcohol and opium. Imagines that his family have all turned against him... Hesitating speech and tremors. Excitable. Incoherent and talks about great wealth and fortunes he is making. Excitable..."[112]

Prior to departing on his exploits in the United States, Edward had incurred a number of debts and had misused trust funds from his father's estate. These activities took place while Edward was "laid up" from drinking and possibly from other drug use. Apparently as a result of these debts, the Toronto General Trusts Company sued Edward's family to retain control of the estate of Edward's father. The exact conditions around this case are not clear, although it seems likely that Edward's brother Andrew Jr., appealed to the TGT Company to get the money that was intended for dependent relatives, but for which Edward was responsible, into safer hands. To faciliate this court case, the family

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[112]London Asylum Admissions Records, patient #3952.

barrister, Mr. Gamble, requested a psychological evaluation of his client. Bucke examined the patient, collected a mass of paperwork describing his various exploits, and determined that Edward was "an insane person and a dangerous lunatic." Bucke drew mostly upon accounts of Edward's "moral" behaviour:

> He has been careless and reckless in his life and in his business, has drank spirits almost continuously in sufficient quantity to keep him a large part of the time in a dazed state, and has spent money so much in excess of his income as to deprive his family.... of the ordinary comforts of life. . . The people who have stood by him for years. . . who have assisted to support his family, who have supplied him with money. . . he looks upon with indifference or as his enemies. . . seems indeed to be destitute of any feeling of obligation or gratitude.[113]

Bucke concluded that Edward was "a moral imbecile," who "cannot recover from his debility, and [it is] very doubtful if [he] will ever [recover] from his delusions."

Edward's barrister then asked Daniel Clark to examine the patient. Clark's observations drew upon the same documentary evidence as Bucke, combined with personal interviews, but he concluded that Edward was not insane. Bucke had considered the aberrant moral behaviour; Clark looked at the gaps between these fits of insanity.

> Assuming all that has been stated . . . to be true, it is evident that intermittently he was subject to hallucinations and delusions. It is, however, noticeable that also intermittently he was rational and in his right mind and did at these times intelligent work. . . It is evident then that there was no fixed or permanent brain disease at this period, else would his delusional state have been continuous and incapacitated him from earning a salary in responsible positions.[114]

Clark did not deny the "strange conduct" and hallucinations were the behaviour of "no

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[113]Bucke, Affadavit "In the High Court of Justice," nd, in "Edward C." file, Toronto Asylum Admission Records, Patient #8077.

[114]Daniel Clark to R. Christie, Inspector of Asylums, November 19, 1896, in Edward C. File, Patient #8077, pp 1-2

man in his right mind," and drew the Inspector's attention to "the fact that he not only drank liquor heavily but was also a victim of cocaine, which he acknowledges, and experience teaches us that the excessive use of these deleterious poisons not only causes delirium, but also often excites to hallucinations of sight and hearing as well as delusions of persecution."[115] Clark was adamant, however, that "these intermittent periods of undue excitement cannot be rightly called insanity." Clark likened Edward's insistence that the delusions in Georgia had actually happened to the strong impressions made by dreams, which "impress us with an intensity almost equal to real actions and waking mental impressions."[116] Contrary to Bucke, Clark suggested that Edward could be released on probation, to see if the patient had recovered. This probation began in January, 1897, and in March Edward was formally discharged.[117]

Both Bucke's and Clark's opinions are consistent with their published perspectives on the nature of the human mind, and the effects of drugs upon it. As noted above, in Mental Diseases, Clark argued that the mental derangement caused by substance use was not itself insanity. He argued that the only time delirium caused by substance use should be properly labelled insanity was when "a permanent mental disease follows the use of and

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[115]Clark to Christie, p. 2

[116]Clark to Christie, p. 3.

[117]The High Court decided that the TGT would have control of the Edward's family estate. Since the specific reasons for the trial are not clear, it is difficult to comment upon this decision. However, it appears that Edward was the eldest brother, and so the TGT case was an attempt, at the request of the rest of the family, to get a third party in charge of the funds from Andrew C. Sr.'s estate, to protect them from misappropriations like those of Edward. In that respect, this court decision was a victory for both sides.

abstinence from these drugs."[118] Edward's case was a temporary condition. That Edward was lucid and rational upon cessation of the substances, suggested that no mental disease was present. Bucke's writings focussed less upon the biological or organic nature of insanity, and more strongly upon broader questions of the moral nature of the individual and the human race. While not exploring the case of Edward C. specifically, S. E. D. Shortt and Rainer Baehre have both explained that in his work, Bucke consistently argued towards the developing moral superiority of humanity, validating this perspective with organic theories of moral growth.[119] Cosmic Consciousness (1901), Bucke's more celebrated work, argued that humanity was reaching a moral transcendence that few had yet achieved. Edward, an individual whose willful indulgence led to violence, abuse, and rejection of the sympathies of others, was, to Bucke, an irredeemable individual, and a potential example of what Shortt calls "atavism... regression to a more primitive state."[120] Edward's refusal to admit his hallucinations, and his history of aberrant behaviour, suggested to Bucke one who was morally regressing, instead of developing.

Both arguments related to broader issues of social progress and the role of addiction as deviance within the larger social context. Clark's arguments drew upon generally accepted truths regarding the effects of drugs upon the behaviour of the

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[118]Daniel Clark, Mental Diseases, p. 37-38 emphasis added.

[119]S. E. D. Shortt, Victorian Lunacy, pp. 100-109; Rainer Baehre, "The Bucke Era: The Custodial Asylum, Incurability, and Devolution, 1876-1902" in "The Ill-Regulated Mind: A Study in the Making of Psychiatry in Ontario, 1830-1921" (PhD Dissertation, York University, 1985).

[120]On atavism and Bucke's ideas, see Shortt, Victorian Lunacy, pp. 100-101.

individual, but offered an optimistic assessment of the prospects of treating addiction. Addicted to drink, cocaine, and (in some accounts) opium, Edward personified the social panic over the substance abuser.[121] He was a wealthy man who had indulged too frequently. He fell into bad habits, and became delusional and unable to keep his job. His addiction led to temporary insanity, which in turn caused havoc to the family and potential danger to society. For Clark to view the potential restoration of the individual's faculties was for him to offer hope to society's growing "problem" of substance use. Bucke, meanwhile, provided no solution but perpetual incarceration and pessimism. His class-based interpretation of progress meant that when a wealthy individual squandered his property and abused his relatives and peers, that individual's behaviour demonstrated a threat to the positivistic, progressivist perspective that Bucke embraced. For the superintendent of the London Asylum, insanity was the only way to explain such behaviour.

Treatment of insanity in the non-specialist asylum

In the asylum, diagnosis determined treatment. Warsh noted that assessment of the patient's condition could affect the patient for the duration of his or her stay in the asylum, or even for the rest of his or her life.[122] Since the diagnosis of the patient played a

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[121]On class-based moral and social panic, see especially Mariana Valverde, The Age of Light, Soap and Water: Moral Reform in English Canada, 1885-1925. (Toronto: McClelland & Stewart, 1991); Angus MacLaren, Our Own Master Race: Eugenics in Canada, 1885-1945 (Toronto: McClelland & Stewart, 1990).

[122]Warsh, Moments of Unreason, p. 37.

significant role in the treatment of the addict, I explore how addiction was treated at the asylum, and how interpretation of the patient's disorder could affect the patient's treatment.

In one respect, the diagnosis may not have hampered the resulting treatment. In milder addictions, requiring lower doses to maintain, a minimal degree of medical intervention may have been necessary, and asylum therapeutics could have been effective simply by the controlled conditions under which the patient was placed. At Toronto, John M. was "put on [a] powerful tonic treatment," and then his recovery "was left to simple diet[,] regular habits and asylum regimen."[123] This treatment was common for non-addict patients displaying similar physical and behavioural conditions to John. Ann S. arrived at London and admitted that she had been in the habit of taking a morphine pill each night to sleep.[124] The medical attendants used Potassium Bromide, Cannabis Indica, Chloral Hydrate and Strychnine to try to ease her to sleep. These therapies mirrored those of experts like Lett and Levenstein--chemical intervention to soothe the patient during withdrawal.[125] Since the general philosophy of asylum therapeutics from the middle of the century favoured moral treatment, an addict who arrived at an asylum in a state of melancholy or "morbid introspection," could pass relatively unnoticed through the process

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[123]Toronto Asylum Casebook, p. 403. Joseph's treatment was not listed.

[124]London Asylum Casebook, patient # 2513 (Ann S.) May 11, 1885.

[125]Lett and Levinstein were distinctly opposed in their general approach to treatment of the addict. Lett favoured gradual withdrawal, and Levinstein favoured the abrupt cessation of the drug. They both concurred that drugs and physical therapy would ease the withdrawal symptoms.

of detoxification without the attendants suspecting any affliction other than those that often appeared at the asylum. Unless he or she asked specifically for opiates, the addict could experience the period of violent spasms, hallucinations, vomiting, diarrhoea, and other physical effects of detoxification, and at the end the physical craving might be gone. He or she would then be described as so many appeared prior to discharge: "in good bodily health, quiet and cheerful."

Moral treatment, however, was of limited value in combatting addiction. Some conditions were so severe, that nothing less than a substantial therapeutic regimen was necessary. At Homewood, Stephen Lett envisioned extended stays of at least several months, for his addict patients, in order to wean them slowly from their habit.[126] While the length of Lett's treatments may have been extreme, a stop-over of a few days would be relatively ineffective to treat a physical addiction. Several examples illustrate the potential ineffectiveness of therapeutics based on incomplete diagnoses. Dr. T. E. spent six days in the St. John asylum in September, 1880. His first admission record noted that he had a "mind disturbed by drinking." His second and third visits, for which drug use was part of a broader condition of the insanity, also lasted less than a week.[127] On the fourth admission, Dr. E. received longer-term care. The admission records identified addiction as

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[126]Warsh, Moments of Unreason, pp. 158-9.

[127]Saint John Lunatic Asylum Casebook, April 2, 1881. Saint John Lunatic Asylum Casebook, November 6, 1881, p. 287. This record of Dr. E.'s stay was crossed out in the casebook. However, since the casebook listed the entry and departure dates, I am assuming that he did enter the asylum for this brief period. The reason the record was crossed out is unclear, but it seems unlikely that a full case would exist for someone who never arrived at the institution.

the main reason for his condition: he was taking morphine and stimulants, and had reached the considerable dosage of thirty grains a day, administered hypodermically. His fourth stay lasted nearly three weeks. Whether this treatment worked is unclear, although Dr. E. did not return in the next eighteen months.[128] Other addictions were also apparent after repeated visits. Sarah M. arrived at Toronto from Homewood, supposedly relieved of the chloral addiction for which she had entered that institution.[129] She returned to the Toronto Asylum to be treated specifically for her addiction at least three more times.

Treatment of the identified addict patient

By the turn of the century, asylum physicians could draw upon two main approaches to the treatment of addiction. Edward Levinstein, the German physician whose Morbid Craving for Morphia (1877) many historians have credited with initiating the disease theory of addiction, advocated an abrupt cessation of morphine. He argued that to do otherwise was like "cutting off a dog's tail one piece at a time"[130] The role of the physician would then turn to supporting the patient as he or she suffered withdrawal symptoms. The alternative to Levinstein's heroic approach was gradual withdrawal, ideally under the care of a physician. Again, doctors argued that the physician would be essential in supporting the patient during detoxification.

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[128]Saint John Lunatic Asylum Casebook, January 18, 1884, p. 128; February 4, 1884, p. 129.

[129]Toronto Asylum Casebook and Admissions Records, Patient #6186. First Admitted August 13, 1887.

[130]David Musto, The American Disease, p. 74.

Both approaches, which different Canadian physicians supported, linked the scientific and the moral authority of the doctor to exert control over the patient. Not only was the doctor's intervention and oversight necessary to ensure the sufficient medical care of the patient, but he or she would also guard against transgression. Levinstein insisted that the patient be locked in a room for several days, watched but rarely interfered with by a vigilant nurse. Preferably this nurse would be female, since a male attendant would be "more accessible to bribing."[131] In 1887, the Canadian Medical and Surgical Journal recognized that treatment of addiction required the physician to recognize the inherent untrustworthiness of the addict. "Seclusions and careful watching are in most cases essential, and if communication with the outside world be not entirely cut off, there is very great danger of deception. The devices resorted to are almost incredible, and, as a rule, not the slightest reliance can be placed on the patients' statements."[132] The problem was the suspension of the will. Edward Mann, writing in the Montreal Medical Journal in 1894, explained that "such a patient often manifests an utter disregard of truthfulness, honesty and sincerity and after a long time shows a seeming inability to exert the will in any other direction or for any other purpose than the gratification of his morbid appetite."[133]

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[131]Eduard Levinstein, Morbid Craving for Morphia (Die Morphiumsucht) (London: Smith and Elder, 1878), p. 14.

[132]Editorial, Canada Medical and Surgical Journal 16 (December, 1887), pp. 318-319.

[133]Edward Mann, "The Nature and Treatment of the Morphia Habit" Montreal Medical Journal, 24 (July, 1894), pp. 2-3.

This opinion of the addict was not without its powerful critics. Jamieson Beemer Mattison, a noted addiction specialist from Brooklyn, New York, argued in the Canada Lancet that "the habitual use of opium, in many cases, does exert a baneful influence on the moral nature... but we also know that in the ranks of these unfortunates are those who would scorn to deceive, and whose statements are as worthy of credence as those upon whom has not fallen this blight."[134] Mattison was the superintendent of a private home in Brooklyn. Stephen Lett agreed. By the turn of the century, Lett was enjoying the recognition as the premier addiction specialist in Canada, and used his influence to present his perspective on the priorities of therapeutics of drug addiction. He challenged William Osler's view that "persons addicted to morphia are inveterate liars and no reliance whatever can be placed upon their statements" which he called, "to say the least, unnecessarily strong." Lett explained that "the condition of the unfortunate habitue... whose confidence in the good faith and kindliness of his doctor is not established, who surrenders all his drugs at once would be much like a traveller who hands over his weapons and trusts to the merits and goodness of the bandit." Lett's therapeutics would establish the authority of the physician over the addict, for the sake of returning the addict's self control. To do this well, however, required "a proper man and a proper place." Not surprisingly, given his interest as medical superintendent (and shareholder) at Homewood, Lett argued for the importance of the kindly but vigilant treatment of the

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[134]Mattison, "Therapeutics of Opium Addiction," Canada Lancet 15 (May, 1883), pp.261-263.

addict far from "harmful and damaging surroundings ... in ... a haven of rest and safety."[135]

Lett and Levinstein took contrasting approaches to addiction treatment. Levinstein's work was printed in the Canada Lancet in 1877, and a similar method from an anonymous "German physician"--likely Levinstein--appeared in the Canada Medical and Surgical Journal the following year.[136] His treatment had Canadian supporters. Dr. James Stewart of McGill argued that, although dangerous, the sudden removal of opium may be necessary. "Success is seldom obtained unless the measure is resorted to," he explained in 1886, concluding that cocaine could serve to allay the depression and support the system through the initial shock of detoxification.[137] That same year the Canada Lancet abstracted a work by Dr. Morandon de Montyel, who tempered the abrupt cessation thesis. It was a valuable procedure, he explained, "unless contraindicated by the vital forces of the patient or concomitant pathological phenomena."[138] Stewart and Montyel's therapeutics were fundamentally the same, since Stewart would employ cocaine to provide an artificial boost to flagging physical power that concerned Montyel. More prominent were the physicians who condemned Levinstein's abrupt withdrawal method. Lett was

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[135]Lett, "The Prognosis of Drug Habits, With Some Reference to Treatment." Canada Lancet, 34 (September, 1900), pp. 1-4.

[136]Edward Levinstein, "The Abuse of Hypodermic Injections of Morphia (Morphiomania)," from Bulletin General de Therapeutique (trans J. Williams) Canada Lancet, 9 (January, 1877), pp. 138-142; Anonymous, "The abuse of Hypodermic Injection of Morphia," Canada Medical and Surgical Journal 5 (August, 1876), pp. 67-68 (reprinted from Schmidt's Jahrbuecher der Gesammten Medicin, 1876).

[137]Stewart, Canada Medical and Surgical Journal, 14 (April 1886), p. 539.

[138]Canada Lancet, 37 (April, 1904) p. 242.

first among this group in Canada, and his view was joined--and possibly informed--by the opinions of notable American addiction specialists. Lett, Mattison, and Mann all adhered to a disease theory of addiction, but insisted upon asylum treatment and constant vigilance over the addict by trained addiction specialists.

Outside of the private retreat, medical superintendents at provincial asylums were facing the problem of how best to treat addicted patients. Their therapeutics remain mostly undeterminable, since records of specific treatments are rare. However, the records of the Toronto asylum demonstrate that Daniel Clark approached the treatment of the addict as Lett had done, although he harboured less faith in the trustworthiness of the patient. In his letters to families, Clark occasionally explained both his approach to treating addiction and how addiction affected the veracity of the patient. A physician for the insurance company of Dr. John B. asked Clark to predict the prognosis of the patient, a cocaine user.[139] Clark explained that "so many of such remain insane and so many recover as much depends on the natural strength and vitality of each individual." The wife of Dr Stuart S. asked why her husband could not come back to her, since his letters sounded rational now. Clark explained that "the trouble with all such cases is that after a few weeks they recover their mental condition to some extent, with one exception, and that is their will power. The consequence is that they are taken out so often by their friends because they talk so sensibly and write so sensibly before they have sufficient sense of will to resist the taking of the drug again." Clark noted that he preferred a patient

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[139]Toronto Asylum Casebook and Admission Registers, patient #8360. Daniel Clark to Dr. A. Eadie, November 8, 1898.

remain from six months to a year to be fully over the addiction. He also asked that all money for the patient's use be sent to him, since "I want to have control of the expenditure as such display so much cunning that sometimes... they get possession of the drug through someone who may be visiting the ward."[140] This direct control of the institution of the asylum, enforced through Clark, also could appear in the role of the asylum in sequestering the addict. He advised the wife of Dr. Stuart M., another physician patient, that if she wanted to take her husband home, the best way would be by sending him out on probation. "As he will still be a patient of this asylum and could be returned should he go back to this habit again without any examination from Medical men... The fact of his still being a patient in connection with the asylum will have a deterring effect upon him as he will know that he can be returned to the asylum at any time without formality."[141]

The arguments for asylum treatment presented in Clark's letters ranged from the coercive, like in the Dr Stuart M. case, to the directly therapeutic. Dr. M. was a good example of how asylum treatment could be construed as necessary. He had been trying to relieve his own iatrogenic morphine addiction by "regulating the dose & taking cocaine instead," a process that appears to have failed.[142] He looked to the asylum to help him bolster his own resolve. However, Clark's caution that money needed to be regulated lest a patient be able to procure the drug from a visitor demonstrates a potential over-

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[140]Clark to Mrs. S., January 24, 1899. In Toronto Asylum Admission file for patient #8442. Emphasis in original.

[141]Toronto Asylum Admission files, patient #8536.

[142]Statement of referring physician, in Toronto Asylum Admission files, patient #8442.

confidence in the security of the administrative structure of the asylum. In 1904, Dr Charles M., another doctor suffering from morphine addiction, entered the asylum but did not appear to get better. The patient's sister, Mrs. S., "believes he gets the drug yet; she says that she can tell it as soon as he gets it." This suspicion was correct, and Clark was disappointed to report that "a few days ago we found he had been able to get some morphia through our night watch.... I need scarcely say the night watch is not here now and our attendants understand that immediate dismissal will follow if found that they carry drugs to him."[143] Clark described to Charles's brother, also a physician, that Clark's response to this transgression was an appeal to the honour of the patient, along with guilt and coercion:

> I told him, this morning that he must go away from here unless he makes an effort to assist us in our attempt to cure him and he has no right to jeopardise the position of our attendants by bribing them to get him the drug....as I told him this morning it was like rolling a barrel up hill and letting it run down to the bottom again and starting over and we would never get the barrel up permanently at that rate and if this bribing attendants is found again that he must leave here; that I cannot attempt to cure him unless he helps himself.[144]

Clark was not optimistic: "I am quite convinced that if he were out in his present condition he would go immediately to a store to procure the drug." Dr. M left eight months later, apparently recovered.

Clark's letters reflect the dominant themes within the broader discourse of addiction treatment and asylum therapeutics. The patient needed to submit to the will of

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[143]Clark to Dr. M., April 19, 1904, Toronto Asylum Admission files, patient #9152.

[144]Clark To M., January 24, 1904.

the superintendent, required kind but strict vigilance, and would not be cured merely by a physical appearance of cure. The admission records of the Toronto Asylum suggest that Clark's experience with addiction was limited, yet he spoke with authority on the cases and the conditions of addiction treatment. This authority was not likely a veneer covering an uncertain therapeutic perspective. Clark likened addiction to the other mental derangements he approached. The problem of the will was central in the treatment of many forms of insanity. As the case of Edward C. demonstrates, Clark saw addiction as a temporary form of mental alienation, "with no fixed or permanent brain disease."[145] The line he drew between addiction and insanity in Edward's case was between permanent derangement and periodical dissolution. The concerned family had to be patient, and wait for the results of their relative's treatment. Addiction fit an expanding range of forms of mental illness both in diagnostics and in therapeutics.

Admission of addiction: Family trouble and aberrant behaviour

Addiction specialists and asylum physicians focussed upon mental and behavioural conditions which would help them to understand and treat the patient's condition; the families of addicts, however, upon whose initiative most of the addicts were sent to the asylum, looked at aberrant behaviour as justifications for committal. The weakened will could be of particular concern to the families of the addicts: a weakened will and profligate lifestyle could lead to family disgrace or even economic ruin. Not only did the asylum generally admit wealthier patients, as illustrated in Table 5.5a-c, but these patients arrived

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[145]Clark to Christie, November 19, 1896, in Edward C. file, patient #8077.

after causing considerable family upheaval. The centrality of the family in promoting Victorian stability has been the topic of many examinations, and the health and background of the families of addicts who were admitted to the asylum were significant to the asylum personnel. The addicts that arrived at the asylum ended up there because they either threatened the physical health of family members, or the moral integrity of the family. These familial conditions suggest that the asylum was an endpoint in a broader struggle with personal addiction, as well as suggesting the social forces that contributed to the extended problematization, medicalization and institutionalization of addiction.

The identified drug users in the admission registers of the Toronto asylum reinforce the stereotype of the late-nineteenth-century addict as a wealthy middle-class individual. Both the wealthy woman who may have been discontented with her expected role in life and the restless male relative who found no satisfaction in following the family business could find in drug use a temporary escape.[146] Yet, unless Canadians were particularly abstemious, few addicts ended up at the asylum. Those that did appear not

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[146] For a general discussion of the asylum as a repository of socially redundant women, for example, see Warsh, "The First Mrs. Rochester: Family Motivations for Commitment and the Dynamics of Social Redundancy," in Warsh, Moments of Unreason, pp. 63-81. On the demographics of addicts, see Warsh, "The Aristocratic Vice" in Warsh, Moments of Unreason, pp. 155-171; Courtwright, Dark Paradise: Opiate Addiction in America Before 1940 (Cambridge, Mass.: Harvard Press, 1982), pp. 113-147, scrutinizes a demographic shift from addicted respectable middle class individuals to recreational use among the "underclass." An earlier attempt to explore the demographics of opium addicts, is William H. Swatos, Jr., "Opiate Addiction in the Late Nineteenth Century: A Study of the Social Problem, Using Medical Journals of the Period," International Journal of the Addictions 7 (1972), pp. 739-753; Berridge and Edwards also discuss upper class drug use in Opium and the People, specifically in Chapter Five, "Opium Use in Literary and Middle-Class Society" pp. 49-61; Chapter Nine, "Opium and the Workers: 'Infant Doping' and 'Luxurious Use'" pp. 97-109; Chapter Thirteen, "The Ideology of Opium: Opium Eating as a Disease" pp.150-170.

only to have been addicted to substance use, but, like Edward, displayed behaviour that was socially disruptive or upsetting to the family or friends who decided to send the individual to the asylum. Just as alcohol use was constructed by the middle class as an anti-social behaviour that ran contrary to the values of industry and the so-called work ethic, so families often looked upon relatives' addiction as equally contrary to inherent values of industry and the work ethic. In the following series of cases I explore how addiction that manifested itself in disruptive behaviour that violated preconceived notions of propriety and station in life--determined by social factors, most notably gender and also class--were key issues in the decision to send an individual to the asylum. I end the discussion by considering how the perception of the demographics of addiction simultaneously informed and was the outcome of a class-based moral panic.

The drug user whose behaviour challenged social values of industriousness is typified in the experience of William B., a forty-year old manufacturer, who arrived at the Toronto asylum in July, 1894. William's "Form of Mental Disorder" listed on his admission records was mania, but his referring physicians could not detect any sign of that condition when they interviewed him. Both relied heavily upon family testimony that William was paranoid, occasionally violent and overly extravagant. Furthermore, "he neglects his business... [and] under the impression of great wealth he spends his money with irrational extravagance." The only suggestion of any problem came from William's own admission to one of the doctors that he used morphine. William remained at the asylum for three months, and did not return.[147]

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[147]Toronto Asylum Admission files, patient #7688.

An alternative to the manic patient was the melancholy one. Juliana B. entered the Toronto asylum at least twice in two years, suffering from melancholia. At Juliana's first admission, morphine was the predisposing cause of her derangement, and grief was the exciting cause. She had also taken chloral hydrate, opium and bromides. The drug use may have been considered a predisposing cause because, according to the records of the first visit, Juliana had stopped using her personal pharmacopoeia between 12 and 18 months earlier. However, the form of mental disorder was unclear. The individual who had filled in the admission form wrote "melancholia" but that was crossed out with a question mark after it.[148] The role of the drug use in the etiology of Juliana's disorder was not clear to the admitting physicians. Upon the second admission, the physicians noted that Juliana had "formerly used chloral and opium" but that the insanity manifested itself in being "very fretful, wants drugs" and that she was "taking drugs &c." Drug use may have been a major part of Juliana's behavioural change, but she was sent to the asylum only after she began displaying protracted symptoms of grief. According to the referring physician, Juliana's mental derangement both resulted from and led to drug use, but the patient's daughter noted that she "has a habit of taking drugs."[149] Her case suggests a pattern that Warsh observed with respect to older women who were being sent to Homewood: social redundancy, an affliction to which women were particularly prone, combined with a family that was unwilling or unable to take care of widowed or invalid

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[148]Toronto Asylum Admission files, patient #6461.

[149]Toronto Asylum Admission files, patient #6506. This record is of Juliana's subsequent visit, at which time she was given a new patient number.

family members, often drove family to admit people who otherwise would be cared for at home.[150] The confusion in the references about the causes and the manifestations of Juliana's mental illness suggests a lack of clarity about why specifically the patient was being sent to the asylum.

As in Juliana's case, the asylum could become a place to which families sent their members who had become either superfluous or an embarrassment. Before the turn of the century, women in the "superior" wards of the Toronto asylum appear to have been especially prone to this treatment. Although numerically the sex of addicts fluctuated, the conditions under which women arrived at the asylum seems particularly notable compared to men. The susceptibility of women to becoming socially redundant--widowed mothers living with adult children, or unwed daughters or sisters--was combined with rules of propriety that set fairly strict guidelines of behaviour on women. Sarah M., who came to the Toronto Asylum from Homewood in 1887, had been addicted to chloral and alcohol, but Lett stated in his admission application for Toronto that she "has not had either for the past three months." Lett's confidence in his ability to wean Sarah from chloral hydrate appears to have been overly optimistic. Sarah returned to the Toronto asylum three times; each time the chloral habit was listed as the cause. Sarah's addiction, ostensibly the reason she required asylum treatment, may have been a factor driving her husband to try to make her disappear, socially. After the fourth entry, in January, 1889, Sarah was presented with the option of signing an "Indenture of Separation" or "go back to the asylum." Sarah, however, refused to be "coaxed or cohersed [sic] into signing and asked that her solicitor

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[150]See Warsh, "The First Mrs. Rochester."

be sent." Even after several close friends and her brother tried to convince her to sign the Indenture, Sarah refused, and returned to the asylum.[151]

An addicted family member, whose behaviour was socially aberrant, could wreak havoc on the family to an extent that even the asylum may not have been able to remedy. The case of Theresa E. was an example of the potential family upheaval of late nineteenth-century addiction. While many addicts displayed a passive melancholia, which resulted in lethargy and challenged the ideals of industriousness in late nineteenth century protestant bourgeois culture, addiction could also manifest itself in socially embarrassing or publicly disgraceful conduct. Theresa was an intelligent, educated tri-lingual, 25 year old divorced mother of one, from Niagara, Ontario. She "craves for alcohol, morphia and cocaine," behaviour that led to further social deviation. At one point, Theresa "was drunk and found in a bar with a lot of soldiers who were trying to lead her away." The key reason for the incarceration, however, was that "her mother cannot manage her at all[;] she abuses her mother at times. . . ; mother says patient came home Friday night in an intoxicated condition raved all night and had to be carried up stairs, she was completely exhausted with Alcohol and narcotics." Theresa's mother, Mrs. R., was an attentive and concerned "anchious [sic]mother" as she described herself, and sent magazines and money for her daughter's well being in the asylum. She simply did not know how to control her daughter.

After a few months, Theresa appeared to have recovered, and Clark asked her family to take her home for a trial. In July, soon after her mother died, Theresa received a

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[151]Toronto Asylum Admission files, patient #6186.

letter from a man who was probably her brother-in-law: "Mother... is gone it is you that kill her[;] you broke her hart [sic]. . . I hope God will forgive you and you have made poor mother poor, she had not one cent when she died and everybody knows that you have kill [sic] mother[.] We never wont [sic] to see you again in this world. . ." Clark wrote back acknowledging that the family did not want to have anything to do with Theresa, but that he could not keep her at the asylum any longer. He noted that Theresa was willing to go to New York, but she needed money for the train. If the family did not send money, Clark would be forced just to release her in Toronto, and she would most certainly end up back in Niagara. Her sister sent 18 dollars, and vented to Clark about the terrible state in which Theresa left the family. "She is not to be trusted with monny[sic] so look after this monny[.] Please as I have had hard work to get this to geather [sic] it is just offull [sic] what that woman has had she has made mother poor and broke her hart [sic]." Theresa did go to New York, but three years later sent a letter to Dr. Clark, saying "I am without a home and it seems nearly impossible for me to make an honest living out in the world and I thought maybe you might be able to give me something to do in the institution or near by." Clark's reply was concise: "I have no situation that you could properly fill. I am sorry for your condition."

Like Edward's case, the assessment of Theresa provide's a useful glimpse at the social interpretation of addiction, and under what conditions it could fall within the state's purview. Theresa's family sought state intervention only when the woman's conduct was too much for her family to handle alone. Once in the asylum, removed from her old life and under the surveillance of the state institution, Theresa recovered quite rapidly. Clark

did not feel that Theresa required state oversight once her addiction and its attendant behavioural excesses had ceased. Theresa's family's reaction to her impending release, and the woman's subsequent appeal to Clark for financial help, suggest the dependency provided to the addict while in the care of the state. Theresa's letter does not discuss what other events had affected her life. We cannot determine whether Theresa was unable to find work because she had succumbed again to her drug use, or whether she was a victim of the plight of an unmarried middle class woman who had been cut off from familial support.

Edward and Theresa also give us a glimpse into the class-based interpretation of addiction. Both came from wealthy families. Although Theresa's stay at Toronto left her mother poor, she was staying in the $6.00 ward, which suggests that she or her family were wealthy enough to afford that level of comfort and personalized treatment. The emotional and economic havoc Theresa wreaked upon her family is indicative of the moral panic that fueled social concern over drug addiction. Her substance use was believed to have led to Theresa's sexual impropriety in public, while the family's attempts to have her contained and treated drained familial resources. The result was economic and emotional disaster. Edward's addictions had also placed an economic burden upon his family. However, when they were able to limit his ability to do further damage, after the Toronto General Trusts Company retained control over Edward's father's estate (apparently to the advantage of the rest of Edward's family), they were willing to accept Clark's diagnosis that Edward was sane, and take him home.

The utility of the asylum to provide a relief to the burdens that addiction placed

upon the wealthier members of society is further suggested in conditions surrounding the admission of some patients. Several patients who entered the asylum at London, for example, did so of their own volition, seeking a means of relief from their damaging mental or physical conditions.[152] Similarly, some addicts sought asylum treatment to relieve their addiction. Meanwhile, the role of the medical superintendent seems to have filled the requisite strong-willed moral leader so central to the images of asylum treatment of addiction. At several points, Edward wrote to Clark hoping to convince the doctor that he had not fallen back into his dissolute ways. After one incident of alleged recidivism, Edward wrote to Clark, noting "I thought it only fair that you should have this explanation as you have always treated me so fairly and kindly."[153] The asylum could provide an outlet for wealthier families to protect themselves from the economic and moral ravages of addiction. This role of asylum as protecting people from damaging social deviance may have affected the state's formal policies towards the treatment of cases that came under the purview of the asylum. As mentioned above, by 1908 the Ontario government recognized behavioural changes caused by morphine and cocaine use as distinct mental illnesses, worthy of treatment in public asylums.

Conclusions

By the turn of the century, drug use had emerged as a viable diagnostic category for

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[152]See London Asylum Casebook (male), patient #1300, who "says he is anxious to live in an asylum to get rid of business perplexities" or patient # 1511, who "drove his own rig; says he has not be perfectly right in his mind... tried treatment of a good may Doctors in vain and thought he would try asylum treatment as a last resort."

[153]Edward to Clark, in Edward C. file, Toronto Asylum Admission files, patient #8040.

admission to the state-run lunatic asylum, but generally only when it manifested itself in socially disruptive behaviour. Although doctors differed in their assessments of how to treat addiction, and what sort of damage it could wreak upon the individual's mental apparatus, they increasingly recognized that addiction alone was a form of mental disorder, and could potentially benefit from the treatment provided by the state-run asylum. As asylum physicians carved out their domain of authority from the broader field of medicine, they both enforced their role in determining the proper care and treatment of mental deviance, and reinforced the social dominance of their medical colleagues. The experience of doctors at the asylums, however, should not suggest that addiction had become a widespread social concern, since the cases that arrived at the gates of the hospitals were individuals whose addiction had become extreme enough to disrupt the family and the community. Addiction slowly became a problem that many expected the state to control.

In the asylum, addiction presented a further means for physicians to demonstrate their essential role in guiding and protecting social development and the integrity of the nation. Not only was mental alienation a growing problem, they argued, but inherited and developed mental damage (characterised by the diathesis) would result in socially deviant behaviour like drug and alcohol consumption. Habitual substance use would subsequently cause further damage to the physical, mental and moral fabric of the individual. Since the addicts who appeared at the asylums often came from the middle or upper classes, these cases reinforced the interpretation of a potential threat to the integrity of the nation. Nationalistic justifications for state control of the addict became enmeshed with the

broader justifications for the control of pathological social deviance. These arguments were likely bolstered by an upper-class belief that they were particularly susceptible to drug addiction.

Since investigations into the causes of addiction began increasingly to centre upon the physical causes wrought by drugs themselves, the experience of asylum physicians provided further validation of state-centred control of drug addiction, and eventually drug prohibition. As the nineteenth century ended and the twentieth century began, concerns over drug addiction entered a broader discourse of national and social integrity, a discourse which entered the policy arguments and decisions at both the provincial and national level. The place of drug use in the etiology of insanity, treatable under the auspices of the state institutional system, fed into a broader discourse which equated mental dysfunction with social danger, and conversely viewed confining or curing the insane with social elevation. Prophylactic means of dealing with detrimental misuse of drugs could therefore contribute to the broader program of social elevation. To improve society, and to defend its integrity, required vigilance over the purveyors of insanity. Since drug use, unlike masturbation, was a behaviour directly related to a commodity, one way to reduce or even eliminate insanity resulting from drug use was to strictly control the sale of drugs. In the next chapter, I examine how the potential danger of drug addiction informed and reinforced the arguments regarding the regulation of the patent medicine trade, and how that debate affected the initial legislation to prohibit the sale and use of opium for non-medical purposes.

6

Professional Medical Agitation Against Patent Medicines, and Legislative Action Against Habit-forming Drugs, 1870-1908

The perceived growth of the increased prevalence of addiction led to questions about where the addicts acquired their drugs. Doctors and pharmacists looked at their own practices, at the public's means of acquiring dangerous substances, and at the types of new drugs available, to define the problem of addiction. Two key developments affected the discussions of addictive substances at the turn of the century. First, the changing nature of *materia medica* and expanding pharmaceutical experimentation and innovation provided new or modified substances, the side effects of which were unknown or unclear. Drugs like cocaine and heroin, initially heralded as panaceas for medical problems, including opiate addiction, themselves quickly became considered highly addictive problematic substances. Second, the expanded national and international transportation networks enabled a more effective (and some would say destructive) distribution of patent and proprietary medicines.[1] Although the trade in medicine manufactured by large pharmaceutical companies increased, the range of dubious remedies and fantastic cures of

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[1]See Glenn F. Murray, "The Road to Regulation: Patent Medicines in Canada in Historical Perspective," in Judith C. Blackwell and Patricia G. Erikson, eds., Illicit Drugs in Canada: A Risky Business (Toronto: Nelson Canada, 1988), pp. 72-87; Jim Cameron, "Patent Medicines," Good for What Ails You: Self-Help Remedies from 19th Century Canada (Burnstown: General Store Publishing, 1995), pp. 149-152; Guildo Rousseau, "La Santé par correspondance: un mode de mise en marché des médicament brevetés au debut du siècle" Histore Sociale/Social History (1996), pp. 1-25; on the tactics of patent medicine manufacturers, see Janice Dickin McGinnis, "*Carlill v Carbolic Smoke Ball Company*: Influenza, Quackery and the Unilateral Contract" Canadian Bulletin of Medical History/ Bulletin canadien d'histoire de la médecine 5 (1988), pp. 121-141.

the "quack" medicine vendors also expanded.[2]

By the beginning of the twentieth century, commentators increasingly drew the public's attention to the dangers of the patent medicine trade. Despite these warnings from doctors and pharmacists, the public continued to use patent medicines, and the industry remained relatively unchecked until the first decades of the twentieth century. The most notorious publicity against patent medicines came in a series of articles by reformer Samuel Hopkins Adams called "The Patent medicine Fraud." These articles first appeared in Collier's Weekly in 1905, and continued until 1907. Canadian commentators

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[2]In Canada, the topic has seen minor treatment, relative to the work on patent medicines in the United States. The most notable is Glenn F. Murray's "The Road to Regulation." Shirley Small/Cook in "Canadian Narcotics Legislation, 1908-1923: A Conflict Model Interpretation," Canadian Review of Sociology and Anthropology 6 (1968), pp. 36-46 dedicates one short paragraph to the passing of the Patent and Proprietary Medicines Act (p.32); Melvyn Green, "A History of Canadian Narcotics Control: The Formative Years," University of Toronto Faculty of Law Review, 42 (1979), pp. 42-79 and Neil Boyd "The Origins of Canadian Narcotics Legislation: The Process of Criminalization in Historical Context" Dalhousie Law Review 8 (1983), pp. 102-136 both give it one paragraph. More substantial treatments have not been directly related to addiction concerns. See R. G. Guest, "The Development of Patent Medicine Legislation," Applied Therapeutics (September, 1966), pp. 786-789; Rousseau, "La santé par correspondance;" L. I. Pugsley, "The Administration and Development of Federal Statutes on Food and Drug Legislation," Medical Services Journal, Canada (March, 1867), pp. 387-449. For the more detailed considerations of patent medicines and addiction in the United States, see, H Wayne Morgan, Drugs In America: A Social History, 1800-1980 (Syracuse: Syracuse University Press, 1981), pp. 100-104; David Musto, The American Disease: Origins of Narcotic Control (New Haven and London: Yale University Press, 1973) especially pp. 1-23; David Courtwright, Dark Paradise: Opiate Addiction in America Before 1940 (Cambridge, Mass.: Harvard Press, 1982), pp. 56-59. On the patent medicine trade in the United States in general, see James Harvey Young, Toadstool Millionaires: A Social History of Patent Medicines in America Before Federal Regulation (Princeton: Princeton University Press, 1961); John Parascandola, "Patent Medicines in Nineteenth-Century America" Caduceus, Vol 1 (Spring, 1985), pp. 1-41.

discussed Hopkins' and others' "muckraking" revelations.[3] Although this series likely inspired the growing urgency in the drive for Canadian legislation, Canadian doctors and druggists had been urging government intervention before 1905.[4]

In this chapter I examine the emergence of legislative concerns over the relatively unrestricted access to and use of addictive and dangerous drugs from the creation of provincial pharmacy laws to the federal Patent and Proprietary Medicine Act and the Opium Act of 1908. I argue that these two pieces of legislation were more intricately linked than most historians have recognized, and that the successful achievement of the Opium Act was not only an anti-Chinese issue. The Opium Act also fit into a broader concern over addictive drugs and dangerous substances, which in turn were related to national health. When King referred to the opium industry's "baneful influences" he spoke to a political climate in which concern over Chinese opium smoking was part of a larger issue of dangerous drug availability. The development of the patent medicine industry,

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[3]Canadian Pharmaceutical Journal, 40 (March, 1907), p 359. The Ladies Home Journal also took up the cry. See "The 'patent medicine' curse" Dominion Medical Monthly 22 (May, 1904), p. 293; "Retraction," Canadian Pharmaceutical Journal 37 (July, 1904), p 568.

[4]R. G. Guest and L. I Pugsley both make the connection; see Guest, "The Development of Patent Medicine Legislation," pp. 786-787; Pugsley, "The Administration and Development of Federal Statutes on Foods and Drugs in Canada," pp. 400-401. Glenn F. Murray is more reserved about the influence of the articles on Canadian legislation: Glenn F. Murray, "The Road to Regulation," p. 80. On Adam's series in the American context, see Musto, The American Disease, pp. 10-11; Young, "The Great American Fraud" in Young, Toadstool Millionaires, pp 205-225. The editor of the Canadian Pharmaceutical Journal noted that the increasing public concern over patent medicines may have been the result of "a vigorous campaign... by 'Collier's Weekly' and 'The Ladies' Home Journal,'" Canadian Pharmaceutical Journal, 40 (March, 1907), p 359.

and its relationship to the medical and pharmaceutical professions, is the central issue of the first part of this chapter. The creation of federal legislation to restrict the sale of patent medicines is the topic of part two.

Part 1. Defining a problem

Medical professionals' growing concern over public use of patent medicines coincided with changes in doctors' therapeutic practices and the business of pharmacy. Concerned about the apparently ineffective drugs, which their predecessors had used so extensively, physicians faced a therapeutic skepticism, and looked for alternative means of healing their patients.[5] Many doctors began to rely upon milder, less "heroic" treatments, while also finding in the expansion of chemical and scientific knowledge of their pharmaceutical colleagues more refined understanding of the values of some drugs, including opium. The elusiveness of opiates expressed by Fluckiger in 1870 began to fade as analysis and refinement procedures became more advanced.

These chemical advancements were both fuelled by and caused changes in the business of the druggist. The pharmaceutical industry was no longer characterized by the traditional small-scale operation; it utilized the transportation and communication

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[5]John Harley Warner, The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885 (Cambridge, Mass.: Harvard University Press, 1986), pp. 17-36; Rosenberg, "The Therapeutic Revolution: Medicine, Meaning and Social Change in Nineteenth Century America," in Morris Vogel and Charles Rosenberg, eds., The Therapeutic Revolution: Essays in the Social History of American Medicine (Philadelphia: University of Pennsylvania, 1979), pp. 18-21; S. E. D. Shortt discusses therapeutic "pessimism" in Victorian Lunacy: Richard M. Bucke and the Practice of late Nineteenth-Century Psychiatry (Cambridge: Cambridge University Press, 1986), pp. 127, 138.

networks of advanced capitalist society to reach a broader clientele. By the end of the century, the small individually-owned pharmacy, in which a druggist or an assistant compounded medicines for the patient, were competing with large drug houses, serving a variety of needs, from cosmetics to soda fountains, and in which drug compounding was a small part of a large business. Toronto physician John Hunter, discussing the growth of the patent medicine trade in 1906, reminded his audience that "twenty or thirty years ago the drug store was practically a medical laboratory, and the druggist. . . belonged to the learned professions. . . [Now he] must be a man of business aptitude and training. . . The dispensing of prescriptions is only an incidental part of the commercial enterprise." Hunter was criticizing the dangers of corporate pharmacy. The compounding of prescriptions was now the responsibility of a clerk:

> During the one, two or three, hours the clerk is at work on a doctor's prescription he serves many swains and their sweet-hearts with ice cream sodas, washes the tumblers and spoons, selects the best brands of cigars for young and old sports, sells brushes, nursing bottles; in short, everything pertaining to the needs, fads, or fancies of the nursery, bath or lady's boudoir. . . Is not the commercial spirit the most dominant and rampant factor in pharmacy and therapeutics?[6]

Drug compounding, itself once the cornerstone of the pharmacist's claim to professional credibility, often became secondary to selling pills and medicines manufactured by such notable names as Parke Davis and Company, Merck's, and Canadian companies like the Lyman Brothers and the National Drug and Chemical Company.

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[6]John Hunter, "Nostrums and Proprietary Medicines," Canada Lancet 39 (August, 1906), pp. 1057-1062.

Table 6.1: Patent Medicines Manufactured in Canada

Year	Value	Population	Per Capita
1871	$171,050	3,485,761	$0.05
1881	$666,580	4,324,810	$0.15
1891	$789,400	4,833,239	$0.16
1901	$1,350,993	5,371,315	$0.25
1911	$3,214,939	7,204,838	$0.45

Table 6.2: Medicines and Drugs Manufactured in Canada

Year	Value	Per capita
1871	$248,127	$0.07
1881	$733,087	$0.17
1891	$970,654	$0.20
1901	$1,726,256	$0.32
1911	$4,136,757	$0.57

Table 6.3: Value of Patent Medicines and Drugs Imported and Home Produced

Year	Value	Per Capita
1871	$248,127	$0.07
1881	$733,087	$0.17
1891	$970,654	$0.20
1901	$2,412,595	$0.45
1911	$7,769,551	$1.08

Table 6.4: Patent Medicine Imports and Per Capita Value.

Year	Value	per capita
1871	$77,077	$0.02
1881	$66,507	$0.02
1891	$181,254	$0.04
1901	$375,263	$0.07
1911	$921,818	$0.13

Sources: Trade and Navigation Reports, Sessional Papers of the House of Commons, 1871-1911; Census of Canada, 1871-1911.

A perceived threat?

Import and home consumption data suggest that the growing use of patent medicines, bemoaned by doctors and druggists, may have been at least partly imaginary. The extent of the growth in proprietary medicine manufacturing and consumption in Canada is suggested by the data in Table 6.1. These figures provide the value of patent medicines manufactured in Canada, in the census years between 1871 and 1901, and compares them to the population. Table 6.2 adds the value of drugs produced in the country, since in 1901 and 1911, the census included a category of "drug manufacturers" distinct from patent medicine manufacturers. Since Canadians also had access to the broad array of patent medicines available from outside the country, Table 6.3 adds the value of patent medicines imported in the census years, using statistics taken from the Trade and Navigation (later Customs) Department reports in the annual Sessional Papers. These statistics suggest a distinct rise in the per capita amount of patent medicines in Canada. Since we cannot determine the proportion of Canadian-made drugs and patent medicines that were exported, Table 6.4 lists the per capita value of patent medicines imported for "home consumption." In this table, the pattern of increased cost of patent medicines is reproduced. In these three tables, the per capita costs of patent medicines was increasing significantly over the five census years, a pattern that appears to validate the impression that Canadians were consuming more patent medicines. However, some numbers challenge that tentative conclusion.

We cannot determine from per capita *cost* statistics whether or not people were actually buying quantitatively more patent medicines, or if drugs were just costing more.

Figure 6.1: Patent Medicine Imports vs Population Growth, 1867-1912

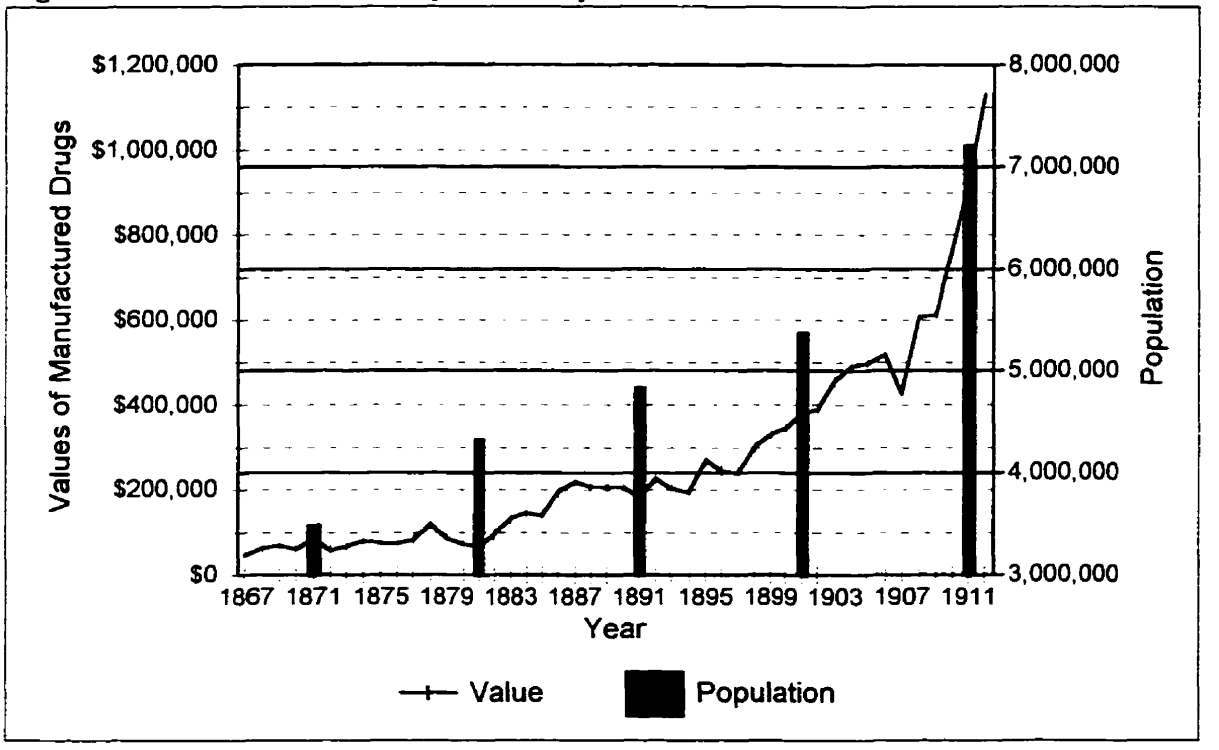
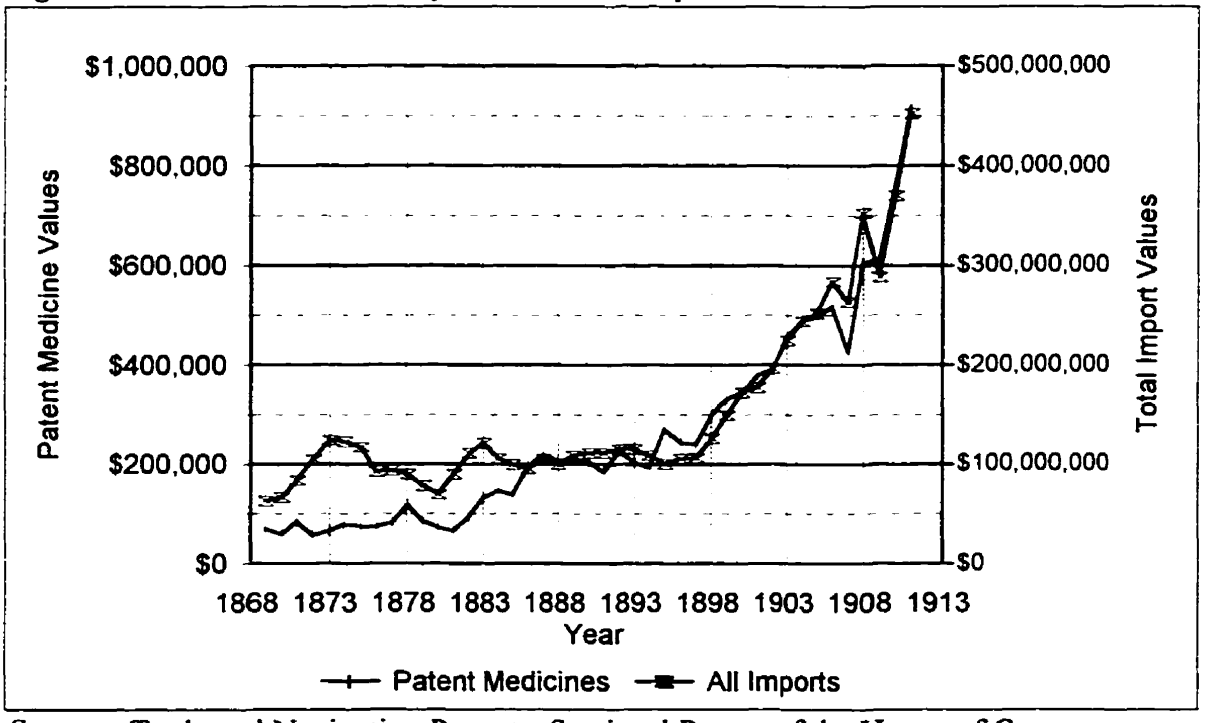


Figure 6.2: Patent Medicine Imports and Total Imports, 1867-1911.



Sources: Trade and Navigation Reports, Sessional Papers of the House of Commons, 1869-1911; Census of Canada, 1871-1911; K. W. Taylor and H. Michell, Statistical Contributions to Canadian Economic History, (Toronto: MacMillan, 1931), p. 11.

Table 6.5: Patent Medicine Imports and All Imports, 1869-1911

Year	Pat. Meds.	All Imports
1869	$46,891	$63,155,000
1870	$62,958	$66,902,000
1871	$70,271	$84,214,000
1872	$59,636	$104,955,000
1873	$84,847	$124,509,000
1874	$56,575	$123,181,000
1875	$66,914	$117,409,000
1876	$79,337	$92,513,000
1877	$76,056	$94,126,000
1878	$74,572	$90,396,000
1879	$83,164	$78,703,000
1880	$119,356	$69,901,000
1881	$85,507	$90,488,000
1882	$72,082	$111,145,000
1883	$66,886	$121,861,000
1884	$95,342	$105,973,000
1885	$133,330	$99,756,000
1886	$147,144	$95,992,000
1887	$138,756	$105,107,000
1888	$195,562	$100,672,000
1889	$219,070	$109,098,000
1890	$207,186	$111,683,000
1891	$208,360	$111,534,000
1892	$205,749	$115,160,000
1893	$185,004	$115,171,000
1894	$227,244	$109,071,000
1895	$203,712	$100,676,000
1896	$193,545	$105,361,000
1897	$270,248	$106,618,000
1898	$244,335	$126,307,000
1899	$239,236	$149,422,000
1900	$301,549	$172,652,000
1901	$331,195	$177,931,000
1902	$345,658	$196,738,000
1903	$378,717	$225,095,000
1904	$390,541	$243,909,000
1905	$456,587	$251,964,000
1906	$489,325	$283,740,000
1907	$497,071	$263,528,000
1908	$517,711	$352,541,000
1909	$425,801	$288,594,000
1910	$605,251	$370,318,000
1911	$612,051	$452,725,000

Table 6.6: Correlation Coefficient Comparing Patent Medicine Imports and All Imports, 1869-1911

	Medicine	All Imports
Medicine	1	
All Imports	0.9242	1

Sources: Trade and Navigation Reports, Sessional Papers of the House of Commons, 1869-1911; Taylor and Mitchell, Statistical Contributions, p. 11.

However, comparing import costs, we find a parallel growth between the costs of patent medicines, and the costs of all medicines. Table 6.5 lists the value of patent medicine imports and total imports from 1869 to 1912. Figure 6.1 compares the steady increase in values of patent medicine imports to the population growth, listed in the five census years from 1871-1911. These last two comparisons suggest that the rise in the value of patent medicines parallelled a rise in the value of other imports. Figure 6.2 charts the rise in patent medicine imports against the values of the imports.[7]

The numbers in these tables and figures lead to tentative conclusions about Canadians' use of patent medicines. The per capita value of patent medicines imported and manufactured in Canada suggest that Canadians were paying significantly more for their patent medicines between 1871 and 1911. Those numbers taken alone might suggest an increase in the real amount of patent medicines consumed in Canada. Since we do not have numbers for patent medicine exports, we cannot make conclusions about the total values of patent medicines consumed in Canada. However, the comparison between annual patent medicine import statistics and all annual imports suggest that patent medicine import values corresponded with the general importing behaviour of Canadians. The correlation coefficient of 0.9242 demonstrates a high positive relationship between the two import values, suggesting that, if Canadians were buying more imported patent medicines, they were not likely buying a significantly larger number of these products.

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[7]Source for Tables 6.1-6.4: Census of Canada, 1871-1911. Source for Table 6.5 and Figure 6.1: Sessional Papers of the Legislature of Canada. Trade and Navigation Reports, 1867-1912. The general import statistics and per capita values are reproduced in K. W. Taylor and H. Michell, Statistical Contributions to Canadian Economic History Volume 2 (Toronto: Macmillan Company, 1931)..

Unfortunately for our purposes, these numbers include "legitimate" pharmaceuticals and so-called "quack" medicines indiscriminately. We cannot tell by these statistics whether or not the increase was in the pharmaceutical business, the "quack" trade, or both. Nevertheless, since qualitative evidence suggests a growing "legitimate" trade in pharmaceuticals, encouraged by the efforts of drug manufacturers inside and outside of Canada, these import statistics may actually indicate a decline in the purchases of "quack" nostrums.

Patent and proprietary medicines were not new to late-nineteenth century medical practice. Physicians had relied upon numerous proprietary preparations for decades; not the least among them was Dover's Powder a therapeutically versatile mixture of opium and ipecac first compounded by Thomas Dover in 1732.[8] Even laudanum, or tincture of opium, bore the marks of a proprietary preparation. The form of laudanum made popular by Thomas Sydenham in the seventeenth century, a mixture of opium, brandy, cinnamon, cloves, saffron and other spices, was both a valuable medicine and potentially a substance for leisurely non-medical consumption.[9] Thomas DeQuincey, Samuel Taylor Coleridge and Wilkie Collins were addicted primarily to laudanum, and notable Romantic writers like Percy Shelley, Keats, Sir Walter Scott and Lord Byron purportedly used laudanum,

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[8]J. Worth Estes, Dictionary of Protopharmacology: Therapeutic Practices, 1700-1850 (Canton, MA: Science History Publications, 1990), p. 70.

[9]Estes, Dictionary of Protopharmacology, pp 112-113. Sydenham's laudanum is discussed in "What is Laudanum?" (editorial) Canadian Pharmaceutical Journal, 20 (January 1881), pp 81-2.

although whether or not they were addicted remains unclear.[10]

By the turn of the nineteenth century, patent and proprietary medicines had changed significantly, and were taking a larger role in medical practice. In 1903 Andrew Macphail, the editor of the Montreal Medical Journal, distinguished between potentially useful proprietary medicines, and dubious "secret" proprietary medicines. The former, he observed tautologically, is a "preparation which is proprietary," manufactured by a specific company, but the ingredients of which the manufacturer made clear. Identifying a specific brand name of a "tincture of opium" or "nitrous spirits of ether" enabled the physician to avoid a further pitfall of the growing pharmaceutical industry, since he or she could ask for a brand name that he or she trusted.[11]

Some evidence also suggested that the expanding medical manufacturing industry would ensure a certain degree of uniformity in preparations. According to bulletins issued by the Inland Revenue Department in 1903, often substances bearing the same name

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[10]See Alethea Hayter, Opium and the Romantic Imagination: Addiction and Creativity in DeQuincey, Coleridge, Baudelaire and others Second Edition (New York: Crucible, 1988); M. H. Abrams, The Milk of Paradise: The effects of opium visions on the works of DeQuincey, Crabbe, Francis Thompson and Coleridge (New York: Octagon, 1971); Sheperd Siegel, "Wilkie Collins: Victorian Novelist as Psychopharmacologist" Journal of the History of Medicine and Allied Sciences 38 (April 1983): 161-175; Berridge and Edwards, "Opiate Use in Literary and Middle Class Society," in Berridge and Edwards, Opium and the People: Opiate Use in Nineteenth Century England (London: Allen Lane, 1981), pp. 49-61.

[11]Near the end of the century, prescriptions in pharmacists books increasingly requested specific forms of proprietary medicines. See Cairncross and Lawrence Company books, UWO Regional Room; Mitchell's Pharmacy, UWO Regional Room. On the expansion of the pharmaceutical industry, see John Parascandola, "Pharmacologists in Government and Industry,"in Parascondola, The Development of American Pharmacology: John J. Abel and the Shaping of a Discipline (Baltimore and London: Johns Hopkins University Press, 1992).

varied widely in their potency or makeup. In Bulletin No. 60 the Department reported on an analysis of 15 samples of Tincture of Opium, fourteen made up by druggists, and one by a proprietary manufacturer. "[O]nly four samples were genuine. Some were too strong in alcohol or opium; five were deficient in opium and in one case the deficiency amounted to fifty percent."[12] The proprietary preparation was one of the genuine articles. Macphail used these results to argue that, since preparations made by druggists were not reliable, the existence of brand name preparations enabled each physician to base his or her reputation upon that of the firm. "If a physician thinks that a preparation of opium, manufactured by a certain firm, is better than any other, he may prescribe that it be drawn from the stock manufactured by that firm."[13] Nevertheless, Macphail made it clear that the term "proprietary" did not refer to "whether the preparation is good or bad, [but] whether its composition is secret or well-known."[14]

The difference between good and bad patent preparations lay also in the means of distribution, and the manufacturer's attitude towards the physician. In 1906, the editors of the Dominion Medical Monthly, observed that "formerly, proprietary articles were looked upon with favor by the medical profession, and could, consequently, be styled as ethical." Ethical preparations "were made expressly for the dispensation of the [medical] profession, and were in no way advertised to or brought before the people at large."

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[12]"Proprietary Preparations," [editorial] Montreal Medical Journal, 32 (May, 1903): 359-362. See also, "Report of the Inland Revenue Department: Adulteration of Food," Journals of the Parliament of Canada, 1903, Bulletin 60.

[13]Editorial, Montreal Medical Journal, 32 (October, 1903), p. 749.

[14]Ibid.

Lately, the editors noted, a movement had begun to style as "unethical" any preparation whose manufacturer kept the recipe secret. The editors did not agree with this rough distinction: "We remain so far unconvinced that it has been wrong to use these [secret] preparations; for we have seen many times prescriptions [made by physicians] which when compounded would floor their master to tell what form the combinations took when it had entered the stomach of his patient and what its therapeutic effect would be."[15] According to these doctors, many physicians were unable to write a useful prescription; proprietary medicines might permit physicians to free themselves from their own ignorance; the status of the profession would benefit from the uniformity of prescription medicine, and the public would benefit from improved health.

These editors viewed the reasoned and controlled growth of the proprietary medicine industry as a positive step in the treatment of patients. Here doctors were reconciling with competitive capitalism, as long as the capitalists acted on the terms of the physicians. Medicine manufacturers who recognized and acted upon doctors' authority were worthy of physicians' support. Vulgar tactics and dishonourable behaviour ran contrary to the values of transcendent professionalism, and the honourable pharmaceutical industry would follow those unstated but fully understood rules of engagement with the same deference as credible physicians and pharmacists. As the public was educated to the problem, physicians argued, the practice of advertising dubious remedies in newspapers, sending unsolicited samples through the mail, and utilizing all sorts of "obscene" literature in these ads, would disappear.

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[15]Editorial, Dominion Medical Monthly, 26 (June, 1906), pp 304-306.

Doctors' main concern reflected a general interest in broadening the reach of their profession. Their influence continued to be limited because people could, and did, use self-remedies, whether these substances were manufactured by dubious companies, published in volumes of "receipts," or transmitted through oral tradition (see Chapter One). The Maritime Medical News often printed articles in which doctors scratched their head over why the public did not trust the medical profession.[16] Most astonishing, was the fact that many people seemed to prefer the patent medicine "quack" or "charlatan" over the educated doctor. The biggest loser, however, was the public: "Pharmacy and the medical profession are injured by this open system of quackery, but not one fraction of the extent of injury that is inflicted upon the public by the sale of these secret nostrums," wrote R. MacNeill, president of the Maritime Medical Association in 1899.[17] This rejection by the public was more startling because, doctors argued, the medical profession was most capably armed to protect the public health.

Physicians had to strike a balance between their role as guardians of the public health and their economic and professional interests. They worried that people would believe doctors who opposed unrestricted patent medicine sales were merely acting to strengthen their economic power, rather than in the interest of the public. John Fulton, the editor of the Canada Lancet, sought to overturn this charge when he declared that

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[16]Edmund Moore, "Status of the Medical Profession," Maritime Medical News 2 (April 1890):, p. 69; D. MacKintosh, "The Mutual Relations of the Profession and the Public," Maritime Medical News 12 (July, 1900) p. 222.

[17]R. MacNeill, "Patent and Secret Nostrums," Maritime Medical News, 11 (April, 1899), p 119.

physicians were the only people "in a position to fully comprehend the magnitude of this ever-growing evil." He argued that an inquiry into the selfless actions of physicians need look no further than the numerous positions that physicians held: "we are continually making strenuous exertions in the public interest against disease in many ways, and devoting our time and talents often gratuitously to hospitals, homes, asylums, infirmaries, boards of health, etc.... Therefore we claim credence and confidence when our advice is given."[18] Likewise, Dr. John Hunter, of Toronto, wrote that "the preservation of life is a sacred trust, committed to the individual, to society, to the nation, and to the race. Any act that imperils it unlawfully is a crime."[19] To Hunter, proprietary medicines were "a stain on the medical profession,"[20] precisely because the medical profession should have been able to stop their proliferation, and thereby protect the health of the people. Although they stood to gain more control over the medical treatment of the nation, doctors argued that by eliminating the threats posed by unscrupulous and uncontrolled medicine vendors, the public would benefit.

Critics of the trade contrasted the idea of the doctor's honourable calling with denigrating images of the patent medicine vendor. These images painted the vendor as an

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[18]"Secret Proprietary Medicines," [editorial] Canada Lancet, 18 (July, 1886), pp. 343-344.

[19] John Hunter, "Nostrums and Proprietary Medicine," Canada Lancet, 41 (August, 1906), p. 1061.

[20]Quoted in Canada Lancet, 42 (July, 1907), p. 977.

inferior by class, profession and occasionally race.[21] In 1902, the Canada Lancet argued against proprietary medicines containing "stimulants and interdicted drugs" noting that "any one, a carpenter, a stableman, a farmer a blacksmith or a scrubwoman, for example, may put up compounds."[22] In 1893, the Toronto News argued that the government needed to enact some form of legislation. The editor noted that, although a doctor had to undertake years of education, "here we find a blacksmith on the one hand patenting a narcotic that is to insure baby's sleeping well, while on the other hand a shoe maker or a railway navvy [patents] the 'sure cure' for consumption."[23] In 1899, during special committee hearings on patent medicines in Quebec, Professor J. Morrison warned that unless pharmacy was protected, prescriptions could be made up by a "cook or coachman" instead of a druggist.[24] Morrison's class-based argument extended to racial concern. As the editor of the Canadian Pharmaceutical Journal (1896-1901),[25] he told his readers about

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[21]Several historians have considered the issue of patent medicine as violating professional sovereignty, but the general class-centred discourse about patent medicines has been overlooked. See Morgan, Drugs in America, pp. 102; Musto, American Disease, pp. 14-15; Parssinen, Secret Passions Secret Remedies: Narcotic Drugs in British Society, 1820-1940 (Philadelphia: The Institute for the Study of Human Issues, 1983), pp. 31-35; the discussion by Berridge and Edwards in Opium and the People, pp 123-131, includes the "professional 'scare' about expanding chlorodyne use."

[22]"Stimulants and Narcotics in Proprietary Medicines," Canada Lancet 35 (August, 1902), p 55.

[23]Quoted in Canadian Pharmaceutical Journal, 27 (October, 1893), p 31

[24]Evidence of J. Morrison, Journals of the Legislative Assembly of Quebec, 1899, Appendix B, p 415.

[25]In his biography of Edward Shuttleworth, Ernest Stieb states that Shuttleworth was editor of the Canadian Pharmaceutical Journal until he sold it to G. E. Gibbard in 1900. (Stieb, "Edward Buckingham Shuttleworth, 1842-1934" Pharmacy in History 12

"An Indian of the Caughnawagas" who was marketing "Dr. White-Cloud's No-Dac Pain Reliever." The man's modus operandi was to send a bogus order to a druggist for the substance, of which the druggist had never heard, and then to arrive at the place of business a few days after the order, posing as a legitimate trader to sell this new cure, which was obviously in demand. Morrison suggested that the reader "keep a good hefty club on hand for the entertainment of all such redskin swindlers, and when they call invite them out into the back yard to attend a seance."[26] In 1900, Dr. D. MacKintosh, President of the Medical Society of Nova Scotia, suggested a racial aspect to the danger of patent medicines when he criticized the mysticism and non-scientific nature of medicines advertised "by the picture of a Red Indian with feathers in his head."[27] Owing to these dangers, posed by lower class, uneducated and occasionally non-white swindlers, ran the arguments, the sale of patent medicines needed to be restricted.

The class, professional and racial imagery paralleled arguments about the actual physical effects of patent medicines on the health of the people. Not only did these

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(1970), pp. 91-116.). However, the masthead of the journal suggests otherwise. Shuttleworth was listed as editor until February, 1895, and then until July, 1896 no editor was listed. From August, 1896 to October, 1901, J. E. Morrison was listed as the editor (he noted this affiliation at his testimony to Quebec Select Committee on Patent medicines in 1899). Gibbard became editor, according to the masthead, in November, 1901. My thanks to Laura Elms at the Pharmacy Library, University of Toronto, for her assistance in finding this information.

[26]"A Clever Swindle," Canadian Pharmaceutical Journal, 33 (May, 1900), p.446.

[27]D. MacKintosh, "The Mutual Relation of the Profession and the Public" Maritime Medical News 12 (July, 1900), p. 222. Another link with race is suggested by Michael McCulloch in "'Dr. Tumblety, the Indian Herb Doctor': Politics, Professionalism and Abortion in Mid-Nineteenth-Century Montreal," Canadian Bulletin of Medical History/ Bulletin canadien d'historie de la médecine 10 (1993), pp. 49-66.

products contain unstated and potentially dangerous drugs, but the very science of medicine required a more nuanced understanding of the specific condition than any patent medicine could provide. Mackintosh contrasted the mystical and mysterious allure of "quack" remedies with the practicalities of the medical profession. In contrast to the extravagant claims of patent medicine vendors, doctors could only identify diseases "after patient waiting and watching." The physician's role was scientific, empirical and interactive: "learn [the patient's] peculiarities, adapt our treatment to the conditions as they arise." Sometimes, Mackintosh reminded his readers, all the doctor could do was make the patient's final hours bearable.[28] Even this recognition of medicine as part of a scientific process was did not always lead to success. The editors of the Maritime Medical News stated that people would avoid dubious patent medicines if they "only realized how difficult it is at times for even the best trained physicians to decide upon the best course of medication."[29] Likewise, Victoria physician C.J. Fagan noted, even educated physicians could make mistakes in their prescriptions; "the question as to when, how, and how much is to be given in each individual case, is often a perplexing one even to the medical attendant."[30] How, these doctors argued, could self-medication avoid some of the pitfalls into which properly trained physicians sometimes stumbled?

Improper administration was one of several grave dangers. By the first decade of

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[28]D. MacKintosh, "The Mutual Relation of the Profession and the Public," p. 222.

[29]"The Patent Medicine Problem," [editorial] Maritime Medical News 10 (February, 1898), p. 56.

[30]C. J. Fagan, "Patent Medicine", Canada Lancet, 40 (January, 1905), p. 414.

the twentieth century, entreaties for the need to restrict the sale of patent medicines argued that many secret cures could addict the patient to certain ingredients.[31] "Alcohol in some, cocaine in others, opium in a third, impotent stuff in a forth, no alcohol advertised in a fifth, and yet full of it, etc., etc., is the every-day experience of every doctor," observed the editors of the Canada Lancet in 1906.[32] John Herald, editor of the Kingston Medical Quarterly, stated that "almost every day the practitioner meets some victim of the medicine habit who is as great a slave to some patent nostrum, manufactured for the purpose of enriching its proprietor, as the ordinary alcoholic or 'dope' habitue."[33] In the Montreal Medical Journal, Macphail tied his charge to the dubious advertising tactics of the patent medicine vendors:

> A person suffering from a "tired feeling" is stimulated with a tonic wine containing alcohol and cocaine; another has his catarrh dried up by morphine; constipation is cured with senna under the guise of some fanciful syrup, and children are soothed into a lethal slumber by some preparation of opium. It is no wonder then that the victims are ready to adduce sworn testimony that they cannot get along without their favorite medicine; any drunkard or morphinomaniac will attest to as much.[34]

The Montreal Medical Journal agreed, and argued that the doctor had the duty to warn the public of the danger of "the evil habit of drug taking, for nefarious habits in this respect

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[31]Morgan, Drugs in America, pp. 65-66; Musto, The American Disease, p. 3; Courtwright, Dark Paradise, pp. 56-58; Berridge and Edwards, Opium and the People, pp 163, 221.

[32]"Proprietary medicines," [editorial] Canada Lancet (may, 1906), p. 841.

[33]Kingston Medical Quarterly, 9 (October, 1904), pp. 161-162.

[34]"Medical Advertising" [editorial] Montreal Medical Journal 22 (May, 1903): 362-364.

are soon and easily formed." These writers called for legislation to regulate various aspects of the trade.[35]

The inclusion of addiction in the list of dangers presented by patent medicines was part of a transformation in arguments against unregulated patent and proprietary medicines. It drew from a growing awareness of the problem of addiction, along with a shifting perception of the best means of presenting potential public "dangers." In the 1870s, commentators attacked proprietary medicines because they purportedly "cured" diseases that the regular medical profession knew were incurable, and because they could kill if taken in excess. Just as the unrestricted trade in patent medicines presented a challenge to the authority of the medical profession, so the growth of addiction also threatened the authority of doctors and druggists. When discussing addiction, pharmacists and physicians once again clashed in defining the borders of their professional domains.

Druggists and doctors saw addiction as mostly an issue of access to addictive drugs, but they could not agree on who was to blame. In 1900, the Canadian Pharmaceutical Journal cited E. Toussaint's article in La Dosimetre au Canada which attacked the "hundreds of unscrupulous pharmacists who sell morphine to anyone who asks for it." The editor, J. E. Morrison, responded that "if there are so many morphinomaniacs it is due to the carelessness, and, we might say, laziness of a certain class of physicians who prescribe morphine for every little pain and ache of which their patients may complain."[36] Morrison's successor as editor, G. E. Gibbard, cast the net of

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[35]Dominion Medical Monthly, 26 (June, 1906), pp. 304-306.

[36]"Who is to blame?" Canadian Pharmaceutical Journal 33 (June, 1900), p. 494.

blame wider, although he was less willing to admit the growth of addiction. In 1903 he noted that drug addiction was on the rise in other "civilized" countries, especially the United States and Europe, but Canada was less affected by addiction. He attributed this condition to "the strenuous life we lead, the rigor of climate in which we live, and, with all, the quality of material out of which Canadians are built. . . . Alcohol, rather than 'dope,' is our tendency, and even this habit is created and fostered more by social tendency than by desire or appetite."[37] Despite these conditions, he noted, "there are amongst us unfortunates who have acquired drug habits." Two years later, this confidence had diminished to a certain resignation. "Almost every member of the craft [pharmacy] has to deal with the habitues," wrote Gibbard in 1905. He speculated on three principal causes of the growth of addiction: 'the carelessness on the part of physicians. . . a certain class of patent medicines.. . and ... the aid rendered by unscrupulous druggists."[38]

The role of the unscrupulous druggist in creating or encouraging drug habits concerned pharmacists, who wanted to strengthen their profession's integrity. In 1899, the editor of the Canadian Druggist declared that any druggist who was selling addictive drugs to an individual in order "to sustain the cumulative influence of a drug habit is guilty of a moral crime of a very serious nature."[39] Another writer concluded that, compared to the

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[37]"Drug Habits" Canadian Pharmaceutical Journal 37 (Sept, 1903) p. 63.

[38]"The Sale of Narcotics," Canadian Pharmaceutical Journal 38 (May, 1905) p . 450.

[39]"Unwise sales" Canadian Druggist 11 (July, 1899). p. 153.

immoral vendor of habit-forming drugs, the liquor dealer "is angelic."[40] Yet despite the potential damage an unprincipled druggist could do, Gibbard asserted that the pharmacist's "influence in combatting and remedying the evil is all powerful if he chose to exert it."[41] This power came from the pharmacists' ability to control the trade in dangerous drugs, ascertained in the drives for extended pharmaceutical legislation, and in the self-regulating powers of the various provincial and local pharmaceutical societies. When, in 1903, the Council of the Ontario College of Pharmacy and the Toronto Drug Section of the Retail Manufacturer's Association passed resolutions condemning the sale of narcotics to habitues, Gibbard called upon medical associations to join the pharmacists to condemn the practice, and move to secure "legislation. . . to properly restrict the traffic."[42]

This call to the physicians is indicative of the unsteady relationship between druggists and doctors in the area of controlling drug addiction. The medical associations generally recognized their members' own culpability in causing iatrogenic addiction, and they pointed out the pharmacists' role in the increase of drug habituation. In 1879, a Montreal druggist wrote to the Canada Medical and Surgical Journal arguing that the city's doctors needed to arrive at some "understanding. . . with pharmacists regulating the repetition of prescriptions containing Morphia, Chloral, &c."[43] He explained that his

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[40]Extracted from Merck's Report, Canadian Pharmaceutical Journal 31 (May, 1898), p 478.

[41]"The Sale of Narcotics" Canadian Pharmaceutical Journal 37 (May, 1903) p. 451

[42]"Drug Habits," Canadian Pharmaceutical Journal 37 (September, 1903), p 63.

[43]"Correspondence: Repeating Prescriptions," [signed "H.R.G"] Canada Medical and Surgical Journal 8 (December 1879) .

confreres faced a dilemma when asked by patients to repeat prescriptions containing these dangerous substances. The editors of the Journal in 1880, agreed, and cited a case from the Medical Times and Gazette of a woman who took advantage of the practice of repeating prescriptions to procure enough bottles of a remedy to compile a fatal dose. The editors' concern included the danger both to the public and to the physician's reputation. Often an individual, who found a certain prescription was effective, would circulate it "among the members of the family or kindly friends in the neighborhood. Surely under such circumstances it is grossly unfair to hold a physician answerable for what may happen."[44]

The accusations of culpability in causing addiction reiterated itself in the discussions of patent medicine abuse. Some doctors suggested that the growth in the sale of patent medicines were the fault of "our weak-kneed friend, the druggist," who, by repeating prescriptions and selling patent medicines that could be dangerous, helped the patient avoid a doctor's fee.[45] The Canadian Pharmaceutical Journal reprinted an article from the California State Journal of Medicine which had defended pharmacists against the attacks by doctors: "there is hardly a pharmacist in the country who would not gladly rid himself of half his stock of clap trap stuff, if he could; but the physician will not let him, because, forsooth, he does not know enough about his own profession to know what he is making the druggist do. If doctors would cease prescribing patent medicines, the

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[44]"Repeating Prescriptions," Canada Medical and Surgical Journal 8 (February, 1880), p. 328-330.

[45]"Prescribed Repetition and its Dangers," [Editorial], Dominion Medical Monthly 20 (May, 1903), pp. 289-290.

pharmacists would no longer have to stock them."[46] While commentators like Alfred H. Mason argued that "medicine and pharmacy ought ever to be united in friendly co-operation," when confronting the issue of drug addiction through the patent medicine trade, doctors and druggists continued to eye each other with suspicion.[47]

Status, national health and patent medicine advertisements.

Doctors who argued against the patent medicine trade did not just present concerns about the damage these substances could wreak on the patient; they were also concerned about the repercussions of the unscrupulous methods of advertising.[48] Much of this concern related to how ads for the products represented physicians. Doctors, who idealized the concept that professionalism transcended the corruption of competitive capitalism, saw patent medicines ads, that used doctors' testimonials to support extravagant claims, as a challenge to medical authority. To combat this practice, the Montreal Medical Journal provided an illustration of how patent medicine vendors elicited testimonials from physicians regarding the effectiveness of their product. A "patent medicine man" offers a physician sample bottles of his medicine,

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[46]Canadian Pharmaceutical Journal 37 (June, 1904), pp. 496-497.

[47]Alfred Hy. Mason, "Pharmaceutical Ethics," Canadian Pharmaceutical Journal 20 (September, 1886) p. 26

[48]On patent medicine advertising, see Morgan, Drugs in America, p. 102-4; Parascandola, "Patent Medicines in Nineteenth-Century America," pp. 5-16; Young, The Toadstool Millionaires, pp. 111-124, 165-202; Musto, The American Disease, pp. 14-15; David L. Cowen and William Helfand, Pharmacy: An Illustrated History (New York: Henry Abrams, 1990), pp. 184-186.

> he tells [the physician] what is in these bottles, being careful to suppress the quantities and the exact composition, at the same time impressing [the doctor] with the important fact that no one else can prepare this medicine.... Finally, he insinuatingly requests, as a return for the amount of the doctor's time that he has wasted the small favor of a testimonial setting forth the merits of the preparation....the wearied doctor hesitates and is lost. To get rid of his persecutor he signs.[49]

Medical associations saw this tendency to provide testimonials to patent medicine vendors as anathema, and tried to put an end to the practice. The Montreal Clinical Society, for example, passed a resolution to condemn this "reprehensible" behaviour. The Society would permit its members to recommend and prescribe secret remedies when they felt the remedies were effective, but they were not to be quoted or named in ads. The Montreal Medical Journal's editors questioned this permission, noting that, since the recipe of a patent medicine was secret, there was no guarantee that it would remain the same.[50] Some evidence bears out this suspicion.[51]

With the trade in reliable substances upon the market came both aggressive marketing tactics, and an overabundance of fraudulent substances. "We have been

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[49]"Proprietary Medicines" [editorial] Montreal Medical Journal, 22 (May 1894), p. 866.

[50]Ibid, p. 867.

[51]In July, 1904, the Canadian Pharmaceutical Journal commented upon a libel case launched against the Ladies Home Journal by the R.V. Pierce Medical Company. In an examination of the patent medicine trade, editor of the Ladies Home Journal had alluded to the existence of opiates in one of Pierce's products. After the Pierce Company threatened court action, the Ladies Home Journal printed a retraction, noting that its original article had drawn upon studies of the products from 25 years earlier. A new chemical investigation of the medicine demonstrated that the formula for the medicine had changed, and it contained no opiates. See Canadian Pharmaceutical Journal, 37 (July, 1904), p. 568.

'circularized,' we have been overwhelmed with 'literature,' we have been patiently waited upon by 'representatives,' of this firm and of that," complained the editors of the Montreal Medical Journal in 1903. The problem was that doctors were being overwhelmed by such attention, and could neither distinguish good preparations from the bad, nor could they handle the persistent harassment from manufacturer's advertising methods. "Frankly, we cannot do without the products of the manufacturers; we can and shall do without the products--good or bad--of those firms which push their wares with undue zeal. If they wish to adopt a suggestion, it would be, to take to heart the wisdom of hastening slowly."[52]

Despite cautions and resolutions of this sort, physicians continued to agitate for restriction of what they saw as a growing trade. Professional integrity and the health of the people coincided with arguments against patent medicines. C.J. Fagan noted the intersection of professional and public interest when he illustrated a hypothetical case with which he figured all physicians likely had experience. A patient, the treatment of whom occupies a great deal of the physician's time and energy, "is lured away by some glowing advertisement of alleged miraculous cures." The patient purchases "bottle after bottle, it may be case after case" of the medicine, but with little improvement. "After utterly ruining his system... [the patient] struggles back to our office, more dead than alive," and complains that he does not seem to be getting better. If subsequent attempts to cure the now even weaker condition should fail, the physician, not the patent medicine, would take

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[52]"Proprietary Preparations," [editorial] Montreal Medical Journal 22 (May, 1903), pp 359-362.

the blame.[53] Fagan proceeded to introduce examples of his experiences with patients who had been duped by the claims of patent medicine vendors, and in the process lost money and health. He likened the morality of the business of patent medicine to highway robbery, and reminded his reader that the methods of the successful patent medicine vendor centred around preying upon the fears and anxieties of the sick.

Some pharmaceutical vendors used the fears over the concerns of dangerous secret remedies in patent medicines to their advantage. By the turn of the century, several advertisements in the pharmacy trade papers included declarations that the medicine in question was free of all dangerous substances. In 1900, the Canadian Pharmaceutical Journal endorsed the "Indian Catarrh Cure" as a valuable alternative to the many catarrh cures on the market that "contain cocaine, and are as a consequence dangerous to the user, and such as no pharmacist can recommend." In contrast, this cure was "'absolutely free from opiates of all kinds."[54] Restrictive legislation could also serve to bolster the credibility of proprietary medicines which, when analysed, were proven free of opiates. An advertisement entitled "NO POISON in Chamberlain's Cough Remedy," explained that "Owing to special legislation regarding the Poison Act, the Pharmacy Board of New South Wales had an analysis made of all the cough medicines that were sold in that market." The results showed that only Chamberlain's remedy was "entirely free from all poisons."[55] The

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[53]C. J. Fagan, "Patent Medicine," pp. 412-413.

[54]Canadian Pharmaceutical Journal 34 (August, 1900), p. 43.

[55]See the advertisement, for example, in Canadian Pharmaceutical Journal, 37 (December, 1903), p. 233.

company played upon fears of infant doping expressed often in condemnations of patent medicines. "The absence of all narcotics makes this remedy the safest and best that can be had, and it is with a feeling of security that any mother can give it to her little ones."[56] The advertiser did not mention the effectiveness of the remedy, but rather asserted that its remedy was a safe alternative to dangerous medicines.

Professional commentators disparaged this tendency to manipulate public sentiment as favouring the business of advertising over the science of creating better remedies. In 1906, G. E. Gibbard of the Canadian Pharmaceutical Journal provided an example of a medicine manufacturer who, finding that his remedy was not selling as well as he had hoped, sought a new advertising manager, rather than a new business manager. The result was an increase in sales, with no change in the product. While this process may have appeared to business people as not unusual, Gibbard was disgusted, and alluded to the problems presented when competitive capitalism overwhelmed the medical industry. "The truth and nothing but the truth is too much to expect in a condition where the advertiser's art is so potent a factor in producing successful results, but so grossly have the bounds of truthfulness been overstepped that the over-advertised patent medicine has almost become a public nuisance."[57] A similar opinion came from the Canada Lancet, when its editor, John Ferguson, responded to the Globe's defence of the right of patent medicine vendors to keep their preparations secret. The Globe likened a medical

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[56]Ibid.

[57]"Patent Medicines," [editorial] Canadian Pharmaceutical Journal 39 (March, 1906), p 358-9.

innovation to any other invention, for which a patent protects the creator. Ferguson stated simply that, "Medicines are not on the same level at all as a patent. If a man gets hold of a formulae [sic] for a mixture for whooping cough, and then places it upon the market, it is absolutely necessary that its composition should be made known. The medical profession is then in a position to inform its clientele of the safety, or otherwise, of such a mixture." Ferguson rejected the arguments of the protective devices of capitalism, such as the patent, made by a newspaper editor who relied upon patent medicine ads for revenue: the doctor's duty was to protect the "public weal in all sanitary and healthful measures."[58]

The cocaine addiction panic.

Intersecting the growing concern over the trade in patent medicines was the issue of the use and abuse of cocaine.[59] Isolated from the coca leaf in 1855, cocaine entered the *materia medica* quickly in a number of forms. The Parke-Davis Company became an enthusiastic marketer of cocaine in a numerous stimulant preparations, including cigarettes, cordials, and tablets.[60] Cocaine's anaesthetic properties made it valuable in eye

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[58]"Proprietary Medicines," [editorial], Canada Lancet, 36 (May, 1906), pp 841-43.

[59]Glenn Murray argues that a "cocaine scare" was equally as influential in driving legislative initiatives as was concern over opium use. Glenn F. Murray, "Cocaine Use in the Era of Social Reform: The Natural History of a Social Problem in Canada, 1880-1911," Canadian Journal of Law and Society 2 (1987), p. 29.

[60]The most comprehensive historical study of cocaine to date is Joseph Spillaine, "Modern Drug, Modern Menace: The Legal Use and Distribution of Cocaine in the United States, 1880-1920" (PhD Dissertation, Carnegie Mellon University, 1994). For Canada, see Glenn F. Murray, "Cocaine Use in the Era of Social Reform." Other discussions of cocaine include Robert C. Peterson, "History of Cocaine," in R. C. Peterson and R. C.

and dental surgery. Like opium, cocaine's flexibility resulted in a degree of enthusiastic confusion regarding its value. In 1882, Dr. E. Palmer touted cocaine as a remedy for the opium habit, stating that his patients took the fluid extract of coca a few times and never felt the need for opium again.[61] By the turn of the century, cocaine was part of a broad array of proprietary substances, the most notorious of which was Coca-Cola.[62]

The dangers of cocaine addiction emerged quickly as its use spread. In 1886, Dr. James Stewart, from McGill College, reported to the Canada Medical and Surgical Journal that, while cocaine was a valuable therapeutic medicine, doctors must use it cautiously, "otherwise we may bring about a cocaine habit which, if all reports be true, is even worse than that of opium."[63] Stewart's tempered interpretation of cocaine use contrasted with a report the same journal printed eighteen months later. The editor quoted a Dr. Heimann in the Journal of Mental Science, condemning the moral effects of cocaine habituation, "the patients lie when they open their mouths, they steal on the first opportunity, and they desire to do that which they are unable to perform. They are irresolute in their action, and should they have begun anything, their activity is of the shortest duration. In their being they become apathetic, indifferent to everything, untidy in their belongings, unclean in

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Stillman, eds, Cocaine: 1977 NIDA Research Monograph #13 (May, 1977), pp. 17-34; Musto, The American Disease, p. 7; Morgan, Drugs in America p. 18.

[61]E. R. Palmer, "The Opium Habit--A Possible Antidote" Canada Medical Record, 9 (May 1881) pp. 180-181.

[62]Morgan, Drugs in America pp 15-19; Courtwright, Dark Paradise, pp 96-99.

[63]James Stewart, "Report on Pharmacology and Therapeutics," Canada Medical and Surgical Journal, 14 (April, 1886), p. 538.

their person--in short, they are demoralized."[64] Not all commentators were so cautious about cocaine, however. The Canada Lancet quoted a Dr. J. R. Rankin of Muncy, Pa., who said that "he has never seen any alarming effects follow the use of cocaine in his practice, although he has employed it quite extensively."[65] Enthusiasm like Rankin's declined as the century drew to a close.

Often the effects of cocaine habituation were compared with opium's effect on the body and soul, and most determined that cocaine was a more significant problem than opiates. Charles M. Pratt, told the St. John Medical Society that the cocaine habit was "even worse than the morphine habit," and W. S. Muir of the Dominion Medical Association, said the habit was harder to break "than that of opium or alcohol."[66] For another, the physical effects of the drug were worse than those of opium, precisely because cocaine created such an overwhelming change in the body: "The opium habitue may have a fairly steady hand and a reasonably steady head for years.... the cocaine user finds a complete and ever increasing lack of power to co-ordinate the muscles of the body."[67] One writer's descriptions of a "coca smoker" parallelled earlier characterizations of the opiate habitue: "a tall, thin individual, with sallow complexion, and queer,

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[64]Heimann, "The Untoward Effects of Cocaine," Canada Medical and Surgical Journal, 16 (September, 1887), p. 88-89.

[65]"The exaggerated dangers of cocaine," Canada Lancet 20 (September, 1887), p

[66]Charles M. Pratt, "Cocaine," Maritime Medical Journal 18 (August 1906), p. 308; W. S. Muir, "An Address on Materia Medica and therapeutics, Part 2," Maritime Medical Journal 3 (February, 1891), p. 27.

[67]C. Richard Shaughnessy, "The Cocaine Habit," Maritime Medical News, 15 (March, 1903), p. 86.

expressionless eyes."[68] Physical effects were not as significant to many writers as the moral impact of cocaine addiction. In 1898, the Canadian Pharmaceutical Journal quoted Dr. W. F. Waugh, who wrote in the Quarterly Journal of Inebriety that cocaine was "the most disastrous in its effects of any habit-drug... it destroys the soul, the moral consciousness is dead."[69] In 1906, Charles Heebner, Dean of the Ontario College of Pharmacy, called the unrestricted trade in cocaine "the traffic in human souls."[70] The Canadian Pharmaceutical Journal, discussing the "diabolical traffic in cocaine" in Montreal during 1910, called it "this soul-destroying evil."[71]

Some writers saw in cocaine the central reason for the growing numbers of "drug fiends" in Canada. Heebner argued in 1906 that public and legislative sentiment against habit-forming drugs was virtually non-existent until "the Cocaine Monster came upon the arena. . . cocaine proved to be a far more enslaving drug than opium or morphine."[72] Two years later, Gibbard, of the Canadian Pharmaceutical Journal, reported that a pharmacist was suspected of selling exorbitant amounts of morphine and cocaine. He argued that all pharmacists would recognize that the amounts this druggist ordered far exceeded the

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[68]Canadian Pharmaceutical Journal, 19 (January, 1886), pp. 80-81.

[69]W. F. Waugh, "Cocaine," Canadian Pharmaceutical Journal, 32 (September, 1898), pp. 80-81.

[70]Charles H. Heebner, "Regulation of Sale of Habit-Forming Drugs," Canadian Pharmaceutical Journal, 40 (August, 1906), p.23

[71]"Cocaine Selling In Quebec," Canadian Pharmaceutical Journal 44 (December, 1910) pp. 212-214.

[72]Heebner, "Regulation of Sale of Habit-Forming Drugs," p. 23.

requirements of normal business, and called the practice "diabolical," particularly because of cocaine's addictive nature. "In the case of whiskey and morphine, victims may and frequently do reform, but with cocaine never."[73] Other writers were not convinced that cocaine addiction was the driving force in the rise of addiction, but argued that restrictions on cocaine would be "a much needed safeguard," against potential addiction. In 1908, two Montreal druggists were threatened with legal action "for causing grievous injury in selling cocaine to parties addicted to the habit."[74] Restrictions on the sale of cocaine and other drugs, then, some argued, could prevent the spread of addiction, and protect pharmacists from prosecution.

Pharmacists became concerned particularly about cocaine's prevalence in various cures for catarrh, or an inflamation of the mucous membrane in the nose and throat. Many catarrh cures were inhaled into the nose. The Canadian pharmaceutical press repeated stories of "cocaine fiends" fraudulently obtaining catarrh cures from local druggists. In 1898 one of the Toronto wholesale houses discovered "a pile of empty bottles and lengths of rubber tubing" near the basement water closet:

> An inspection revealed the fact that the bottles were the empty containers of a much advertised catarrh cure, and the rubber tubing the instrument used for puffing up the nostril. The pile of bottles on counting was found to contain 20 dozen. The suggestiveness of the find comes in from the fact that this particular catarrh powder is said to contain a large percentage of cocain[sic].[75]

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[73]"Cocaine Restriction" Canadian Pharmaceutical Journal, 37 (April, 1904), pp 404-405.

[74]"The Sale of Cocaine" Canadian Pharmaceutical Journal 41 (March, 1908) p 357.

[75]Canadian Pharmaceutical Journal, 32 (October, 1898), p. 114.

In 1908 a Toronto druggist reported that he had received dubious calls for the delivery of a catarrh cure which contained cocaine. When the messenger arrived on the street where the customer lived, he would encounter a man who said the cure was for himself, but took the medicine without paying. The messenger demanded the product back, and the man, through a slight-of-hand, returned an empty bottle. After this initial story was printed in the Canadian Pharmaceutical Journal, over forty Toronto Druggists reported similar incidents. Later that month, "that cocaine fiend" was apprehended.[76]

Behind the growing cocaine panic was its mutable relationship to social structural concerns. As a stimulant and an anaesthetic, cocaine had a variety of applications, and hence a variety of forms of abuse. Several writers linked cocaine use to concerns based upon class, gender and race. In 1897, the Dominion Medical Monthly abstracted an article by Dr. E. R. Waterhouse in the Eclectic Medical Journal who was describing a "cocaine joint" in St. Louis. "The patronage was largely from the lower class or fallen women, men seldom using [cocaine]."[77] The Canadian Pharmaceutical Journal reported in 1900 that the sale of cocaine was attaining "alarming proportions in certain parts of the Southern states." The alarm came mainly from the impression that "the consumption is mostly amongst the negroes. In Louisville it is said that 90% of the colored population are cocaine fiends."[78] In 1903, the Canadian Pharmaceutical Journal published an article

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[76]Canadian Pharmaceutical Journal, 41 (April, 1908), p. 418; Canadian Pharmaceutical Journal, 41 (May, 1908), p. 450.

[77]"Cocaine Debauchery" Dominion Medical Monthly, 8 (March 1897) p 249.

[78]Canadian Pharmaceutical Journal, 33 (December 1900), p. 208.

by E. G. Eberle of Dallas. Eberle linked cocaine to social deterioration, and stated that it was "most used amongst the lower classes of society. The habitues fill our insane asylums, almshouses, city hospitals, and the acts they commit as a result of the dissipation, bring them into the courts for crimes and offences of every description."[79] Eberle's assertion contrasts with the presence of cocaine addicts like Edward in the lunatic asylums of Ontario. Many of these patients came from the wealthier families, an assertion further borne out in Warsh's examination of Homewood.[80] Accordingly, the Canada Lancet noted in 1896 that "it is almost entirely in our own profession that the [cocaine] habit has taken root." [81] Heebner noted in 1906 that "the cocaine habit claims those following the higher callings of life, such as pharmacy, medicine and law."[82] Amongst the known addicts was renowned Johns Hopkins physician, William Halsted.[83] Cocaine use, then, occupied a bifurcated realm of social concern, relating to status-based fears over a dangerous lower class, violent racial others, and potential deterioration of the upper class. Although many of the examples came from the southern United States, the images they presented

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[79]"E.G. Eberle, "Narcotics and the Habitues" Canadian Pharmaceutical Journal, 36 (July, 1903) p 556.

[80]Warsh,"The Aristocratic Vice," pp. 162-165.

[81]"The Cocaine Habit" [editorial] Canada Lancet 28 (August, 1896) p. 500.

[82]Heebner, "Regulation of Sale of Habit-Forming Drugs."

[83]Schneck JM. Cocaine addiction and Dr. William S. Halsted [letter] Journal of Clinical Psychiatry 49 (December, 1988): 503-4; Schneck J. M. "Cocaine Addiction and Dr. William S. Halsted" Journal of Clinical Psychiatry 50 (September, 1989):358; Wright A. J. "More on Cocaine Addiction and Dr. William S. Halsted" [letter; comment] Journal of Clinical Psychiatry. 50 (September, 1988) p. 358.

resonated in the debates in Canada.

The danger of cocaine mania, and the social panic that it often inspired, drove legislation in the first decade of the twentieth century. In its restrictive nature, this legislation often exceeded the controls placed upon opiates. By 1908, before either the passing of the Opium Act or the Patent and Proprietary Medicine Acts, the Ontario provincial government had made substantial changes to its pharmacy act to strictly limit access to cocaine. Whereas pharmacy acts generally could be modified by additions to the poison schedules, legislatures and pharmacists were declaring such modifications were not good enough to deal with the growing problem of cocaine use. Early in 1908 the Ontario government, encouraged by the Ontario College of Pharmacy, passed a substantial amendment subjecting the sale of cocaine to specific and unique restrictions. Others provinces soon followed suit, finding that just having cocaine on their list of poisons was not enough to deter its sale to addicts. By the 1911 enactment of the federal Opium and Narcotic Drug Act, three provinces--Manitoba, British Columbia, and Quebec--had amended their pharmacy acts to restrict specifically the sale of cocaine without a prescription.[84]

Part 2. Legislating away the problem

Concerned with the growing trade in patent medicines, both pharmacists and physicians looked for the best means of restricting this trade. Their approaches ranged from "moral"

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[84]Statutes of Manitoba, Chapter 153; Statues of British Columbia, Chapter 178; "An Act to Amend the Pharmacy Act," Canada Lancet 41 (May, 1908), pp 804-805; "Bill An Act to regulate the Sale of cocaine, morphine and their compounds," Canadian Pharmaceutical Journal 44 (March, 1911), pp. 373-374.

methods, educating the public about the dangers of these dubious remedies, to pursuing legislation at the provincial and federal levels. Having failed in the early 1870s to include patent medicines in their pharmacy legislation, pharmacists in both Ontario and Quebec continued to insist that modification of the existing pharmacy legislation was the most efficient means of controlling the distribution of patent medicines. In these goals, they faced persistent and strong opposition from retail businesses. Pharmacists saw the emerging "departmental" stores like the T. Eaton Company, as a menace to the druggist's retail trade. Most druggists relied upon the sale of articles other than drugs to remain in business. By stocking patent medicines, the department stores presented a further threat to the business of the pharmacists. To achieve a measure of control over the changing nature of trade, pharmacists had to couch their discussions, yet again, in the language of social protection. Many pharmacists knew the dangerous ingredients could endanger the health of the people. Both pharmacists and physicians saw themselves as responsible for the public health. Their professional status validated their perspective as guardians of health.

Achieving restrictive legislation, however, was not the only means commentators envisioned to protect the public from dubious nostrums. In 1873, James Neish, editor of the short-lived Canadian Medical Times, argued that "moral means are probably the only effective ones," when dealing with the patent medicine trade. Moral means reinforced the doctor's social status, but also relied upon that status for legitimacy. Physicians should take every effort, he explained, to inform their patients of the potential dangers of patent medicines, and to suggest legitimate remedies, "which may be more cheaply obtained from

a respectable druggist."[85] Neish rejected legislative restriction on patent medicines. He likened such legislation to a heavily value-laden scheme for government restriction of alcohol: "high license." High license was the means of attempting to restrict the sale of alcohol by imposing large taxes on the manufacture and sale of liquor. Opponents argued that this practice restricted access to alcohol only for the wealthy, and did not effectively deal with the social problems of the liquor trade; it also legitimated the liquor trade, by equating government taxation with government endorsement. Neish saw the parallels in the patent medicine trade. By making vendors or manufacturers pay expensive fees, the government could price patent medicines out of reach of most people. He opposed this approach on the principle that it would appear to provide government-sponsored legitimacy for any patent medicine, regardless of the substance's ingredients or effectiveness. He did not reject the possibility of other means to control the trade, but preferred the moral means. The Canada Lancet also viewed moral suasion as a key aspect of a broader-based reform effort. In 1886, John Fulton, the Lancet's editor, recognized that gaining legislation against patent medicines would require concerted efforts on the part of physicians to educate the public on the issue. This job would be particularly difficult, since doctors faced the opposition of the public press; many newspapers derived a large proportion of their advertising revenues from patent medicines. However, Fulton explained, only physicians could help society resist the "tide which threatens to overwhelm

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[85]"The Sale of Quack Medicines" [editorial], Canadian Medical Times 1 (September 27, 1873), pp. 100-101.

us."[86]

The concerted and somewhat successful attempts to bring patent medicines under the purview of the pharmaceutical and medical associations began in Ontario and Quebec in the 1880s and gained momentum as the century drew to a close.[87] In 1885, Quebec's Pharmaceutical Association successfully sponsored a new Pharmacy Act through the legislature. The poison schedule of this act was divided into two parts (schedules A and B). Schedule B included substances that could be sold by non-pharmacists only if the package or bottle remained unopened. Patent medicines headed this list.[88] Although not a total cessation of widespread sales of patent medicines, the 1885 Act provided a framework for the pharmacists to extend their control. In 1890, a broad-based amendment passed the legislature. This amendment included a clause which gave pharmacists nearly unrestricted power to define poisons; the College of Physicians and Surgeons no longer had any input into the process. The 1890 act also consolidated the bifurcated poison schedule. The act no longer included patent medicines explicitly, but by subjecting all poisons to the same form of restrictions, and giving pharmacists the power to identify specific poisonous substances, the act enabled druggists to control a broader

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[86]"Secret Proprietary Medicines," [editorial] Canada Lancet 8 (July, 1886) p. 343-344.

[87]Other provincial legislatures had also attempted to deal with the sale of patent medicines, for example British Columbia, Manitoba, and New Brunswick, a fact that Minister of Inland Revenue noted in 1908 suggested "widespread public opinion that legislation of some kind is necessary." Debates of the House of Commons, June 15, 1908, p 10551. I am using Quebec and Ontario a comparative case studies.

[88]"Quebec Pharmacy Act, 1885," Canadian Pharmaceutical Journal 19 (August, 1885), pp. 7-11.

range of medicines.[89] The power of the profession over the trade in patent medicines, therefore, became nearly absolute.

In 1892, the physicians in Quebec petitioned for amendments to the Quebec Medical Act to give them some control over the distribution of patent medicines. Their amendment would have defined anyone who advertised a patent or proprietary medicine, dispensed these medicines, or "gave consultation" before selling a remedy or patent medicine," as practising medicine. If they were not registered under the Medical Act, such people would have violated the law. Edward Shuttleworth, in the Canadian Pharmaceutical Journal, called upon the druggists of Quebec to oppose this act, since it would make it illegal for a druggist to recommend even a simple remedy to a common ailment, like a cough medicine or liniment, without breaking the law.[90] The legislation did not pass.

The legislative initiatives against unrestricted sale of patent medicines in Ontario reflected similar tensions between pharmacists and retail merchants. In 1892, the Council of the College of Pharmacy proposed an amendment to the Pharmacy Act of 1871. Initially, the Council looked to include the phrase "any and all patent or proprietary medicines, of whatever nature, that contain any one or more of the poisons contained in the schedule" in Part 2 of the Poison Schedule. This amendment would have placed many dubious or dangerous patent medicines under the pharmacists' purview. A committee of

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[89]Statutes of Quebec, 1890 Cap XLVI pp. 88-94.

[90]"Proposed Legislation to Restrict the Sale of Patent Medicines in Quebec" Canadian Pharmaceutical Journal 25 (March, 1892), p. 114.

the College of Pharmacy modified this clause, so that only patent medicines that contained poisons listed in Part One of the Schedule would fall under the amendment's provisions. Shuttleworth questioned this alteration, and predicted that the entire proposal would fail. He argued that the amendment had to be more specific than "any and all patent and proprietary medicines," that poisons in part two of the schedule were also dangerous, when hidden in patent medicines, and that no official means of determining the content of patent medicines existed. Any law that restricted patent medicines on the basis of their contents, he said, would be meaningless without a provision to test these medicines.[91] Shuttleworth was arguing for increased power of pharmacists over the definition and control of patent medicines.

Instead of restricting the trade in patent medicines, the legislature opened the trade up to more vendors, apparently in retaliation for pharmacists' monopolistic tendencies. Many legislators and newspapers had opposed the amendment to restrict patent medicines, charging that it was once again an attempt by the pharmacists to extend their monopoly over one aspect of trade. Pharmacists, fearing a total collapse of their initiative, attempted compromise. In March, 1893, R. W. Elliot, one of the founders of the Ontario College of Pharmacy, who had helped to draft the original Ontario Pharmacy Act, and was a co-owner of the large drug wholesaling firm Elliot and Company, suggested an amendment to the clause that "would have been acceptable, possibly even to the patent medicine men." Elliot proposed that instead of a blanket provision restricting all patent medicines under

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[91]"Patent Medicines and the Pharmacy Act," Canadian Pharmaceutical Journal, 25 (March, 1892), pp. 113-114.

certain conditions, all patent and proprietary medicines be exempt from the Pharmacy Act. Patent medicines could face the scrutiny of the Board of Health if:

> on the petition of the College of Pharmacy or any licensed medical practitioner, the Provincial Board of Health shall cause to be made a full and sufficient analysis of such patent or proprietary medicine by the official analyst or some other competent person, and if on such analysis it appears that such patent or proprietary medicine contains any of the poisons mentioned in any of the schedules to this Act to an extent that renders their use dangerous to health or life.[92]

Board of Health would then request the Lieutenant Governor to add the specific patent medicine to the Schedule.

This compromise, which appeared to satisfy all of the requirements of opponents to the earlier amendment, passed through the legislative committee, but was defeated in the legislature. Not only did the pharmacists' compromise fail to sway the legislature, but the legislators reacted to the pharmacists' initiative by opening the trade in patent medicines. While debating another amendment to the Pharmacy Act, which was intended to lift restrictions on the sale of Paris Green, a common fertilizer, the legislature added a temporary clause which eliminated restrictions on patent medicines.[93] Instead of succeeding in curtailing the sale of dangerous patent and proprietary medicines, the pharmacists unwittingly aided in opening up the market. This temporary clause was

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[92]Canadian Pharmaceutical Journal, 26 (June 1893), pp. 161-2. On Elliot, see "Elliot, Robert Watt," Dictionary of Canadian Biography Volume 13, pp. 321-2.

[93]Paris Green was also called Schwienfurt Green, and was the subject of a number of investigations about its poisonous nature. Prior to the 1871 Pharmacy Act, commentators had registered their concerns over the availability of Paris Green, which apparently occasionally had been used for suicides and homicides.

extended for a second year in 1894.[94]

The attempts to restore some legislative--and pharmaceutical--control over the sale of patent medicines resumed two years later, and initially the pharmacists were not satisfied with these efforts. While preparing to lift the annulment, the Ontario legislature added a significantly modified version of Elliot's clause. Shuttleworth thought this change was laughable, and "attempts at pharmaceutical law making have of late years been characterized by absurdity and sometimes utter puerility."[95] Instead of a concise programme by which suspected patent medicines could be analysed and restricted, Shuttleworth found the new clause to be vague and unsatisfying:

> This rigmarole simply amounts to this: That "in case of there being reason to apprehend"--by whom the provisio does not specify--that a medicine contains any of the poisons in the schedule, in such quantity as would render the use of the medicine, in the prescribed doses, dangerous to health or life, the health authorities may ascertain that this is the case, and may submit to the Lieut.-Governor in Council, or report to this effect, and after considerable circumlocution the medicine may, subject to appeal, be considered as being under the poison provisions of the Pharmacy Act.[96]

Shuttleworth concluded that, not only did the new law fail to provide an effective check upon secret medicines, it also reduced the power of pharmacists to influence legislation. Unlike Elliot's compromise, which had empowered the college of Pharmacy and medical practitioners to request analysis of specific medicines, this clause provided no such authority. Also, Shuttleworth suspected that the amendment allowed "poisonous

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[94]Province of Ontario, Bills, 1894, Bill 137.

[95]"Exemption of Patent or Proprietary Medicines from the operation of the Ontario Pharmacy Act," Canadian Pharmaceutical Journal, 28 (May, 1895), pp. 143-144.

[96]Ibid., p. 144.

medicine" to be sold by "others" besides registered pharmacists. According to Shuttleworth, the initial concerted attempt to restrict the sale of patent medicines in Ontario through extant legislative means had failed, because pharmacists did not achieve the power of definition of patent medicines, and their retail control was not extended.

In their quest to control the trade in patent medicines, and extend their authority, the pharmacists in Quebec were more successful. In 1898, the control which Quebec pharmacists had gained over the distribution of patent medicines earlier in the decade, came under the scrutiny of the legislature and the public press. In that year, the Grocers' Association lobbied the legislature for broad-based amendments to the Pharmacy Act which would have effectively permitted any retail vendor to sell patent medicines. The grocers accompanied this legislative initiative with a concerted attack on pharmacists in the public press. In December, 1898, several newspapers in the province began to print letters denouncing "the druggists' monopoly."[97] The pharmacists were concerned that they seemed unable to present their side of the story to the press, which they charged had too much to gain by an unrestricted sale of patent medicines, since a large proportion of many newspapers' ads were for these nostrums. When the grocers had the bill reintroduced in 1899, the results were less than ideal for the opponents of pharmacists' control. This time, the legislature formed a select committee to investigate the viability of the amendments. After several days of hearing testimony from notable doctors, druggists, and grocers, the committee recommended a compromise to limit the sale of only those patent medicines

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[97]"The Press and the Quebec Pharmacy Act," Canadian Pharmaceutical Journal 32 (February, 1899), pp. 306-307.

that a chemical analysis determined to be dangerous to the public.[98]

Unlike the Ontario legislation, the result of the debates was an expanded role for scientific investigation in the policy decisions of the province. No longer would commercial interests have such an extended control over an aspect of provincial health. In the amended Act, the Pharmaceutical Association "could declare that any substance. . . shall be a poison within the meaning of this act" but it had to submit this recommendation to the Lieutenant Governor for approval. The Lieutenant Governor had two options: he could simply approve the recommendation, or, he could "cause to be ascertained, by an expert, at the expense of the Pharmaceutical Association of the Province of Quebec, whether the substances mentioned in the regulation are or are not poisons within the meaning of this act." Patent medicines were not subject to a blanket restriction, but they were now liable to government scrutiny. As in Ontario, suspicions about the contents or safety of any medicine could result in the Board of Health requesting an analysis, a process that could lead to the restriction of a specific product. The 1899 amendments to Quebec's Pharmacy Act, then, maintained the control of the pharmacists, while extending the power of scientific investigation to define policy decisions. Professional chemists affected policy, and the Board of Health, generally dedicated to concerns about contagious diseases and the health-related infrastructure of the province (such as drinking water, ventilation and pollution) gained influence over drug policy. Ironically, a movement begun by the grocers to curtail the pharmacists power and extend their own commercial interests, further

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[98]Journals of the Legislature of Quebec, 1897-1898, Bill 78, December 7, December 14, December 22, December 30, January 7, January 12, January 13, January 14; Journals of the Legislature of Quebec, 1899.

legitimated the status of pharmacy, and reinforced the place of medical science in policy formation.

The shift to federal regulation

The successes and failures of provincial pharmacists to extend their control over the regulation of the patent medicine trade was accompanied by discussion over whether the federal government should take an interest in this issue. In 1893, the Toronto News argued that the federal government should use extant mechanisms to bring the patent medicine trade under check. The correspondent called upon "controller Wood, of the Inland Revenue Department, to exercise his genius and devise some means by which he may secure a considerable amount of excise revenue," and "cause these medicines to be compounded under Government inspection."[99] In 1888, under the authority of the Adulteration Act of 1884 the Chief Analyst of the Inland Revenue Department began to issue bulletins of analyses of food, drugs and agricultural products (like Paris Green) in their annual reports to the federal government.[100] The I.R.D. occasionally included selected proprietary medicines in its analyses. As mentioned earlier, unfortunately for the pharmacists, these analyses occasionally suggested that pharmacists were not more reliable at providing uniform medicine than were the proprietary medicine manufacturers.

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[99]"Proposal to place Patent Medicines under Dominion Government Control," reprinted from the Toronto News in the Canadian Pharmaceutical Journal, 27 (October, 1893), p. 31.

[100]On the passing of Pure Food and Drug Legislation, see L. I. Pugsley, "The Administration and Development of Federal Statutes on Foods and Drugs in Canada."

To many commentators, the suggestion that the Inland Revenue Department create higher taxes on patent medicines was not a viable solution. As had the Canadian Medical Times in the 1870s, other journals declared that any form of license or tax would not serve the purpose of restricting the trade adequately. Responding to a doomed bill presented to the Ontario Legislature which would have required all patent medicine manufacturers to take out a license for $1000,[101] the Dominion Medical Monthly said that this provision would serve only to "freeze out. . . all the small concerns, so that the large firms may have the dear public. . . more entirely under their care." The Monthly's solution was twofold: no remedy should be permitted to be sold "unless it were first proved to the satisfaction of a competent authority that it could reasonably be expected to be of value to the conditions for which it was supposed to give relief," and second, "the ingredients should be plainly stated on the bottle or package."[102]

These legislative initiatives and the responses by the professions, illustrate the different perspectives of pharmacists and physicians on regulating the secret patent medicine trade. Both groups looked upon the trade as a menace, both to the health of the population and to the potential for their profession to do good (and profitable) work for the health of the nation. For this reason, occasionally pharmacists and physicians united in their efforts to seek regulation. In 1898, while the Quebec legislature debated its

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[101]Legislature of Ontario, Bills, (1900), Bill # 254, presented by Mr. German. This bill also placed extremely high fines on the illegal sale of patent medicines. It did not pass beyond the first reading, and was not reintroduced.

[102]"Patent Medicine Legislation" [editorial] Dominion Medical Monthly 16 (February, 1902), pp. 91-92.

amendments to the Pharmacy Act, R. W. Williams, President of the Quebec Pharmaceutical Association, wrote to the College of Physicians of the province asking it to form a committee to investigate the possibility of federal legislation of the patent medicine trade. The pharmacists agreed to "give our aid to this committee." In response, the Provincial Medical Board drafted three motions to deal with the issue. It agreed to approach the Federal Government to legislate against patent medicines, and specifically intended to ask the provincial legislature not to "legislate on the sale of secret remedies before the Federal Parliament has taken the matter into consideration."[103] J. E. Morrison, the new editor of the Canadian Pharmaceutical Journal, applauded this initiative, but cautioned that, while pharmacists and medical bodies working together may be able to secure this type of legislation, "perhaps the medical societies will not take such an active interest in the question."[104]

Morrison's reservations reflect a general disagreement between pharmacists and doctors on the best way to ensure the public would be protected from these medicines. From the 1880s until the passing of the 1908 federal law, the editors of the Canada Lancet repeatedly argued that Canada should adopt the practice of printing the entire recipe of the patent medicine on the label.[105] In 1903, Dr. Moorehouse, the president of the Canada

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[103]"Physicians Taking Action," Canadian Pharmaceutical Journal 32 (November 1898), pp. 162-163. The results of these requests are not clear. However, that the Quebec government continued to legislate and investigate the issue suggests that it refused to entertain this entreaty.

[104]Ibid.

[105]See, for example, "Stimulants and narcotics in proprietary medicines," [editorial]," Canada Lancet, 34 (August, 1902), p. 55; "Secret proprietary medicines,"

Medical Association, endorsed the system used in France, "by which all makers of patent medicines are obliged to put the formula, both qualitative and quantitative[,] upon the package."[106] The Vancouver Medical Association (VMA) resolved in 1906 that "if persons know, as they should know, what is offered them, they would be able to discriminate between the beneficial and harmful."[107] The VMA's discussion took place soon after a provincial bill to regulate patent medicines, which included the "formula on the label" requirement, failed to become law in B.C. For physicians, placing the formula on the label would enable them to determine if the substance was indeed useful, according to accepted contemporary pharmacology.

Pharmacists condemned the recipe on the label approach. To them, it was a violation of the rights of pharmaceutical vendors, and would not provide necessary information to the purchaser because few people had the pharmacological education required to understand the recipes. When the legislature of British Columbia considered the 1906 bill to regulate patent medicines, G. E. Gibbard argued in the Canadian Pharmaceutical Journal, that placing the formula on the label would both interfere with the practice of pharmacists, and would not address the concerns regarding fraudulent claims. Unless the public had specific knowledge of *materia medica*, Gibbard explained, people

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[editorial] Canada Lancet 18 (July, 1886), p. 343, "The Growth of Quackery," [editorial], Canada Lancet 36 (August, 1904), p. 1147.

[106]Moorehouse, "Presidential Address," Canada Lancet, 36 (September 1903), p. 10.

[107]"Vancouver Medical Association on Patent Medicines," Canada Lancet, 41 (April, 1906), p. 750.

would not be able to assess the efficacy of the cure, or its danger. Repeatedly, pharmacists insisted that a better way to determine the safety of the substance was through the creation of an "impartial board of commissioners appointed by [the] government and possessed of the professional and technical knowledge requisite to arrive at a correct conclusion as to [the medicine's] merits or fitness to cure a specified disease."[108]

As with the creation of the Poison Acts in the 1860s and 1870s, the different perspectives on the most effective way to protect the public from patent medicines stemmed from different professional priorities. Doctors, insisting that they could benefit from pre-mixed medicines, which, as Chambers and McKeown, the Dominion Medical Monthly's editors had noted, would provide physicians with a consistently reliable preparation, preferred to know as much about the medicine as possible. Their patients would trust the doctors' assessments, and follow their advice. Legislation, therefore, needed only to ensure that the patent medicine vendors were operating within parameters of professional conduct and honesty. Pharmacists, however, were further concerned about proprietary rights to medical preparations. They did not think that the entire formula needed to be on the label, since that could potentially interfere with the individual medicine manufacturer's ability to compete in the market. The emphasis upon creating a

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[108]"Probable Legislation Regulating Patent Medicines," Canadian Pharmaceutical Journal 39 (March, 1906), pp. 354-355. This argument was repeated often. See "Proposal to place Patent Medicines under Dominion Government Control," Canadian Pharmaceutical Journal 27 (October, 1893), p. 31; "Patent Medicines," Canadian Pharmaceutical Journal, 39 (March, 1906), pp. 358-359; A. E. DuBerger, "Return to an Order of the House of Commons, dated April 23, 1906, for a copy of the Report of A. E. DuBerger, on the Drug and Proprietary Medicine Trade of Canada." Sessional Papers of the House of Commons, No. 125 (Ottawa, 1906), pp.22-23.

government bureaucracy to ensure consistency in quality had a dual purpose. First, it demonstrated the pharmaceutical societies' confidence that the government would protect the pharmaceutical industry's interests. Second, it would create a bureaucracy that strengthened the role of scientific medicine in policy making. These "experts" would have pharmacological training. Just as the 1899 legislation in Quebec ensconced scientific research in social policy decisions, so would federal legislation legitimize and help to expand the authority of pharmacists in the realm of public health.

The federal government takes over: 1904-1908

Starting in 1904, the federal government began efforts to restrict patent medicines. This federal involvement began slowly. In 1904, Senator Sullivan, a physician who was acting on behalf of confreres in the Ontario Medical Council, announced that he would ask the governor general to investigate the patent medicine business. The Senate agreed to the motion, and the same date the Secretary of State, Mr. R. W. Scott, asked the Minister of Inland Revenue to investigate the issue. This investigation wound gradually through the bureaucracy. Eight months after the initial request, in April, 1905, the Minister of Inland Revenue asked A. E. DuBerger, an analytical chemist, to prepare such a report. DuBerger submitted the report in April of the following year.[109]

DuBerger's report examined specifically how the Adulteration Act could be modified to ensure against both adulteration of medicines, and quack nostrums.

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[109]Some of the details of the formation of the 1908 legislation are in Glenn Murray, "The Road to Regulation."

DuBerger's conclusions parallelled those of his pharmacist colleagues, reiterating the importance of the pharmaceutical sciences in defining dangers of certain patent medicines. He explained that sometimes patent medicines "possess real merits and their formulae are the fruit of long work and often the result of several years of experience and observation." In these cases, publishing the formula would "favour indelicacy and abuses on the part of unscrupulous persons," and would be "unfair." DuBerger concluded that the government ought to form a committee composed of "two physicians and two pharmacists and of the chief of the pharmaceutical or drug section of the Department of Inland Revenue... to take into consideration all formulae of preparations submitted to them." This solution reflected the proffered solution of pharmacists, while it accepted the claims of authority of physicians over issues of public health.[110]

The subsequent events surrounding the creation of the 1908 Patent and Proprietary Medicines Act illustrate the legislature's (and the public's) willingness to accept the authority of pharmaceutical chemistry and medicine as determinants of social policy, and the importance of the cocaine panic in legislative debates. DuBerger's report was not formally discussed in the House, but a few weeks after its submission, Alfred Stockton, member from St. John, moved that a committee be formed to consider the best way to deal legislatively with the patent and proprietary medicine trade. Stockton's request, and the subsequent committee's investigation, may have come from the growing

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[110]A. E. DuBerger, "Return to an Order of the House of Commons."

public concern over the patent medicine trade, rather than Sullivan's earlier initiative.[111] The government formed the committee, which took evidence and resolved that a law "regulating the sale and manufacture in Canada of patent medicine and the advertising thereof" was necessary.[112] In 1907, William Templeman, the Minister of Inland Revenue, presented a bill to the Commons, and sent copies of it to "those interested in the trade."[113] The main concern of the opposition in 1907 was not the details of the bill, but that the bill would not make its way into law that year. When Templeman added the post of acting minister of Marine and Fisheries to his portfolio, Mr. J. G. H. Bergeron asked if Templeman's new duties would kill the bill's chances. Templeman admitted that, since some of the responses he had received to the initial drafts of the bill had been critical, it would be difficult to present an acceptable form of legislation in that session. When the legislature debated the final decision to set back the bill, members of both the opposition and the government noted their disappointment. As Mr. Bergeron observed, "the public are waiting for the passing of that Act with a great deal of interest." Despite support from both sides of the house, the concern to ensure that the legislation did not violate pharmacists' interests, combined with administrative complexity, set the Bill back to 1908.

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[111]As several historians have noted, the articles in Collier's Weekly attracted the attention of many Canadians. This is the perspective of R. G. Guest, "The Development of Patent Medicine Legislation," who does not note Sullivan's earlier activities and Glenn Murray, "The Road to Regulation," who does. According to Murray (p. 79) Stockton said he had the public interest in mind.

[112]Debates of the House of Commons, February 21, 1907, p. 3464. Unfortunately, I could not find the records of this committee.

[113]Debates of the House of Commons, March 11, 1907, p. 4441.

When the parliament sat a year later, then, the members had already debated legislation on the issue of patent and proprietary medicines for two sessions. The final bill had changed somewhat to accommodate the interests of the druggists. Introducing the bill in April, Templeman summarized the main issues facing the legislation. Provincial enactments to restrict the trade almost always failed, he noted, "because it was felt that any Act of the kind should be of a Dominion character," to ensure uniformity in manufacturing parameters. He called the new bill less "drastic," since it did not *require* a formula to be printed on the label. However, were the manufacturer to print a full formula on the label of the medicine, the substance would be exempt from the other provisions of the law. Instead, the legislation required that manufacturers note on the product label the existence and proportions of any substances listed in an attached schedule. Templeman explained the key aims of the bill in June, two months after consultation with interested parties:

> We aim to prohibit absolutely the use of cocaine; we propose to prohibit the excessive use of alcohol; and we propose to require that any manufacturer who will put the formula on the label will not come under the act.[114]

The Bill passed the Commons after a brief debate which involved primarily the specifics of the poisons schedule.

The debates in the Senate turned to issues of who should hold authority over the regulation and distribution of dangerous drugs. In particular, the senators scrutinized Clause 7, which set out the specific restrictions of the legislation. In three subsections, Clause 7 provided that no proprietary or patent medicine should contain "cocaine or any

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[114]Debates of the House of Commons, June 15, 1908, p. 10553.

of its salts or preparations. . . alcohol in excess of the amount required as a solvent or preservative" or any drug in the attached schedule which was not listed on the label of the medicine. Mr. Roy proposed an amendment that created a proviso on the clause, stating that a manufacturer could have their substance exempted from the third restriction if they "transmit to the minster an affidavit specifying such drug and the proportion of it contained in the mixture and dose."[115] The provision gave the Minister the authority to exempt the substance from the requirements of the act. Several senators objected to this exemption. Mr. Sullivan argued that "by this clause you are . . . authorizing the Minister of Inland Revenue to permit the sale of the most virulent poisons. . . it is outrageous. . . damnable unless the minister has supernatural knowledge."[116] At issue was the capability and authority of the Minister to make distinctions better left to pharmacists and doctors. Mr. McMullen replied that the Minster would only act upon the recommendations of the analysts of the Department of Inland Revenue, whom he called "some of the best analysts in the country." He added that he "would rather trust the analysts of the department than the doctors... We are safer in the hands of the analyst than we would be in the hands of the doctors."[117] The Minister's position to decide would be reinforced by the authority of the chemists.

This assurance did not end the debate, and the Senate considered the broader definition of drugs. Several senators were concerned about how the bill would relate to

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[115]Debates of the Senate, July 17, 1908, p. 1670.

[116]Debates of the Senate, July 17, 1908, p. 1667.

[117]Debates of the Senate, July 17, 1908, p. 1667.

the forthcoming Opium Act. Since the latter legislation required opium to be sold only on the prescription of a physician, and the Patent and Proprietary Medicine Act allowed opium to be sold in patent medicines, the senators were concerned that one could affect the proper operation of the other. Repealing the proviso to Clause 7 would not, Mr. Scott claimed, be detrimental to the operation of either legislation. In fact, it would allow the buyer to be aware of the existence of opium in the medicine. "In view of all the evidence we have of the harm that opium is doing, it will scarcely do for the Senate to say that a person buying a patent medicine or accepting a prescription at the druggists, shall have to take it without knowing whether or not opium forms an element in it."[118] He proceeded to challenge the priorities of the bill, which he saw as comparing "the lives of the public" to "the money invested in the drug business." When the Senate voted to retain the proviso, Mr. Scott commented that this was a case of, "Money over human life."[119]

In the debates over the Patent and Proprietary Medicines Act, the needs of the health of the public were placed against the requirements of the pharmaceutical industry and the authority of the government. The legislators recognized the integrity of the pharmaceutical bodies, consulting with them at all stages of the legislation, both inside and outside of the standard committee channels of consultation. In drafting and refining the bill, the legislators recognized the dangers that the unrestricted sale of certain drugs, specifically cocaine and opiates, presented to the public. They also recognized and validated the potential role of the pharmaceutical industry and the retail trade in

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[118]Debates of the Senate, July 17, 1908, p. 1669.

[119]Debates of the Senate, July 17, 1908, p. 1672.

controlling this trade, under the auspices of the government. At the same time, the senators scrutinized and rejected the importance of the physicians' role in protecting the public from patent medicines. As the instance of Senator Scott's opposition suggests, the Senate also viewed the role of the government as legitimately required to monitor the public's right to make its own decisions. These events demonstrate how the government was erecting more elaborate legislative framework, ostensibly to protect the public, but also to guide public actions along lines determined by government policy.

Glenn Murray has called the Patent and Proprietary Medicine Act "a very weak instrument," and the reaction by the doctors and druggists suggests that this weakness was a matter of interpretation.[120] According to the Canadian Pharmaceutical Journal, the legislation was almost exactly what the pharmacists had wanted. Gibbard explained that "This bill as it passed parliament is practically the recommendation of the C[anadian] Ph[armaceutical] A[ssociation]."[121] The doctors' reactions, however, were less precise, and less positive. The Canada Lancet seems to have ignored the legislation. In September, 1909, fully one year after the Act received royal assent, that journal printed an editorial demanding that physicians lobby for some form of restriction to the patent medicine trade. Alluding to the provisions of the Act, the writer observed that patent medicine vendors were putting on their labels a variety of inaccurate ingredients, possibly to bolster the claims of the advertisements. The article called on organized physicians to

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[120]Murray, "The Road to Regulation," p. 82.

[121]"Some Important Acts of Parliament," Canadian Pharmaceutical Journal 42 (August 1908), p. 23.

vigilantly voice their opposition to such behaviour.[122]

This form of opposition to the legislation was not the only reaction of physicians. The Canada Medical and Surgical Journal printed a mixed review of the Act. It noted that the attached Schedule of poisons was comprehensive and important, but it condemned the mild restrictions the legislation placed on the products themselves. It cited as an example the case that Mrs. Winslow's Soothing Syrup for Infants could still be sold, providing that it had "Morphine" printed on the label. The editor still wanted a formula on the label. In September, 1909, the Journal of the American Medical Association printed an article that condemned the Act. The editor's criticisms were extensive:

> A careful perusal of the new Canadian Act respecting proprietary and patent medicines will leave the impression that the law has been framed with a view rather to appeasing public clamor than to furnishing public protection... it would seem that the new law will actually protect the Canadian public against cocain-containing [sic] nostrums; but from the innumerable other vicious forms of self-administered medicaments the Act seems to offer tempting opportunities for the unscrupulous manufacturer to profit at the expense of the people.[123]

Canadian medical journals gave this article a mixed reaction. The Canadian Practitioner and Review simply printed the article verbatim, with no comment.[124] W. A. Young, the managing editor of the Canadian Journal of Medicine and Surgery, however, took

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[122]"The Ways of the Patent Medicine Man," Canada Lancet, 43 (September, 1909), pp. 5-6.

[123]"The Unsatisfactory Canadian Patent Medicine Act," Journal of the American Medical Association, 53 (September 25, 1909), p. 1034.

[124]"The Unsatisfactory Canadian Patent Medicine Act," Canadian Practitioner and Review 34 (December, 1909) p. xxx. Apparently, this page was appended with three others to the end of the last issue of this volume, and was therefore numbered out of sequence.

exception to the "quite uninvited" criticism. Carefully avoiding any specific support for the act, Young noted that Canadian doctors "are a unit on the subject of pure drugs and proper public protection," and that the JAMA's editor had no place criticizing the Canadian lawmakers. "We are at a serious loss," Young observed, "to learn the ingredients of the self-esteem nerve tonic this gentleman takes. It really should be writ large on the label and filed away in the archives of drugdom."[125] Nevertheless, Young did not frame his criticism to the JAMA's charges by defending the legislation, preferring instead to defend Canadian institutions from an American critic. Doctors' reactions to the Patent Medicine Act, therefore, suggest that they recognized the weakness of the legislation, but saw it as a better condition than the unregulated trade.

Conclusions

The efforts to enact restrictions on patent medicines was part of a broader movement to protect the health of the public, and emerged out of concerns over growing instances of addiction and the social threat presented by old and new substances. The rising panic over cocaine, a persistent vigilance over alcohol sales, and a concern over the availability of habit-forming opiates combined to present restrictions on patent medicines as a viable and necessary public policy issue. What remained was the question of who would control the distribution of the substances, and what role the government would play in regulating the drugs. Limited provincial efforts to restrict patent medicine led to a recognition of the

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[125]"The Unsatisfactory Canadian Patent Medicine Act," [Editorial] Canadian Journal of Medicine and Surgery, 28 (November, 1909), pp. 320-321.

need for federal legislation. The result of federal legislation was an increased reliance upon the knowledge and skill of chemists, the strengthening of a government bureaucracy overseeing the nation's health, and an acceptance of the pharmaceutical profession's role as guardians of society. Two key outcomes are most important to recognize. The process of creating patent medicine laws recognized the authority with which doctors identified addictive substances as a problem; but that authority of definition did not equate to authority over social policy. Given the conflicting perspectives on how best to ensure that dangerous substances would be properly regulated, the government elected to extend an existing bureaucracy system, guided by the knowledge and skill of pharmaceutical science. The government's measures were driven by physician's concerns over the dangers of drug mis-use, but they resulted in more control by pharmacists and government agencies.

Conclusion

Refining Nation, Race and Authority Over Drugs

This dissertation has explored the medical context of narcotic drug prohibition in Canada. It is based upon the assertion that we cannot fully understand the origins of narcotic drug laws without examining how medical professionalisation and changing medical concepts of drugs affected social policy. The idea of narcotic drugs as dangerous was linked intricately with the professional interests of doctors and druggists. Until the emergence of a medical "disease" concept of addiction, the danger of narcotic drugs lay in their toxicity. That hazardous nature informed doctors' attempts to control the use and distribution of drugs, and also the use of certain esoteric medical devices, in particular the hypodermic syringe. These early control efforts drove subsequent attempts at further drug restriction. The drug laws of the first decades of the twentieth century resulted from a growing concern over improper use of medicines, fuelled by a refined concept of "poison." After the turn of the century, concerns over "dangerous"drug use combined issues of toxic drug fatality and addiction ("chronic poisoning"). Both of these dangers fell under the purview of medical professionals. Doctors and druggists, therefore, played a key role in identifying improper drug use, and influencing public policy. However, while doctors could define improper drug use, their ability to assert their profession's role in protecting the health of the public was not as successful. Doctors had the authority to define addiction, but not to control access to addictive drugs. Efforts to control drugs shifted the control over drug mis-use from the purview of provincial medical and pharmaceutical bodies, to federal regulating agencies.

Three central themes have informed this dissertation. First, the Victorian idea of profession, which enabled an individual to transcend the petty bickering and temptations of competitive capitalism to the benefit of society, drove debates over the professionalization of pharmacy and the regulation of the sale of poisonous drugs. Second, the growth of medical science as an authoritative explanatory framework empowered doctors and druggists to enhance their appeals to the idea of professional ascendancy. Finally, medical commentators linked professional aspirations and scientific imperatives to a broader theme of building and maintaining a healthy nation. The rest of this conclusion clarifies the place of these themes within the broader discussion, and explores more succinctly the connections between a refined concept of poison, medical science, nation and race.

The first two issues formed central discursive modes around which debates about drug use emerged within the medical profession. Inherent within each of these issues were fundamental contradictions. In their drive for professionalization, pharmacists attempted to assert their autonomy from doctors. They characterized doctors, themselves members of an incorporated, traditional profession, as equally prone to the temptations and disgraceful behaviour endemic to capitalist competition. Druggists, therefore, argued professional ascendancy while demonstrating professional immanence. Second, the emergence of science as an authoritative language rested upon the idea that science was an ever-changing and progressing field of inquiry. Doctors who asserted the primacy of science also recognized that science could not *yet* provide all of the answers that society needed. As a result, doctors often used scientific language merely to replace moralistic

terminology with different jargon that was less accessible to the public. Doctors' inability to develop precise terms, most notably illustrated with the idea of "diathesis," when discussing addiction, demonstrates the nineteenth-century limitations in actually pressing new ideas in addiction treatment.

Chapters One and Two established the importance of opium, the main drug in question, and its derivatives, in the medical systems of nineteenth-century Canadian society. Opiates were virtually unrestricted prior to the advent of poison laws in the 1870s; they were important to the medical needs of the public, and restriction of that supply was a significant step for doctors to establish medical authority. In the second chapter, I considered more closely the value of opiate therapeutics to Canadian doctors. I placed these physicians within the broader Anglo-American medical discussions to explore how doctors saw opium's dual nature, as a powerful medicine and a deadly poison, as enhancing their claims to social and cultural authority. Doctors argued that they alone could determine the proper, medical, application of this dangerous drug. However, their efforts at ascertaining cultural authority were hampered by their own internecine conflicts, driven by personal animosity and the inability for medical science to define the effects of opium on the body.

Opium's role in therapeutics related to the advent of another crucial medical tool: the hypodermic syringe. Wielding hypodermics, doctors were able to administer medicine without the help of the patient or the "co-operation" of the body. The hypodermic syringe, however, also presented dangers; they enabled opium addicts to consume morphine with less gastrointestinal discomfort and more immediate effect. Several

historians have argued that, witnessing the effects of hypodermic injection of morphine, doctors realized the dangers of opium addiction. I argue that an equally important aspect of the growing concern over hypodermic opiate addiction lay in the fact that the hypodermic syringe represented a medical technology that doctors saw being abused by non-physicians. The combination of opium consumption for non-medical use and hypodermic syringe for non-medical applications, demonstrated to doctors that their authority was challenged by what, to them, was a persistent, inappropriate use of medical "technology," broadly defined. Doctors urged each other to avoid providing the hypodermic to their patients, and turned to the state to limit access to opiates.

In Chapter Three, I examined the first comprehensive laws to restrict opiates: the provincially enacted pharmacy laws. The conception that opium was a dangerous poison was part of the debates over pharmacy laws. Doctors and pharmacists often argued for their particular perspective in controlling the distribution of powerful drugs. The first three comprehensive provincial pharmacy acts included provisions for the regulation of poisons. The successes of pharmacists in asserting their authority to define, and distribute, poisons created a legal precedent for the restriction of drugs that authoritative bodies declared dangerous. Doctors were obliged to share authority over drug definitions with their colleagues, and erstwhile rivals, the pharmacists. The conception of the dangers of "poisons," then, translated into broader power for the medical industry, and restricted public access to medicine except through these professional channels.

I considered the issue of addiction itself in Chapter Four, moving beyond the legal frameworks and therapeutic activities of Canadian medicine, and into the more extensive

international debates on drug use. Canadians were minor contributors to these international addiction debates, but the discussions of organizations like the Society for the Study of Inebriety and the American Association for the Study and Cure of Inebriety affected the ideas of Canadian practitioners. In these investigations, doctors presented a medicalized concept of addiction, which emerged from the idea of habitual drug use as "chronic poisoning." However, they were unable to agree upon the nature of key concepts of addiction, most notably what, exactly, was a diathesis, and how did it manifest itself. Their inability to find actual physical causes of addiction meant that they relied upon technical language to reiterate the same moralistic ideas of addiction that earlier writers had expressed in religious or political terms. Encouraged by the ascendancy of science, doctors sought further somatic explanations, a perspective taken by Dr. Henry Howard, who placed total faith in medical materialism. His arguments demonstrated how doctors saw somatic/materialistic perspectives to provide ultimate answers to questions of physical and behavioural anomalies, even though they could not yet do so. I ended this chapter by illustrating how Canadian doctors asserted their crucial role in the public realm, not only as healers and protectors of the public from dangerous drugs, but as social leaders and guardians of health, within what Mariana Valverde identifies as an expanded version of "the social."[1]

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[1]I agree with Valverde's expansion of "the social" beyond the specific realms identified by Jacques Donzelot and David Garland. Valverde notes that instead of being a "distinct realm of fairly clear if shifting boundaries separating it from politics and economics," it was "a new way of conceptualizing any and all problems of the collectivity." Valverde, The Age of Light, Soap and Water: Moral Reform in English Canada, 1885-1925 (Toronto: MacClelland And Stewart, 1991) p. 20. I discuss Valverde's work in subsequent pages.

With Chapter Five, I turned from the general examination of addiction to the specific relationship of drugs in psychology, through a case study of several public asylums. Asking how drugs operated in the emerging field of asylum medicine, I divided the chapter into two themes: first, how public policy affected medical practice, and second, how addiction as a viable diagnostic category affected the asylum treatment of drug users. I made two general conclusions. First, government's role in determining medical policy, restricted late-nineteenth-century state-funded medicine. Second, while doctors who made addiction their specialty may have begun to conceive of addiction as in issue of concern as early as the 1870s, addiction as a "problem" entered the lexicon of the asylum much more slowly. Drug use itself did not become a form of mental disease until after the turn of the century.

In exploring the diagnostics of doctors and the admissions of drug users, I made two more specific conclusions. First, since the decision to admit patients was made by several medical practitioners, we can see how ideas of esoteric branches of medicine, such as the addiction specialists, affected slowly traditional concepts held by general practitioners. Second, addiction became a condition requiring state intervention when it manifested itself in some form of social deviance. To members of the public who could afford to place their friends or relatives in the asylums, drug habituation only became a concern when it related to more broadly construed deviant behaviour and social dis-ease.

I returned to the political forum in Chapter Six, exploring the legislative efforts behind the restriction of patent and proprietary medicines. These debates again included the idea of the dangers of poisons in publicly-accessible medicines, but that toxicity was

overshadowed by an increased concern over addictive drugs in patent medicines. Doctors and pharmacists once again clashed in their efforts to control one of the few remaining aspects of self-medication in Canada. At the turn of the century, their discussions began to include more forcefully the issue of the addictive nature of patent medicines. Even before the revelations made in Collier's Weekly in 1905, doctors and pharmacists in Canada were debating the propriety of the patent medicine trade, and how best to eliminate the sales of dangerous and addictive proprietary medicines. Unlike the debates over pharmacy laws of the 1860s and 1870s, these later discussions drew directly upon the perceived danger of addiction presented by these products. A central issue in these debates, and one which seemed to make the debates more imperative, involved emerging panic over cocaine. The "cocaine fiend" was quickly rivaling the opium fiend as a metaphor for the social danger from drug addiction. Cocaine was a key ingredient to many dubious patent medicines. Doctors and druggists agreed on key issues, such as the problems of addictive or "dangerous" drugs, and the need to control the patent medicine trade, but they disagreed on the best way to enact that control. These conflicts demonstrate how neither doctors nor druggists could claim definitive authority over drugs. That role was taken over by the state, albeit with professional input. This refined dynamic between professionals and state control recognized the role of analytical chemistry, a companion science to pharmacy, in policy formation, while, to the physicians' dismay, the legislation limited the input of doctors.

The importance of the patent medicine debates to the broader issue of drug prohibition needs clarification. I agree with Glenn Murray, who observed that patent

medicine regulation was a significant step in the regulation of habit forming drugs.[2] I would add that the relationship between patent medicine legislation and opium legislation was intricately linked. The connection between the Patent and Proprietary Medicines Act (1908) and the Opium Act (1908) was not just that they both dealt with drugs. The succession of debates on the two Bills meant that when the government turned to consider William Lyon Mackenzie King's proposal to restrict opium for non-medicinal purposes, it was in an atmosphere already scented with the fear of dangerous drugs. Several historians have argued that Parliament's lack of debate over the Opium Act demonstrates that members viewed the legislation positively because they understood opium use to be an issue of Chinese deviance. However, my study suggests that this limited debate, instead of indicating an ideational connection between opium and the Chinese, may have been a side effect of the discussions over opiates during the previous three years. Instead of demonstrating that the legislators knew opium smoking to be bad because of its relationship to Chinese people, this lack of debate might also indicate that they did not need to repeat arguments about the dangers of unrestricted drug sales: they had already covered the topic when discussing the more widespread problem of patent medicines.

Building a strong nation: class, race, religion and slavery in Canada.

The efforts of doctors and druggists and the emerging idea of addiction, can be linked to several broader social and political movements that were taking place at the same time.

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[2]Glenn F. Murray, "The Road to Regulation: Patent Medicines in Canada in Historical Perspective," in Judith C. Blackwell and Patricia G. Erickson, eds., Illicit Drugs in Canada: A Risky Business (Scarborough: Nelson Canada, 1988), p. 72.

The issue of drug addiction drew upon several key discourses relating to nation building and what I call "national integrity." The two terms are intricately related, not only because they draw upon an idea of nation, but because the idea of integrity of a nation was essential to the project of building a nation. The efforts to define and construct a nation was a process of creating what Benedict Anderson called an "imagined community."[3] The term denotes the necessity for people of a similar political organization, but not familiar with each other personally, to find commonality in images, metaphors and cultural devices.[4] As Eric Hobsbawm has explained, this imagined community would be based on a variety of concepts, relating to language, ethnicity/race, religion, and economic viability.[5] Suzanne Zeller has suggested that inventory science would also contribute to the creation of an idea of the "transcontinental nation." Inventory sciences of such national projects as the Geological Survey of Canada contributed to a project of "Inventing" Canada. Zeller's

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[3]Benedict Anderson, Imagined Communities: Reflections on the Origins and Spread of Nationalism Revised Edition (London: Verso, 1991). This perspective has been connected to Greek political developments and philosophical movements. As Samuel Enoch Stumpf has noted, with the decline of the city state at the end of the Golden Age of Greece (500-300 BC), when Greece Polies were absorbed into different broader polities, first the Macedonian, and later the Roman, the individual's engagement with his political community diminished. One result was the emergence of philosophical movements that emphasized the individual rather than the individual's engagement with his society, such as the Cynic, Stoics and Skeptics. Both of these issues were gendered male, since the woman's political role was distinctly marginal. Samuel Enoch Stumpf, Philosophy: History and Problems (Toronto: McGraw-Hill, 1971), pp. 116-117.

[4]A valuable implementation of Anderson's perspective can be found in Michael Dawson, The Mountie: From Dime Novel to Disney (Toronto: Between the Lines, 1998).

[5]E. J. Hobsbawm, Nations and Nationalism since 1780: Programme, Myth and Reality Revised edition (London: Canto, 1991).

idea translates well into the idea of the "imagined community."[6] This broad definition of nation building uncovers the narrowness in scope of many works in Canadian drug law history. They have emphasized that drug prohibition came about as an attempt to drive the unwanted Chinese labourers from Canadian soil. This perspective suggests that "national integrity" was based upon restricting an ethnic minority, and possibly quelling potential class tension, by placating one sector of the working class through demonizing another. The defining cultural metaphors and images would therefore be a boldfaced racism and class upheaval.

These perspectives are certainly valid parts of the broader issue, but not, I believe, key to understanding the meaning of early Canadian drug laws. Canadian commentators generally took the stance of morally superior patriarchs whose role was to extend their Anglo-Saxon hegemony around the world; boldfaced racial exclusion was contrary to the spirit of that goal, although certainly not contrary to the results of these efforts. Directed at the minority of Chinese coolie labourers, the Opium Act was racial legislation couched in a broader issue of national integrity; this latter issue, as well as racial exclusion, was what gave the opium act and subsequent narcotics acts their political and social significance. National integrity would be built not merely upon the process of excluding an out-group, but more extensively in fortifying the in-group. To be sure, the two aims were strongly connected: in the discourse of national integrity, exclusion of undesirables would help to fortify the white, anglo-saxon nation. Before 1908, doctors who discussed

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[6]Suzanne Zeller, Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation (Toronto: University of Toronto Press, 1987).

the problems of improper drug use in Canada rarely mentioned the Chinese; they were concerned with the purity of their own people--their imagined community. On the other hand, the scaffolding of objective scientific legitimacy the doctors and druggists erected around the issue of drug addiction and deviant drug behaviour empowered legislators, members of a specific privileged racial, class and gendered minority of the population, to continue to construct the nation based upon the subjective foundation of how they imagined the nation.

These subjective transformations were part of a broader shift in the formation of the Canadian nation. Commentators on drugs in Canada participated in a form of nation building that occurred in a variety of political and social transformations. As Bryan Palmer has demonstrated, the turn of the century saw a new role for government in regulating class tensions. Changes in the social formation, "economic concentration and the transformation of the workplace... necessitated the rise of the interventionist state."[7] Perhaps not coincidentally, a key player in the emergence of state intervention in labour issues was William Lyon MacKenzie King, first as deputy minister of labour, and later as Minister in the Laurier government. King viewed the government's role in labour disputes as "an impartial umpire," a goal that Paul Craven suggests was not achieved.[8] Issues of class conflict merged with spiritual reforms in the programme of the Social Gospel movement. As Richard Allen and others have shown, the Social Gospel sought to

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[7]Bryan D. Palmer, Working Class Experience: Rethinking the History of Canadian Labour, 1800-1991 (Toronto: McClelland and Stewart, 1992), pp. 157; 205-207.

[8]Paul Craven, "An Impartial Umpire": Industrial Relations and the Canadian State, 1900-1911 (Toronto: University of Toronto Press, 1980).

regenerate society along lines in keeping with the Protestant evangelical message, to create the "Kingdom of God on Earth." The activities of Social Gospellers ranged from union activism to immigrant welcoming societies and "home missions," all in the efforts of creating a strong, vital and moral Christian nation.[9]

The racial aspect of bolstering the national integrity have been discussed by Angus McLaren (1990) and Mariana Valverde (1991).[10] Their discussions demonstrate the place of the current dissertation in the broader context of race and nation. Restricting Chinese labourers was a small part of a broader issue of strengthening the Canadian "race." Doctors, as guardians of health, were integral to refining the conception of the Canadian race, and both McLaren and Valverde cite individuals whose ideas I have also examined. The project of constructing a "genetically" pure society, whether it be a discursive issue relating to the power of images of purity, or a political issue of eugenic policy and social control, was related to the social and cultural authority of physicians and scientists, and their ability to assert how their technical concepts and scientific investigations were essential to social elevation. Valverde also demonstrates how gendered roles informed

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[9]Richard Allen, The Social Passion: Religion and Social Reform in Canada, 1914-1928 (Toronto: University of Toronto Press, 1971); see also Brian J. Fraser, The Social Uplifters: Presbyterian Progressives and the Social Gospel in Canada, 1875-1915 (Waterloo: Canadian Corporation for Studies in Religion, 1988); Ramsay Cook, The Regenerators: Social Criticism in Late Victorian English Canada (Toronto: University of Toronto Press, 1985); a concise overview of the reform work of the evangelical organizations is in Phyllis D. Airhart, "Ordering a New Nation and Reordering Protestantism, 1867-1914," in George Rawlyk, ed., The Canadian Protestant Experience, 1760-1990 (Burlington: Welsh Publishing Company, 1990), pp. 98-139.

[10]Mariana Valverde, The Age of Light, Soap and Water; Angus McLaren, Our Own Master Race: Eugenics in Canada, 1885-1945 (Toronto: McClelland and Stewart, 1990).

and enhanced white Canadian's hopes to construct a strong nation.[11]

McLaren and Valverde demonstrate the power of subjective definitions based on racial concepts in shaping public policy and social attitudes. McLaren demonstrates the moralistic aspect of scientific investigation specifically. He notes that social scientists presented "old moralistic maxims simply dressed up in scientific garb."[12] Scientists and social scientists united to define social policy that was driven by their own concepts of the "imagined community" and national integrity. He connects the ideas of pure science, social science, moral reform, and politics as a "collective" that shaped public policy and both drew upon and informed biases and prejudices in the public consciousness. Valverde discusses how the efforts to reform individuals on a moral and physical level was a goal "not to suppress, but to re-create and re-moralize" Canadians. The moral reform movement, she explains, was held together by a "common subjectivity" which appears to parallel Anderson's "imagined communities." Valverde emphasizes a common subjectivity which enabled this connection between the individual purity and the purity of the state; the common subjectivity's "constant recreation at the individual level ensured the continued survival of the collectivity."[13] Here she presents the imagined community driving the integrity of the nation. The "collectivity," in this case, is the nation, defined by certain

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[11]Valverde, "'When the Mother of the Race is Free': Race, Reproduction and Sexuality in First-Wave Feminism," in Valverde and Franca Iacovetta, eds. Gender Conflicts: New Essays in Women's History (Toronto: University of Toronto Press, 1992), pp. 3-26.

[12]McLaren, Our Own Master Race, p. 70.

[13]Valverde, Age of Light, Soap and Water p. 33.

weighted categories of gender, class and race/ethnicity. The divisions of men and women, rich and poor, Anglo-Saxon and "other," drove the image of the ideal makeup of the "collectivity" and what projects were necessary to ensure the integrity of this imagined community.

My work drew upon these ideas of individual and collective efforts at reform. The medical professions, both doctors and druggists, presented their professional aspirations in language that invoked upon these ideas of national purity. I have chosen the term "integrity" because the scientific arguments presented by doctors were often attempts to avoid moralistic terminology, and "purity" blurs the line between a religious morality and a physical cleanliness (the same reasons that Valverde sees it as so valuable, and evocative of her thesis). The duality of the term "integrity" is intentional: it relates to a concept of "essentialness" and strength or vitality. Doctors asserted that they have a necessary role in building and ensuring the vitality of the nation. Given the concerns of reformers presented by Valverde and McLaren, I would argue that doctors were likely more concerned about essential vitality of the nation, since by the turn of the century key issues of decline in national health and fitness had emerged into the broader political arena.

These issues of vitality were not only connected to physical and moral integrity, but to more subtle issues of slavery and freedom. According to Valverde, the liberal anti-alcohol movement viewed alcoholism as a "Slavery From Within," and the racist efforts of first-wave feminism looked for a time "When the Mother of the Race is Free."[14] Most investigators who discussed any form of addiction related it to the concept of an enslaved

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[14]Valverde, "'When the Mother of the Race is Free.'"

will. The issues of slavery and freedom provide a discursive connection between the themes presented in discussions of white people's addiction to medical opiates and Chinese people's opium smoking. This theme links earlier arguments that the Opium Act was a work of boldfaced racial exclusion, with my perspective that it was driven by a less blatantly--but not less genuinely--racist concern over racial improvement. In the following pages, I explore more specifically how the discussions of the Chinese "problem" in Canada and non-Chinese drug use drew upon and contributed to the same broad discourse of national integrity.[15]

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Several historians have investigated the arguments underlying opposition to the Chinese in Canada, especially in British Columbia.[16] Kay Anderson has noted that two main issues fuelled the anti-Chinese agitation: workers concerns about their ability to make a "living wage" and, more centrally in Anderson's estimation, racial ideas regarding the building of the province and the nation as white Anglo-Saxon polities.[17] Exploring the discourse surrounding immigration in English Canada, Valverde ties the concern over the character

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[15]The following section is adapted from my "'Its baneful influences are too well known': Debates over Drug Use in Canada, 1967-1908"Canadian Bulletin of Medical History 17 (Fall, 1997), pp. 263-288.

[16]See in particular, Kay Anderson, Vancouver's Chinatown: Racial Discourse in Canada, 1875-1980 (Montreal and Kingston: McGill-Queen's University Press, 1991); Patricia E. Roy, A White Man's Province: British Columbia, Politicians and Chinese and Japanese Immigrants, 1858-1914 (Vancouver: UBC Press, 1989); W. Peter Ward, White Canada Forever: Popular Attitudes and Public Policy Toward Orientals in British Columbia Second Edition (Montreal and Kingston: McGill-Queen's Press, 1990).

[17]Anderson, Vancouver's Chinatown, esp. pp. 60-63

of Chinese immigrants to the racist perspective of the social purity campaign.[18] Both Anderson and Valverde demonstrate that race was a significant part of a broader social formation debates.

In British Columbia, arguments condemning Chinese labourers focussed upon the inability and unwillingness of Chinese immigrants to assimilate, the unsanitary condition of the homes of Chinese labourers, and the morally-questionable behaviour of the Chinese immigrant in the eyes of white Christian Canadians. The main issues emerged in the minutes of evidence of the Royal Commission on Chinese Immigration, an investigation carried out by Joseph Chapleau and John Hamilton Gray in 1885. I will use the evidence of the 1885 commission, and the discussions in public newspapers because I believe it reflects the range of ideas regarding the Chinese and their practice of opium smoking at that time. I conclude by discussing how similar attitudes reappeared in the 1901 Royal Commission Investigating Chinese and Japanese Immigration.

For individuals concerned with building a white, Anglo-Saxon nation, the direct influence of the Chinese upon the moral and physical character of the people was important. Opium smoking was one of three key vices--along with gambling and prostitution--associated with the Chinese in B.C. Many whites considered opium smoking to be both an indication of the depravity of the Chinese, and of the danger such behaviour posed to the health and morality of white people. Giving his impressions of the Chinese

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[18]Valverde, The Age of Light, Soap and Water." See, especially, Chapter 5, "Racial Purity, Sexual Purity and Immigration Policy" pp. 104-128. Also, MacLaren, Our Own Master Race, Chapter 2 "Public Health and Hereditarian Concerns" (pp. 28-45) and Chapter 3, "Stemming the Flood of Defective Aliens," pp. 46-67.

influence in San Francisco, C. C. Cox, a detective, illustrated fears repeated by many British Columbians.[19] He told the commission that the Chinese "have taught white men and women, and boys and girls, to smoke opium, and many arrests of whites in these places [opium dens] have been made."[20]

While people like Cox suggested the dangers to *all* whites posed by the Chinese presence, others focussed upon the danger to specific groups of white people, most notably those who were expected to advance the nation. B. M. Pearse, who claimed to be one of the oldest settlers in the province, and a former surveyor general, noted that the opium dens of Chinatown were the centre of social debasement: "in these dens one may see able-bodied and well-dressed men lying cheek-by-jowl with the Chinamen and all indulging in the pernicious habit."[21] Here is guilt by association: able bodied, well dressed men, an image of bourgeois respectability, in whom the future of the nation would be entrusted, lying together with the degraded Chinese, and all enjoying in a "most degrading and physically injurious" habit. Police Superintendent Charles Bloomfield of Victoria challenged Pearse's assertion that young, middle class white *men* were frequenting opium dens by presenting an image that was likely even more disturbing to his audience. "There

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[19]As well as taking evidence in British Columbia, the commissioners sought opinions and perspectives from individuals from the western United States.

[20]Report of the Royal Commission on Chinese Immigration (hereafter, RCCI) (Ottawa: Printed by order of the commission, 1885), p. 14. Pagination of the reports should be clarified. The published report included two summaries, one by each of the two commissioners. Gray's report was numbered with capital Roman numerals, and Chapleau's used lowercase Roman numerals.

[21]Ibid, p. 95.

are not many cases amongst young and industrious men..." he stated, "but I have been told on good authority, that white girls of respectable parents use [opium]."[22] In Bloomfield's illustration, these girls were associating with "working men.... white women prostitutes, [and] Indian women." He presented elements of a class-based moral panic. Young women were associating in secret with the debased and demoralized; the collapse of respectability seemed imminent. Indeed, as the Industrial News, itself no friend to Chinese labour, noted, "every father and mother" should hope to see the eradication of opium dens, "*because there are in this city to-day, young men and women married and single, who visits* [sic] *these haunts*, AND THE HABIT IS ON THE INCREASE."[23]

Evidence before the 1885 royal commission compared the fear of young white women's corruption with the assumption of lower class depravity amongst women in the opium dens. Mr. W. Tuckfield, of the Knights of Labour, answered the commission's questions after his own tour of an opium den. In response to the question of whether the white woman that he saw in the den was "known to the police officer [who accompanied Tuckfield] to be a prostitute," Tuckfield replied, "I do no know who the woman was, she could not have been respectable, of course."[24] This inferred degeneracy emerged again when the commissioners themselves toured an opium den in Victoria. There they met, "a young woman, well dressed and full of intelligence," who agreed to an interview.[25] She

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[22]Ibid, p. 48.

[23]Industrial News, August 28, 1886, p. 1. Emphasis in original.

[24]RCCI, p. 67.

[25]Ibid, p. 405.

gave the pseudonym of Emily Wharton. During the interview, the commissioners' questions reflected their assumptions about the moral character of the white female opium smoker:

> Q. I do not want to be offensive, but are you what is called a fast woman?--A. I am. But you would be greatly mistaken if you imagined that all the women who come here to smoke are of that character...[26]

Despite Wharton's assurances, Commissioner Gray noted in his report that the only white people who smoked opium were those who were already depraved.[27] This assumption of degeneracy, the immediate connection between women indulging in pleasure with men and moral decline, fuelled a good deal of anti-opium and anti-Chinese sentiment. Women defying specific gender roles, and rules of propriety, were considered depraved and already fallen. Especially dangerous were women's associations with Chinese men in opium dens, even though Emily Wharton, who appears to have been an eloquent spokesperson, noted that women faced more danger from white men--especially white men who drank--than they did from Chinese men. The latter, Wharton claimed, were "far more certain not to offend or molest a woman than white men, especially white men with a glass in."[28]

The assumptions of the depravity of women in opium dens, appears to contradict the concern that respectable women were frequenting opium dens. If they were in the opium dens, they could not possibly be respectable, but the danger of the opium dens lay

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[26]Ibid, p. 151.

[27]Ibid, p. LIX.

[28]Ibid.

in their allure for respectable white women. Yet, this contradiction may be an indication of the earlier conceptions of opiate addiction itself. As I discussed in Chapter Four, physicians argued (and still do) about a predisposition towards addiction, the addictive personality so prevalent in Dr. McGillivray's evaluation of Mr. M.D.B. Many commentators assumed that addiction was the result of a weak will, and an inability to control one's animal desires. Women, inherently weak, were liable to fall if not protected, and guided properly.[29] The image of the opium den was one of a seedy, dangerous place that threatened the nation by subverting the morality of the mothers of the race, and destroying the integrity of the future generations.[30] Healthy, respectable white women in particular, were victims of unscrupulous men. Despite the evidence of Wharton and others, Chinese opium smokers, not drunken white men, were those predators.[31] Chinese debasement was repeated in the belief that all Chinese women were prostitutes, and the (dubious) evidence of enforced slavery of Chinese women presented in numerous newspaper accounts of raids upon houses of ill repute in Chinatown.[32]

Beyond physiological and racial degradation of the individual by opium smoking, many white Canadians were concerned with the effect of opium smoking on the integrity

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[29]Mariana Valverde discusses the idea that women had less will power than men in "'Slavery from within': The Invention of Alcoholism and the Freedom of the Will," Social History 22 (Autumn, 1997), pp. 263-265.

[30]See Valverde, "'When the mother of the race is free.'"

[31]A woman who worked for a Chinese man in Portland, testified that her employer was more respectful of her than other white employers. RCCI, p. 173.

[32]See a number of articles in the Daily Colonist, such as January 8, 1889; December 15, 1886; February 27, 1884.

of the nation. As doctors and reformers were concerned with the issues of freedom and slavery that opium addiction presented, so too, the commentators on Chinese opium smoking linked the behaviour to slavery. Anti-Chinese rhetoric often connected the Chinese character to servility, slavery and a disregard for freedom. Opium smoking likewise bound the user. This slavery was considered insidious, gradual and inevitable. As the commissioners, commenting on a white man's story of his addiction to opium smoking, explained, "from a luxury it became a necessity, and then from being a minister of pleasure, [it became] a master which made him its miserable slave."[33] Opium use, furthermore, affected the moral capabilities of the individual, which could have detrimental effects on the family. "In China, opium-smokers who have been brought from opulence to indulgence by the vice have sold their daughters to the procuress in order to procure the poppy."[34] The lesson was clear: opium smoking would lead to a loss of personal control, and ruin; it spelled doom for the integrity of the family. As the family was the building block of the nation, opium smoking, and the dependency it created, was a danger to the nation.

Just as the desire to restrict or eliminate the Chinese from the country based itself on fears of the Chinese threat to the values of national freedom and individual liberty, so the potential effects of anti-Chinese legislation needed to be scrutinized with the same criteria. This consideration was a concern of Commissioner Gray's report and summary of the questions regarding the Chinese in British Columbia. Grey, a B.C. Supreme Court

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[33]RCCI, p. 370.

[34]Ibid.

judge, was concerned with the political and social implications of a miscarriage of justice. The mandate of the commission, Gray noted, was to determine if the Chinese were indeed the true cause of evils like prostitution and opium smoking in the country, "for if not, punishing them will not only not remove the evil [sic], but will be an act of injustice, discreditable to a free and self-governing country."[35] This concern with freedom and justice affected Gray's perception of behaviour of Chinese people in Canada. He argued that, it would be unfair to judge Chinese immigrants using western values, which were inherently superior: "The Christian religion, the institutions of the middle ages, the habits of freedom, the moral tone of the European races of the highest class, have tended to make truth an essential element in the characteristics of their people and descendants.... It is not so with the Asiatics."[36] Gray's concern, then, encapsulates the patriarchal racism of some white reformers: he argued for the clear and strong growth of national character by an application of "justice" towards all people. He rejected the imperative of racial exclusionist arguments, while accepting the imperative of national integrity, and an implicitly racial concept of European justice.

Both Gray and Chapleau concluded by rejecting the idea that the Chinese presented any real threat to the country. On the economic arguments that the Chinese were diminishing the ability of the white labour to make a decent living, Gray countered with an argument based upon an assumption of the supremacy of Anglo Saxons. Cheap labour such as that provided by the Chinese, "enables those whose minds are capable of

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[35]Ibid, p. LVI.

[36]Ibid, p. LXI.

higher development and whose ambition looks to more ennobling industry--to follow pursuits in which they will rise"[37] He further argued that such a "superior race" as the Anglo Saxons, had little to fear from "a small, inferior and comparatively speaking, feminine race." As for opium smoking, Gray concluded that he saw little evidence that white people were inclined to use it, thereby rejecting the alarmism of some of the evidence presented to the commission.[38] Chapleau, in contrast, decided that evidence "is positive" that Chinese taught whites to smoke opium, but it was a matter for the police to control, not the legislature.[39] From Gray's experience, the only whites who used opium were those who already had "degraded habits." Opium users, in Gray's mind, were already excessive and degraded.[40] He concluded that Chinese behaviour and morality was not a threat to the morals of the nation, that the "religion and morals of a people depend upon the people themselves, not upon the foreigners who come into the country for business or pleasure."[41] Instead, the injustice of mistreating the Chinese would pose more of a threat to a strong national character than would the behaviour of a relatively small and generally insular minority. Gray's patriarchal racist comments were supported by testimony of several notable B.C. residents, including physician and legislator Dr. John Helmcken and

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[37]Ibid, p. LXIX.

[38]Ibid, p. LVIII.

[39]Ibid, p. xxx. Chapleau's comment is interesting, given that opium smoking does not appear to have been illegal in 1885.

[40]Ibid, p. LIX.

[41]Ibid, p. XCIV.

Chief Justice Sir Matthew Begbie.

The concerns expressed in the 1885 commission arose again in 1901. In that year, a Royal Commission consisting of Roger Clute, Daniel Munn, and Christopher Foley, investigated Chinese and Japanese immigration to B.C. Here the issues of freedom, racial purity and--I would argue--national integrity were compared directly to the existence of the Asian labourers in Canada. Although many of the witnesses to this second commission agreed that cheap Chinese labour had contributed to the economic vitality of the country, few opposed the restriction of Chinese immigration. In their final report, the commissioners suggested that they found a unanimous condemnation of Chinese immigration, but the unpublished minutes of evidence demonstrate that several people opposed the idea of any form of exclusion.[42] Opium smoking was of minor concern to the investigators. They often asked witnesses if the Chinese labourers with whom they were in contact smoked opium, but did not explore the issue as closely as the 1885 Commission.[43] In the 1901 report, a section on the "Moral and Religious Aspect of the Case" emphasized the assertion that Chinese immigrants could not be assimilated, were rarely converted to Christianity, and their habits and nature tended to "bring down" the

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[42]See, for example, Royal Commission on Chinese and Japanese Immigration into British Columbia (hereafter, RCCJI) evidence, Volume 3, pp. 191-2 Henry Croft; p. 515, Edward Musgrave. National Archives of Canada, RG 33/145.

[43]See, for example, the evidence of James Wilson, RCCJI (evidence) Volume 1, p. 112; Robert Johnston, RCCJI (evidence) Volume 2, pp. 90-91; Fred Stephen Hussey p. 135; Noah Shakespeare, RCCJI (evidence) Volume 3, pp. 545-6. National Archives of Canada, RG 33/145.

white race.[44] In the evidence of the 1901 commission, then, opium smoking was just another indication of Chinese incompatibility with white Canadians. To the commissioners and witnesses, the Chinese labourers themselves, in their habits, living conditions and very existence in Canada, challenged the freedom and integrity of the nation.[45]

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The discourse to which doctors and anti-Chinese reformers/agitators spoke was united, not merely on a racist basis of excluding the Chinese because of their immorality, but on the more subtle connection that emphasised strengthening the Anglo-Saxon people generally, and Canadians specifically. To strengthen the body it was necessary to attack two social dangers, metaphorically represented in poison and slavery. The idea of poison in the body acted both in a literal sense--the danger of fatality or addiction--and a metaphorical sense--the danger of an alien substances, polluting the body politic. Samuel Woodward and James Bovell discussed this metaphorical concern in their work on inebriety asylums; Samuel Parrish discussed "chronic poisoning" at the AASCI; Richard Maurice Bucke presented it when he wrote that opium and other drugs, when used improperly, were "simply foreign bodies, hostile elements," within the individual body.[46]

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[44]Report of the RCCJI (Ottawa, 1902) pp 22-41.

[45]The details of this commission are explored in Anderson, Vancouver's Chinatown, pp. 61-63, Ward, White Canada Forever, pp. 59-61, and Roy, White Man's Province, pp. 108-118.

[46]Richard Maurice Bucke, "Annual Report of the Medical Superintendent of the Asylum for the Insane, London," in "Twenty-First Annual Report of the Inspector of Prisons and Public Charities for the Province of Ontario" Sessional Papers of the Province of Ontario (Toronto: Warwick & Sons (Queen's Printer), 1889) p. 36.

Similarly, Roger Clute, the chair of the 1901 commission, utilized the body metaphor when he called the Chinese labourers, "a foreign substance within, but not of, our body politic."[47] Here the issues of the dangers of poisoning to the individual and the nation converged.

The second issue was the literal and figurative concept of slavery. Opium addiction was considered a form of slavery. In the preceding discussion, the issue of slavery was related to the Chinese. The discourse reveals its inherent contradictions since the fact that the Chinese workers were good, cheap labour (not enslaved, but close to it), provided an argument for keeping the Chinese workers in Canada, and for excluding them. Although Canadians wanted to avoid slavery, they were not above imposing a near-slavery on the Chinese "other"; indeed, the national integrity, to the 1885 Commission, demanded it, and the 1901 Commission recognized the value of cheap Chinese labour in the past; it was just no longer necessary to bolster the material life of the province, or the nation, and would in fact bring down the nation's integrity. As the 1901 commissioners noted, the Chinese labourers "are obnoxious to a free community and dangerous to the state."[48]

To these commentators, the state's role towards both Chinese immigration and drug addiction was similar. Clute argued that the Chinese immigration needed to be restricted through a substantial head tax of $500. Discussing drug addiction in 1908, Dr. E. Ryan of Kingston argued the importance to the state of a legal process to treat addiction: "it is the duty of the State to prevent the degeneracy of its population, the

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[47]Report of the RCCJI, p. 278.

[48]Report of the RCCJI, p. 278 (quoted in Ward, p. 60.)

heredity transmission of a vice, a disease [inebriety] that carries with it such endless shame, and sorrow, that robs the nation of its brightest intellects, that sears and withers all within its lethal grasp."[49] Ryan reiterated the moralistic discussion of addiction, but insisted upon a medico-legal means to treat it: he was concerned about treating addiction through "a legal process."[50] Addiction was a national danger, a lethal social poison, and the state had to act to end it.

The position of the reformers who discussed Chinese opium smoking and the doctors who discussed national integrity through broadening their professional powers emerge from a common discourse that elevated white people, white Canadians and the value system of the "common subjectivity" of the emerging nation. The struggle was to benefit a specific group that adhered to a common set of values, and exclude those whom the representatives and leadership of the subjectivity saw as anathema to this pseudo-progressive project. The racism of the Opium Act, therefore, was more subtle and fundamental than simply excluding a group of people who happened to smoke opium and not be white; it spoke to a discourse of health, vitality and national development which certain behaviours and certain people challenged. Doctors and druggists used this discourse of national integrity to bolster their own professional claims; their efforts, while not necessarily directly inspired by racism, certainly helped to validate and strengthen racist policy. Their lobbying demonstrates the power of a racial discourse to inform

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[49]Dr. E. Ryan, "The Inebriate Population," Canadian Practitioner and Review 33 (March 1908), p. 146.

[50]Ibid.

policy; while subsequent reactions to drug laws demonstrate the power of policy to inform discourse.[51]

The creation of the 1908 Opium Act, and the Patent and Proprietary Medicines Act mark endings and beginnings. They indicate the end of a period when doctors and druggists held a unique, though flexible, authority over the distribution of drugs, and had control over defining the propriety of drug use. Doctors' attempts to define fact and value, a project necessary to establish their cultural authority, ironically resulted in a loss of authority over a key aspect of their professional domain, as the state took over. This change was not necessarily a failure, however. Doctors had seen their definitions of drug addiction as a dangerous disease validated in the Acts of 1908. Patent medicines had been restricted, however unsatisfactory that legislation was to doctors; and the Opium Act defined "medicinal purposes" as the only legitimate reason to import the drug. Moreover, doctors often sought state intervention in defining the boundaries of their professional domain, so the loss of authority embedded in the Patent Medicine Act may not have been entirely objectionable. Pharmacists, who had used their claims that chemistry and pharmacy were important means of defining danger to extend their economic power, saw their efforts succeed, and their science validated. These Acts were also starting points to a

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[51] As many writers have demonstrated, post-1908 drug policy and drug related convictions served to reiterate a racist tone in the concepts of drug addiction. The most recent work in this field for Canada is Catherine Carstairs, "'Deport the Drug Traffickers': The Racialization of Drug Use in 1920s Canada" presented at the Conference on Opium in East Asian History, 1830-1945 sponsored by the Joint Centre for Asian-Pacific Studies, Toronto, May 1997; and Carstairs, "Innocent Addicts, Dope Fiends and Nefarious Traffickers: Illegal Drug Use in 1920s English Canada," Journal of Canadian Studies (forthcoming).

new form of public morality legislation: control over drug addiction. From 1908 to 1911, the concerns that doctors, pharmacists, social reformers and other key groups identified, in their challenges to non-medical use of habit forming drugs, entered public policy more forcefully than before. In the ideational shift from habitual drug use being of minor concern to the community, to drug addiction as significant a medical and social issue--a transition that the two 1908 Acts embodied--non-medical drug use entered a new, criminal, domain. Meanwhile, reformers who had earlier struggled to explain how the issue was one of morality and social deviance prior to the laws, could now simply state that addiction may be a disease, but that its symptoms were distinctly criminal. It set a precedent we are still hard pressed to overturn.

Appendix:
Explaining Statistical Methods

In this dissertation I have used the statistical method of correlation equations in Chapters Two Five and Six. A correlation coefficient (R) is based on an equation which calculates the statistical relationship between a set of data (here X and Y) with a number of cases expressed as N. The formula is:[1]

$$R = \frac{N\sum XY - \sum X \sum Y}{\sqrt{([N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2])}}$$

The resulting table demonstrates the relationship between the two variables with a number that ranges between one and minus one. The higher the absolute value of the number, the greater the significance between the two variables. The closer that number is to one, the more positively significant the relationship. In other words, if Event A and Event B were compared, a high *positive* correlation means that Event B was likely to occur when Event A did. The closer the value is to negative one, the higher the *negative* relationship: Event B would happen when Event A did not take place. For example, when I considered the purchases of medicine and alcohol by the Toronto Lunatic Asylum in Chapter Five, Table 5.2, a high positive correlation between purchases of Medicines and Alcohol would suggest that the asylum physician employed more alcohol when he employed more

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[1]See Roderick Floud, An Introduction to Quantitative Methods for Historians Second Edition (London and New York: Methuen, 1973), pp. 141-143.

medicine. A negative correlation meant that alcohol would likely be used when medicine was not used, in other words, instead of medicine (alcohol could then be considered to have acted as a medicine). The closer the number is to zero, the lower the significance between the two variables; a low number meant that there was little or no relationship between the two events. Alcohol and medicine were used notwithstanding the employment of the other substance.

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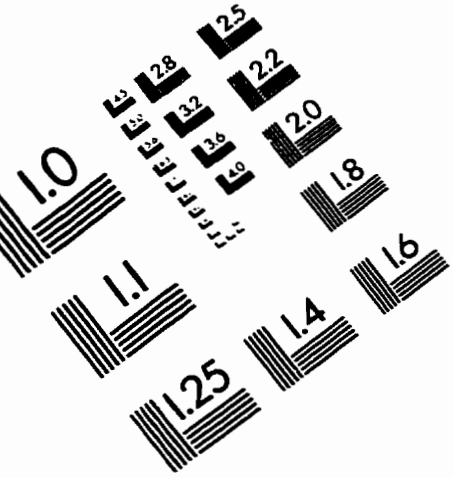

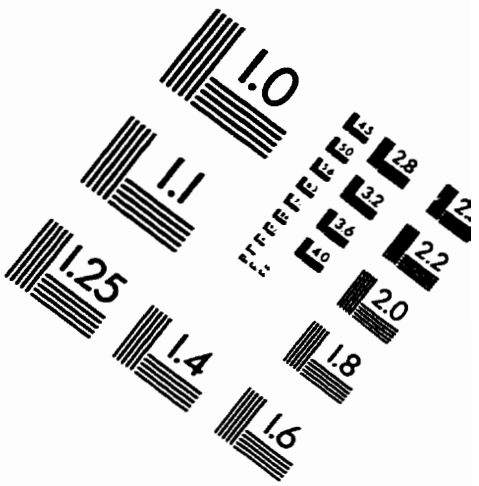

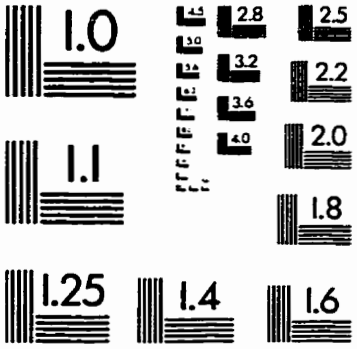

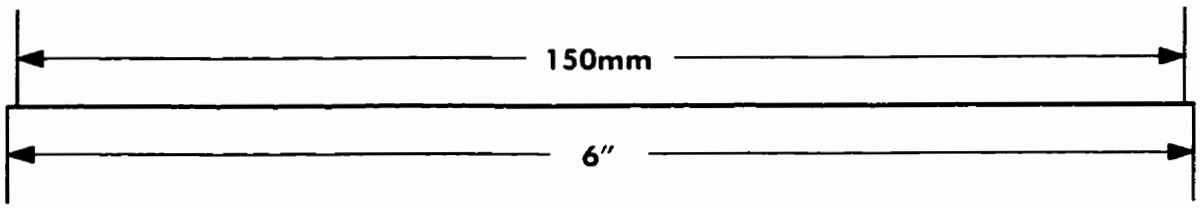

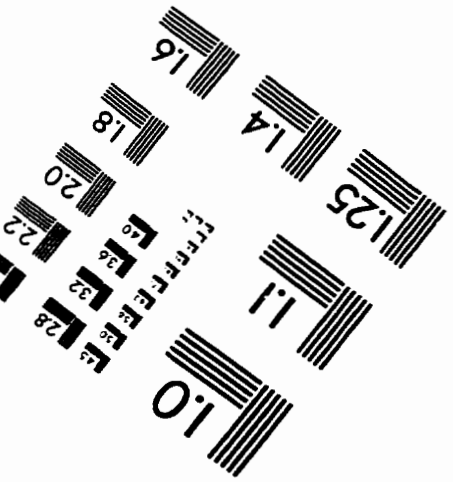

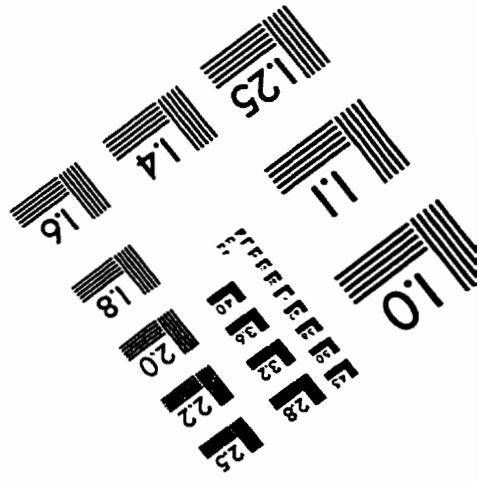

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